

# READING MUNICIPAL LIGHT DEPARTMENT

BOARD OF COMMISSIONERS

**REGULAR SESSION** 

**NOVEMBER 21, 2014** 

#### READING MUNICIPAL LIGHT DEPARTMENT BOARD OF COMMISSIONERS MEETING

230 Ash Street Reading, MA 01867 November 21, 2014 7:30 p.m.

- 1. Call Meeting to Order
- 2. Opening Remarks
- 3. Introductions
- 4. Public Comment
- 5. Report of the Chairman

**ACTION ITEMS** 

- a. Review of RMLD General Manager
- b. Vacancy on RMLD Board
- 6. Approval of Board Minutes (Tab A) April 24, 2014

**ACTION ITEM** 

- 7. General Manager's Report Ms. O'Brien General Manager
- 8. Power Supply Report September 2014 Ms. Parenteau (Tab B)
  Note: July and August are contained in the packet, report will be on September.

ACTION ITEM

a. LED Streetlight Rate

#### Suggested Motion:

Motion to recommend RMLB approve the proposed LED Street Light rate for the towns of Reading, North Reading, Wilmington and Lynnfield.

- 9. Engineering and Operations Report September 2014 Mr. Jaffari (Tab C)
- 10. Financial Report September 2014 Mr. Fournier (Tab D)
- 11. M.G.L. Chapter 30B Bids (Tab E)

**ACTION ITEM** 

a. IFB 2015-06 S&C SCADA-Mate CX Switch

#### **Suggested Motion**

Move that bid 2015-06 for S&C SCADA-Mate CX Switch be awarded to Stuart C. Irby for a total cost of \$55,070.00 as the lowest qualified bidder on the recommendation of the General Manager.

b. IFB 2015-08 Single Phase Pole Mounted Transformers

#### Suggested Motion

Move that bid 2015-08 for Single Phase Pole Mounted Transformers be awarded to Power Sales Group for a total cost of \$3,300.00 and WESCO for a total cost of \$75,880.00 as the lowest qualified bidder on the recommendation of the General Manager.

c. IFB 2015-09 Three Phase Pole Mounted Transformers

#### **Suggested Motion**

Move that bid 2015-09 for Three Phase Pole Mounted Transformers be awarded to WESCO for a total cost of \$79,096.00 as the lowest qualified bidder on the recommendation of the General Manager.

d. IFB 2015-11 750 MCM Cable

#### **Suggested Motion**

Move that bid 2015-11 for 750 MCM Cable be awarded to Arthur J. Hurley Company, Inc. for a total cost of \$139,590.00 as the lowest qualified bidder on the recommendation of the General Manager.

#### 12. General Discussion

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED E-Mail responses to Account Payable/Payroll Questions Rate Comparisons, July, August, September

#### **RMLD Board Meetings**

Thursday, December 11, 2014 Thursday, January 29, 2015

#### 13. Executive Session

**Suggested Motion:** 

**ACTION ITEM** 

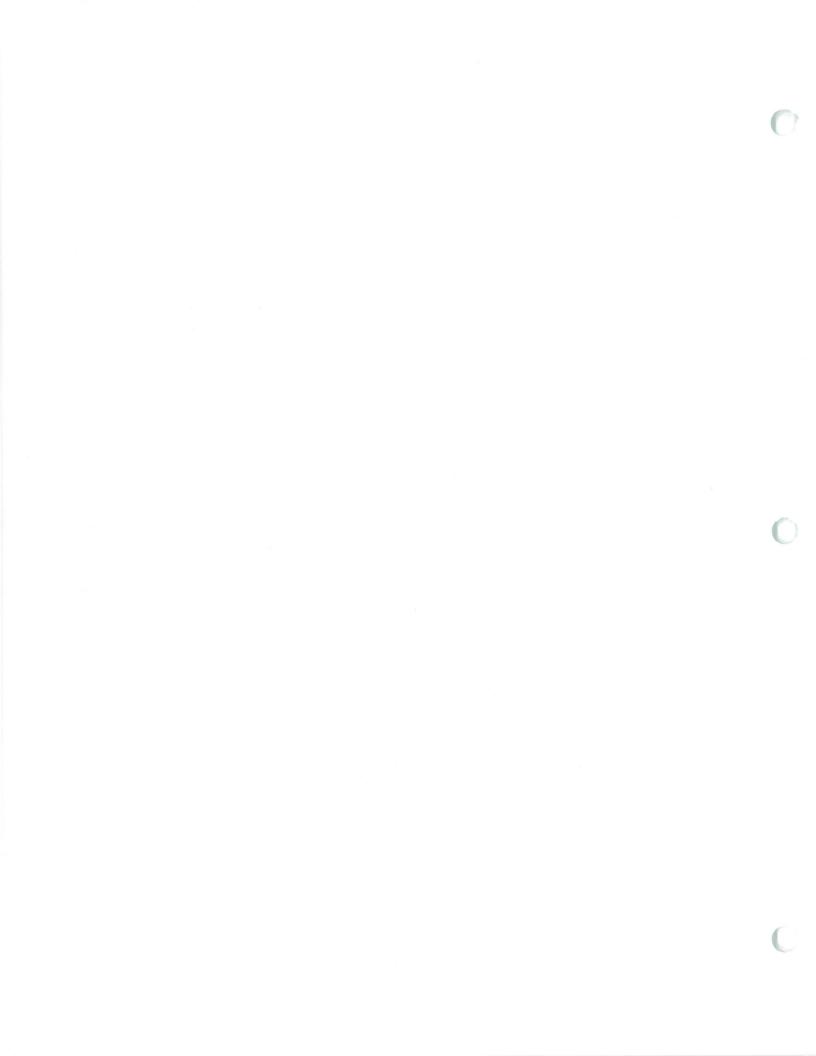
Move that the Board go into Executive Session based on Chapter 164 Section 47D, exemption from public records and open meeting requirements in certain instances, to discuss mediation and union negotiations update, and return to Regular Session for the sole purpose of adjournment.

# 14. Adjournment **Suggested Motion:**

ACTION ITEM

Move to adjourn the Regular Session.

# REGULAR SESSION MEETING MINUTES BOARD REFERENCE TAB A



# Reading Municipal Light Board of Commissioners Regular Session 230 Ash Street Reading, MA 01867 April 24, 2014

Start Time of Regular Session:

5:35 p.m.

End Time of Regular Session:

6:57 p.m.

**Commissioners:** 

John Stempeck, Chairman

Philip B. Pacino, Vice Chair

Robert Soli, Secretary Pro-Tem

**David Talbot, Commissioner (Remote Participation)** 

Thomas O'Rourke, Commissioner

Staff:

Coleen O'Brien, General Manager David Polson, Facilities Manager Jane Parenteau, Director of Integrated Resources Patricia Mellino, Operational Assistant Bob Fournier, Accounting/Business Manager Hamid Jaffari, Director of E&O Mark Uvanni, IT Manager

Citizens' Advisory Board:

**Dennis Kelley** 

**Public:** 

None

Call Meeting to Order

Chairman Stempeck called the meeting to order and stated that the meeting was being videotaped, it is live in Reading only.

**Poening Remarks** 

nairman Stempeck read the RMLD Board of Commissioners Code of Conduct.

Chairman Stempeck welcomed new Commissioner Thomas O'Rourke and Dennis Kelley Citizens' Advisory Board (CAB) member.

Chairman Stempeck stated that Commissioner Talbot would be attending the meeting via remote participation due to geographic distance.

#### Discussion of Fiscal Year 2015 Capital and Operating Budgets

#### Fiscal Year 2015 Operating Budget

Ms. O'Brien thanked the Board for allowing the staff to present the Operating and Capital budgets this evening. The RMLD annually files a DPU report which provides the outline and basis for all electric utility budgets, FERC accounting essentially divides electric budgets into operating, the 500 and 900 series numbers and the capital which is the 300 series numbers. Ms. O'Brien stated that this evening each division manager will first provide the highlights of their operating budget and then their capital outlay. Ms. O'Brien said that the budget has been reformatted to tell a story via a six-year plan, what has happened, how we are doing and what we plan to do in the future. The justifications to what we do for all intended purposes are backed in large by engineering standards, science and a sprinkle of politics. Ms. O'Brien said that the objective is straight forward, we want the decal on the side of our trucks that says "Reliable for Generations" to be true. To maintain that objective a utility must have strategic plans in place that address the electric system, its power supply and employees along with its financial health. Ms. O'Brien said that these plans address efficiency, safety and procedures to optimize reliability, when formalized and implemented on a consistent basis we will be true to our motto. The six-year plan will remain updated, the operating six-year financials focus on revenues and our statutory duty to cover all of our production costs. The RMLD Capital Six-Year Plan focusses on reliability and the essential enterprise projects and appropriate funding including the Depreciation Fund balances.

Ms. O'Brien mentioned one issue is the percent change that is seen in the Operating Budget noting that this is not reflective or a difference from the FY14 budget, rather a percent difference from what has been spent. Ms. O'Brien then turned the meeting or to Mr. Fournier.

Mr. Fournier stated that this evening the staff would be presenting the FY15 Operating Budget. Mr. Fournier said that he had distributed a handout prior to the meeting and would inform the Board when they should refer to it.

### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Operating Budget

This evening they would only be reviewing the summary section and that the individual division's detail will be used as a reference but it would not be discussed. Mr. Fournier reported that the Six-Year Plan shows the current year as seven months actual and projecting out for the remaining five months of this fiscal year. The FY15 Operating Budget which will be presented tonight and going out four more years to show that picture. Mr. Fournier noted that the bottom line showing the ROR percentage which is the Rate of Return, by statute we are allowed to make up to 8% of our net plant and those percentages show what we are anticipating based on those revenue and expense projections for those upcoming years.

Mr. Fournier asked the Board to look at the first page of the handout Operating Budget Draft 1. This draft shows what is contained in this budget and that in FY15 the RMLD is projecting to about eighty-seven million dollars in expenses stating that this business is a highly fixed cost business. The purchase power base cost, fuel cost, depreciation, our commitments to the towns and normal accounting processes which are the miscellaneous deductions for loss and disposal and of the \$87M, seventy-three million of that is more or less fixed costs or 84% of the budget that leaves about 16% or \$14M of semi-variable costs which entails the balance of the budget. Some of the obvious items are labor expense, employee pensions and benefits, overtime, insurances, and training which all are normal accounting activities that take part during the year. Mr. Fournier said that the 16% is really a fraction of the total budget.

Mr. Fournier stated that each division manager will explain the main drivers that make up the 2015 budget to arrive at that \$2.5 million Net Income. Mr. Fournier said that on the last page of the three page handout, RMLD noticed some changes or adjustments that needed to be made in the \$2.5M that was presented in Draft I. The first two were a re-classification from the Capital labor budget to the Operating budget which was a decrease in net income of about \$15,800 and a \$45 adjustment on the CAB side to be as accurate as possible. Mr. Fournier reported that the big ticket item was the decrease in the tree trimming expense from \$757,000 to \$640,000 and stated that there will be a Draft II. Mr. Fournier stated that Draft II represents a Net Income of \$2.6M and that was what the CAB had recommended at their last meeting. Mr. Fournier said that the CAB is on board with this figure.

Mr. Fournier explained that they just covered the summary and the rest of the pages are the detail and that it breaks out the revenue and other expenses. Mr. Fournier stated that the next section is the description of RMLD's Power Supply which Ms. Parenteau will present.

Mr. Pacino entered the meeting at 5:45 p.m.

Ms. Parenteau reported that in the past with several new Board members one of the recommendations was that the various projects and unit entitlements be listed with a description. Ms. Parenteau said that following the description section is a list of the Purchase Power Expenses which are broken down by project type as well as capacity, transmission and energy. Some of the contracts are long-term unit contracts while some are energy only contracts.

Ms. Parenteau reported that the Capacity total was at \$16.3M and Transmission at \$12.556M for a total of \$28.889M for the FY15 budget. Fuel is projected to come in at \$36.249M based on the market conditions at the time the budget was created.

Chairman Stempeck asked if there were any questions. Mr. Soli asked if transmission should go up during the year, is there any response that the RMLD makes. Ms. Parenteau replied yes, currently within our rate structure the RMLD has a Purchase Power adjustment which looks at the forecasted transmission costs and it compares the actual transmission costs. If there is an increase midstream we are able to make adjustments through the Purchase Power Adjustment costs.

Mr. Fournier stated that the division managers would be addressing the key points within their budgets on the Budget/Actual Comparison Summary which is typically found in the monthly financials.

Ms. Parenteau reported on the Integrated Resources and Planning (IR&P) division. Within this division there are two primary focuses one being the wholesale side which is the Power Supply and the other focus in the group is the retail side with the efficiency programs as well as working with the RMLD's commercial customers and municipal towns. The RMLD is integrating both the wholesale side along with the customer base as well as tying into the electrical benefit for the short and long term reliability of the electrical system. The RMLD is actually integrating all of the programs with the electrical side, the wholesale side and the customer side and focusing the Integrated Resources and Planning budget in that direction.

Mr. Talbot asked if there was an increase in the efforts in this direction on how the RMLD will help commercial customers. Ms. Parenteau replied that the group is increasing their personnel, working on economic development programs to work with the municipalities that the RMLD serves in Wilmington, North Reading, Reading and portions of Lynnfield to try to grow the kilowatt hour sales that allows the RMLD to have lower rates.

# Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Operating Budget

Ir. Talbot asked for clarification of what line item Ms. Parenteau was referring to. Ms. Parenteau replied that it was basically ne strategy that the RMLD was moving forward with so there is no one particular line item. It is the direction that the Integrated Resources and Planning group along with the RMLD is working towards in terms of programs and staffing.

Mr. Talbot asked if the RMLD has enough communications infrastructure to do what Ms. Parenteau was talking about. Ms. Parenteau replied that she and Mr. Seldon have been actively working with Mr. Jaffari and the E&O group to utilize an outside vendor in lieu of having active personnel within the Department to assist them with that so that they would have the communication capabilities without utilizing any fiber.

Mr. Soli asked if Ms. Parenteau projected load growth for next year and if so how much. Ms. Parenteau replied that the RMLD has projected a flat growth minus the economic development piece, and that over the last five years the growth has been flat to slightly decreasing.

Chairman Stempeck said that there was talk of a meeting from Town Hall for economic growth or developing an economic growth portfolio.

Ms. O'Brien reported on the budgets for the General Manager, Human Resources, Community Relations, the CAB and Board. With respect to the General Manager's budget, the legal fees were being categorized in such a way that it did not make a lot of sense. They were reallocated so all legal fees that have to do with Power Supply would be under Integrated Resources & Planning, all legal fees that have to do with employees and unions would be put under Human Resources and all legal fees that may have to do with general questions or Chapter 164 statutory questions would come under the General Manager.

