

## READING MUNICIPAL LIGHT DEPARTMENT

BOARD OF COMMISSIONERS

**REGULAR SESSION** 

**FEBRUARY 23, 2017** 

## POWER SUPPLY REPORT DECEMBER, 2016 ATTACHMENT 1

# Integrated resources

February 23, 2017

**RMLD Board of Commissioners Meeting** 

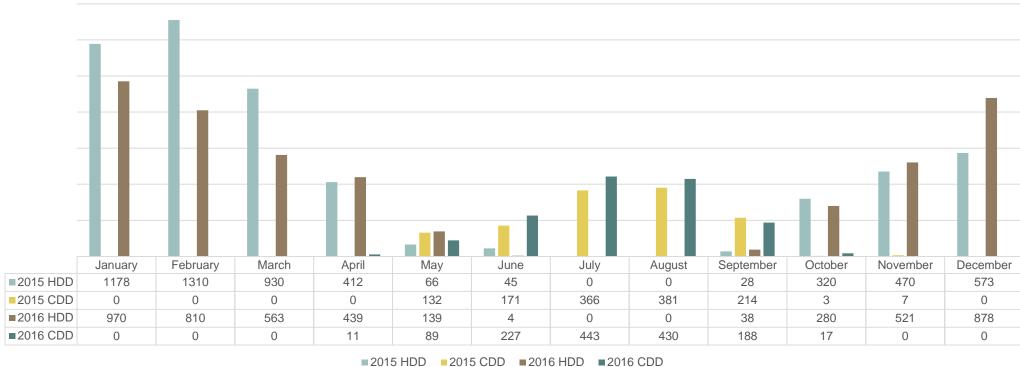
Reporting for December



Jane Parenteau Director of Integrated Resources

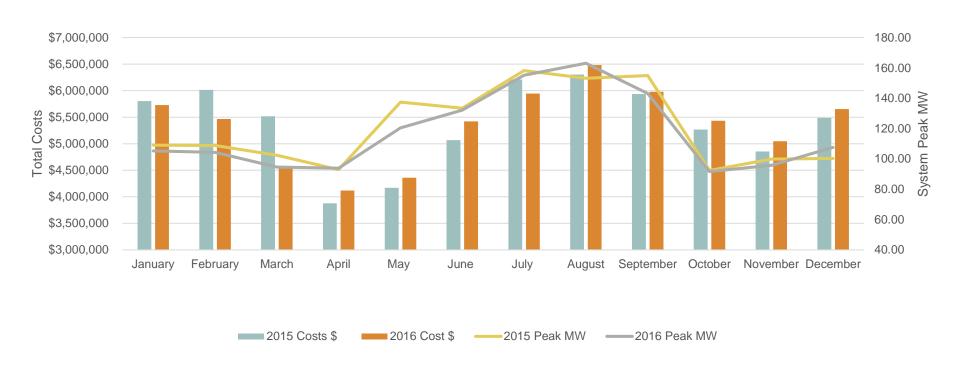
## Heating and cooling degree days

2015 vs. 2016



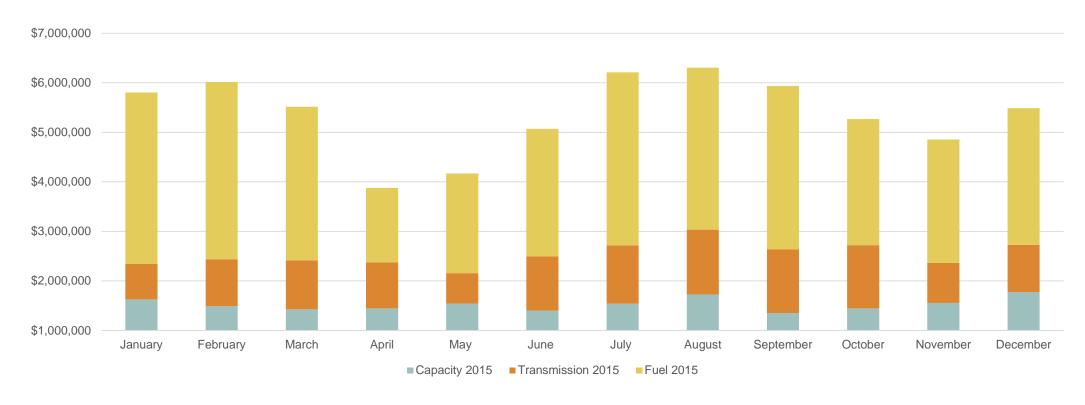
# Purchase power cost (capacity, transmission & other) Vs. system peak



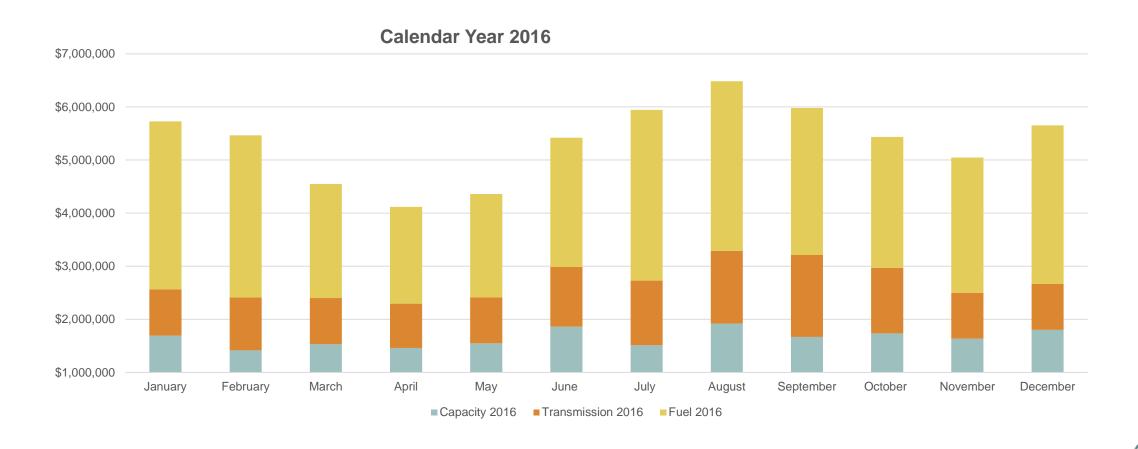


## Purchase power costs

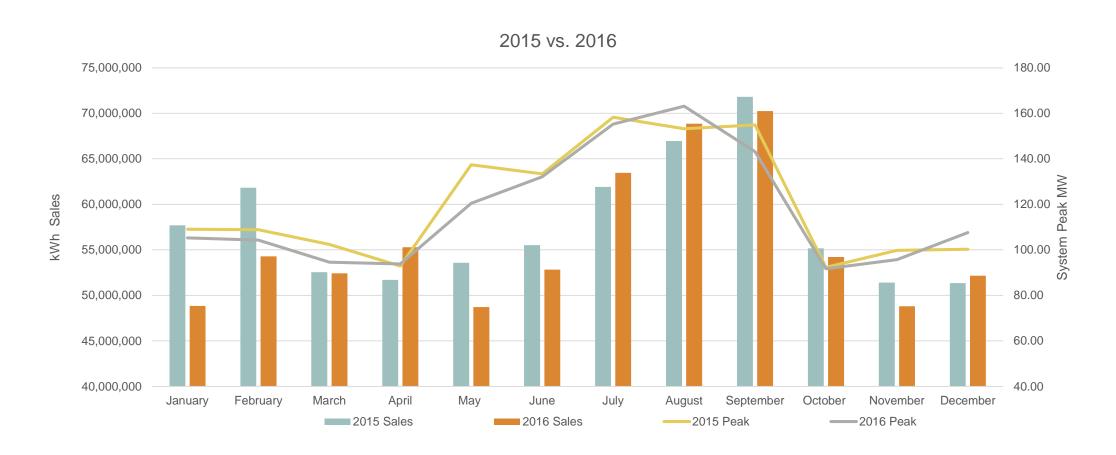
## Calendar Year 2015



## Purchase power costs



## kWh sales vs. system peak





To:

Coleen O'Brien

From: Maureen McHugh, Jane Parentean

Date:

February 13, 2017

Subject:

Purchase Power Summary - December, 2016

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of December, 2016.

## **ENERGY**

The RMLD's total metered load for the month was 58,436,483 kWh, which is an 3.56% increase from the December, 2015 figures.

Table 1 is a breakdown by source of the energy purchases.

|                         |            | Table 1  |            |             |         |
|-------------------------|------------|----------|------------|-------------|---------|
|                         | Amount of  | Cost of  | % of Total | Total \$    | \$ as a |
| Resource                | Energy     | Energy   | Energy     | Costs       | %       |
|                         | (kWh)      | (\$/Mwh) |            |             |         |
| Millstone #3            | 3,702,204  | \$6.72   | 6.32%      | \$24,885    | 0.83%   |
| Seabrook                | 5,905,327  | \$6.32   | 10.08%     | \$37,321    | 1.25%   |
| Stonybrook Intermediate | 355,543    | \$171.31 | 0.61%      | \$60,907    | 2.04%   |
| Shell Energy            | 10,437,000 | \$63.58  | 17.81%     | \$663,632   | 22.22%  |
| NYPA                    | 2,526,578  | \$4.92   | 4.31%      | \$12,431    | 0.42%   |
| ISO Interchange         | 8,607,486  | \$66.83  | 14.69%     | \$575,202   | 19.26%  |
| NEMA Congestion         | 0          | \$0.00   | 0.00%      | \$18,190    | 0.61%   |
| Coop Resales            | 17,973     | \$102.69 | 0.03%      | \$1,846     | 0.06%   |
| BP Energy               | 8,893,800  | \$46.90  | 15.18%     | \$417,119   | 13.97%  |
| Hydro Projects*         | 2,526,792  | \$85.23  | 4.31%      | \$215,365   | 7.21%   |
| Braintree Watson Unit   | 307,004    | \$54.89  | 0.52%      | \$16,853    | 0.56%   |
| Saddleback/Jericho Wind | 2,976,917  | \$86.22  | 5.08%      | \$256,681   | 8.60%   |
| One Burlington Solar    | 122,432    | \$70.00  | 0.21%      | \$8,570     | 0.29%   |
| Exelon                  | 12,210,600 | \$55.46  | 20.84%     | \$677,247   | 22.68%  |
| Stonybrook Peaking      | 0          | \$0.00   | 0.00%      | \$0         | 0.00%   |
| Monthly Total           | 58,589,656 | \$50.97  | 100.00%    | \$2,986,249 | 100.00% |