Ms. O'Brien stated that there is a part time Tech Admin that will be going into Integrated Resources & Planning to help with all of these programs moving forward and the other half was put into the General Manager's budget but needed to be reallocated to Community Relations. It is the RMLD's intent that Community Relations will be highly supporting Integrated Resources & Planning so that we can have a much better effort to convey to the public what we are doing on a consistent and regular basis.

.vis. O'Brien said that the miscellaneous under the General Manager is APPA, NEPPA and all of the industry related dues. As far as Human Resources is concerned other than the reallocation of the legal fees the miscellaneous has to do with the physicals, drug and alcohol testing, job postings, new employees, want ads and items of that nature. Ms. O'Brien reported that the supplies under Community Relations in general have to do with the Public Power Week open house along with the Rotary and Chamber dues. The CAB is a budget that is based on the Twenty Year plan that has to do with travel, training and consultants. That figure was adjusted slightly back down to \$15,000 to correct the typo that Mr. Fournier spoke of.

Mr. Pacino asked what is appropriate for the CAB and is that in compliance with the Twenty Year Agreement, stating there is a set amount in the Twenty Year agreement that they are to have each year. Ms. O'Brien replied that there was a typo and now this is in accordance with the plan. Mr. Fournier said that Mr. Pacino may not have been here when he reported that there was a \$45 adjustment to get the CAB back to a level \$15,000 level which is where they needed to be.

Mr. Polson, Facilities Manager stated that he is responsible for four budgets. In the General Benefits budget the main drivers are pension increases, OPEB (Other Post-Employment Benefits) and healthcare. Mr. Polson noted that in the Transportation budget which includes the fleet, there is no amount listed there because the money is allocated to the different operating groups and that budget is level funded with no changes. Mr. Polson reported that the RMLD has developed an eight to ten year plan for vehicle replacement which is in line with industry standards for other utility companies for the larger vehicles. The Building Maintenance budget is for the interior and exterior building maintenance for all the RMLD facilities and that there is no significant change. Materials Management is responsible for all the warehousing and insurances with no major change.

Mr. Fournier reported that the Business division is responsible for Administration section as well as internal and external customers. There are no major changes anticipated in FY15 from what we have currently in place except for some of the obligations that are required through agreements that need to be in effect. There are four departments that comprise of this division and except for normal increases there are really no significant changes happening this year in the Business division. Chairman Stempeck asked if there were any questions. Mr. Pacino asked what the depreciation rate is. Mr. Fournier replied ree percent.

### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Operating Budget

Mr. Fournier said that the last division to report would be Engineering & Operations. He then instructed the group to refer to page seven of the handout.

Mr. Jaffari, Director of Engineering & Operations stated that he is in charge of Engineering & Operations, Technical Services and Facilities. The main drivers in the budget for operating expenses are education, preventative maintenance program, tree trimming, metering, street lights, outside services, labor and supplies. Mr. Jaffari stated that education is a main driver in the budget and reported that he and Ms. O'Brien were developing the CDPs (Career Development Plans) for the employees in response to their needs, skills and training that they need in order to do their job more effectively and efficiently. Training programs for the Substation Technical Services and Engineers in the area of the SCADA, Milsoft which is an engineering model, electrical code and outage management system.

Mr. Jaffari reported that another driver is the preventative maintenance program which includes hazardous waste, transformer disposal, pole inspection, maintenance of the aged overhead and underground facilities, also replacing the porcelain cutouts, the infra-red scan of the distribution system and substations as well as the substation vegetation.

RMLD is revamping the cyclic tree trimming program. Mr. Jaffari stated that once we have the engineering load flow model along with reliability indices they would indicate to us the problem areas. Then, we would modify the maintenance program to respond to the needs of the areas and make changes.

Expenditures in metering for calibration tools and testing meters, street light maintenance, outside services include the NERC (North American Electric Reliability Corporation) compliance consultants, the standards keep getting increased.

Mr. Jaffari reported that the RMLD is getting ready to be in compliance with another NERC standard on BES (Bulk Electric System), which is coming right around the corner. Labor is another driver in the budget, the department needs to hire two more staff in Technical Services in order to officially form the Technical Services group so they can perform testing at the substations. This will insure that RMLD can maintain the substations to make sure that reliability starts with the source for Stations 3, 4 & 5. Mr. Jaffari stated that there will be one new staff person in engineering to maintain the GIS model; right now the RMLD is trying to bring that model up-to-date, the data is being compiled with the assistance of consultants. Another new hire as part of the career development succession planning that Ms. O'Brien started is an Assistant General Foreman.

The next driver is supplies which include fire-resistant clothing, substation testing a big ticket item at \$150,000 to test all devices at the substations including transformers, breakers and relays so we set the baseline for moving forward to start the cyclic maintenance program (3-5 years) for testing and making sure that the substations are reliable. Chairman Stempeck asked if they are tested once per year, once every three years and asked what the cycle is. Mr. Jaffari replied that the breakers and relays should be tested every two to three years, personal preference for transformer testing is every three years, but can be tested up to every five years. The RMLD equipment has not been tested in so long that the current status is not known at this time, once there is confidence that the relays are functioning properly they can be tested in a two to three year cycle.

Chairman Stempeck asked if the training described also have to do with the RMLD performing the underground as opposed to using outside services. Ms. O'Brien replied that the UPG (United Power Group) will be performing a baseline assessment and testing that will double as training for Technical Services employees to get them off the ground. As Mr. Jaffari stated this will give us a baseline of where of our equipment is so that we can come up with a cycle of maintenance program. The RMLD will go with Fischbach & Moore until the end of that contract so we will be able to double up on not only the underground work but also get the training aspect out of it as well. Chairman Stempeck asked what was left on the length of the contract. Ms. O'Brien stated that it was her belief that the Fischbach & Moore contract goes through 2015 and the UPG for the maintenance will be three to four months and then there will be a baseline to put into the program and we are off and running from there.

Mr. Jaffari said that they have already developed a cyclic maintenance program that will automatically tell us when the next due date is, this was done for Stations 3, 4 & 5 and we are now just waiting for the data to be compiled, once the data is entered the software will figure out the next due date for retesting. Ms. O'Brien stated that was done in-house.

Mr. O'Rourke asked on education and development, how much is instructor-led versus online and how much is in-house versus outsourced. Mr. Jaffari replied that mostly the training will be outside and that some of the in-house training he can provide himself, as well as Ms. O'Brien and other employees. For example; the Milsoft training will initially be done by the vendor then the subsequent training for engineers he can do himself. Mr. Jaffari stated that because of his affiliation with ECNE and the fact that he teaches courses for them training will be discounted for the RMLD employees.

### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Operating Budget

fr. O'Rourke asked if there was much training online. Mr. Jaffari replied that it is his experience that for technical courses you really need in class interaction with an instructor and the classroom environment is much better for learning. Remote courses are much better for refresher courses once you have the basic understanding and knowledge from the classroom environment.

Mr. Fournier as he stated at the outset that there would be Draft II this draft will show approximately \$100,000 increase in Net Income from Draft I from \$2.5M to \$2,652,997. The CAB did take a vote at 5:0:0, and made a recommendation to accept that figure for the FY15 Operating Budget.

#### Fiscal Year 2015 Operating Budget

Mr. Pacino made a motion seconded by Mr. O'Rourke that the RMLD Board of Commissioners move to recommend the Fiscal Year 2015 Operating Budget with an Adjusted Net Income of \$2,652,997 as presented.

Chairman Stempeck polled the Board. Motion carried by a polling of the Board:

Mr. Talbot; Aye, Mr. Pacino; Aye, Mr. O'Rourke; Aye, Mr. Soli; Aye, and Chairman Stempeck, Aye. Motion carried 5:0:0.

Mr. Soli stated that he would like to make an amendment to the motion.

Mr. Soli made a motion that the non-fuel FY15 Operating Budget with an Adjusted Net Income of \$2.65M as it was be approved and that the fuel budget target a \$2.5M a year end balance with progress towards these goals be reported to the RMLD each month.

Chairman Stempeck asked Mr. Soli to comment on the amendment and to explain why. Mr. Soli asked if someone would second the motion. Chairman Stempeck asked if there was a second. Mr. Pacino replied that he did not understand the amendment and it would be appropriate to explain what it is that is trying to be accomplished. Mr. Soli replied that the number did not change and said that in the spring we got into trouble because the Board could not see that the real bottom line was ing missed as opposed to businesses where they have one bottom line we have two. One bottom line we are allowed to make a profit, the other is the fuel charge that we are allowed to pass through to the customers but not make any money and this motion mixes those two up. Mr. Soli said that we really should keep our eye on two balls, how we are doing towards the amount that is 8% taking out the fuel and then how is the fuel doing towards meeting the reserve. Chairman Stempeck said so this is to provide more visibility and transparency into what it is, it is not depending on the budgeted numbers but tracking it on a month by month or quarter by quarter basis. Mr. Soli stated that we do get the numbers, but no one has been subtracting out the fuel.

Ms. O'Brien asked Ms. Parenteau to speak to this unbundling and make a recommendation on the motion. Ms. Parenteau said that it is her understanding with the new Cost of Service and how the Department is going to be unbundling their rates so that the distribution charge will be separated with the power supply charges which will include capacity, transmission and fuel. Ms. Parenteau believes the point that Mr. Soli is making is because the way the rates are currently structured part of the power supply costs are embedded in the base rates which make it difficult to track as he had said. The Cost of Service proposal and the directive that the consultant is working on is to unbundle those rates so that there will be much more transparency in terms of the power supply being a pass through and the 8% that the Board is speaking of. Ms. Parenteau stated that this should help the Board in terms of those financials and the transparency of the power supply skewing the overall bottom line. Chairman Stempeck asked then that this will accomplish the same thing that Mr. Soli is asking for. Ms. Parenteau replied yes.

Chairman Stempeck stated that if it does not then it can be addressed in terms of another motion at the next meeting or the appropriate meeting to then further unbundle it so we get an idea of what is happening and then asked Mr. Soli if that would serve the purpose. Chairman Stempeck asked how difficult is it to meet Mr. Soli's motion, is it merely a redistribution of the financials to basically reconstitute them or is it significantly more difficult to do the unbundling at this point in time.

Mr. O'Rourke said that the amount is not changing so we can approve the amount as originally motioned it sounds like it is a reporting or displaying data issue which he is in favor to have visibility on items that are not so easy to find but that could be accomplished with an addendum or summary to be reported monthly. Mr. O'Rourke is not sure it changes the motion. Ms. O'Brien said that we spoke to this issue which is one of the objectives of unbundling, when you unbundle you are separating all of power supply including fuel which are all pass-throughs and the RMLD does not make money on any of them.

Ms. O'Brien stated that we are working towards unbundling and to do that will be part of the Cost of Service presentation.

#### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Operating Budget

Ms. O'Brien believes that the billing system is going to be able to handle that, so we working towards that objective and is not sure the purpose it serves right at this very moment when we are working towards what Mr. Soli had requested. Mr. Soli said that in the past Cost of Service studies the capacity and transmission we made money on. Mr. Soli recollected that when the new set of rates came out the PPA that was on the bill then went into the base charge. Ms. Parenteau said that we do not make money on it what happens is that it is a part of revenue and when you look at the Mr. Fournier's calculation in terms of what the Department is able to earn a return on that is our net plan which comes out of the revenue so we never make any money on capacity or transmission. Ms. Parenteau stated that we collect revenue for our rate structure and are able to earn a return on the net plant.

Chairman Stempeck said that he would like to table this to an offline discussion. Ms. Parenteau stated that we could accomplish what Mr. Soli is requesting through a reporting mechanism, unbundling the rates would accomplish this and that is scheduled to be implemented for this this fiscal year. Chairman Stempeck asked if Mr. Soli would withdraw his motion and move to table it to see if the reporting can accomplish the same mechanism. Mr. Soli replied that we have two balls that we should keep our eyes on and previously we only kept our eye on one and it got us in trouble. Mr. Pacino commented that he did not fully understand what Mr. Soli was trying to accomplish. Chairman Stempeck said that they should look at it and consider it absolutely but right at this moment he did not understand it either.

Mr. Pacino said that they should vote on the budget, instruct the Department to take a look at this and report back to the Board at the next meeting in order for the Board to get a better understanding of what this is trying to do. Mr. Soli stated that was fine.

Chairman Stempeck said that he would like to go back to the original motion and if everyone is in favor a roll call vote would have to be taken because Mr. Talbot is participating remotely.

#### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Capital Budget

Ms. O'Brien reported that the RMLD staff has done an excellent job generating the new capital outlay which now includes similar to the Operating Budget a six-year plan. While we are here tonight to focus on FY15 and have provided to you where we expect to land at the end of FY14, what is scheduled for FY15 and then what is planned for FY16 through FY19. New focus items that were mentioned previously include the GIS which is the mapping system that produces the geographically correct map of our system assets, the GIS as Mr. Jaffari stated is the basis for our engineering modeling software that works to determine the accuracy of our system, coordination and protection as well as our future reliability planning addressing capacity and flexibility to meet the challenges of the future including areas that we may be able to get additional kilowatt hour sales. The second area that was discussed previously is the lack of system maintenance where we are developing a predictive asset management system that would tie into the GIS and serve as a basis for assessing the current condition of our assets, with the appropriate data loaded, it will support predictive maintenance to extend the life of the equipment and schedule replacements prior to any equipment failure.

The LED streetlight conversion of which the pilot report is completed the Board will be receiving a copy of that this week. It includes converting approximately 8,000 lights at less than \$3M for significant energy savings to each of the towns and a decrease in maintenance. Engineering is finalizing the pilot program. It targets the areas for the pilot program LED light placements within each town. Ms. O'Brien said that she along with Ms. Parenteau and Project Engineer Brian Smith are meeting with each of the Town Managers and the CAB representatives from each town to go over the pilot. Ms. O'Brien reported that the streetlight rate is being produced and will be presented at the Cost of Service presentation. Inventory is now being stocked with LEDs and the RMLD will no longer carry the conventional lights and the towns will be credited for any lights that the RMLD replaces.

Ms. O'Brien turned the focus to the capital outlay spreadsheet where it shows the six-year plan for Facilities, MIS and the System. On the right hand side is a tickler with an explanation of the objective of the project and on page two is where the funding schedule can be found for the plant depreciation. Ms. O'Brien explained that some of the items that go beyond FY15 it does not necessarily mean the money will be spent it is a place holder and that we are taking a conservative approach to make sure that we have the funding. The table lists the starting amounts what we might be looking for and any type of force accounts where we might get any state reimbursements or bonding and it shows where we will land.

Mr. Polson reported that the HVAC budget was a multi-year plan that was discussed and approved in previous years and reflects the plan out over a period of two years.

### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Capital Budget

The Master Site Plan is very similar that was approved last year with place holders for FY16 and FY17 for anticipated work at will be the result of the Master Site Plan.

The Station 1 Rehabilitation Project will be part of the overall site plan and was moved out pending the outcome of Master Site Plan for the best use of the buildings.

The Covered Storage is the same situation falling under the site plan as well.

Mr. Polson stated that the Oil Containment Project is new and that the RMLD has a consultant studying the facilities. Mr. Polson reported that right now the RMLD is in compliance and has a Spill Prevention, Control and Countermeasure Plan (SPCC) and that we are evaluating the facilities for opportunities to mitigate any potential risk that we might have. The RMLD will have studies performed this year and work performed next year.

The Security Upgrades are to make sure that the RMLD is compliant with the NERC and FERC requirements at the substations and that the RMLD on a regular basis makes security improvements at its facilities. Mr. Polson stated that over the next few years there will be added security at the substations.

Mr. Polson said that the Rolling Stock Replacement Project was developed as a ten year plan. The plan helps to make sure that we are levelizing our vehicle replacement and reducing maintenance costs on the fleet. Chairman Stempeck asked if the Rolling Stock was getting more reliable. Mr. Polson replied that we have reduced some of our stock including trucks, trailers and vehicles and we are constantly evaluating the stock while reducing the fleet. Mr. Polson stated that we do need to maintain enough vehicles to address situations like severe weather and to ensure that the vehicles are all operating correctly. The history of the fleet is that they have all been up and running during critical times and credits this to a very good vehicle maintenance plan. Mr. Polson said that this too will be evaluated as part of the Organizational Study.

Mr. Uvanni reported on three items in the Capital Budget, Hardware and Software Upgrades and Licensing. The first project is the Great Plains/Cogsdale Update. The RMLD will be updating the back office Financial and Customer Service Management of tware which is about ten years old and is at the end of its lifecycle. A conversion/migration will be performed and will take approximately the rest of calendar year 2014 and could possibly go into calendar year 2015. Mr. Uvanni stated that it is going to be a big project personnel wise because it touches everybody and there will be a lot of training and testing involved.

Mr. Uvanni said that there will be Hardware and Software Upgrades and Licensing and that this year the hardware line item for the most part encompasses turning everything into virtual machines. Mr. Uvanni reported that we are just about done but there are a few left and then to virtualize all of the servers, the related software, the backup software, storage area networks and replication software that goes with it. On the pure software side Mr. Uvanni stated that money is always put aside for custom programming to build up the integration between Outage Management, GIS, Utility Authorization Number Management System and other specific software for backup and replication of virtual machines and related systems. Mr. Uvanni reported that the Great Plains/Cogsdale is the big project this year.

Chairman Stempeck asked if there had been any issues relative to this Heartbleed Bug virus. Mr. Uvanni replied that it is a wide spread issue and that people use open source software for SSL for Secure Sockets Layer connections so it affected roughly two-thirds of all secure websites. Mr. Uvanni stated that we have not run into it yet, the big companies like Microsoft, the Googles and a lot of the major banks have already patched it but obviously it caught a lot of people by surprise.

Mr. O'Rourke asked on the Customer Service software update what is the expected go live date and is there much of a potential impact on Customer Service when that happens. Mr. Uvanni replied that the go live date is the second or third week of December, we really want to do it by the end of the year but it really is a big undertaking mostly training and extensive testing. There are so many things that it touches from metering to service orders, credit and collections, receivables, the bill itself which will have a change of format.

Mr. O'Rourke asked if it was a hard cut or do you run parallel systems. Mr. Uvanni replied that you run parallel for certain things but it is very difficult to run parallel in everything, you almost create more work and more confusion by trying to tie everything out. The bottom line is to make sure that your receivables bill for bill ties out that is really the main concern. Mr. Uvanni said that if he were to choose a bill on the current system with all things being equal is that bill going to look the same. is is the bottom line on the new system so that is really where you test.

# Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Capital Budget

Mr. Uvanni stated that he had been through a few of these before and there is a process that they will follow and as far as customer service for our customers the impact is minimal to none.

Mr. Jaffari reported on the capital authorization improvement projects for his section starting with Project 108, Relay Replacement – Station 4. Currently at the Gaw substation there are electromechanical relays that are not capable of bringing analog data to the Remote Terminal Unit (RTU) back to the SCADA only one phase. In order to enhance the capability and use the full capacity of the SCADA system we need to replace those with solid state relays so we can bring more power quality data back especially power factor and the harmonics.

Mr. Jaffari reported on Project 130, Remote Terminal Unit (RTU) Replacement – Station 3 and said that there are actually two RTU replacements one at Station 3 and one at Station 5. Station 5 should be complete by the end of June to mid-July 2014 and Station 3 will be done in FY2015. The current RTU at Station 3 is not capable of providing all the data such as voltage, current and the effect on harmonics by upgrading that it is going to be operating the SCADA system now they will be synced in to bring more data back for engineering and analysis.

Project 122, Engineering Analysis Software & Data Conversion this project along with Project 125, GIS go hand in hand. Mr. Jaffari explained earlier that GIS is a platform for engineering models and once we have the data in the GIS database completed then we can convert that model into an engineering Milsoft model. Then, the Department will have an up-to-date load flow model that we can perform all sorts of engineering analysis.

Mr. Jaffari reported on state-funded project on West Street, Reading. This project is scheduled for construction completion in FY2015 to widen the road. The next project is Pole Line Upgrade – Lowell Street, Wilmington. This area is of old construction and needs to be brought up-to-code by upgrading the poles, wires and circuits. Mr. Pacino asked where they are going to widen West Street. Mr. Jaffari replied that it would be close to Route 93.

The next project discussed was Distribution Protection & Automation. Mr. Jaffari reported that once they have the working load flow model and the Reliability Study recommendations, this will provide the road map for automation in order to further sectionalize the circuits. Mr. Jaffari said adding more protective devices prevents tripping breakers due to a fault at the end of a circuit and it minimizes the affected outage areas. Mr. Jaffari stated that you have to have a road map for planning ten to fifteen years ahead.

Mr. Jaffari reported on the SCADA System Upgrades stating that the Surveillance Software is upgraded for free and that they are also going to provide us with the Outage Management System upgrade for free. However, there are some costs involved for installation and training and that will be about \$60,000. Once the SCADA System is brought up-to-date with the RTUs at the substations we will have the capability to bring data back from substations to SCADA for engineering analysis. This is going to enhance the capability of the engineers in order to do all sorts of engineering analysis.

The LED Street Light Pilot Area project will be in four areas, one area in each of the four towns. Mr. Jaffari reported that there will be eighty lights then subsequently the following years FY16, FY17 and FY18 the RMLD will be spending close to \$1.2M each year in order to change out all the street lights to LED efficient lights.

Mr. Jaffari reported that the Outage Management Software & Integration project goes hand in hand with the SCADA System upgrade.

The Predictive Asset Management Program project which is a number of predictive programs and once we have the working model we can develop these programs in order to protect our assets.

Mr. Jaffari reported on the Substation Test Equipment project, as we form the Technical Services group so they can test the substations we will need to provide them with the testing equipment. Mr. Jaffari stated that right now we rely on UPG and once the RMLD staff is trained we will be taking the ownership and will be testing our 13.8 kV equipment from A-Z including transformers and breakers. However, for some 35kv devices and 115kv we will still have to rely on outside services like UPG.

Mr. Pacino left the meeting at 6:45 p.m.

The Arc Flash Study project, Mr. Jaffari reported this is another requirement that we need to meet. This study is going to be performed as soon as the Milsoft model has been completed. Mr. Jaffari said the Arc Flash Study will see which devices need to completely shut down in order to perform switching or maintenance work safely.

#### Discussion of Fiscal Year 2015 Capital and Operating Budgets Fiscal Year 2015 Capital Budget

1r. Jaffari reported that the RFP has been sent out for the Organizational/Reliability Study to provide a road map for the next wenty years with an outline on the priority on how we need to allocate the money and the spending in order to make sure that we are going in the right direction with a plan in place.

Mr. Jaffari stated that the rest of the projects are continued and are historic to previous years FY13 continuing to FY19.

Mr. Soli said that he was the Board representative at the CAB meeting and had written down a few notes that may be of interest. It looks like the depreciation for next year will be at 3% the General Manager had said that sometime in the future that it might be necessary to fund this plan to increase the depreciation to 5%.

Ms. O'Brien stated that what is in here beyond FY15 is place holders, it does show that one way of doing it is that the DPU allows you to increase your depreciation up to 5% and you have to file. This targets areas like the facilities, if we are looking at the efficiency use of all of our facilities and we would spend a certain amount of money to renovate the architectural building next door or whatever we are going to do with that along with the LED street lights we would ramp up to five then back down to three.

Mr. Soli said that within the Capital Budget between improvements that are probably pretty well thought out but we do not know what the escalation is and these are prosperous times and other things that look to be just place holders there is about \$1M in here of what seems to be somewhat or quite iffy. Mr. Soli asked if the Board could get a report of how the plan is fleshing out. Chairman Stempeck said that those place holders are there because we are doing things new and differently and that we are setting that foundation for the future and sometimes it is very difficult to see into the future unless you have them in place. Chairman Stempeck stated that clearly we are all about reliability and lowering the costs where we can. Mr. Jaffari said reliability, efficiency and productivity are the three main ingredients behind all the forecasting of the capital improvements moving forward.

Ms. O'Brien stated that prior to this budget you never saw what happened in FY14, now we are letting you know how we are doing with last year and as soon as this gets approved and we get into FY15 then you will get a how we are doing in FY15 with ch of the budgets. Ms. O'Brien said that Mr. Jaffari would go over them quickly during the meetings. Chairman Stempeck said that clearly the visibility of the future years is the way it should be done.

Ms. O'Brien stated that there was talk at one of the meetings that we are upgrading the Ballardvale Area to Target. Ms. O'Brien said that we are probably looking at some kind of substation in that area and are waiting for the consultant. Mr. O'Rourke said that it gives you visibility and enables discussion and if you are not on the radar screen you do not have a chance to talk about

Mr. O'Rourke asked that something like the GIS in the systems area is there much support or interface with the Information Technology group because a lot of your areas have a heavy IT component. Mr. Jaffari replied that there is close coordination and at the last meeting it was mentioned that he and Mr. Uvanni had provided a technology roadmap and would share that with him. This roadmap shows how all the different technologies come together and it shows how they managed. Ms. O'Brien said that it operates on a super highway like a service bus where you have outage management, metering, data, SCADA where this all integrates in so it can all be managed where not one system can be down and effect everything else.

#### Fiscal Year 2015 Capital Budget

Mr. Soli made a motion seconded by Mr. O'Rourke that the RMLD Board of Commissioners move to approve the Fiscal Year 2015 Capital Budget dated March 28, 2014 in the amount of \$5,849,673 as presented.

Chairman Stempeck polled the Board. Motion carried by a polling of the Board: Mr. Talbot; Aye, Mr. O'Rourke; Aye, Mr. Soli; Aye, and Chairman Stempeck, Aye. Motion carried 4:0:0. (Mr. Pacino was not present for this motion.)

#### Adjournment

At 6:57 p.m. Mr. Soli made a motion seconded by Mr. O'Rourke move to adjourn the Regular Session. Chairman Stempeck polled the Board. Motion carried by a polling of the Board: Mr. Talbot; Aye, Mr. O'Rourke; Aye, Mr. Soli; Aye, and Chairman Stempeck, Aye.

ption carried 4:0:0. (Mr. Pacino was not present for this motion.)

A true copy of the RMLD Board of Commissioners minutes as approved by a majority of the Commission. Robert Soli, Secretary Pro -Tem - RMLD Board of Commissioners

# POWER SUPPLY REPORT BOARD REFERENCE TAB B

			6

To:

Coleen O'Brien

From: Maureen McHugh, Jane Parenteau

Date:

September 24, 2014

Subject:

Purchase Power Summary - July, 2014

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of July, 2014.

#### **ENERGY**

The RMLD's total metered load for the month was 72,548,494 kWh, which is a 7.85% decrease from the July, 2013 figures.

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

Table 1

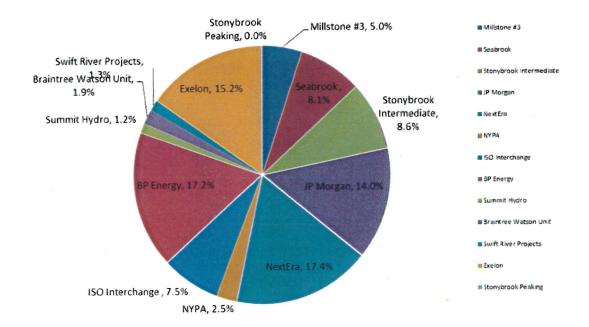
	Amount of	Cost of	% of Total	Total \$	\$ as a
Resource	Energy	Energy	Energy	Costs	%
	(kWh)	(\$/Mwh)			
Millstone #3	3,657,051	\$6.41	5.02%	\$23,447	0.71%
Seabrook	5,895,780	\$5.61	8.10%	\$33,088	1.01%
Stonybrook Intermediate	6,254,374	\$36.47	8.59%	\$228,120	6.94%
JP Morgan	10,211,200	\$62.62	14.02%	\$639,389	19.45%
NextEra	12,693,000	\$53.98	17.43%	\$685,186	20.84%
NYPA	1,842,999	\$4.92	2.53%	\$9,068	0.28%
ISO Interchange	5,429,129	\$57.99	7.46%	\$314,854	9.58%
NEMA Congestion	0	\$0.00	0.00%	\$7,258	0.22%
Coop Resales	25,834	\$128.72	0.04%	\$3,325	0.10%
BP Energy	12,543,800	\$48.27	17.23%	\$605,489	18.42%
Summit Hydro/Collins/Pioneer	873,946	\$71.96	1.20%	\$62,890	1.91%
Braintree Watson Unit	1,348,370	\$52.07	1.85%	\$70,216	2.14%
Swift River Projects	970,248	\$100.80	1.33%	\$97,798	2.97%
Exelon	11,072,200	\$45.83	15.21%	\$507,461	15.44%
Stonybrook Peaking	0	\$0.00	0.00%	\$0	0.00%
Monthly Total	72,817,931	\$45.15	100.00%	\$3,287,590	100.00%

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of July 2014.