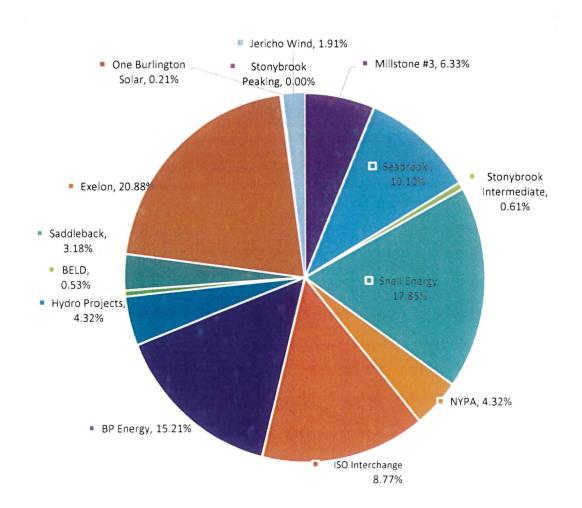
<sup>\*</sup>Pepperell, Woronoco,Indian River,Turner Falls,Collins, Pioneer,Hosiery Mills, Summit Hydro

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of December, 2016.

|                                | Table 2                      |                               |                      |  |
|--------------------------------|------------------------------|-------------------------------|----------------------|--|
| Resource                       | Amount<br>of Energy<br>(kWh) | Cost<br>of Energy<br>(\$/Mwh) | % of Total<br>Energy |  |
| ISO DA LMP *<br>Settlement     | 13,995,321                   | \$59.18                       | 23.89%               |  |
| RT Net Energy **<br>Settlement | (5,387,834)                  | \$47.00                       | -9.20%               |  |
| ISO Interchange (subtotal)     | 8,607,486                    | \$66.80                       | 14.69%               |  |

<sup>\*</sup> Independent System Operator Day-Ahead Locational Marginal Price

## **DECEMBER 2016 ENERGY BY RESOURCE**



<sup>\*\*</sup> Real Time Net Energy

## **CAPACITY**

The RMLD hit a demand of 107,565 kW, which occurred on December 19, at 6 pm. The RMLD's monthly UCAP requirement for December, 2016 was 232,355 kWs.

Table 3 shows the sources of capacity that the RMLD utilized to meet its requirements.

|                       |              | Table 3            |               |                 |
|-----------------------|--------------|--------------------|---------------|-----------------|
| Source                | Amount (kWs) | Cost (\$/kW-month) | Total Cost \$ | % of Total Cost |
| Millstone #3          | 4,950        | 33.53              | \$165,967     | 9.20%           |
| Seabrook              | 7,909        | 36.43              | \$288,110     | 15.97%          |
| Stonybrook Peaking    | 24,981       | 3.15               | \$78,780      | 4.37%           |
| Stonybrook CC         | 42,925       | 7.07               | \$303,265     | 16.81%          |
| NYPA                  | 0            | 0.00               | \$6,679       | 0.37%           |
| Hydro Quebec          | 0            | 0                  | \$583         | 0.03%           |
| Nextera               | 60,000       | 6.15               | \$369,000     | 20.46%          |
| Braintree Watson Unit | 0            | 0.00               | \$86,226      | 4.78%           |
| ISO-NE Supply Auction | 91,591       | 5.52               | \$505,230     | 28.01%          |
| Total                 | 232,356      | \$7.73             | \$1,803,840   | 100.00%         |

Table 4 shows the dollar amounts for energy and capacity per source.

|                         |             |             | Table 4     |            |               | Cost of  |
|-------------------------|-------------|-------------|-------------|------------|---------------|----------|
|                         |             |             |             | % of       | Amt of Energy | Power    |
| Resource                | Energy      | Capacity    | Total cost  | Total Cost | (kWh)         | (\$/kWh) |
| Millstone #3            | \$24,885    | \$165,967   | \$190,852   | 3.99%      | 3,702,204     | 0.0516   |
| Seabrook                | \$37,321    | \$288,110   | \$325,431   | 6.81%      | 5,905,327     | 0.0551   |
| Stonybrook Intermediate | \$60,907    | \$303,265   | \$364,173   | 7.62%      | 355,543       | 1.0243   |
| Hydro Quebec            | \$0         | \$583       | \$583       | 0.01%      | -             | 0.0000   |
| Shell Energy            | \$663,632   | \$0         | \$663,632   | 13.88%     | 10,437,000    | 0.0636   |
| NextEra                 | \$0         | \$369,000   | \$369,000   | 7.72%      | -             | 0.0000   |
| * NYPA                  | \$12,431    | \$6,679     | \$19,109    | 0.40%      | 2,526,578     | 0.0076   |
| ISO Interchange         | \$575,202   | \$505,230   | \$1,080,432 | 22.59%     | 8,607,486     | 0.1255   |
| Nema Congestion         | \$18,190    | \$0         | \$18,190    | 0.38%      |               | 0.0000   |
| BP Energy               | \$417,119   | \$0         | \$417,119   | 8.72%      | 8,893,800     | 0.0469   |
| * Hydro Projects        | \$215,365   | -\$8,324    | \$207,041   | 4.33%      | 2,526,792     | 0.0819   |
| Braintree Watson Unit   | \$16,853    | \$86,226    | \$103,078   | 2.16%      | 307,004       | 0.3358   |
| * Saddleback/Jericho    | \$256,681   | \$0         | \$256,681   | 5.37%      | 2,976,917     | 0.0862   |
| * One Burlington Solar  | \$8,570     | \$0         | \$8,570     | 0.18%      | 122,432       | 0.0700   |
| Coop Resales            | \$1,846     | \$0         | \$1,846     | 0.04%      | 17,973        | 0.1027   |
| Exelon Energy           | \$677,247   | \$0         | \$677,247   | 14.16%     | 12,210,600    | 0.0555   |
| Stonybrook Peaking      | \$0         | \$78,780    | \$78,780    | 1.65%      | -             | 0.0000   |
| Monthly Total           | \$2,986,249 | \$1,795,516 | \$4,781,765 | 100.00%    | 58,589,656    | 0.0816   |

<sup>\*</sup> Renewable Resources

## RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through December 2016, as well as their estimated market value.

Table 5
RECs Summary
Period - January 2016 - December 2016

| Indian River         0         1,912         1,912         \$35,372           Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         36,296         671,476   |                    |        | . onoa oane | any zoro boodiii | 301 2010  |
|---|--------------------|--------|-------------|------------------|-----------|
| Woronoco         0         9,599         9,599         \$177,582           Pepperell         0         6,217         6,217         \$115,015           Indian River         0         1,912         1,912         \$35,372           Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         671,476           RECs Sold         \$0         0         \$0 |                    | Banked | Projected   | Total            | Est.      |
| Pepperell         0         6,217         6,217         \$115,015           Indian River         0         1,912         1,912         \$35,372           Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         671,476           RECs Sold         \$0         0         \$0  |                    | RECs   | RECs        | RECs             | Dollars   |
| Pepperell         0         6,217         6,217         \$115,015           Indian River         0         1,912         1,912         \$35,372           Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         671,476           RECs Sold         \$0         0         \$0  |                    |        |             |                  |           |
| Indian River         0         1,912         1,912         \$35,372           Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         \$127,539           Sub total         0         36,296         671,476           RECs Sold         \$0         0         \$0  | Woronoco           | 0      | 9,599       | 9,599            | \$177,582 |
| Turners Falls         0         1,135         1,135         \$20,998           Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         36,296         671,476           RECs Sold         \$0         0         \$0   | Pepperell          | 0      | 6,217       | 6,217            | \$115,015 |
| Saddleback         0         10,539         10,539         \$194,972           Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         36,296         671,476           RECs Sold         \$0         0         \$0  | Indian River       | 0      | 1,912       | 1,912            | \$35,372  |
| Jericho         0         6,894         6,894         \$127,539           Sub total         0         36,296         36,296         671,476           RECs Sold         \$0         0         \$0   | Turners Falls      | 0      | 1,135       | 1,135            | \$20,998  |
| Sub total         0         36,296         36,296         671,476           RECs Sold         \$0         0         \$0   | Saddleback         | 0      | 10,539      | 10,539           | \$194,972 |
| <b>RECs Sold</b> \$0 0 \$0  | Jericho            | 0      | 6,894       | 6,894            | \$127,539 |
|   | Sub total          | 0      | 36,296      | 36,296           | 671,476   |
| Grand Total 0 36,296 36,296 \$671,476   | RECs Sold          | \$0    |             | 0                | \$0       |
|   | <b>Grand Total</b> | 0      | 36,296      | 36,296           | \$671,476 |

## **TRANSMISSION**

The RMLD's total transmission costs for the month of December, 2016 were \$863,599. This is a decrease of .27% from the November transmission cost of \$865,917. In December, 2015 the transmission costs were \$955,262.

Table 6

|                  | Current Month | Last Month  | Last Year   |
|------------------|---------------|-------------|-------------|
| Peak Demand (kW) | 107,565       | 95,704      | 100,307     |
| Energy (kWh)     | 58,589,656    | 52,217,414  | 56,019,481  |
| Energy (\$)      | \$2,986,249   | \$2,545,398 | \$2,757,146 |
| Capacity (\$)    | \$1,795,516   | \$1,630,243 | \$1,578,215 |
| Transmission(\$) | \$863,599     | \$865,917   | \$955,262   |
| Total            | \$5,645,364   | \$5,041,558 | \$5,290,623 |

## FINANCIAL REPORT DECEMBER, 2016 ATTACHMENT 2

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF NET ASSETS 12/31/16

|  | PREVIOUS YEAR  | CURRENT YEAR   |
|--|--|--|
| ASSETS   |  |  |
| CURRENT UNRESTRICTED CASH RESTRICTED CASH RESTRICTED INVESTMENTS RECEIVABLES, NET PREPAID EXPENSES OTHER DEFERRED DEBITS INVENTORY | 11,358,085.47<br>21,442,729.78<br>1,284,061.45<br>7,501,623.12<br>2,750,539.26<br>1,547,815.00<br>1,674,959.04 | 15,081,102.32<br>22,649,697.18<br>1,345,663.06<br>9,566,223.57<br>1,129,845.45<br>6,338,218.00<br>1,580,914.77 |
| TOTAL CURRENT ASSETS   | 47,559,813.12  | 57,691,664.35  |
| NONCURRENT<br>INVESTMENT IN ASSOCIATED CO<br>CAPITAL ASSETS, NET   | 26,993.75<br>70,337,308.32   | 26,993.75<br>72,977,009.04   |
| TOTAL NONCURRENT ASSETS  | 70,364,302.07  | 73,004,002.79  |
| TOTAL ASSETS   | 117,924,115.19   | 130,695,667.14   |
| LIABILITIES  |  |  |
| CURRENT ACCOUNTS PAYABLE CUSTOMER DEPOSITS CUSTOMER ADVANCES FOR CONSTRUCTION ACCRUED LIABILITIES                                  | 7,304,330.51<br>903,279.18<br>938,349.15<br>3,174,618.47   | 7,209,463.04<br>1,024,765.67<br>1,028,449.93<br>10,153,695.95  |
| TOTAL CURRENT LIABILITIES  | 12,320,577.31  | 19,416,374.59  |
| NONCURRENT<br>ACCRUED EMPLOYEE COMPENSATED ABSENCES  | 3,070,487.93   | 3,257,809.00   |
| TOTAL NONCURRENT LIABILITIES   | 3,070,487.93   | 3,257,809.00   |
| TOTAL LIABILITIES  | 15,391,065.24  | 22,674,183.59  |
| NET ASSETS   |  |  |
| INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT<br>RESTRICTED FOR DEPRECIATION FUND<br>UNRESTRICTED                                | 70,337,308.32<br>6,426,278.58<br>25,769,463.05   | 72,977,009.04<br>5,298,216.37<br>29,746,258.14   |
| TOTAL NET ASSETS   | 102,533,049.95   | 108,021,483.55   |
| TOTAL LIABILITIES AND NET ASSETS   | 117,924,115.19   | 130,695,667.14   |

## TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT NONCURRENT ASSET SCHEDULE 12/31/16

## SCHEDULE C

| SCHEDULE OF INVESTMENTS IN ASSOCIATED COMPANIES   | PREVIOUS YEAR  | CURRENT YEAR  |
|---|--|---|
| NEW ENGLAND HYDRO ELECTRIC<br>NEW ENGLAND HYDRO TRANSMISSION  | <b>2,975.74</b><br>24,018.01                                   | <b>2,9</b> 75.74<br><b>24,018.01</b>  |
| TOTAL INVESTMENTS IN ASSOCIATED COMPANIES   | 26,993.75  | 26,993.75   |
|   |  |   |
| SCHEDULE OF CAPITAL ASSETS  |  |   |
| LAND STRUCTURES AND IMPROVEMENTS EQUIPMENT AND FURNISHINGS INFRASTRUCTURE TOTAL CAPITAL ASSETS, NET | 1,265,842.23<br>6,481,420.15<br>11,899,631.47<br>50,690,414.47 | 1,265,842.23<br>8,148,752.49<br>11,891,047.99<br>51,671,366.33<br>72,977,009.04 |
| TOTAL NONCURRENT ASSETS   | 70,364,302.07  | 73,004,002.79   |

## TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS 12/31/16

| FUEL REVENUE 2,826,899,78 2,573,066.92 17,625,976.84 17,129,536.64 2.82% PURCHASED POWER CAPACITY 2,200,292.86 2,485,637.87 15,422,435.34 17,830,948.63 15,82% FORFEITED DISCOUNTS 86,146.38 66,416.22 406,781.88 456,872.78 12,53% PORFEITED DISCOUNTS 86,146.38 66,416.22 406,781.88 456,872.78 12,53% PORFEITED DISCOUNTS (91,032.01) (91,032.01) (91,022.42) (520,802.01) (634,547.18) 2,64% NYPA CREDIT (91,032.01) (91,032.01) (91,022.42) (520,802.01) (634,547.18) 2,64% PVPA CREDIT (91,032.01) (91,032.01) (91,022.42) (520,802.01) (634,547.18) 2,64% PVPA CREDIT (91,032.01) ( |   | MONTH<br>LAST YEAR   | MONTH<br>CURRENT YEAR  | LAST YEAR<br>TO DATE  | CURRENT YEAR<br>TO DATE   | YTD %<br>CHANGE   |
|--|---|--|--|---|---|---|
| FUEL REVENUE 2.826,899.78 2,573,066.92 17,625,976.84 17,129,536.64 2.82% PURCHASED POWER CAPACITY 2,200,292.88 2,453,637.87 15,422,436.34 17,830,948.63 16,82% FORFEITED DISCOUNTS 86,146.38 66,416.22 406,781.88 466,872.78 12,59% ENERGY CONSERVATION REVENUE 60,272.82 51,161.08 361,624.08 360,942.52 -0.13% NYPA GREDIT (91,032.01) (91,032.01) (91,202.42) (520,802.01) (534,547.18) 2.64% TOTAL OPERATING REVENUES 6,832,106.72 7,023,255.22 45,519,957.16 48,766,556.61 7.11% OPERATING EXPENSES:  PURCHASED POWER CAPACITY 1,773,743.78 1,802,095.92 9,392,215.65 10,272,863.98 9.38% PURCHASED POWER TRANSMISSION 955,222.13 863,599.00 6,812,931.23 7,091,209.59 4.09% PURCHASED POWER PURCHASED PO | OPERATING REVENUES:   |  |  |   |   |   |
| OPERATING EXPENSES:  PURCHASED POWER CAPACITY 1,773,743,78 1,802,095.92 9,392,215.65 10,272,863.93 9.38% PURCHASED POWER TRANSMISSION 956,262.13 863,599.00 6,812,532.13 70,912,295.59 4.99% PURCHASED POWER TRANSMISSION 956,262.13 863,599.00 6,812,532.13 71,715,745.04 3.81% OPERATING 1,090,311.58 1,094,909.95 5,275,563.09 5,583,693.84 5.84% MAINTENANCE 287,885.24 289,477.82 1,496,627.46 1,806,309.44 20.69% OPERATING NOTING 328,732.65 341,775.67 1,972,395.90 2,050,654.02 3.97% VOLUNTARY PAYMENTS TO TOWNS 106,973.00 113,372.00 696,973.00 703,372.00 0.92% TOTAL OPERATING EXPENSES 7,300,054.84 7,491,479.30 43,601,969.90 44,683,927.91 2.72% OPERATING INCOME (467,947.92) (468,224.08) 2,017,987.26 4,072,628.70 101.82% OPERATING PROPERTY OF TOTAL OPERATING EXPENSES (458.39) 633.93 38,444.74 70,421.93 83.18% RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,192,225.60) (1,192,334.00) 0.60% INTEREST INCOME 14,193.96 15,485.65 69,114.38 73,472.79 6.31% INTEREST INCOME (189.44) (1,960.60) (1,087.01) (2,925.91) 169.17% OTHER (MDSE AND AMORT) 3,039.25 (1,990.00) 148,729.85 185,723.80 24.88% OTHER (MDSE AND AMORT) 3,039.25 (1,990.00) 148,729.85 185,723.80 24.88% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (365,632.39) -6.92% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654.37) (930,020.64) (3665,632.39) -6.92% OTHER (MDSE AND AMORT) (181,006.32) (186,654 | FUEL REVENUE PURCHASED POWER CAPACITY FORFEITED DISCOUNTS ENERGY CONSERVATION REVENUE | 2,826,699.78<br>2,200,292.86<br>86,146.38<br>50,272.62                 | 2,573,056.92<br>2,453,637.87<br>66,416.22<br>51,151.08                 | 17,625,976.64<br>15,422,436.34<br>405,781.68<br>351,624.05                    | 17,129,536.64<br>17,830,948.53<br>456,872.78<br>350,942.52                    | 10.53%<br>-2.82%<br>15.62%<br>12.59%<br>-0.19%<br>2.64%       |
| PURCHASED POWER CAPACITY 1,773,743.78 1,802,096.92 9,392,216.86 10,272,863.98 9,39% PURCHASED POWER TRANSMISSION 955,262.13 863,599.00 6,812,931.23 7,091,289.59 4,09% PURCHASED POWER FUEL 2,767,146.26 2,986,246.94 17,855,289.73 17,175,745.04 -3.81% OPERATING 1,090,311.58 1,094,909.95 5,276,563.93 5,583,693.84 5,84% MAINTENANCE 287,885.24 289,477.82 1,496,627.46 1,806,309.44 20.69% OPERATING NOTION 328,732.65 341,775.67 1,972,395.90 2,056,654.02 3,97% VOLUNTARY PAYMENTS TO TOWNS 106,973.00 113,372.00 696,973.00 703,372.00 0.92% TOTAL OPERATING EXPENSES 7,300,054.64 7,491,479.30 43,501,969.90 44,683,927.91 2.72% OPERATING INCOME (467,947.92) (468,224.08) 2,017,987.26 4,072,628.70 101.82% INTEREST INCOME (467,947.92) (468,224.08) 2,017,987.26 4,072,628.70 101.82% INTEREST INCOME 14,139.36 15,485.65 69,114.38 73,472.79 6,31% INTEREST INCOME (183.44) (1,960.60) (1,087.01) (2,925.91) 169,177% OTHER (MOSE AND AMORT) 3,039.25 (1,991.00) 148,729.35 (185,722.80) (2,925.91) 169,177% OTHER (MOSE AND AMORT) 3,039.25 (1,991.00) 148,729.35 (185,722.80) 24,809.31 194.77% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77%  | TOTAL OPERATING REVENUES  | 6,832,106.72   | 7,023,255.22   | 45,519,957.16   | 48,756, <b>556</b> .61  | 7.11%   |
| PURCHASED POWER TRANSMISSION 955,282.13 863,599.00 6,812,931.23 7,091,289.59 4,09% PURCHASED POWER FUEL 2,767,146.26 2,986,248.94 17,855,289.73 17,175,745.04 -3.81% OPERATING 1,090,311.58 1,094,909.95 5,275,536.93 5,883,693.84 5,84% MAINTENANCE 287,885.24 289,477.82 1,496,627.46 1,806,309.44 20.69% OPERATION 328,732.65 341,775.67 1,972,395.90 2,050,654.02 3,97% VOLUNTARY PAYMENTS TO TOWNS 106,973.00 113,372.00 696,973.00 703,372.00 .92% TOTAL OPERATING EXPENSES 7,300,054.64 7,491,479.30 43,501,969.90 44,683,927.91 2.72% OPERATING INCOME (467,947.92) (468,224.08) 2,017,987.26 4,072,628.70 101.82% RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,185,222.50) (1,192,334.00) 0.60% INTEREST INCOME 14,139.36 15,485.65 69,114.38 73,472.79 6,31% INTEREST EXPENSE (189.44) (1,994.06.06) (1,087.01) (2,025.91) 699.17% OTHER (MDSE AND AMORT) 3,039.25 (1,991.00) 148,729.85 185,732.80 24.88% CHANGE IN NET ASSETS (648,954.24) (664,878.45) 1,087,966.72 3,206,996.31 194.77% CHANGE IN NET ASSETS (648,954.24) (664,878.45) 1,087,966.72 3,206,996.31 194.77% CHANGE IN NET ASSETS (648,954.24) (664,878.45) 1,087,966.72 3,206,996.31 194.77%  | OPERATING EXPENSES:   |  |  |   |   |   |
| OPERATING INCOME (467,947.92) (468,224.08) 2,017,987.26 4,072,628.70 101.82% NONOPERATING REVENUES (EXPENSES)  CONTRIBUTIONS IN AID OF CONST (458.39) 533.93 38,444.74 70,421.93 83.18% RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,185,222.60) (1,192,334.00) 0.60% INTEREST INCOME 14,139.36 15,485.65 69,114.38 73,472.79 6.31% INTEREST EXPENSE (189.44) (1,960.60) (1,087.01) (2,925.91) 169.17% OTHER (MDSE AND AMORT) 3,039.25 (1,991.00) 148,729.85 185,732.80 24.88% TOTAL NONOPERATING REV (EXP) (181,006.32) (186,654.37) (930,020.54) (865,632.39) -6.92% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77%  | PURCHASED POWER TRANSMISSION PURCHASED POWER FUEL OPERATING MAINTENANCE DEPRECIATION  | 955,262.13<br>2,757,146.26<br>1,090,311.58<br>287,885.24<br>328,732.65 | 863,599.00<br>2,986,248.94<br>1,094,909.95<br>289,477.82<br>341,775.67 | 6,812,931.23<br>17,855,289.73<br>5,275,536.93<br>1,496,627.46<br>1,972,395.90 | 7,091,289.59<br>17,175,745.04<br>5,583,693.84<br>1,806,309.44<br>2,050,654.02 | 9.38%<br>4.09%<br>-3.81%<br>5.84%<br>20.69%<br>3.97%<br>0.92% |
| NONOPERATING REVENUES (EXPENSES)  CONTRIBUTIONS IN AID OF CONST RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,185,222.50) (1,192,334.00) 0.60% (1,100.00) (1,100. | TOTAL OPERATING EXPENSES  | 7,300,054.64   | 7,491,479.30   | 43,501,969.90   | 44,683,927.91   | 2.72%   |
| NONOPERATING REVENUES (EXPENSES)  CONTRIBUTIONS IN AID OF CONST (458.39) 633.93 38,444.74 70,421.93 83.18% RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,185,222.50) (1,192,334.00) 0.60% INTEREST INCOME 14,139.36 15,485.65 69,114.38 73,472.79 6.31% INTEREST EXPENSE (189.44) (1,960.60) (1,087.01) (2,925.91) 169.17% OTHER (MDSE AND AMORT) 3,039.25 (1,991.00) 148,729.85 185,732.80 24.88% TOTAL NONOPERATING REV (EXP) (181,006.32) (186,654.37) (930,020.54) (865,632.39) -6.92% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77%   | OPERATING INCOME  | (467,947.92)   | (468,224.08)   | 2,017,987.26  |   | 101.82%   |
| RETURN ON INVESTMENT TO READING (197,537.10) (198,722.35) (1,185,222.50) (1,192,334.00) 0.60% INTEREST INCOME 14,139.36 15,485.65 69,114.38 73,472.79 6.31% INTEREST EXPENSE (189.44) (1,960.60) (1,087.01) (2,925.91) 169.17% OTHER (MDSE AND AMORT) 3,039.25 (1,991.00) 148,729.85 185,732.80 24.88% TOTAL NONOPERATING REV (EXP) (181,006.32) (186,654.37) (930,020.54) (865,632.39) -6.92% CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77%  | NONOPERATING REVENUES (EXPENSES)  |  |  |   |   | , , ,   |
| CHANGE IN NET ASSETS (648,954.24) (654,878.45) 1,087,966.72 3,206,996.31 194.77%   | RETURN ON INVESTMENT TO READING INTEREST INCOME INTEREST EXPENSE                      | (197,537.10)<br>14,139.36<br>(189.44)                                  | (198,722.35)<br>15,485.65<br>(1,960.60)                                | (1,185,222.50)<br>69,114.38<br>(1,087.01)                                     | (1,192,334.00)<br>73,472.79<br>(2,925.91)                                     | 83.18%<br>0.60%<br>6.31%<br>169.17%<br>24.88%                 |
|  | TOTAL NONOPERATING REV (EXP)  | (181,006.32)   | (186,654.37)   | (930,020.54)  | (865,632.39)  | -6.92%  |
| NET ASSETS AT BEGINNING OF YEAR 101,445,083.23 104,814,487.24 3.32%  | CHANGE IN NET ASSETS  | (648,954.24)   | (654,878.45)   | 1,087,966.72  | 3,206,996.31  | 194.77%   |
|  | NET ASSETS AT BEGINNING OF YEAR   |  |  | 101,445,083.23  | 104,814,487.24  | 3.32%   |
| NET ASSETS AT END OF DECEMBER 102,533,049.95 108,021,483.55 5.35%  | NET ASSETS AT END OF DECEMBER   |  | _  | 102,533,049.95  | 108,021,483.55  | 5.35%   |

## TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS 12/31/16

| OPERATING REVENUES:  | 2017<br>BUDGET   | ACTUAL<br>YEAR TO DATE   | REMAINING<br>BUDGET<br>BALANCE   | %<br>CHANGE  |
|--|--|--|--|--|
| BASE REVENUE FUEL REVENUE PURCHASED POWER CAPACITY FORFEITED DISCOUNTS ENERGY CONSERVATION REVENUE NYPA CREDIT   | 25,500,000.00<br>34,074,492.00<br>34,322,278.00<br>688,500.00<br>673,000.00<br>(900,000.00)                      | 13,522,803.32<br>17,129,536.64<br>17,830,948.53<br>456,872.78<br>350,942.52<br>(534,547.18)                  | 11,977,196.68<br>16,944,955.36<br>16,491,329.47<br>231,627.22<br>322,057.48<br>(365,452.82)                  | 46.97%<br>49.73%<br>48.05%<br>33.64%<br>47.85%<br>40.61%           |
| TOTAL OPERATING REVENUES   | 94,358,270.00  | 48,756,556.61  | 45,601,713.39  | 48.33%   |
| OPERATING EXPENSES:  |  |  |  |  |
| PURCHASED POWER - CAPACITY PURCHASED POWER - TRANSMISSION PURCHASED POWER FUEL OPERATING MAINTENANCE DEPRECIATION VOLUNTARY PAYMENTS TO TOWNS TOTAL OPERATING EXPENSES | 20,943,651.00<br>13,378,627.00<br>33,174,492.00<br>12,107,583.00<br>3,717,632.00<br>4,134,000.00<br>1,445,420.00 | 10,272,863.98<br>7,091,289.59<br>17,175,745.04<br>5,583,693.84<br>1,806,309.44<br>2,050,654.02<br>703,372.00 | 10,670,787.02<br>6,287,337.41<br>15,998,746.96<br>6,523,889.16<br>1,911,322.56<br>2,083,345.98<br>742,048.00 | 50.95%<br>47.00%<br>48.23%<br>53.88%<br>51.41%<br>50.40%<br>51.34% |
| OPERATING INCOME   | 5,456,865.00   | 4,072,628.70   | 1,384,236.30   | 25.37%   |
| NONOPERATING REVENUES (EXPENSES)   |  |  |  |  |
| CONTRIBUTIONS IN AID OF CONST<br>RETURN ON INVESTMENT TO READING<br>INTEREST INCOME<br>INTEREST EXPENSE<br>OTHER (MDSE AND AMORT)                                      | 500,000.00<br>(2,534,668.00)<br>125,000.00<br>(2,100.00)<br>390,000.00   | 70,421.93<br>(1,192,334.00)<br>73,472.79<br>(2,925.91)<br>185,732.80   | 429,578.07<br>(1,342,334.00)<br>51,527.21<br>825.91<br>204,267.20  | 85.92%<br>52.96%<br>41.22%<br>-39.33%<br>52.38%                    |
| TOTAL NONOPERATING REV (EXP)   | (1,521,768.00)   | (865,632.39)   | (656,135.61)   | 43.12%   |
| CHANGE IN NET ASSETS   | 3,935,097.00   | 3,206,996.31   | 728,100.69   | 18.50%   |

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT RECONCILIATION OF CAPITAL FUNDS 12/31/16

#### SOURCE OF CAPITAL FUNDS:

| DEPRECIATION FUND BALANCE 7/1/16              | 4,494,952.86 |
|---|--------------|
| CONSTRUCTION FUND BALANCE 7/1/16              | 1,500,000.00 |
| INTEREST ON DEPRECIATION FUND FY 17           | 15,360.04    |
| DEPRECIATION TRANSFER FY 17                   | 2,050,654.02 |
| LED GRANT PROGRAM                             | 62,500.00    |
| TOTAL SOURCE OF CAPITAL FUNDS                 | 8,123,466.92 |
| USE OF CAPITAL FUNDS:                         |              |
| LESS PAID ADDITIONS TO PLANT THRU DECEMBER    |              |
| TOTAL USE OF CAPITAL FUNDS                    | 2,825,250.55 |
| GENERAL LEDGER CAPITAL FUNDS BALANCE 12/31/16 | 5,298,216.37 |

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SALES OF KILOWATT HOURS 12/31/16

| SALES OF ELECTRICITY:  | MONTH<br>LAST YEAR                        | MONTH<br>CURRENT YEAR                     | LAST YEAR<br>TO DATE                         | CURRENT YEAR<br>TO DATE                              | YTD %<br>CHANGE           |
|--|---|---|--|--|---------------------------|
| RESIDENTIAL SALES<br>COMM. AND INDUSTRIAL SALES<br>PRIVATE STREET LIGHTING | 18,891,467<br><b>29,987,560</b><br>79,996 | 18,657,110<br><b>31,062,309</b><br>99,677 | 134,467,011<br><b>209,094,489</b><br>477,356 | 136,447,232<br><b>206,674,777</b><br><b>5</b> 52,368 | 1.47%<br>-1.16%<br>15.71% |
| TOTAL PRIVATE CONSUMERS  | 48,959,023                                | 49,819,096                                | 344,038,856                                  | 343,674,377  | -0.11%                    |
| MUNICIPAL SALES:   |   |   |  | -  |                           |
| STREET LIGHTING<br>MUNICIPAL BUILDINGS                                     | 222,241<br>733,200                        | 185,163<br>768,127                        | 1,381,864<br>4,604,141                       | 1,229,430<br>4,515,047                               | -11.03%<br>-1.94%         |
| TOTAL MUNICIPAL CONSUMERS  | 955,441                                   | 953,290                                   | 5,986,005                                    | 5,744,477  | -4.03%                    |
| SALES FOR RESALE   | 203,566                                   | 179,911                                   | 1,726,301                                    | 1,598,470  | -7.40%                    |
| SCHOOL   | 1,233,814                                 | 1,197,145                                 | 7,085,798                                    | 6,709,791  | -5.31%                    |
| TOTAL KILOWATT HOURS SOLD  | 51,351,844                                | 52,149,442                                | 358,836,960                                  | 357,727,115  | -0.31%                    |

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF CASH AND INVESTMENTS 12/31/16

SCHEDULE A

|  | PREVIOUS YEAR  | CURRENT YEAR   |
|--|--|--|
| UNRESTRICTED CASH  |  |  |
| CASH - OPERATING FUND<br>CASH - PETTY CASH   | 11,355,085.47<br>3,000.00  | 15,078,102.32<br>3,000.00  |
| TOTAL UNRESTRICTED CASH  | 11,358,085.47  | 15,081,102.32  |
|  |  |  |
| RESTRICTED CASH  |  |  |
| CASH - DEPRECIATION FUND CASH - TOWN PAYMENT CASH - DEFERRED FUEL RESERVE CASH - RATE STABILIZATION FUND CASH - UNCOLLECTIBLE ACCTS RESERVE CASH - SICK LEAVE BENEFITS CASH - HAZARD WASTE RESERVE CASH - CUSTOMER DEPOSITS CASH - ENERGY CONSERVATION TOTAL RESTRICTED CASH | 6,426,278.58<br>0.00<br>4,430,170.05<br>6,796,669.46<br>200,000.00<br>1,805,599.83<br>150,000.00<br>903,279.18<br>730,732.68 | 5,298,216.37<br>1,900,333.98<br>4,536,119.09<br>6,848,427.56<br>200,000.00<br>1,940,334.17<br>150,000.00<br>1,024,765.67<br>751,500.34 |
| INVESTMENTS  |  |  |
| SICK LEAVE BUYBACK   | 1,284,061.45   | 1,345,663.06   |
|  |  |  |
| TOTAL CASH BALANCE   | 34,084,876.70  | 39,076,462.56  |