	•	Table 2	
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	6,829,836	46.42	9.42%
RT Net Energy ** Settlement	-1,400,707	15.64	-1.93%
ISO Interchange (subtotal)	5,429,129	57.99	7.49%

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

#### **JULY 2014 ENERGY BY RESOURCE**



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

#### **CAPACITY**

The RMLD hit a demand of 157,252 kW, which occurred on July 2, at 4 pm. The RMLD's monthly UCAP requirement for July, 2014 was 208,440 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	42.94	\$212,572	15.21%
Seabrook	7,919	41.71	\$330,274	23.64%
Stonybrook Peaking	24,981	1.95	\$48,704	3.49%
Stonybrook CC	42,925	3.51	\$150,475	10.77%
NYPA	4,019	4.19	\$16,834	1.20%
Hydro Quebec	4,673	3.99	\$18,639	1.33%
Nextera	60,000	5.65	\$339,000	24.26%
Braintree Watson Unit	10,520	11.03	\$116,009	8.30%
ISO-NE Supply Auction	48,453	3.40	\$164,736	11.79%
Total	208,440	\$6.70	\$1,397,243	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)
	Millatara #2	<b>COD 447</b>	<b>#040.570</b>	#000 040	5.040/	0.057.054	
	Millstone #3	\$23,447	\$212,572	\$236,019	5.04%	3,657,051	0.0645
	Seabrook	\$33,088	\$330,274	\$363,362	7.76%	5,895,780	0.0616
	Stonybrook Intermediate	\$228,120	\$150,475	\$378,595	8.08%	6,254,374	0.0605
	Hydro Quebec	\$0	\$18,639	\$18,639	0.40%	-	0.0000
	JP Morgan	\$639,389	\$0	\$639,389	13.65%	10,211,200	0.0626
	NextEra	\$685,186	\$339,000	\$1,024,186	21.86%	12,693,000	0.0807
*	NYPA	\$9,068	\$16,834	\$25,901	0.55%	1,842,999	0.0141
	ISO Interchange	\$314,854	\$165,595	\$480,449	10.26%	5,429,129	0.0885
	Nema Congestion	\$7,258	\$0	\$7,258	0.15%	-	0.0000
	BP Energy	\$605,489	\$0	\$605,489	12.92%	12,543,800	0.0483
×	Summit Hydro/Collins/Pioneer	\$62,890	\$0	\$62,890	1.34%	873,946	0.0720
	Braintree Watson Unit	\$70,216	\$116,009	\$186,225	3.98%	1,348,370	0.1381
*	Swift River Projects	\$97,798	-\$859	\$96,939	2.07%	970,248	0.0999
	Coop Resales	\$3,325	\$0	\$3,325	0.07%	25,834	0.1287
	Constellation Energy	\$507,461	\$0	\$507,461	10.83%	11,072,200	0.0458
	Stonybrook Peaking	\$0	\$48,704	\$48,704	1.04%	-	0.0000
	Monthly Total	\$3,287,590	\$1,397,243	\$4,684,833	100.00%	72,817,931	0.0643

<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 July 2014, as well as their estimated market value.

Table 5
Swift River RECs Summary
Period - January 2014 - July 2014

	Banked	Projected	Total	Est.
	RECs	RECs	RECs	Dollars
Woronoco	995	2,618	3,613	\$149,940
Pepperell	1,363	2,217	3,580	\$207,640
Indian River	608	1,453	2,061	\$119,538
Turners Falls	394	1,107	1,501	\$0
RECs Sold			0	\$0
Grand Total	3,360	7,395	10,755	\$477,118

#### **TRANSMISSION**

The RMLD's total transmission costs for the month of July, 2014 were \$1,238,157. This is an increase of 50.18% from the June transmission cost of \$824,454. In July, 2013 the transmission costs were \$1,183,000.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	157,252	142,696	167,759
Energy (kWh)	72,466,675	61,288,919	78,781,462
Energy (\$)	\$3,287,590	\$2,523,075	\$3,464,349
Capacity (\$)	\$1,397,243	\$1,428,943	\$1,486,497
Transmission(\$)	\$1,238,157	\$824,454	\$1,183,000
Total	\$5,922,990	\$4,776,472	\$6,133,846

# ENERGY EFFICIENCY

Table 7 shows the comprehensive results from the Energy Conservation program. The amount of savings is broken down by both demand and energy for the Commercial and Residential sectors.

Table 7				Total \$		Total		Total \$					
Commercial	Year	Capacity Saved (kW)	Energy Saved (kwh)	Capacity	\$/kW	Energy	\$/kWh	Rebate	Rebate/kWh		Rebate/kW	Cost Benefit	
Total to date	FY07-13	11,346	46,338,741	,338,741 \$ 1,053,256		2,592,993		\$ 1,455,819	\$ 0.03	3 \$	128.31	\$ 2,190,431	,431
Current	FY14	976	2,653,428	\$	134,057 \$11.45	132,671	\$ 0.05	132,671 \$ 0.05 \$ 276,567	€9	0.10	283.46	s	(9,838)
Residential													
Total to date	FY07-13	1,795	1,593,066	\$ 168,790		83,191		\$ 568,591	\$ 0.36	\$ 9	316.79	\$ (316,610)	(019)
Current	FY14	257	122,974	\$ 35,260	35,260 \$11.45	6,149	6,149 \$ 0.05	\$ 149,940	\$ 1.22	2 \$	584.28	\$ (108,	(108,531)
				9			2						
Total													
Total to date	FY07-13	13,141	\$   47,931,807   \$	\$ 1,222,046		2,676,184		\$ 2,049,410 \$	\$ 0.04	\$	155.96	155.96 \$ 1,848,820.24	0.24
Current	FY14	1,232	2,776,402	<del>69</del>	169,317 \$11.45	138,820 \$ 0.05 \$	\$ 0.05	\$ 426,507	\$ 0.15	5 \$	346.11	\$ (118,	(118,370)

Table 8 shows the breakdown for residential appliance rebates by type and year.

Table 8	<b>&amp;</b>																								1
	Washin	Washing Machine	Refrigerator		Dishwasher	her	Dehur	Dehumidifier	Centr	Central A/C	Windo	Window A/C	Thermostat	stat	Audits		Ren	Renewable	Air 5	Air Source Heat Pump HP Water Heater Fan	at Pump HF	Water	Heater Fa	E .	
Year	∆T\	Dollars	QTY Dollars	ars	QTY Do	Dollars	QTY I	QTY Dollars	QTY	QTY Dollars	ΔT	QTY Dollars	QTY Dollars	ollars	ΔTY	Dollars	P	QTY Dollars	ΩTΛ	/ Dollars		QTY Dollars	- 1	QTY Do	Dollars
2007																	_		-	-		4	7	$\dashv$	
2008	\$ 98	\$ 4,300	47 \$	2,350	\$ 22	2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23 \$	\$ 230	107	7 \$ 14,940			-	-		$\dashv$	7	$\dashv$	T
2009	\$ 904	\$ 20,300	259 \$	12,950	235 \$	11,750	40	\$ 1,000	41	\$ 4,100	20	\$ 1,250	114	\$ 1,140	107	14,940			-	_		4	1	$\dashv$	
2010	519 \$	\$ 25,950	371 \$	18,550	382 \$	19,100	37	\$ 925	64	\$ 6,400	49	\$ 1,225	127	\$ 1,270	8	96'8 \$		6 \$ 20,700	8			$\dashv$	1	$\dashv$	
2011	425 \$	\$ 21,250	383 \$	19,150	313 \$	15,650	47 \$	\$ 1,175	57	\$ 5,700	92	\$ 1,625	118	\$ 1,180	180	\$ 26,960	0	4 \$ 18,000	8	4		4	1	$\dashv$	
2012	339 \$	\$ 16,950	354 \$	17,700	289 \$	14,450	38	\$ 950	44	\$ 4,400	\$ 99	\$ 1,400	105	\$ 1,050	219	32,731	_	3 \$ 14,000	8			6	2,250	3	30
2013	ı	\$ 14,250	336 \$	16,800	311 \$	15,550	59	\$ 725	24	\$ 2,400	55	\$ 1,350	57 \$	\$ 570	375	2 \$ 75,000	6	3 \$ 15,000	00 \$ 19	\$ 61	1,900	4	1,000	2	20
2014	322	\$ 16,100	333 \$	16,650	298 \$	14,900	27	\$ 675	38	\$ 3,800	9/	\$ 1,900	83	\$ 1,245	363	3 \$ 72,600	0	4 \$ 17,250	50 \$ 20	\$ 02	2,000	11 \$	2,750	7	70
Total		2382 \$ 119,100 2083 \$	2083 \$	104,150 1883	1883 \$	94,150	225 \$	5,625	285	\$ 28,500	\$ 098	000'6 \$	\$ 229	\$ 6,685	1	1415 \$ 246,131		20 \$ 84,950		39 \$	3,900	24 \$	000'9	15 \$	150

To:

Coleen O'Brien

From: Maureen McHugh, Jane Parenteau

Date:

October 16, 2014

Subject:

Purchase Power Summary - August, 2014

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of August, 2014.

#### **ENERGY**

The RMLD's total metered load for the month was 65,178,041 kWh, which is a 3.32% decrease from the August, 2013 figures.

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

Table 1

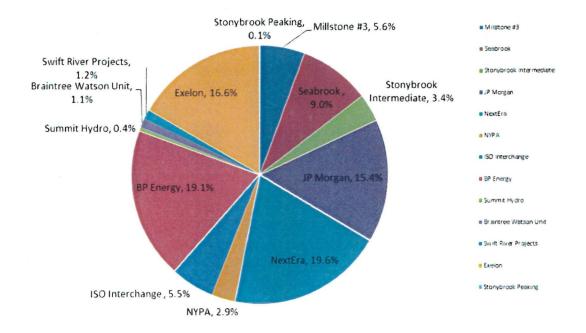
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,637,249	\$6.41	5.58%	\$23,320	0.84%
Seabrook	5,882,778	\$6.69	9.02%	\$39,333	1.42%
Stonybrook Intermediate	2,240,209	\$36.69	3.44%	\$82,197	2.97%
JP Morgan	10,054,800	\$62.35	15.42%	\$626,882	22.64%
NextEra	12,759,000	\$53.61	19.57%	\$684,001	24.71%
NYPA	1,918,893	\$4.92	2.94%	\$9,441	0.34%
ISO Interchange	3,565,090	\$48.61	5.47%	\$173,299	6.26%
NEMA Congestion	0	\$0.00	0.00%	-\$102,978	-3.72%
Coop Resales	17,807	\$140.13	0.03%	\$2,495	0.09%
BP Energy	12,415,800	\$48.27	19.05%	\$599,311	21.65%
Summit Hydro/Collins/Pioneer	290,169	\$67.86	0.45%	\$19,691	0.71%
Braintree Watson Unit	744,997	\$49.68	1.14%	\$37,012	1.34%
Swift River Projects	764,341	\$96.67	1.17%	\$73,891	2.67%
Exelon	10,823,400	\$45.54	16.60%	\$492,881	17.80%
Stonybrook Peaking	71,519	\$106.09	0.11%	\$7,587	0.27%
Monthly Total	65,186,052	\$42.47	100.00%	\$2,768,364	100.00%

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of August, 2014.

		Table 2	
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	4,676,432	33.78	7.18%
RT Net Energy ** Settlement	-111,342	17.22	-0.17%
ISO Interchange (subtotal)	3,565,090	48.61	5.47%

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

#### **AUGUST 2014 ENERGY BY RESOURCE**



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

#### **CAPACITY**

The RMLD hit a demand of 147,012 kW, which occurred on August 27, at 4 pm. The RMLD's monthly UCAP requirement for August, 2014 was 208,440 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	42.94	\$212,540	15.02%
Seabrook	7,919	41.71	\$330,263	23.34%
Stonybrook Peaking	24,981	1.99	\$49,623	3.51%
Stonybrook CC	42,925	3.54	\$152,097	10.75%
NYPA	4,019	4.19	\$16,834	1.19%
Hydro Quebec	4,673	4.30	\$20,098	1.42%
Nextera	60,000	5.65	\$339,000	23.96%
Braintree Watson Unit	10,520	10.77	\$113,348	8.01%
ISO-NE Supply Auction	48,453	3.73	\$180,908	12.79%
Total	208,440	\$6.79	\$1,414,711	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	¢22 220	£242 E40	<b>#</b> 005 000	F 0.40/	2 027 040	0.0040
		\$23,320	\$212,540	\$235,860	5.64%		0.0648
	Seabrook	\$39,333	\$330,263	\$369,596	8.84%	5,882,778	0.0628
	Stonybrook Intermediate	\$82,197	\$152,097	\$234,294	5.60%	2,240,209	0.1046
	Hydro Quebec	\$0	\$20,098	\$20,098	0.48%	-	0.0000
	JP Morgan	\$626,882	\$0	\$626,882	14.99%	10,054,800	0.0623
	NextEra	\$684,001	\$339,000	\$1,023,001	24.46%	12,759,000	0.0802
*	NYPA	\$9,441	\$16,834	\$26,275	0.63%	1,918,893	0.0137
	ISO Interchange	\$173,299	\$180,908	\$354,207	8.47%	3,565,090	0.0994
	Nema Congestion	-\$102,978	\$0	-\$102,978	-2.46%	-	0.0000
	BP Energy	\$599,311	\$0	\$599,311	14.33%	12,415,800	0.0483
×	Summit Hydro/Collins/Pioneer	\$19,691	\$0	\$19,691	0.47%	290,169	0.0679
	Braintree Watson Unit	\$37,012	\$113,348	\$150,359	3.59%	744,997	0.2018
*	Swift River Projects	\$73,891	\$0	\$73,891	1.77%	764,341	0.0967
	Coop Resales	\$2,495	\$0	\$2,495	0.06%	17,807	0.1401
	Constellation Energy	\$492,881	\$0	\$492,881	11.78%	10,823,400	0.0455
	Stonybrook Peaking	\$7,587	\$49,623	\$57,210	1.37%	71,519	0.7999
	Monthly Total	\$2,768,364	\$1,414,711	\$4,183,075	100.00%	65,186,052	0.0642

<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 August 2014, as well as their estimated market value.

Table 5
Swift River RECs Summary
Period - January 2014 - August 2014

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	995	2,618	3,613	\$149,940
Pepperell	1,363	2,453	3,816	\$221,328
Indian River	608	1,714	2,322	\$134,676
Turners Falls	394	1,215	1,609	\$0
RECs Sold			0	\$0
Grand Total	3,360	8,000	11,360	\$505,944

#### **TRANSMISSION**

The RMLD's total transmission costs for the month of August, 2014 were \$1,264,244. This is an increase of 2.11% from the July transmission cost of \$1,238,157. In August, 2013 the transmission costs were \$1,223,588.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	147,012	157,252	140,045
Energy (kWh)	65,186,052	72,817,931	67,363,709
Energy (\$)	\$2,768,364	\$3,287,590	\$2,767,250
Capacity (\$)	\$1,414,711	\$1,397,243	\$1,485,670
Transmission(\$)	\$1,264,244	\$1,238,157	\$1,223,588
Total	\$5,447,319	\$5,922,990	\$5,476,509

# **ENERGY EFFICIENCY**

Table 7 shows the comprehensive results from the Energy Conservation program. The amount of savings is broken down by both demand and energy for the Commercial and Residential sectors.

		The second secon											
Table 7				Total \$		Total		Total \$					
Commercial	Year	Capacity Saved (kW)	Energy Saved (kwh)	Capacity	\$/kW	Energy	\$/kWh	Rebate	Rebate/kWh	-	Rebate/kW	Cost Benefit	Senefit
Total to date	FY07-14	16,169	63,959,276	\$ 1,561,065		3,543,375		\$ 1,732,385	\$ 0.03	3 \$	107.14	\$	3,372,054
Current	FY15	0	-	\$	\$11.45	0	0 \$ 0.05	\$	- €	8	1	8	1
Residential					*********								
Total to date	FY07-14	2,609	2,252,774	\$ 257,422		117,229		\$ 718,531	\$ 0.32	32 \$	275.42	8	(343,881)
Current	FY15	25	12,194	\$ 3,376	3,376 \$11.45	610	610 \$ 0.05	\$ 14,940	\$ 1.23	23 \$	608.08	€	(10,955)
				*****									
Total													
Total to date	FY07-14	18,778	66,212,049	\$ 1,818,487		3,660,603		\$ 2,475,916	\$ 0.04	\$	131.85	\$ 3,0	131.85 \$ 3,003,173.54
Current	FY15	25	12,194	\$	3,376 \$11.45	610	610 \$ 0.05 \$	\$ 14,940	\$ 1.23	3 \$	608.08	€9	(10,955)

Table 8 shows the breakdown for residential appliance rebates by type and year.

Table 8																		-5.00	No. or co		, m. c. mar.						$ \top $
3	ashing	Washing Machine	Refrigerator	بر	Dishwasher	sher	Dehu	Dehumidifier	Cen	Central A/C	>	Window A/C	4/C	Thermostat	ostat	Audits		α.	Renewable	0)	Air Sour	Air Source Heat Pump HP Water Heater	HP dur	Water H	leater Fan	_	
Year Q1	QTY Dol	Dollars	QTY Dollars		QTY [	Dollars	ΔTV	Dollars	YTQ.	/ Dollars		QTY Do	Dollars	QTY [	Dollars	αTY	Dollars	Ø	QTY Dollars	ars	OTY I	Dollars	ΔT	Dollars	S QTY	N Dollars	ars
2007																		+	+				+		+		
2008	\$ 98	4,300	47 \$	2,350	55	\$ 2,750	7 7	\$	175 1	17 \$	1,700	10 \$	250	23	\$ 230	107	\$	14,940	+				-	_	+	-	
2009	406 \$	20,300	259 \$	12,950	235	\$ 11,750	2 40 \$		1,000 4	41 \$	4,100	\$ 09	1,250	114	\$ 1,140	107	\$	14,940	-				+	-		-	
2010	519 \$	25,950	371 \$	18,550	382	\$ 19,100	37	4	925 6	64 \$	6,400	49 \$	1,225	127	\$ 1,270		64 \$ 8	8,960	9	20,700			+		+	+	T
2011	425 \$	21,250	383 \$	19,150	313	\$ 15,650	74 C	69	1,175 5	\$ 25	5,700	\$ 59	1,625	118	\$ 1,180	180	69	26,960	4	18,000			-			-	
2012	339 \$	16,950	354 \$	17,700	289	\$ 14,450	38	69	950 4	44 \$	4,400	\$ 99	1,400	105	\$ 1,050	219	\$	32,731	e9	14,000				\$ 6	2,250	9	30
2013	285 \$	14,250	336 \$	16,800	311	\$ 15,550	29	69	725 2	24 \$	2,400	54	1,350	25	\$ 570	375	€9	000,57	3	15,000	\$ 19	\$ 1,90	006	\$	1,000	2	20
2014	322 \$	16,100	333 \$	16,650	\$ 867	\$ 14,900	72 0	69	675 3	38 \$	3,800	\$ 92	1,900	83	\$ 1,245	363	69	72,600	4	17,250	\$ 20	\$ 2,000	9	\$ 1	2,750	4	70
2015	24 \$	1,200	29 \$	1,450	28 \$	1,400	5	\$	125	\$ 2	200	\$ 6	225	9	06 \$		46 \$ 9	9,200	0	1	\$	\$	200	\$	250	0 \$	
Total 2	\$ 904	2406 \$ 120,300 2112 \$	2112 \$	105,600 1911 \$	1911		95,550 230 \$	\$ 5,750	50 290	\$ 00	29,000	\$ 698	9,225	633	\$ 6,775		1461 \$ 255	255,331	20 \$	84,950	44 \$	\$ 4,400		25.\$ 6	6,250	15.\$	150

To:

Coleen O'Brien

From: Maureen McHugh, Jane Parenteau

Date:

October 30, 2014

Subject:

Purchase Power Summary - September, 2014

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of September, 2014.

#### **ENERGY**

The RMLD's total metered load for the month was 58,960,559 kWh, which is a .61% increase from the September, 2013 figures.

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

Table 1

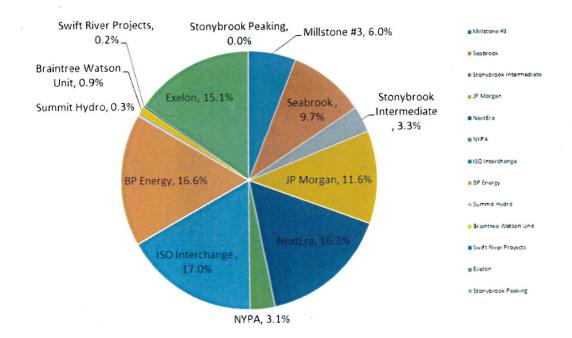
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,509,708	\$6.41	5.95%	\$22,502	0.95%
Seabrook	5,695,492	\$6.69	9.66%	\$38,081	1.61%
Stonybrook Intermediate	1,919,931	\$50.53	3.26%	\$97,005	4.11%
JP Morgan	6,848,400	\$62.39	11.61%	\$427,289	18.12%
NextEra	9,602,000	\$49.40	16.28%	\$474,323	20.11%
NYPA	1,822,126	\$4.92	3.09%	\$8,965	0.38%
ISO Interchange	9,997,965	\$38.42	16.95%	\$384,145	16.29%
NEMA Congestion	0	\$0.00	0.00%	-\$41,235	-1.75%
Coop Resales	14,838	\$139.81	0.03%	\$2,075	0.09%
BP Energy	9,804,000	\$48.27	16.63%	\$473,239	20.06%
Summit Hydro/Collins/Pioneer	196,972	\$80.03	0.33%	\$15,764	0.67%
Braintree Watson Unit	537,400	\$182.73	0.91%	\$98,201	4.16%
Swift River Projects	103,611	\$80.30	0.18%	\$8,319	0.35%
Exelon	8,908,800	\$39.10	15.11%	\$348,291	14.77%
Stonybrook Peaking	7,026	\$227.75	0.01%	\$1,600	0.07%
Monthly Total	58,968,269	\$40.00	100.00%	\$2,358,566	100.00%

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of September, 2014.

	•	Table 2	
Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	9,491,454	38.35	14.56%
RT Net Energy ** Settlement	506,511	39.82	0.78%
ISO Interchange (subtotal)	9,997,965	38.42	15.34%

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

#### **SEPTEMBER 2014 ENERGY BY RESOURCE**



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

#### **CAPACITY**

The RMLD hit a demand of 150,405 kW, which occurred on September 2, at 3 pm. The RMLD's monthly UCAP requirement for September, 2014 was 208,440 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	42.94	\$212,575	14.97%
Seabrook	7,919	41.70	\$330,243	23.26%
Stonybrook Peaking	24,981	1.97	\$49,182	3.46%
Stonybrook CC	42,925	3.53	\$151,616	10.68%
NYPA	4,019	4.19	\$16,834	1.19%
Hydro Quebec	4,673	4.57	\$21,345	1.50%
Nextera	60,000	5.65	\$339,000	23.87%
Braintree Watson Unit	10,520	11.05	\$116,291	8.19%
ISO-NE Supply Auction	48,453	3.77	\$182,892	12.88%
Total	208,440	\$6.81	\$1,419,977	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	\$22,502	\$212,575	\$235,078	6.22%	3,509,708	0.0670
	Seabrook	\$38,081	\$330,243	\$368,323	9.75%		0.0647
	Stonybrook Intermediate	\$97,005	\$151,616	\$248,621	6.58%	1,919,931	0.1295
	Hydro Quebec	\$0	\$21,345	\$21,345	0.56%	-	0.0000
	JP Morgan	\$427,289	\$0	\$427,289	11.31%	6,848,400	0.0624
	NextEra	\$474,323	\$339,000	\$813,323	21.52%	9,602,000	0.0847
*	NYPA	\$8,965	\$16,834	\$25,799	0.68%	1,822,126	0.0142
	ISO Interchange	\$384,145	\$183,786	\$567,931	15.03%	9,997,965	0.0568
	Nema Congestion	-\$41,235	\$0	-\$41,235	-1.09%	-	0.0000
	BP Energy	\$473,239	\$0	\$473,239	12.52%	9,804,000	0.0483
*	Summit Hydro/Collins/Pioneer	\$15,764	\$0	\$15,764	0.42%	196,972	0.0800
	Braintree Watson Unit	\$98,201	\$116,291	\$214,492	5.68%	537,400	0.3991
*	Swift River Projects	\$8,319	-\$894	\$7,426	0.20%	103,611	0.0717
	Coop Resales	\$2,075	\$0	\$2,075	0.05%	14,838	0.1398
	Constellation Energy	\$348,291	\$0	\$348,291	9.22%	8,908,800	0.0391
	Stonybrook Peaking	\$1,600	\$49,182	\$50,782	1.34%	7,026	7.2277
	Monthly Total	\$2,358,566	\$1,419,977	\$3,778,543	100.00%	58,968,269	0.0641

<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 September 2014, as well as their estimated market value.

Table 5
Swift River RECs Summary
Period - January 2014 - September 2014

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	3,613	0	3,613	\$173,424
Pepperell	3,179	1,342	4,521	\$217,008
Indian River	1,711	638	2,349	\$112,752
Turners Falls	1,389	220	1,609	\$0
RECs Sold			0	\$0
Grand Total	9,892	2,200	12,092	\$503,184

#### **TRANSMISSION**

The RMLD's total transmission costs for the month of September, 2014 were \$1,149,000. This is a decrease of 9.12% from the August transmission cost of \$1,264,244. In September, 2013 the transmission costs were \$931,368.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	150,405	147,012	156,230
Energy (kWh)	58,968,269	65,160,895	58,614,875
Energy (\$)	\$2,358,566	\$2,768,364	\$2,168,234
Capacity (\$)	\$1,419,977	\$1,414,711	\$1,489,738
Transmission(\$)	\$1,149,000	\$1,264,244	\$931,368
Total	\$4,927,542	\$5,447,319	\$4,589,340

# ENERGY EFFICIENCY

Table 7 shows the comprehensive results from the Energy Conservation program. The amount of savings is broken down by both demand and energy for the Commercial and Residential sectors.

Table 7				Total \$		Total		Total \$				
Commercial	Year	Capacity Saved (kW)	Energy Saved (kwh)	Capacity	\$/kW	Energy	\$/kWh	Rebate	Rebate/kWh	Rebate/kW	e/kW	Cost Benefit
Total to date	FY07-14	16,169	63,959,276	\$ 1,561,065		3,543,375		\$ 1,732,385	\$ 0.03	\$	107.14	\$ 3,372,054
Current	FY15	10	30,389	\$ 1,338	\$11.45	1,823	1,823 \$ 0.06 \$	\$ 9,388	\$ 0.31	8	963.83	\$ (6,226)
Residential												
Total to date	FY07-14	2,609	2,252,774	\$ 257,422		117,229		\$ 718,531	\$ 0.32	\$	275.42	\$ (343,881)
Current	FY15	40	27,681	\$ 5,504	5,504 \$11.45	1,661	1,661 \$ 0.06	\$ 26,550	\$ 0.96	€9	662.82	\$ (19,385)
Total												
Total to date	FY07-14	18,778	66,212,049	,212,049 \$ 1,818,487		3,660,603		\$ 2,475,916	\$ 0.04	↔	131.85	\$ 3,003,173.54
Current	FY15	90	58,070	\$ 6,842	6,842 \$11.45	3,484	3,484 \$ 0.06	\$ 35,938	\$ 0.62	s	721.70	\$ (25,611)

Table 8 shows the breakdown for residential appliance rebates by type and year.

Table 8	_												-			-				-		-		-	-
	Washin	Washing Machine	Refrigerator	rator	Dishw	Dishwasher	Dehr	Dehumidifier	Cent	Central A/C	N	Window A/C		I hermostat		Audits		Renewable	able	Air S	Air Source Heat PumpHP Water Heater	umpHP	Water He	ater Fan	_
Year	OTY	Dollars	OTY D	Dollars	ΛTΩ	Dollars	QTY	QTY Dollars	ΔT	QTY Dollars	QTY	Y Dollars		QTY Dollars		QTY Do	Dollars	QTY I	QTY Dollars	ΔT	Dollars	QTY	r Dollars		QTY Dollars
1	$\overline{}$								L					Н						4		-		+	4
2008	86	\$ 4,300	47	\$ 2,350	55	\$ 2,750	0 7	\$ 175	17	\$	1,700	10 \$	250	23 \$	230	107 \$	14,940			_		+	1	+	+
2009	406	\$ 20,300	259	\$ 12,950	235	\$ 11,750	0 40	000'1 \$ (	41	8	4,100	\$ 09	1,250	114 \$	1,140	107 \$	14,940			$\downarrow$		+	4	+	+
2010	519 \$	\$ 25,950	371	\$ 18,550	382	\$ 19,100	0 37	\$ 925	64	\$	6,400	49 \$	1,225	127 \$	1,270	64 \$	8,960	9	\$ 20,700			+	1	+	4
2011	425 \$	\$ 21.250	383	\$ 19,150	313	\$ 15,650	0 47	1,175	57	€9	5,700	\$ 29	1,625	118 \$	1,180	180 \$	5 26,960	4	\$ 18,000			+	_	+	4
2012		1	354	\$ 17,700	289	\$ 14,450	0 38	3 \$ 950	44	₩	4,400	\$ 99	1,400	105 \$	1,050	219 \$	32,731	3	\$ 14,000	_			9 \$ 2	2,250	9
2013	285	69	336		+	69	-		5 24	\$ 2	,400	54 \$	1,350	\$ 2	929	375 \$	5 75,000	3	\$ 15,000	0 \$ 19	\$	1,900	4 \$ 1	000	2
2014	322	69	333	\$ 16,650	298	\$ 14,900	0 27	5 675	38	\$	,800	\$ 92	1,900	83 \$	1,245	363 \$	5 72,600	4	\$ 17,250	0 \$ 20	<del>S</del>	2,000	11 \$ 2	2,750	7
2015	63	S	78	\$ 3,900	69	\$ 3,250	L	9 \$ 225	13	8	300	21 \$	525	10 \$	150	\$ 69	13,000	0	- 8	\$	&	800	9	250	9
Total	2445	2445 \$ 122,250 2161 \$ 108,050 1948	2161	\$ 108,050	1948	\$ 97,400	0 234	1 \$ 5,850	298	3 \$ 29,800		381 \$	9,525	637 \$	6,835	1480 \$	5 259,131	20	\$ 84,950	0 47	\$	4,700 2	25 \$ 6	6,250	15 \$



#### ELECTRIC POWER ENGINEERING

#### 35 MAIN STREET HOPKINTON, MA 01748 TELEPHONE (508) 435-9377

To:

Coleen O'Brien, General Manager

Cc:

Jane Parenteau, Bob Fournier, Bill Selden

From:

Mayhew D. Seavey, Jr.