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF OPERATING REVENUE 12/31/16

SCHEDULE D

| SALES OF ELECTRICITY:   | MONTH<br>LAST YEAR                        | MONTH<br>CURRENT YEAR                     | LAST YEAR<br>TO DATE                        | CURRENT YEAR<br>TO DATE                     | YTD %<br>CHANGE          |
|---|---|---|---|---|--------------------------|
| RESIDENTIAL SALES<br>COMM AND INDUSTRIAL SALES<br>PRIVATE STREET LIGHTING | 1,981,917.70<br>2,409,026.19<br>10,569.04 | 1,957,712.34<br>2,370,405.21<br>11,784.26 | 13,246,809.25<br>15,380,916.01<br>60,437.65 | 13,943,003.82<br>15,401,032.29<br>67,825.87 | 5.26%<br>0.13%<br>12.22% |
| TOTAL PRIVATE CONSUMERS   | 4,401,512.93                              | 4,339,901.81                              | 28,688,162.91                               | 29,411,861.98                               | 2.52%                    |
| MUNICIPAL SALES:  |   |   |   |   |                          |
| STREET LIGHTING<br>MUNICIPAL BUILDINGS                                    | (4,604.98)<br>65,864.54                   | 19,829.34<br>67,951.40                    | 71,970.65<br>380,857.53                     | 155,340.74<br>386,097.04                    | 115.84%<br>1.38%         |
| TOTAL MUNICIPAL CONSUMERS   | 61,259.56                                 | 87,780.74                                 | 452,828.18                                  | 541,437.78                                  | 19.57%                   |
| SALES FOR RESALE  | 19,010.76                                 | 16,618.91                                 | 149,317.64                                  |   | -3.43%                   |
| SCHOOL  | 104,643.62                                | 98,951.01                                 | 570,608.37                                  | 554,842.19                                  | -2.76%                   |
| SUB-TOTAL   | 4,586,426.87                              | 4,543,252.47                              | 29,860,917.10                               | 30,652,339.96                               | 2.65%                    |
| FORFEITED DISCOUNTS   | 86,146.38                                 | 66,416.22                                 | 405,781.68                                  | 456,872.78                                  | 12.59%                   |
| PURCHASED POWER CAPACITY  | 2,200,292.86                              | 2,453,637.87                              | 15,422,436.34                               | 17,830,948.53                               | 15.62%                   |
| ENERGY CONSERVATION - RESIDENTIAL ENERGY CONSERVATION - COMMERCIAL        | 18,899.14<br>31,373.48                    | 18,665.67<br>32,485.41                    | 134,5 <b>2</b> 9.71<br>217,094.34           | 136,524.24<br>214,418.28                    | 1.48%<br>-1.23%          |
| NYPA CREDIT   | (91,032.01)                               | (91,202.42)                               | (520,802.01)                                | (534,547.18)                                | 2.64%                    |
| TOTAL REVENUE   | 6,832,106.72                              | 7,023,255.22                              | 45,519,957.16                               | 48,756,556.61                               | 7.11%                    |

## TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF OPERATING EXPENSES 12/31/16

SCHEDULE E

| OPERATION EXPENSES:                     | MONTH<br>LAST YEAR     | MONTH<br>CURRENT YEAR   | LAST YEAR<br>TO DATE     | CURRENT YEAR<br>TO DATE  | YTD %<br>CHANGE   |
|---|------------------------|-------------------------|--------------------------|--------------------------|-------------------|
| PURCHASED POWER CAPACITY                | 1,773,743.78           | 1,802,095.92            | 9,392,215.65             | 10,272,863.98            | 9.38%             |
| PURCHASED POWER TRANSMISSION            | 955,262.13             | 863,599.00              | 6,812,931.23             | 7,091,289.59             | 4.09%             |
| TOTAL PURCHASED POWER                   | 2,729,005.91           | 2,665,694.92            | 16,205,146.88            | 17,364,153.57            | 7.15%             |
| OPERATION SUP AND ENGINEERING EXP       | 50,646.37              | 26,893.57               | 272,264.77               | 228,617.91               | -16.03%           |
| STATION SUP LABOR AND MISC              | 14,514.87              | 8,343.42                | 75,545.30                | 68,665.36                | -9.11%            |
| LINE MISC LABOR AND EXPENSE             | 75,056.73              | 56,029.79               | 381,563.83               | 310,706.06               | -18.57%           |
| STATION LABOR AND EXPENSE               | 38,871.07              | 40,903.29               | 201,987.73               | 250,883.35               | 24.21%            |
| STREET LIGHTING EXPENSE                 | 10,887.62              | 9,256.44                | 57,133.08                | 62,368.60                | 9.16%             |
| METER EXPENSE                           | 20,955.83              | 14,507.25               | 111,130.00               | 101,905.99               | -8.30%            |
| MISC DISTRIBUTION EXPENSE               | 39,758.80              | 49,957.46               | 219,477.30               | 213,764.07               | -2.60%            |
| METER READING LABOR & EXPENSE           | 1,983.88               | 1,857.31                | 14,519.74                | 13,035.48                | -10.22%           |
| ACCT & COLL LABOR & EXPENSE             | 173,003.27             | 152,509.46              | 841,209.15               | 861,985.96               | 2.47%             |
| UNCOLLECTIBLE ACCOUNTS                  | 10,000.00              | 12,500.00               | 60,000.00                | 75,000.00                | 25.00%            |
| ENERGY AUDIT EXPENSE                    | 42,857.32              | 33,480.54               | 275,006.58               | 242,801.94               | -11.71%           |
| ADMIN & GEN SALARIES                    | 87,965.26              | 71,663.53               | 444,925.26               | 477,382.86               | 7.30%             |
| OFFICE SUPPLIES & EXPENSE               | 46,308.92<br>21,578.06 | 44,708.66               | 157,940.86<br>181,123,00 | 151,102.83<br>337,474.60 | -4.33%            |
| OUTSIDE SERVICES                        | 31,242.46              | 146,099.41<br>27,650.70 | 187,454.41               | 166,286.30               | 86.32%<br>-11.29% |
| PROPERTY INSURANCE INJURIES AND DAMAGES | 5,867.83               | 3,562.53                | 24,546.32                | 26,762.30                | 9.03%             |
| EMPLOYEES PENSIONS & BENEFITS           | 337,363.61             | 273,781.81              | 1,399,760.93             | 1,520,499.13             | 8.63%             |
| MISC GENERAL EXPENSE                    | 17,069.02              | 15,951.02               | 78,700.61                | 73,419.16                | -6.71%            |
| RENT EXPENSE                            | 14,157,49              | 15,030.63               | 85,750,73                | 84,171.52                | -1.84%            |
| ENERGY CONSERVATION                     | 50,223.17              | 90,223.13               | 205,497.33               | 316,860.42               | 54.19%            |
| TOTAL OPERATION EXPENSES                | 1,090,311.58           | 1,094,909.95            | 5,275,536.93             | 5,583,693.84             | 5.84%             |
| MAINTENANCE EXPENSES:                   |                        |                         |                          |                          |                   |
| WATERANGE EXTENSES.                     |                        |                         |                          | •                        |                   |
| MAINT OF TRANSMISSION PLANT             | 227.10                 | 8,347.10                | 1,362.50                 | 9,482.50                 | 595.96%           |
| MAINT OF STRUCT AND EQUIPMT             | 30,838.27              | 23,661.36               | 176,250.76               | 237,090.12               | 34.52%            |
| MAINT OF LINES - OH                     | 170,208.97             | 134,041.87              | 843,652.77               | 899,160.99               | 6.58%             |
| MAINT OF LINES - UG                     | 14,519.35              | 23,953.09               | 64,195.11                | 153,725.35               | 139.47%           |
| MAINT OF LINE TRANSFORMERS              | 0.00                   | 464.50                  | 79,916.66                | 18,387.89                | -76.99%           |
| MAINT OF ST LT & SIG SYSTEM             | (20.72)                | (394.34)                | (324.85)                 | 70,100.11                | -21679.22%        |
| MAINT OF GARAGE AND STOCKROOM           | 57,544.79              | 35,081.75               | 268,911.17               | 249,426.62               | -7.25%            |
| MAINT OF METERS                         | 0.00                   | 0.00                    | 0.00                     | 0.00                     | 0.00%             |
| MAINT OF GEN PLANT                      | 14,567.48              | 64,322.49               | 62,663.34                | 168,935.86               | 169.59%           |
| TOTAL MAINTENANCE EXPENSES              | 287,885.24             | 289,477.82              | 1,496,627.46             | 1,806,309.44             | 20.69%            |
| DEPRECIATION EXPENSE                    | 328,732.65             | 341,775.67              | 1,972,395.90             | 2,050,654.02             | 3.97%             |
| PURCHASED POWER FUEL EXPENSE            | 2,757,146.26           | 2,986,248.94            | 17,855,289.73            | 17,175,745.04            | -3.81%            |
| VOLUNTARY PAYMENTS TO TOWNS             | 106,973.00             | 113,372.00              | 696,973.00               | 703,372.00               | 0.92%             |
| TOTAL OPERATING EXPENSES                | 7,300,054.64           | 7,491,479.30            | 43,501,969.90            | 44,683,927.91            | 2.72%             |

## TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUDGETED OPERATING EXPENSE VARIANCE REPORT 12/31/16

|   | 2017                       | ACTUAL                   | REMAINING<br>BUDGET       | REMAINING          |
|---|----------------------------|--------------------------|---------------------------|--------------------|
| OPERATION EXPENSES:                                       | ANNUAL BUDGET              | YEAR TO DATE             | BALANCE                   | BUDGET %           |
| PURCHASED POWER CAPACITY                                  | 20,943,651.00              | 10,272,863.98            | 10,670,787.02             | 50.95%             |
| PURCHASED POWER TRANSMISSION                              | 13,378,627.00              | 7,091,289.59             | 6,287,337.41              | 47.00%             |
| TOTAL PURCHASED POWER                                     | 34,322,278.00              | 17,364,153.57            | 16,958,124.43             | 49.41%             |
| OPERATION SUP AND ENGINEERING EXP                         | 655,195.00                 | 228,617.91               | 426,577.09                | 65,11%             |
| STATION SUP LABOR AND MISC                                | 91,269.00                  | 68,665.36                | 22,603.64                 | 24.77%             |
| LINE MISC LABOR AND EXPENSE                               | 901,213.00                 | 310,706.06               | 590,506.94                | 65.52%             |
| STATION LABOR AND EXPENSE                                 | 472,879.00<br>102,402.00   | 250,883.35<br>62,368.60  | 221,995.65<br>40,033,40   | 46.95%<br>39.09%   |
| STREET LIGHTING EXPENSE METER EXPENSE                     | 205,717.00                 | 101,905.99               | 103,811.01                | 50.46%             |
| MISC DISTRIBUTION EXPENSE                                 | 464,418.00                 | 213,764.07               | 250,653.93                | 5 <b>3</b> .97%    |
| METER READING LABOR & EXPENSE                             | 32,640.00                  | 13,035.48                | 19,604.52                 | 60.06%             |
| ACCT & COLL LABOR & EXPENSE                               | 1,792,724.00               | 861,985.96               | 930,738.04                | 51.92%             |
| UNCOLLECTIBLE ACCOUNTS                                    | 150,000.00                 | 75,000.00                | 75,000.00                 | 50.00%             |
| ENERGY AUDIT EXPENSE                                      | 630,232.00                 | 242,801.94               | 387,430.06                | 61.47%             |
| ADMIN & GEN SALARIES                                      | 1,134,674.00<br>349,000.00 | 477,382.86<br>151,102.83 | 657,291.14<br>197,897.17  | 57.93%<br>56.70%   |
| OFFICE SUPPLIES & EXPENSE OUTSIDE SERVICES                | 418,100.00                 | 337,474.60               | 80,625.40                 | 19.28%             |
| PROPERTY INSURANCE  | 424,500.00                 | 166,286.30               | 258,213.70                | 60,83%             |
| INJURIES AND DAMAGES                                      | 57,215.00                  | 26,762.30                | 30,452.70                 | 53.23%             |
| EMPLOYEES PENSIONS & BENEFITS                             | 2,922,673.00               | 1,520,499.13             | 1,402,173.87              | 47.98%             |
| MISC GENERAL EXPENSE                                      | 219,156.00                 | 73,419.16                | 145,736.84                | 6 <b>6</b> .50%    |
| RENT EXPENSE  | 212,000.00                 | 84,171.52                | 127,828.48                | 60.30%             |
| ENERGY CONSERVATION                                       | 871,574.00                 | 316,860.42               | 554,713.58                | 63.65%             |
| TOTAL OPERATION EXPENSES                                  | 12,107,581.00              | 5,583,693.84             | 6,523,887.16              | 53.88%             |
| MAINTENANCE EXPENSES:                                     |                            | ÷                        |                           |                    |
| MAINT OF TRANSMISSION PLANT                               | 3,000.00                   | 9,482.50                 | (6,482.50)                | -216.08%           |
| MAINT OF STRUCT AND EQUIPMT                               | 419,599.00                 | 237,090.12               | 182,508.88                | 43.50%             |
| MAINT OF LINES - OH                                       | 2,044,499.00               | 899,160.99               | 1,145,338.01              | 56.02%             |
| MAINT OF LINES - UG                                       | 125,066.00                 | 153,725.35               | (28,659.35)               | -22.92%            |
| MAINT OF LINE TRANSFORMERS                                | 300,000.00<br>10,287.00    | 18,387.89<br>70,100.11   | 281,612.11<br>(59,813.11) | 93.87%<br>-581.44% |
| MAINT OF ST LT & SIG SYSTEM MAINT OF GARAGE AND STOCKROOM | 590,523.00                 | 249,426.62               | 341,096.38                | -561.44%<br>57.76% |
| MAINT OF METERS   | 44,658.00                  | 0.00                     | 44,658.00                 | 100.00%            |
| MAINT OF GEN PLANT  | 180,000.00                 | 168,935.86               | 11,064.14                 | 6.15%              |
| TOTAL MAINTENANCE EXPENSES                                | 3,717,632.00               | 1,806,309.44             | 1,911,322.56              | 51.41%             |
|   |                            |                          |                           | v.                 |
| DEPRECIATION EXPENSE                                      | 4,134,000.00               | 2,050,654.02             | 2,083,345.98              | 50.40%             |
| ,   |                            | •                        | . 9<br>41                 |                    |
| PURCHASED POWER FUEL EXPENSE                              | 33,174,492.00              | 17,175,745.04            | 15,998,746.96             | 48.23%             |
|   |                            | ĸ                        | :                         |                    |
| VOLUNTARY PAYMENTS TO TOWNS                               | 1,445,420.00               | 703,372.00               | 742,048.00                | 51.34%             |
|   |                            |                          |                           | -                  |
| TOTAL OPERATING EXPENSES                                  | 88,901,403.00              | 44,683,927.91            | 44,217,475.09             | 49.74%             |

## ENGINEERING & OPERATIONS REPORT DECEMBER, 2016 ATTACHMENT 3

#### READING MUNICIPAL LIGHT DEPARTMENT

#### FOR PERIOD ENDING DECEMBER, 2016

| PROJ       | DESCRIPTION   | TOWN       | ACTUAL<br>COST<br>DECEMBER | YTD<br>ADDITIONS | ANNUAL<br>BUDGET           | REMAINING<br>BALANCE     |
|------------|---|------------|----------------------------|------------------|----------------------------|--------------------------|
|            | CONSTRUCTION:   |            |                            |                  |                            |                          |
| 106<br>107 | Underground Facilities Upgrades (URD's, Manholes, etc) 13.8kV Upgrade (Step-down areas, etc.) | ALL<br>ALL | 11,168                     | 262,981<br>4,909 | 149,965<br>105,748         | (113,016)<br>100,839     |
|            | SUB-TOTAL   |            | 11,168                     | 267,890          | 255,713                    | (12,177)                 |
|            | STATION UPGRADES:   |            |                            |                  |                            |                          |
| 108        | Station 4 (GAW) Relay Replacement Project   | R          | 87,079                     | 101,845          | 48,904                     | (52,941)                 |
| 109        | Station 4 35kV Potential Transformer Replacement  | R          | ,                          | 57               |                            | (57)                     |
| 110        | 4W9 Getaway Replacement-Station 4   | R          |                            | -                | 234,747                    | 234,747                  |
| 111<br>113 | Substation Equipment Upgrade (all)  | ALL        | 24.000                     | -                | 74,590                     | 74,590                   |
| 120        | Station 4 (GAW) Battery Bank Upgrade Station 4 - Relay/SCADA Integration for Bus A&B          | R<br>R     | 24,000                     | 24,000<br>24,261 | 17,037<br>70,308           | (6,963)<br>46,047        |
| 130        | Station 3 - Remote Terminal Unit (RTU) Replacement  | NR         |                            | 24,201           | 39,330                     | 39,330                   |
| 133        | Station 3 - Relay Upgrades and SCADA Integration  | NR         | 20,793                     | 95,298           | 252,225                    | 156,927                  |
| 139        | Station 5 - LTC Control Replacement   | W          |                            | -                | 41,543                     | 41,543                   |
| 140        | Substation Grounding Equipment Upgrade  | ALL        |                            | -                | 20,671                     | 20,671                   |
|            | SUB-TOTAL   |            | 131,872                    | 245,461          | 799,355                    | 553,894                  |
|            | NEW CUSTOMER SERVICES:  |            |                            |                  |                            |                          |
|            | New Service Installations (Commercial / Industrial)   | ALL .      | 10,363                     | 62,814           | 139,570                    | 76,756                   |
|            | SUB-TOTAL   |            | 10,363                     | 62,814           | 139,570                    | 76,756                   |
|            | ROUTINE CONSTRUCTION:   | ALL        | 126,809                    | 881,493          | 1,012,962                  | 131,469                  |
|            | SPECIAL PROJECTS / CAPITAL PURCHASES:   |            |                            |                  |                            |                          |
| 100<br>102 | Distributed Gas Generation (Pilot FY16-17) Padmount Switchgear Upgrade at Industrial Parks    | ALL<br>W   |                            | 43,175           | 2,720,409<br>194,518       | 2,677,234<br>194,518     |
| 103        | Grid Modernization and Opitmization   | ALL        | 2,097                      | 124,339          | 284,000                    | 159,661                  |
| 105        | New Wilmington Sub-Station  | W          |                            | -                | 250,000                    | 250,000                  |
| 112        | AMI Mesh Network Expansion  | ALL        | 4,845                      | 105,045          | 220,021                    | 114,976                  |
| 115        | Fault Indicators  | ALL        |                            | 1,340            | 25,000                     | 23,660                   |
| 116<br>117 | Transformers and Capacitors Meter Purchases   | ALL        |                            | 9,102            | 668,000                    | 658,898                  |
| 125        | GIS   | ALL<br>ALL |                            | 16,140           | 80,000                     | 63,860                   |
| 126        | Communication Equipment (Fiber Optic)   | ALL        | 2,491                      | 7,064            | 360,000<br>69,173          | 360,000<br>62,109        |
| 131        | LED Street Light Implementation   | ALL        | 52,750                     | 368,534          | 804,070                    | 435,536                  |
| 134        | Substation Test Equipment   | ALL        | 52,. 55                    | 14,270           | 30,000                     | 15,730                   |
| 135        | Analog Devices Cap Bank Upgrade   | W          |                            | -                | 54,188                     | 54,188                   |
| 136        | Voltage Data Recorders  | ALL        |                            | -                | 25,000                     | 25,000                   |
|            | SUB-TOTAL   | -          | 62,183                     | 689,008          | 5,784,379                  | 5,095,371                |
|            | OTHER CAPITAL PROJECTS:   |            |                            |                  |                            |                          |
| 96         | Control Center Modifications  | ALL        |                            | -                | 100,000                    | 100,000                  |
| 97<br>98   | HVAC Roof Units - Garage Carpet Upgrade   | R          | 3,111                      | 44,484           | 71.05                      | (44,484)                 |
| 98         | Electric Vehicle Supply Equipment   | R<br>ALL   | 1,303                      | 8,430<br>1,303   | 71,653<br>10,000           | 63,223<br>8,697          |
| 104        | RMLD Lighting (LED) Upgrade   | ALL        | 1,503                      | 1,303            | 25,000                     | 25,000                   |
| 118        | Rolling Stock Replacement   | ALL        |                            | 30,477           | 310,000                    | 279,523                  |
| 119        | Security Upgrades All Sites   | ALL        | 27,840                     | 34,684           | 5,000                      | (29,684)                 |
| 121        | HVAC System Upgrade - 230 Ash Street  | R          | 52,214                     | 467,785          | 500,000                    | 32,215                   |
| 127        | Hardware Upgrades   | ALL        | 18,727                     | 57,078           | 112,065                    | 54,987                   |
| 128<br>129 | Software and Licensing Master Facilities Site Plan  | ALL<br>R   |                            | 12,687           | 230,519                    | 217,833                  |
| 129        | SUB-TOTAL   | κ .        | 103,195                    | 656,927          | 50,000<br><b>1,414,237</b> | 50,000<br><b>757,310</b> |
|            |   |            |                            |                  |                            |                          |
|            | TOTAL CAPITAL BUDGET  | _          | \$ 445,590                 | \$ 2,825,251     | \$ 9,406,216               | \$ 6,602,623             |
|            | ROUTINE CONST ADJ FOR WO MISPOSTING   | _          | 21,658                     |                  |                            |                          |
|            | (July-November)   |            |                            |                  |                            |                          |