Date:

November 14, 2014

Subject:

LED Street Light Schedule

As you requested I have prepared a rate schedule for LED municipal street lights based on my analysis dated June 12, 2014 and revised September 18th. This rate schedule is suitable for filing with the Massachusetts Department of Public Utilities (MDPU). I have made the effective date December 1, 2014 but that date can be changed if desired. I have also left the tariff number blank since I am not sure of the last sequential rate schedule that RMLD has filed.

In developing these rates, I relied on fixture capital and installation costs provided by RMLD. The attached Exhibit 1 shows the development of each fixture rate. The total capital cost, including the cost of the fixture, arm, photocell and installation labor is assumed to be recovered over a 25-year economic life at a depreciation rate of 4%.

For the O&M cost I began with the FY15 budget number of \$92,652. I subtracted the approximately \$60 thousand in maintenance savings from the Pilot Study and added 29% for Administrative and General expenses, which is the level of A&G as a percentage of total O&M excluding purchased power. This resulted in a total O&M plus A&G expense of \$42,354. Divided by the total projected number of fixtures, this gives an annual O&M charge of \$5.87 per fixture. I recommend using a per-fixture charge rather than a per-kWh charge because the amount of maintenance required does not seem to vary with the wattage of the fixture.

These rates should provide savings of around 40% to the towns compared with the present charges for high pressure sodium fixtures with comparable lumen output under the present rate.

If there are any questions regarding this, please do not hesitate to contact me.

#### Town of Reading, Massachusetts Municipal Light Department

M	D	P	U	#	
	_	_	_		

#### **LED Street Lighting Rate**

#### Designation:

LED Street Light Rate

#### Available:

Reading, Lynnfield Center, North Reading, and Wilmington

#### Applicable to:

Street Light service using LED fixtures on all public, private, and unaccepted streets where the Department has private facilities for supplying electricity and where the installation work involved is limited to the necessary lighting unit and connection on the same pole.

#### **Energy Charge:**

The rate per year for the standard 4,000-hour schedule is as follows:

Fixture Type	Annual Rate	Annual kWh
25 Watt LED	\$19.83	100
101 Watt LED	26.75	404
93 Watt LED Flood	40.59	372
134 Watt LED Flood	46.63	536

#### **Fuel Adjustment:**

The bill for service hereunder may be increased or decreased as provided by the Standard fuel Adjustment Clause. The Fuel Adjustment will appear on the bill as the monthly fuel charge multiplied by one twelfth of the Annual kWh shown above for each Fixture Type.

#### Purchase Power Adjustment:

The bill for service hereunder may be increased or decreased as provided by the Purchase Power Adjustment. The Purchase power Adjustment will appear on the bill as the monthly charge multiplied by one twelfth of the Annual kWh shown above for each Fixture Type.

Rate Filed: December 1, 2014

Effective: On Billings on or After December 1, 2014 Filed By: Coleen M. O'Brien, General Manager

# ENGINEERING AND OPERATIONS REPORT BOARD REFERENCE TAB C

#### READING MUNICIPAL LIGHT DEPARTMENT

#### Engineering and Operations Monthly Report

#### September 2014

#### **CAPITAL IMPROVEMENTS**

		% Complete	PROJECT	SPENDING
Con	struction Projects:	FY14-15 Status	Month	YTD
106	<ul> <li>URD Upgrades – All Towns:</li> <li>Snowcrest Run, NR</li> <li>Thistle Lane, LC</li> </ul>	On- going	\$6,671	\$34,545
107	Step-down Area Upgrades – All Towns:  • McDonald Road, W  • Vine Street, R	On- going	\$3,842	\$15,142
New	Customer Service Connections:			
112	Service Installations – Commercial/Industrial:  • Main Street – Agostino Drive, W		\$2,554	\$6,442
113	Service Installations – Residential: This item includes new or upgraded overhead and underground services.		\$15,314	\$44,348

#### **Routine Construction:**

Routine Construction:		
	Month	YTD
Pole Setting/Transfers	19,982	59,445
Overhead/Underground	63,161	188,980
Projects Assigned as Required     Wildwood School, W (transformer replacement)     North Reading High/Middle School (road widening)     Wilmington High School (new service)     Mark Avenue, R (area upgrade)     Lynnfield High Athletic Field (lights)     Ballardvale St, W (transformer replacement)	40,344	160,942
Pole Damage/Knockdowns - Some Reimbursable  • Work was done to repair or replace one (1) damaged pole.	1,455	10,762
Station Group	19,247	19,247
Hazmat/Oil Spills		3,831
Porcelain Cutout Replacement Program	1,428	3,149
Lighting (Street Light Connections)	1,105	4,170
Storm Trouble	7,148	24,231
Underground Subdivisions (new construction)  • Amherst Road, W  • Cheyenne Estates, W  • Rahnden Terrace, N	7,215	19,079
Animal Guard Installation	753	1,763
Miscellaneous Capital Costs	13,490	47,953
TOTAL:	<u>\$ 175,329</u>	\$ 543,551

Spec	ial Projects/Capital Purchases:	% Complete FY14-15 Status	Month	YTD
131	LED Street Light Pilot Program	100%	\$1,335	\$1,335
137	SCADA System Upgrade (server)	100%	\$12,832	\$12,832

November 7, 2014 2

#### MAINTENANCE PROGRAMS

#### **Aged/Overloaded Transformer Replacement**

Padmount:

Single-Phase: 10.71% replaced through 10/31/14 Three-Phase: 6.41% replaced through 10/31/14

Overhead:

Single-Phase: 8.23% replaced through 10/31/14 Three-Phase: 2.22% replaced through 10/31/14

#### Pole Testing System-wide (600-1,000 poles/year)

Contract awarded to mPower Technologies. Inspection underway - 640 poles are schedule for inspection this year; 435 have been inspected as of 11/7/14.

#### 13.8kV/35kV Feeders – Quarterly Inspections

3W8, 3W18, 5W4, 5W8, 5W9, 5W4, 5W5, 4W7, 4W23, 3W8, 3W18, 3W6,3W13, 3W5, 3W15, 4W5, 4W6, 4W13, 4W10, 4W12, 4W16 Miscellaneous branches and vines were found and removed.

#### **Manhole Inspections**

Pending.

#### Porcelain Cutout Replacements (with Polymer)

A total of 20 cutouts were changed out in September. Six (6) were charged as part of the Porcelain Cutout Replacement Program and an additional 14 were replaced because of damage. 87% complete.

#### **Substations:**

#### Infared Scanning (Monthly)

Station 3	Scanning complete through October – no hot spots found
Station 4	Scanning complete through October – no hot spots found
Station 5	Scanning complete through October – no hot spots found
Substation	Maintenance Program

• Inspection of all three stations by UPG in progress. 90% complete.

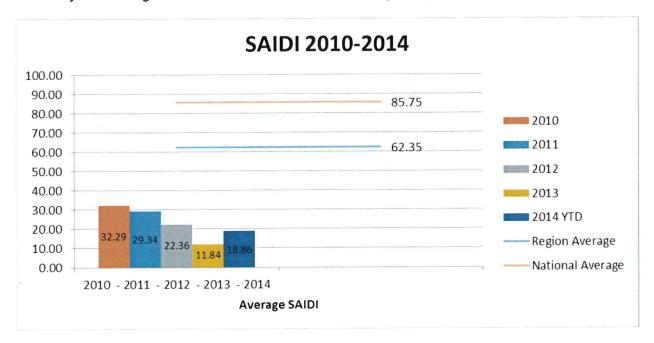
November 7, 2014 3

#### SYSTEM RELIABILITY

Key industry standard metrics have been identified to enable the RMLD to measure and track system reliability.

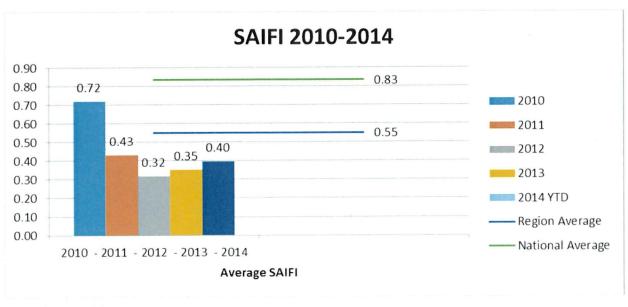
**SAIDI (System Average Interruption Duration Index)** is defined as the average interruption duration (in minutes) for customers served by the utility system during a specific time period.

SAIDI = the sum of all customer interruption durations within the specified time frame ÷ by the average number of customers served during that period.



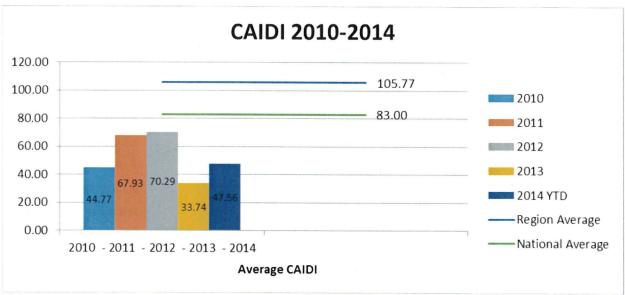
**SAIFI (System Average Interruption Frequency)** is defined as the average number of instances a customer on the utility system will experience an interruption during a specific time period.

SAIFI = the total number of customer interruptions ÷ average number of customers served during that period.



**CAIDI (Customer Average Interruption Duration Index)** is defined as the average duration (in minutes) of an interruption experienced by customers during a specific time frame.

CAIDI = the sum of all customer interruption durations during that time period ÷ the number of customers that experienced one or more interruptions during that time period



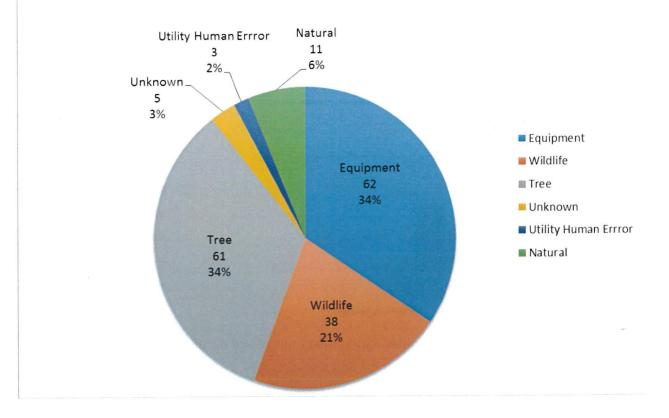
This matric reflects the average customer experience (minutes of duration) during an outage.

**Note:** Since SAIDI, SAIFI and CAIDI are sustained interruption indices; only outages lasting longer than one minute are included in the calculations.

November 7, 2014

5

# 2014 Outage Causes Types YTD September 30, 2014



### FINANCIAL REPORT BOARD REFERENCE TAB D

· ·

Dt: October 31, 2014

To: RMLB, Coleen O'Brien, Jeanne Foti

Fr: Bob Fournier

#### Sj: September 30, 2014 Report

The results for the first three months ending September 30, 2014, for the fiscal year 2015 will be summarized in the following paragraphs.

#### 1) Change in Net Assets: (Page 3A)

For the month of September, the net income or the positive change in net assets was \$639,851, increasing the year to date net income to \$3,490,677. The year to date budgeted net income was \$3,408,662, resulting in net income being over budget by \$82,015 or 2.4%. Actual year to date fuel revenues exceeded fuel expenses by \$1,814,414.

#### 2) Revenues: (Page 11B)

Year to date operating revenues were under budget by \$958,758 or 3.7%. Actual operating revenues were \$24.8 million compared to the budgeted amount of \$25.8 million.

#### 3) Expenses: (Page 12A)

- \*Year to date purchased power base expense was under budget by \$11,069 or .14%. Actual purchased power base costs and budgeted power base costs were \$7.9 million.
- \*Year to date operating and maintenance (O&M) expenses combined were under budget by \$398,007 or 10.8%. Actual O&M expenses were \$3.2 million compared to the budgeted amount of \$3.6 million.
- \*Depreciation expense and voluntary payments to the Towns were on budget.

#### 4) Cash: (Page 9)

- \*Operating Fund was at \$11,038,619.
- \* Capital Fund balance was at \$5,363,336.
- \* Rate Stabilization Fund was at \$6,741,757.
- \* Deferred Fuel Fund was at \$5,947,109.
- \* Energy Conservation Fund was at \$582,350.

#### 5) General Information:

Year to date kwh sales (Page 5) were 194,770,081 which is 7.4 million kwh or 3.6%, BEHIND last year's actual figure.

#### **Budget Variance:**

Cumulatively, the five divisions were under budget by \$405,606 or 7.2%.