# Engineering & Operations Report

RMLD Board of Commissioners Meeting February 23, 2017

December 2016 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

## **Capital Improvement Projects**

| Cons | truction Projects:  | %<br>Complete<br>Status | Dec      | YTD       |
|------|---|-------------------------|----------|-----------|
| 106  | <ul> <li>Underground Facilities Upgrades (URDs, Manholes, etc.) - All Towns</li> <li>Lucaya Estates, Wilmington</li> <li>Crestwood Road, North Reading</li> </ul> | On-<br>going            | \$11,168 | \$262,982 |
| 108  | Relay Replacement - Station 4 (GAW)   | 100%                    | \$87,079 | \$101,846 |
| 113  | Station 4: Battery Bank Upgrade   | 10%                     | \$24,000 | \$24,000  |
| 133  | Station 3: Relay Upgrades and SCADA Integration   | 10%                     | \$20,793 | \$95,298  |
|      |   |                         |          |           |
|      | Service Installations – Residential and Commercial:<br>This item includes new or upgraded overhead and underground<br>services.                                   | On-<br>going            | \$10,363 | \$62,814  |
|      |   |                         |          |           |
| 103  | Grid Modernization and Optimization   | On-<br>going            | \$2,097  | \$124,339 |
| 112  | AMI Mesh Network Expansion  | On-<br>going            | \$4,845  | \$105,045 |
| 131  | LED Street Light Conversion   | 58%                     | \$52,750 | \$368,534 |

## **Routine Construction**

|   | DEC              | YTD              |
|---|------------------|------------------|
| Pole Setting/Transfers  | \$31,263         | \$158,698        |
| Overhead/Underground  | \$19,492         | \$254,884        |
| <ul> <li>Projects Assigned as Required</li> <li>High Street, Reading (Service upgrade)</li> <li>Solar Project – 326 Ballardvale Street, Wilmington</li> <li>Pumping Stations, Reading</li> <li>AT&amp;T Appl, Wilmington</li> </ul> | \$10,167         | \$114,213        |
| Pole Damage/Knockdowns  • Work was done to repair or replace seven (7) damaged poles.   | \$13,109         | \$61,096         |
| Station Group   | \$32,329         | \$108,230        |
| Hazmat/Oil Spills   | -                | \$5,296          |
| Porcelain Cutout Replacement Program  | -                | -                |
| Lighting (Street Light Connections)   | \$1,906          | \$15,444         |
| Storm Trouble   | \$2,554          | \$13,297         |
| Underground Subdivisions (new construction)   | -                | \$45,828         |
| Animal Guard Installation   | -                | \$795            |
| Miscellaneous Capital Costs   | \$15,991         | \$125,371        |
| TOTAL:  | <u>\$126,809</u> | <u>\$903,151</u> |

## **Routine Maintenance**

■ Transformer Replacement (through December 2016)

Pad mount 25.13%

Overhead 15.88%

Pole Inspection (as of 2/15/17)

213 poles have been replaced 116 of 213 transfers have been completed

Quarterly Inspection of Feeders (as of 2/15/17)

Inspected circuits (Jan-Mar): 3W5, 3W6, 3W7, 3W8, 3W13, 4W5, 4W6, 4W7, 4W23, 4W24, 5W9, 4P9, 4P2

Manhole Inspection (through December 2016)

961 of 1,237 manholes have been inspected.

Porcelain Cutout Replacements (through December 2016)

91% complete

256 remaining to be replaced

■ Tree Trimming

December: 87 spans trimmed YTD: 651 spans trimmed

**Substation Maintenance** 

Infrared Scanning - December complete - no hot spots found

## **Double Poles**

Ownership: 16,000 (approximately)

50% RMLD

50% Verizon

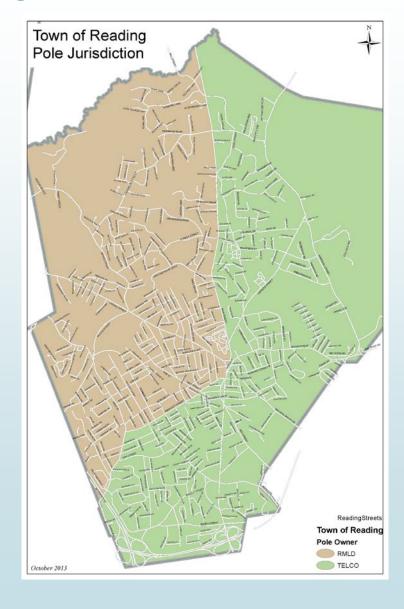
Custodial:

Reading – split (see map)

North Reading – RMLD

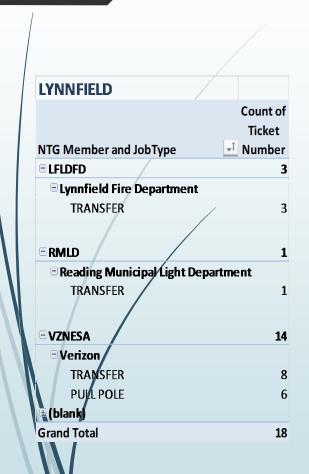
Lynnfield – Verizon

Wilmington - Verizon



## NJUNS

"Next to Go" as of February 16, 2017



| NORTH READING                    |          |
|----------------------------------|----------|
|                                  | Count of |
| NTG Member and JobType           | Ticket   |
| <b>■CMCTNR</b>                   | 4        |
| <b>□ Comcast</b><br>TRANSFER     | 4        |
| <b>⊟NGMA</b>                     | 1        |
| <b>■ National Grid</b>           |          |
| TRANSFER                         | 1        |
| □NRDGFD                          | 44       |
| ☐ North Reading Fire Department  |          |
| TRANSFER                         | 44       |
| ⊟RMLD                            | 104      |
| ☐ Reading Municipal Light Depart | ment     |
| TRANSFER                         | 13       |
| PULL POLE                        | 91       |
| □VZNEDR                          | 46       |
| ⊡ <b>V</b> erîzon                |          |
| TRANSFER                         | 39       |
| PULL POLE                        | 7        |
| ⊞ (blank)                        |          |
| Grand Total                      | 199      |

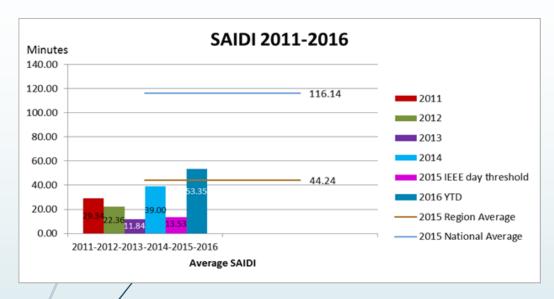
| READING                                |                   |
|--|-------------------|
|  | Count o<br>Ticket |
|  | Numbe             |
| <b>□ CMCTNR</b>                        |                   |
| <b>■ Comcast</b>                       |                   |
| TRANSFER                               |                   |
| □ <b>LTFMA</b>                         |                   |
| ☐ Lightower Fiber Networks             |                   |
| TRANSFER                               |                   |
|  |                   |
| <b>□ NP3PMA</b>                        | 1                 |
| Non-participating 3rd Party Attacher - |                   |
| ■ Massachusetts                        |                   |
| TRANSFER                               | 1                 |
|  |                   |
| □RDNGFD                                |                   |
| ☐ Reading Fire Department              |                   |
| TRANSFER                               |                   |
|  |                   |
| □RMLD                                  | 5                 |
| ☐ Reading Municipal Light Department   |                   |
| TRANSFER                               | 2                 |
| PULL POLE                              | 2                 |
|  |                   |
| □ VZNEDR                               |                   |
| □ Verizon                              |                   |
| TRANSFER                               |                   |
| <b>□ VZNESA</b>                        | 11                |
| □ Verizon                              |                   |
| TRANSFER                               | 10                |
| PULL POLE                              |                   |
| ⊞ (blank)                              |                   |

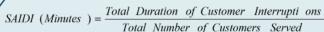
191

**Grand Total** 

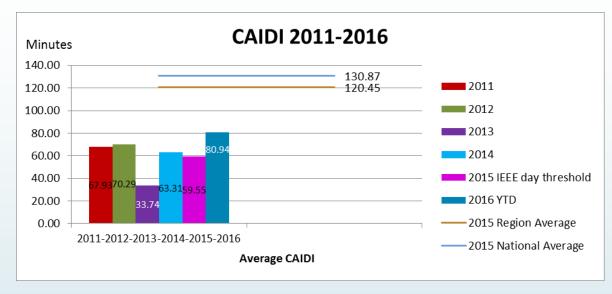
| WILMINGTON                        |          |
|-----------------------------------|----------|
|                                   | Count of |
|                                   | Ticket   |
| NTG Member and JobType            | Number   |
| <b>■CMCTNR</b>                    | 3        |
| ■ Comcast                         |          |
| TRANSFER                          | 3        |
|                                   |          |
| ■ NP3PMA                          | 7        |
| Non-participating 3rd Party       |          |
| ■ Attacher - Massachusetts        |          |
| TRANSFER                          | 7        |
|                                   |          |
| ∃RMLD                             | 65       |
| ■ Reading Municipal Light Departm |          |
| TRANSFER                          | 59       |
| ATTACH                            | 1        |
| PULL POLE                         | 4        |
| INSTLGUY                          | 1        |
|                                   |          |
| <b>UZNEDR</b>                     | 71       |
| □ Verizon                         |          |
| TRANSFER                          | 56       |
| PULL POLE                         | 15       |
|                                   |          |
| <b>∃WLMFIB</b>                    | 3        |
| □ Town of Wilmington              |          |
| TRANSFER                          | 3        |
|                                   |          |
| ∃WMGNFD                           | 72       |
| ☐ Wilmington Fire Department      |          |
| TRANSFER                          | 72       |
|                                   |          |
| ⊕(blank)                          |          |
| Grand Total                       | 221      |

## **RMLD Reliability Indices**

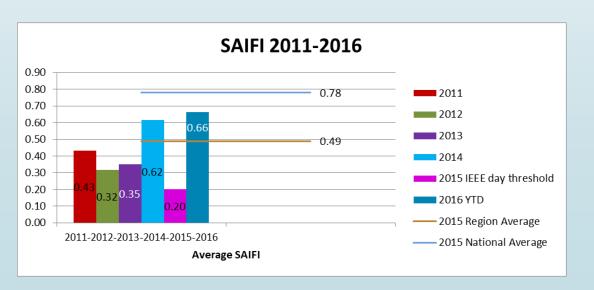




 $SAIFI = \frac{Total\ Number\ of\ Customer\ Interruptions}{Total\ Number\ of\ Customers\ Served}$ 