FINANCIAL REPORT

**SEPTEMBER 30, 2014** 

**ISSUE DATE: OCTOBER 31, 2014** 

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF NET ASSETS 9/30/2014

		PREVIOUS YEAR	CURRENT YEAR
ASSETS			
CURRENT			
UNRESTRICTED CASH	(SCH A P.9)	8,229,356.39	11,038,619.90
RESTRICTED CASH	(SCH A P.9)	20,202,747.62	22,414,031.53
RESTRICTED INVESTMENTS	(SCH A P.9)	0.00	1,292,906.26
RECEIVABLES, NET	(SCH B P.10)	8,195,375.49	7,561,825.18
PREPAID EXPENSES	(SCH B P.10)	1,411,727.14	1,406,716.39 1,439,446.41
INVENTORY		1,521,933.75	1,439,446.41
TOTAL CURRENT ASSETS		39,561,140.39	45,153,545.67
NONCURRENT			4
INVESTMENT IN ASSOCIATED CO	(SCH C P.2)	37,060.48	26,993.75
CAPITAL ASSETS, NET	(SCH C P.2)	70,009,019.31	69,964,993.35
		70 046 070 70	69,991,987.10
TOTAL NONCURRENT ASSETS		70,046,079.79	69,991,987.10
TOTAL ASSETS		109,607,220.18	115,145,532.77
	×		
LIABILITIES			
CURRENT			E 472 E72 C1
ACCOUNTS PAYABLE		4,906,426.64	5,472,573.61
CUSTOMER DEPOSITS		746,358.61	807,738.14 455,965.98
CUSTOMER ADVANCES FOR CONSTRUC	TION	427,384.15	126,372.34
ACCRUED LIABILITIES		170,301.90	120,372.34
TOTAL CURRENT LIABILITIES		6,250,471.30	6,862,650.07
NONCURRENT ACCRUED EMPLOYEE COMPENSATED A	BSENCES	3,132,560.84	2,918,870.73
ACCROED EMPEDIES COMERNSHIED I	20211020		
TOTAL NONCURRENT LIABILITIES		3,132,560.84	2,918,870.73
TOTAL LIABILITIES		9,383,032.14	9,781,520.80
NET ASSETS			
INVESTED IN CAPITAL ASSETS, NET O	F RELATED DEBT	70,009,019.31	69,964,993.35
RESTRICTED FOR DEPRECIATION FUND	(P.9)	3,679,743.06	5,099,591.58
UNRESTRICTED		26,535,425.67	30,299,427.04
TOTAL NET ASSETS	(P.3)	100,224,188.04	105,364,011.97
TOTAL LIABILITIES AND NET ASSETS		109,607,220.18	115,145,532.77

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT NONCURRENT ASSET SCHEDULE 9/30/2014

#### SCHEDULE C

SCHEDULE OF INVESTMENTS IN ASSOCIATED COMPANIES	PREVIOUS YEAR	CURRENT YEAR
NEW ENGLAND HYDRO ELECTRIC NEW ENGLAND HYDRO TRANSMISSION	3,261.87 33,798.61	2,975.74 24,018.01
TOTAL INVESTMENTS IN ASSOCIATED COMPANIES	37,060.48	26,993.75
SCHEDULE OF CAPITAL ASSETS		
LAND STRUCTURES AND IMPROVEMENTS EQUIPMENT AND FURNISHINGS INFRASTRUCTURE TOTAL CAPITAL ASSETS, NET	1,265,842.23 6,430,802.65 12,464,470.46 49,847,903.97	1,265,842.23 6,078,471.99 12,322,184.73 50,298,494.40 69,964,993.35
TOTAL NONCURRENT ASSETS	70,046,079.79	69,991,987.10

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS 9/30/2014

	MONTH	MONTH	LAST YEAR	CURRENT YEAR	YTD %
	LAST YEAR	CURRENT YEAR	TO DATE	TO DATE	CHANGE
OPERATING REVENUES: (SCH D P.11)					
BASE REVENUE	4,388,093.22	1,925,013.36	13,155,956.58	6,085,527.36	-53.74%
FUEL REVENUE	3,096,134.62	2,758,999.30	9,434,647.92	10,386,553.45	10.09%
PURCHASED POWER CAPACITY	23,406.80	2,542,665.72	68,739.15	8,099,597.29	11683.09%
FORFEITED DISCOUNTS	76,781.85	108,263.18	223,391.10	249,020.22	11.47%
ENERGY CONSERVATION REVENUE	67,828.50	59,812.67	199,262.86	190,585.45	-4.35%
GAW REVENUE	68,822.22	0.00	202,191.02	0.00	100.00%
NYPA CREDIT	(61,811.13)	(73,836.15)	(149,297.25)	(157,619.41)	5.57%
TOTAL OPERATING REVENUES	7,659,256.08	7,320,918.08	23,134,891.38	24,853,664.36	7.43%
OPERATING EXPENSES: (SCH E P.12)					
PURCHASED POWER BASE	2,424,682.96	2,576,986.27	7,811,025.76	7,909,530.96	1.26%
PURCHASED POWER FUEL	2,168,234.24	2,358,565.60	8,399,833.69	8,414,519.55	0.17%
OPERATING	778,965.79	772,492.30	2,567,919.66	2,439,760.44	-4.99%
MAINTENANCE	280,641.65	351,060.97	673,512.51	821,822.59	22.02%
DEPRECIATION	314,969.55	321,788.79	944,908.65	965,366.37	2.17%
VOLUNTARY PAYMENTS TO TOWNS	116,666.67	118,000.00	350,000.01	354,000.00	1.14%
TOTAL OPERATING EXPENSES	6,084,160.86	6,498,893.93	20,747,200.28	20,904,999.91	0.76%
OPERATING INCOME	1,575,095.22	822,024.15	2,387,691.10	3,948,664.45	65.38%
OFERTING INCOME	1,3/3,033.22	822,024.13	2,387,091.10	3,940,004.43	03.301
NONOPERATING REVENUES (EXPENSES)					
CONTRIBUTIONS IN AID OF CONST	(280.37)	395.20	4,937.38	395.20	0.00
RETURN ON INVESTMENT TO READING	(191,768.41)	(194,405.25)	(575,305.25)	(583,215.75)	1.38%
INTEREST INCOME	2,285.65	10,097.40	7,361.47	32,355.54	339.53%
INTEREST EXPENSE	(254.60)	(261.92)	(770.38)	(782.66)	1.59%
OTHER (MDSE AND AMORT)	78,804.93	2,002.00	83,094.93	93,261.03	12.23%
TOTAL NONOPERATING REV (EXP)	(111,212.80)	(182,172.57)	(480,681.85)	(457,986.64)	-4.72%
CHANGE IN NET ASSETS	1,463,882.42	639,851.58	1,907,009.25	3,490,677.81	83.04%
=	-/100/002.12	337,332.30	2,30.,003.23	3,133,077.01	03.040
NET ASSETS AT BEGINNING OF YEAR			98,317,178.79	101,873,334.16	3.62%
NET ASSETS AT END OF SEPTEMBER		-	100,224,188.04	105,364,011.97	5.13%

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUSINESS-TYPE PROPRIETARY FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS 9/30/2014

	ACTUAL	BUDGET		2
	YEAR TO DATE	YEAR TO DATE	VARIANCE*	CHANGE
OPERATING REVENUES: (SCH F P.11B)	ILAK 10 DAIL	TEAR TO DATE	VACIANCE	CHANGE
OPERATING REVENUES: (SCH F F.115)				
BASE REVENUE	6,085,527.36	14,709,336.00	(8,623,808.64)	-58.63%
FUEL REVENUE	10,386,553.45	10,752,311.00	(365,757.55)	-3.40%
PURCHASED POWER CAPACITY	8,099,597.29	0.00	8,099,597.29	100.00%
FORFEITED DISCOUNTS	249,020.22	323,605.00	(74,584.78)	-23.05%
ENERGY CONSERVATION REVENUE	190,585.45	202,170.00	(11,584.55)	-5.73%
NYPA CREDIT	(157,619.41)	(174,999.00)	17,379.59	-9.93%
NIFA CREDIT	(137,019.41)	(1/4/333.00)	11,313.33	-9.93%
TOTAL OPERATING REVENUES	24,853,664.36	25,812,423.00	(958,758.64)	-3.71%
Total Orbitalities (available)	-1/000/000100	-5/5-1/115/55	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3.710
OPERATING EXPENSES: (SCH G P.12A)				
PURCHASED POWER BASE	7,909,530.96	7,920,600.00	(11,069.04)	-0.14%
PURCHASED POWER FUEL	8,414,519.55	9,056,605.00	(642,085.45)	-7.09%
OPERATING	2,439,760.44	2,855,299.00	(415,538.56)	-14.55%
MAINTENANCE	821,822.59	804,292.00	17,530.59	2.18%
DEPRECIATION	965,366.37	972,999.00	(7,632.63)	-0.78%
VOLUNTARY PAYMENTS TO TOWNS	354,000.00	354,000.00	0.00	0.00%
VOLUNIARI PRIMENIS TO TOWNS		334,000.00	0.00	0.00%
TOTAL OPERATING EXPENSES	20,904,999.91	21,963,795.00	(1,058,795.09)	-4.82%
OPERATING INCOME	3,948,664.45	3,848,628.00	100,036.45	2.60%
OFEIGHTING INCOME	3,310,001.13	3,010,020.00	200,030.43	2.00%
NONOPERATING REVENUES (EXPENSES)				
NONOFERRIING REVENUES (EXPENSES)				
CONTRIBUTIONS IN AID OF CONST	395.20	50,000.00	(49,604.80)	-99.21%
RETURN ON INVESTMENT TO READING	(583,215.75)	(583,215.00)	(0.75)	0.00%
INTEREST INCOME	32,355.54	24,999.00	7,356.54	29.43%
INTEREST EXPENSE	(782.66)	(750.00)	(32.66)	4.35%
OTHER (MDSE AND AMORT)	93,261.03	69,000.00	24,261.03	35.16%
, , , , , , , , , , , , , , , , , , , ,				
TOTAL NONOPERATING REV (EXP)	(457,986.64)	(439,966.00)	(18,020.64)	4.10%
CHANGE IN NET ASSETS	3,490,677.81	3,408,662.00	82,015.81	2.41%
CHANGE IN NEI ASSEIS	3,490,677.81	3,400,002.00	02,013.01	2.418
NET ASSETS AT BEGINNING OF YEAR	101,873,334.16	101,873,334.16	0.00	0.00%
NET ASSETS AT END OF SEPTEMBER	105,364,011.97	105,281,996.16	82,015.81	0.08%
in a country in the contraction			,,01	3.55%

<sup>\* ( ) =</sup> ACTUAL UNDER BUDGET

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT RECONCILIATION OF CAPITAL FUNDS 9/30/2014

#### SOURCE OF CAPITAL FUNDS:

DEPRECIATION FUND BALANCE 7/1/14	4,130,584.59
CONSTRUCTION FUND BALANCE 7/1/14	1,000,000.00
INTEREST ON DEPRECIATION FUND FY 15	3,640.62
DEPRECIATION TRANSFER FY 15	965,366.37
TOTAL SOURCE OF CAPITAL FUNDS	6,099,591.58
USE OF CAPITAL FUNDS:	
LESS PAID ADDITIONS TO PLANT THRU SEPTEMBER	736,254.92
GENERAL LEDGER CAPITAL FUNDS BALANCE 9/30/14	5,363,336.66

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SALES OF KILOWATT HOURS 9/30/2014

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES COMM. AND INDUSTRIAL SALES PRIVATE STREET LIGHTING	25,540,399 40,557,855 73,957	22,939,398 35,714,805 78,696	80,169,552 114,464,916 222,003	75,043,290 112,076,532 236,838	-6.39% -2.09% 6.68%
TOTAL PRIVATE CONSUMERS	66,172,211	58,732,899	194,856,471	187,356,660	-3.85%
MUNICIPAL SALES:					
STREET LIGHTING MUNICIPAL BUILDINGS	239,515 875,317	242,669 750,172	718,505 2,461,219	729,038 2, <b>4</b> 16,962	1.47% -1.80%
TOTAL MUNICIPAL CONSUMERS	1,114,832	992,841	3,179,724	3,146,000	-1.06%
SALES FOR RESALE	365,264	347,064	1,089,486	1,085,516	-0.36%
SCHOOL	1,159,553	1,036,921	3,044,297	3,181,905	4.52%
TOTAL KILOWATT HOURS SOLD	68,811,860	61,109,725	202,169,978	194,770,081	-3.66%

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT KILOWATT HOURS SOLD BY TOWN 9/30/2014

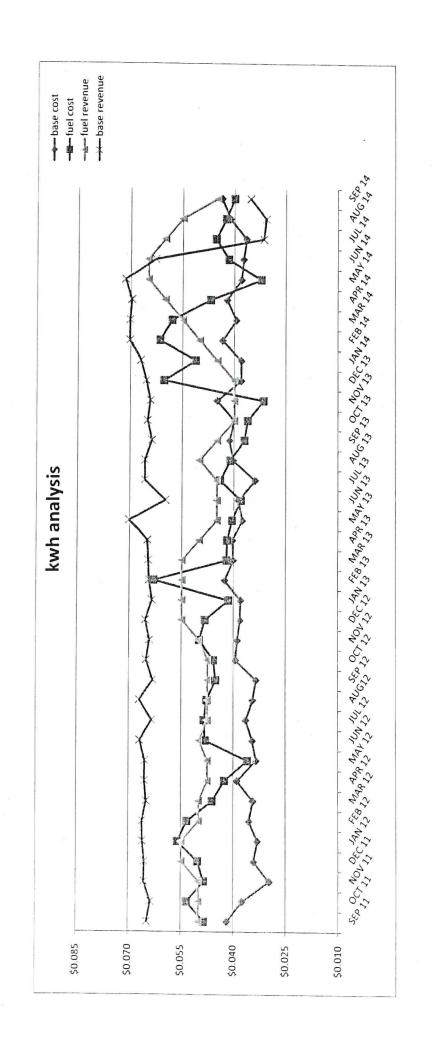
		TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
1 (O) Im ()		101141	141111111111111111111111111111111111111			
MONTH						
					5 455 000	6 000 777
	RESIDENTIAL	22,939,398	7,293,294	3,582,043	5,175,288	6,888,773
	COMM & IND	35,714,805	4,460,805	299,833	5,481,548	25,472,619
	PVT ST LIGHTS	78,696	13,102	1,524	24,826	39,244
	PUB ST LIGHTS	242,669	81,549	32,770	42,644	85,706
	MUNI BLDGS	750,172	176,606	177,483	144,132	251,951
		347,064	347,064	0	. 0	0
	SALES/RESALE				92,360	304,534
	SCHOOL	1,036,921	391,422	248,605	92,300	304,334
					11 110 110	
	TOTAL	61,109,725	12,763,842	4,342,258	10,960,798	33,042,827
WEAR MO DAME						
YEAR TO DATE						
		75 043 000	22 125 020	11 104 760	17,317,923	23,404,625
	RESIDENTIAL	75,043,290	23,125,980	11,194,762		
	COMM & IND	112,076,532	13,954,255	908,358	17,557,728	79,656,191
	PVT ST LIGHTS	236,838	39,938	4,572	74,280	118,048
	PUB ST LIGHTS	729,038	244,994	98,448	128,113	257,483
		2,416,962	546,624	525,872	476,890	867,576
	MUNI BLDGS	The second secon	(*)	0	0	0
	SALES/RESALE	1,085,516	1,085,516	The same of the sa	_	
	SCHOOL	3,181,905	1,208,432	726,715	340,560	906,198
	TOTAL	194,770,081	40,205,739	13,458,727	35,895,494	105,210,121
T 3.00 VD3.5						
LAST YEAR						
TO DATE						
	RESIDENTIAL	80,169,552	24,831,914	11,854,932	18,651,433	24,831,273
	COMM & IND	114,464,916	14,024,549	961,054	17,719,602	81,759,711
	PVT ST LIGHTS	222,003	39,387	4,080	66,526	112,010
			241,986	STATE OF THE PARTY	125,018	254,001
	PUB ST LIGHTS	718,505		97,500		
	MUNI BLDGS	2,461,219	567,020	505,645	495,125	893,429
	SALES/RESALE	1,089,486	1,089,486	0	0	0
	SCHOOL	3,044,297	1,111,061	726,618	358,960	847,658
						2
	TOTAL	202,169,978	41,905,403	14,149,829	37,416,664	108,698,082
	10112			=		
KILOWATT HOUR	S SOLD TO TOTAL					
		TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
MONTH						
					0 470	11.28%
	RESTDENTIAL	37.54%	11.93%	5.86%	8.47%	11.200
	RESIDENTIAL	37.54% 58.44%	11.93%	5.86%		
	COMM & IND	58.44%	7.30%	0.49%	8.97%	41.68%
	COMM & IND PVT ST LIGHTS	58.44% 0.12%	7.30% 0.02%	0.49% 0.00%	8.97% 0.04%	41.68% 0.06%
	COMM & IND	58.44% 0.12% 0.40%	7.30% 0.02% 0.13%	0.49% 0.00% 0.05%	8.97% 0.04% 0.07%	41.68% 0.06% 0.15%
	COMM & IND PVT ST LIGHTS	58.44% 0.12%	7.30% 0.02%	0.49% 0.00%	8.97% 0.04%	41.68% 0.06%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS	58.44% 0.12% 0.40%	7.30% 0.02% 0.13%	0.49% 0.00% 0.05%	8.97% 0.04% 0.07%	41.68% 0.06% 0.15%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57%	7.30% 0.02% 0.13% 0.29% 0.57%	0.49% 0.00% 0.05% 0.29% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00%	41.68% 0.06% 0.15% 0.41% 0.00%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS	58.44% 0.12% 0.40% 1.23%	7.30% 0.02% 0.13% 0.29%	0.49% 0.00% 0.05% 0.29%	8.97% 0.04% 0.07% 0.24%	41.68% 0.06% 0.15% 0.41%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57%	7.30% 0.02% 0.13% 0.29% 0.57%	0.49% 0.00% 0.05% 0.29% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00%	41.68% 0.06% 0.15% 0.41% 0.00%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL TOTAL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL TOTAL RESIDENTIAL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70% 100.00% 38.53% 57.54% 0.12%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70% 100.00% 38.53% 57.54% 0.12%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.24%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% =	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.24% 0.00%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.04% 0.07% 0.24% 0.00% 0.17%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.24% 0.00%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00%
YEAR TO DATE	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.04% 0.07% 0.24% 0.00% 0.17%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.04%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%	12.02% 40.90% 0.13% 0.41% 0.00% 0.50% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00%
	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL	38.53% 57.54% 0.12% 0.40% 1.23% 0.57% 1.70% 100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41% 7.10% 5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.04% 0.07% 0.24% 0.00% 0.17%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.04%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15% 17.94% 8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17% 18.42%	12.02% 40.90% 0.13% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%	0.49% 0.00% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	41.68% 0.06% 0.15% 0.41% 0.00% 0.50%  54.08%  12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%  54.03%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%	0.49% 0.00% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	38.53% 57.54% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12% 0.12% 0.28% 0.54%	0.49% 0.00% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.05% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05% 0.05% 0.05% 0.05% 0.05% 0.05% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%  9.23% 8.76% 0.03% 0.06% 0.06% 0.24% 0.00%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47% 54.03%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	38.53% 57.54% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12% 0.02% 0.12% 0.28%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05% 0.25%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12% 0.28% 0.55%	0.49% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.27% 0.00% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05% 0.25% 0.00% 0.05% 0.25% 0.00% 0.36%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%  9.23% 8.76% 0.03% 0.06% 0.24% 0.00% 0.18%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47% 54.03%
LAST YEAR	COMM & IND PVT ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS MUNI BLDGS SALES/RESALE SCHOOL  TOTAL  RESIDENTIAL COMM & IND PVT ST LIGHTS PUB ST LIGHTS PUB ST LIGHTS MUNI BLDGS SALES/RESALE	58.44% 0.12% 0.40% 1.23% 0.57% 1.70%  100.00%  38.53% 57.54% 0.12% 0.38% 1.24% 0.56% 1.63%  100.00%	7.30% 0.02% 0.13% 0.29% 0.57% 0.64%  20.88%  11.87% 7.16% 0.02% 0.13% 0.28% 0.56% 0.62%  20.64%  12.28% 6.94% 0.02% 0.12% 0.12% 0.28% 0.54%	0.49% 0.00% 0.00% 0.05% 0.29% 0.00% 0.41%  7.10%  5.75% 0.47% 0.00% 0.05% 0.05% 0.37%  6.91%  5.86% 0.48% 0.00% 0.05% 0.05% 0.05% 0.05% 0.05% 0.05% 0.00%	8.97% 0.04% 0.07% 0.24% 0.00% 0.15%  17.94%  8.89% 9.01% 0.04% 0.07% 0.24% 0.00% 0.17%  18.42%  9.23% 8.76% 0.03% 0.06% 0.06% 0.24% 0.00%	12.02% 40.90% 0.15% 0.41% 0.00% 0.50% 54.08% 12.02% 40.90% 0.06% 0.13% 0.45% 0.00% 0.47% 54.03%