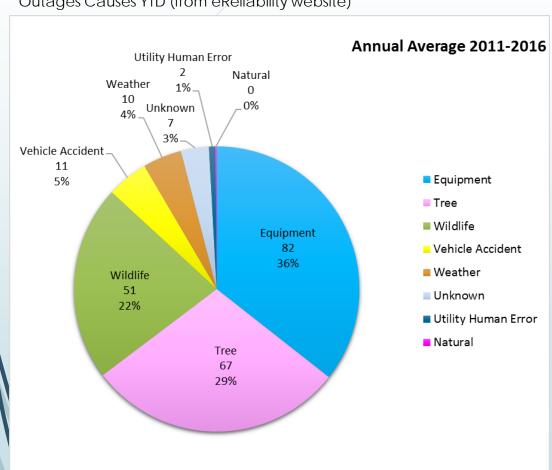


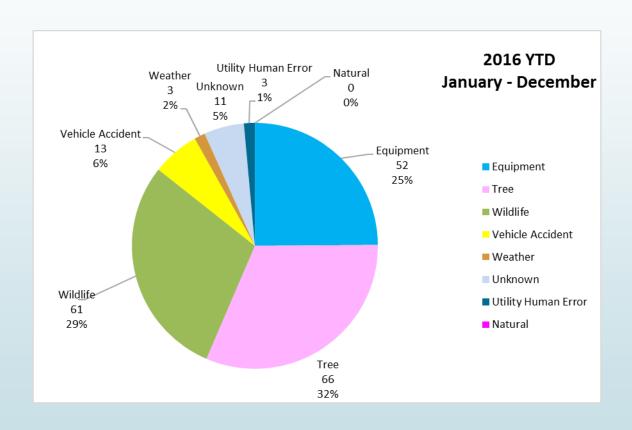
 $CAIDI(Minutes) = \frac{Total\ Duration\ of\ Customer\ Interruptions}{Total\ Number\ of\ Customers\ Interruptions}$ 



## **Outages Causes**

Outages Causes YTD (from eReliability website)





## Questions?



## RMLD PROCUREMENT REQUEST REQUIRING BOARD APPROVAL ATTACHMENT 4



February 13, 2017

Town of Reading Municipal Light Board

Subject: IFB 2017-34 Grounds and Landscape Services

Pursuant to M.G.L. c. 30B, on January 16, 2017 IFB 2017-34 was advertised in the Goods and Services Bulletin and on January 18, 2017 an invitation for bid was placed as a legal notice in the Middlesex East Section of the Daily Chronicle, on COMMBUYS, on the RMLD website and posted on the RMLD lobby bulletin board requesting sealed bids for Grounds and Landscape Services.

An invitation for bid was sent to the following thirty companies:

| BHD Company      | Burns Landscaping Construction, | Ciro Carbone and Sons |  |
|------------------|---------------------------------|-----------------------|--|
|                  | LLC                             | Landscaping, Inc.     |  |
| ConstructConnect | Farthworks Landscaping Co. Inc. | EZ Landscaping Inc.   |  |

| Ferrari Landscaping   | Gerrior Masonry & Landscape   | Greenscape Land Design, Inc.  |
|-----------------------|-------------------------------|-------------------------------|
| i ciidii Ediidecaping | Gerrior masonny de Edinascape | Orechiscape Land Design, inc. |

| Ground Masters Corporation | GroundMasters Landscape | GTA Landscaping   |
|----------------------------|-------------------------|-------------------|
| Ground Masters Corporation | Groundwasters Landscape | G I A Landscaping |

Corporation

Hummer's Lawn Care JR's Landscaping & Sons K.M. Earle Landscaping

Leahy Landscaping Inc. Linnehan Landscaping and Fuel Mac's Landscaping

Mayer Tree Service, Inc. MFB, Inc. NECC Corp.

NETCO Construction Project ONVIA Pathfinder Tree Service, LLC

Managers
ProScape Landscape LLC Sawyer Landscaping Schulte Grounds Management,

Inc.

Shady Tree Landscaping, Inc. Strong Landscaping Inc. Tompkins Landscape

Sealed bids were received from five companies: Ferrari Landscaping, Earthworks Landscaping Co., Inc., Greenscape Land Design, Inc., GroundMasters Landscape Corporation, and Tim Zanelli Excavating, LLC.

The sealed bids were publicly opened and read aloud at 11:00 a.m. on February 8, 2017 in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

The bids were reviewed, analyzed and evaluated by staff and recommended to the General Manager.

Move that bid 2017-34 for: Grounds and Landscape Services be awarded to: Greenscape Land Design, Inc. for \$110,952.00 as the lowest responsive and responsible bidder on the recommendation of the General Manager.

File: Bid/FY17/2017-34 Grounds and Landscape Services



The FY2017 Operating Budget amount for this item is \$45,000.00.

Department Manager

Department Director

General Managar

General Manager

## **Grounds and Landscaping Services**

## Bid 2017-34

| <u>Bidder</u>                          | <u>Year 1 - 2017</u><br><u>Services</u> | <u>Year 2 - 2018</u><br><u>Services</u> | <u>Year 3 - 2019</u><br><u>Services</u> | <u>Three-Year</u><br><u>Total Price</u> | <u>Responsive</u><br><u>Bidder</u> | Exceptions |
|--|---|---|---|---|------------------------------------|------------|
| Earthworks Landscaping Co., Inc.       | \$64,234.00                             | \$65,182.00                             | \$66,167.00                             | \$195,583.00                            | Yes                                | No         |
| Greenscape Land Design, Inc.           | \$36,984.00                             | \$36,984.00                             | \$36,984.00                             | \$110,952.00                            | Yes                                | No         |
| GroundMasters Landscape<br>Corporation | \$55,157.63                             | \$55,508.63                             | \$55,913.63                             | \$166,579.89                            | Yes                                | No         |

## Notes:

Ferrari Landscaping and Tim Zanelli Excavating, LLC were rejected due to not submitting a Comprehensive Application Plan and Schedule with bid.

## BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

From: <u>Tracy Schultz</u>

To: RMLD Board Members Group

Cc: <u>Jeanne Foti</u>

Subject: Account Payable and Payroll Questions

Date: Thursday, February 16, 2017 4:38:00 PM

#### Good afternoon,

There were no Account Payable Warrant questions for the following dates: January 20, January 27, February 3, and February 10.

There were no Payroll questions for the following date: February 6.

This message will be printed for the Board Packet for the RMLD Board Meeting on Thursday February 16, 2017.

## **Tracy Schultz**

Executive Assistant
Reading Municipal Light Department
230 Ash Street
Reading, MA 01867

Tel: (781) 942-6489

Ext: 489

| TOWN OF READING MUNICIPAL LIGHT DEPARTMENT   |
|--|
| RATE COMPARISONS READING & SURROUNDING TOWNS |

|                                 | RESIDENTIAL<br>750 kWh's | RESIDENTIAL-TOU<br>1500 kWh's<br>75/25 Split | RES. HOT WATER<br>1000 kWh's | COMMERCIAL<br>7,300 kWh's<br>25.000 kW Demand | SMALL COMMERCIAL<br>1,080 kWh's<br>10.000 kW Demand | SCHOOL RATE<br>35000 kWh's<br>130.5 kW Demand | INDUSTRIAL - TOU<br>109,500 kWh's<br>250.000 kW Demand<br>80/20 Split |
|---------------------------------|--------------------------|--|------------------------------|---|---|---|---|
| READING MUNICIPAL LIGHT DEPT.   |                          |  |                              |   | ****  |   |   |
| TOTAL BILL                      | \$116.11                 | \$200.74                                     | \$141.85                     | \$1,048.25                                    | \$205.28  | \$4,876.20                                    | \$755,449.20  |
| PER KWH CHARGE                  | \$0.15481                | \$0.13383                                    | \$0.14185                    | \$0.14360                                     | \$0.19007   | \$0.13932                                     | \$0.10981   |
| NATIONAL GRID                   |                          |  |                              |   |   |   |   |
| TOTAL BILL                      | \$146.32                 | \$311.18                                     | \$182.69                     | \$2,027.57                                    | \$308.49  | \$5,877.72                                    | \$1,568,918.65  |
| PER KWH CHARGE                  | \$0.19509                | \$0.20745                                    | \$0.18269                    | \$0.27775                                     | \$0.28564   | \$0.16793                                     | \$0.22805   |
| % DIFFERENCE                    | 26.02%                   | 55.01%                                       | 28.79%                       | 93.42%  | 50.28%  | 20.54%  | 107.68%   |
| EVERSOURCE(NSTAR)               |                          |  |                              |   |   |   |   |
| TOTAL BILL                      | \$143.50                 | \$253.51                                     | \$189.19                     | \$1,233.41                                    | \$204.73  | \$6,692.17                                    | \$882,679.70  |
| PER KWH CHARGE                  | \$0.19133                | \$0.16901                                    | \$0.18919                    | \$0.16896                                     | \$0.18956   | \$0.19120                                     | \$0.12830   |
| % DIFFERENCE                    | 23.59%                   | 26.29%                                       | 33.37%                       | 17.66%  | -0.27%  | 37.24%  | 16.84%  |
| PEABODY MUNICIPAL LIGHT PLANT   |                          |  |                              |   |   |   |   |
| TOTAL BILL                      | \$89.37                  | \$177.53                                     | \$120.42                     | \$988.74                                      | \$156.46  | \$4,883.88                                    | \$672,615.67  |
| PER KWH CHARGE                  | \$0.11916                | \$0.11835                                    | \$0.12042                    | \$0.13544                                     | \$0.14487   | \$0.13954                                     | \$0.09777   |
| % DIFFERENCE                    | -23.03%                  | -11.56%                                      | -15.11%                      | -5.68%  | -23.78%   | 0.16%   | -10.96%   |
| MIDDLETON MUNICIPAL LIGHT DEPT. |                          |  |                              |   |   |   |   |
| TOTAL BILL                      | \$98.74                  | \$201.66                                     | \$132.75                     | \$959.51                                      | \$168.44  | \$4,762.93                                    | \$807,171.40  |
| PER KWH CHARGE                  | \$0.13165                | \$0.13444                                    | \$0.13275                    | \$0.13144                                     | \$0.15596   | \$0.13608                                     | \$0.11733   |
| % DIFFERENCE                    | -14.96%                  | 0.46%  | -6.42%                       | -8.47%  | -17.95%   | -2.32%  | 6.85%   |
| WAKEFIELD MUNICIPAL LIGHT DEPT. |                          |  |                              |   |   |   |   |
| TOTAL BILL                      | \$119.24                 | \$220.92                                     | \$149.38                     | \$1,129.79                                    | \$180.88  | \$5,298.08                                    | \$887,163.30  |
| PER KWH CHARGE                  | \$0.15898                | \$0.14728                                    | \$0.14938                    | \$0.15477                                     | \$0.16749   | \$0.15137                                     | \$0.12896   |
| % DIFFERENCE                    | 2.69%                    | 10.05%                                       | 5.31%                        | 7.78%   | -11.88%   | 8.65%   | 17.44%  |