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT FORMULA INCOME 9/30/2014

TOTAL OPER	ATING REVENUES	(P.3)	24,853,664.36
ADD:	POLE RENTAL		0.00
	INTEREST INCOME	ON CUSTOMER DEPOSITS	788.68
LESS:	OPERATING EXPENS	SES (P.3)	(20,904,999.91)
	CUSTOMER DEPOSIT	INTEREST EXPENSE	(782.66)
FORMULA IN	COME (LOSS)		3,948,670.47

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT GENERAL STATISTICS 9/30/2014

	MONTH OF SEP 2013	MONTH OF SEP 2014	% CHANG 2013	GE 2014	YEAR SEP 2013	THRU SEP 2014
(0.5)		61 400 F05	2 252	2.660	000 160 000	
SALE OF KWH (P.5)	68,811,860	61,109,725	-3.05%	-3.66%	202,169,978	194,770,081
KWH PURCHASED	58,649,074	58,968,269	-3.68%	-1.66%	199,904,885	196,595,839
AVE BASE COST PER KWH	0.041342	0.043701	396.00%	2.96%	0.039074	0.040232
AVE BASE SALE PER KWH	0.063769	0.031501	0.89%	-51.99%	0.065074	0.031245
AVE COST PER KWH	0.078312	0.083698	-4.41%	2.39%	0.081093	0.083034
AVE SALE PER KWH	0.108764	0.076649	-0.19%	-24.31%	0.111741	0.084572
FUEL CHARGE REVENUE (P.3)	3,096,134.62	2,758,999.30	-4.65%	10.09%	9,434,647.92	10,386,553.45
LOAD FACTOR	51.42%	53.71%				
PEAK LOAD	156,230	150,405				



#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF CASH AND INVESTMENTS 9/30/2014

SCHEDULE A

	PREVIOUS YEAR	CURRENT YEAR
UNRESTRICTED CASH		
CASH - OPERATING FUND CASH - PETTY CASH	8,226,356.39 3,000.00	11,035,619.90 3,000.00
TOTAL UNRESTRICTED CASH	8,229,356.39	11,038,619.90
		5
RESTRICTED CASH		
CASH - DEPRECIATION FUND CASH - CONSTRUCTION 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	3,679,743.06 740,489.65 925,305.27 3,495,004.36 6,695,667.22 200,000.00 3,133,039.93 150,000.00 746,358.61 437,139.52	5,099,591.58 263,745.08 937,215.75 5,947,109.45 6,741,747.60 200,000.00 1,684,533.64 150,000.00 807,738.14 582,350.29
TOTAL RESTRICTED CASH	20,202,747.82	22,414,031.33
INVESTMENTS		
SICK LEAVE BUYBACK	0.00	1,292,906.26
TOTAL CASH BALANCE	28,432,104.01	34,745,557.69

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF ACCOUNTS RECEIVABLE 9/30/2014

SCHEDULE B

	PREVIOUS YEAR	CURRENT YEAR
SCHEDULE OF ACCOUNTS RECEIVABLE		
5025022 01 1100001110 12022 1202		
RESIDENTIAL AND COMMERCIAL	4 202 722 72	2 215 425 44
	4,382,722.72	2,315,435.44
ACCOUNTS RECEIVABLE - OTHER	191,098.46	36,729.23
ACCOUNTS RECEIVABLE - LIENS	28,097.35	18,531.86
ACCOUNTS RECEIVABLE - EMPLOYEE ADVANC	ES 892.14	892.14
SALES DISCOUNT LIABILITY	(336,183.12)	(189,055.47)
RESERVE FOR UNCOLLECTIBLE ACCOUNTS	(229, 274.56)	(242,977.30)
TOTAL ACCOUNTS RECEIVABLE BILLED	4,037,352.99	1,939,555.90
	-,,	-//
UNBILLED ACCOUNTS RECEIVABLE	4,158,022.50	5,622,269.28
ONDIDEED ACCOUNTS INCLIVEDED	4,150,022.50	5,022,209.20
MOMAL ACCOUNTS DECETUABLE NEW	8,195,375.49	7 561 005 10
TOTAL ACCOUNTS RECEIVABLE, NET	8,195,375.49	7,561,825.18
SCHEDULE OF PREPAYMENTS		
••••••		
PREPAID INSURANCE	878,713.48	892,934.06
PREPAYMENT PURCHASED POWER	45,427.17	(11,355.59)
PREPAYMENT PASNY	242,260.90	259,957.39
PREPAYMENT WATSON	230,801.89	252,480.42
PURCHASED POWER WORKING CAPITAL	14,523.70	12,700.11
TOTAL PREPAYMENT	1,411,727.14	1,406,716.39
ACCOUNTS RECEIVABLE AGING SEPTEMBER 2	014:	
RESIDENTIAL AND COMMERCIAL	2,315,435.44	
LESS: SALES DISCOUNT LIABILITY	(189,055.47)	
GENERAL LEDGER BALANCE	2,126,379.97	
		7.6.740
	JRRENT 1,652,618.50	76.71%
	DAYS 362,982.61	17.07%
60	DAYS 53,086.64	2.50%
90	DAYS 12,274.62	0.58%
OVER 9		2.14%
	TOTAL 2,126,379.97	100.00%
	= /== - / 3 / 3 / 3 /	

#### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF OPERATING REVENUE 9/30/2014

SCHEDULE D

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES COMM AND INDUSTRIAL SALES PRIVATE STREET LIGHTING	3,132,641.80 4,057,260.29 5,595.73	2,056,407.30 2,427,140.29 9,023.30	9,961,643.09 11,788,188.40 17,178.79	7,350,485.41 8,449,224.57 29,082.19	-26.21% -28.32% 69.29%
TOTAL PRIVATE CONSUMERS	7,195,497.82	4,492,570.89	21,767,010.28	15,828,792.17	-27.28%
MUNICIPAL SALES:					
STREET LIGHTING MUNICIPAL BUILDINGS	27,072.58 95,737.98	29,860.45 57,058.21	82,409.26 278,037.77	89,581.35 197,228.47	8.70% -29.06%
TOTAL MUNICIPAL CONSUMERS	122,810.56	86,918.66	360,447.03	286,809.82	-20.43%
SALES FOR RESALE	41,577.45	27,694.90	125,818.59	95,864.70	-23.81%
SCHOOL	124,342.01	76,828.21	337,328.60	260,614.12	-22.74%
*			1		
SUB-TOTAL	7,484,227.84	4,684,012.66	22,590,604.50	16,472,080.81	-27.08%
FORFEITED DISCOUNTS	76,781.85	108,263.18	223,391.10	249,020.22	11.47%
PURCHASED POWER CAPACITY	23,406.80	2,542,665.72	68,739.15	8,099,597.29	11683.09%
ENERGY CONSERVATION - RESIDENTIAL ENERGY CONSERVATION - COMMERCIAL	25,554.01 42,274.49	22,939.09 36,873.58	80,206.52 119,056.34	75,062.94 115,522.51	-6.41% -2.97%
GAW REVENUE	68,822.22	0.00	202,191.02	0.00	-100.00%
NYPA CREDIT	(61,811.13)	(73,836.15)	(149,297.25)	(157,619.41)	5.57%
TOTAL REVENUE	7,659,256.08	7,320,918.08	23,134,891.38	24,853,664.36	7.43%

### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF OPERATING REVENUE BY TOWN 9/30/2014

	TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
MONTH					
RESIDENTIAL	2,056,407.30	657,792.23	317,429.89	463,595.43	617,589.75
INDUS/MUNI BLDG	2,484,198.50	342,598.54	35,267.54	445,864.82	1,660,467.60
PUB.ST.LIGHTS	29,860.45	10,014.23	4,024.08	5,267.05	10,555.09
PRV.ST.LIGHTS	9,023.30	1,490.07	177.54	2,948.23	4,407.46
CO-OP RESALE SCHOOL	27,694.90 76,828.21	27,694.90 29,151.06	0.00 18,118.10	0.00 7,051.78	0.00 22,507.27
SCHOOL	70,020.21	29,131.00	10,110.10	7,031.76	22,307.27
TOTAL	4,684,012.66	1,068,741.03	375,017.15	924,727.31	2,315,527.17
THIS YEAR TO DATE					
RESIDENTIAL	7,350,485.41	2,273,055.54	1,087,962.49	1,692,603.84	2,296,863.54
INDUS/MUNI BLDG	8,646,453.04	1,190,908.22	118,411.39	1,480,385.94	5,856,747.49
PUB.ST.LIGHTS	89,581.35	30,042.69	12,072.24	15,801.15	31,665.27
PRV.ST.LIGHTS	29,082.19	4,834.10	570.72	9,434.80	14,242.57
CO-OP RESALE	95,864.70	95,864.70	0.00	0.00	0.00
SCHOOL	260,614.12	98,770.33	58,546.49	29,513.10	73,784.20
TOTAL	16,472,080.81	3,693,475.58	1,277,563.31	3,227,738.84	8,273,303.08
LAST YEAR TO DATE					
RESIDENTIAL	9,961,643.09	3,102,957.12	1,463,052.89	2,319,914.15	3,075,718.93
INDUS/MUNI BLDG	12,066,226.17	1,606,957.16	161,557.73	1,926,936.10	8,370,775.18
PUB.ST.LIGHTS	82,409.26	26,828.72	10,600.31	14,582.09	30,398.14
PRV.ST.LIGHTS	17,178.79	3,025.09	310.43	5,319.37	8,523.90
CO-OP RESALE SCHOOL	125,818.59 337,328.60	125,818.59 123,798.95	0.00 78,654.72	0.00 40,968.64	0.00 93,906.29
7				4,307,720.35	Section 1 to Section Assessed
TOTAL	22,590,604.50	4,989,385.63	1,714,176.08	4,307,720.33	11,579,322.44
PERCENTAGE OF OPERAT	TOTAL	READING	LYNNFIELD	NO DEADING	
				NO.READING	WILMINGTON
RESIDENTIAL	43.90%	14.04%	6.78%	9.90%	13.18%
INDUS/MUNI BLDG	53.04%	7.31%	6.78% 0.75%	9.90% 9.52%	13.18% 35.46%
INDUS/MUNI BLDG PUB.ST.LIGHTS	53.04% 0.64%	7.31% 0.21%	6.78% 0.75% 0.09%	9.90% 9.52% 0.11%	13.18% 35.46% 0.23%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS	53.04% 0.64% 0.19%	7.31%	6.78% 0.75%	9.90% 9.52%	13.18% 35.46% 0.23% 0.10%
INDUS/MUNI BLDG PUB.ST.LIGHTS	53.04% 0.64%	7.31% 0.21% 0.03%	6.78% 0.75% 0.09% 0.00%	9.90% 9.52% 0.11% 0.06%	13.18% 35.46% 0.23%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE	53.04% 0.64% 0.19% 0.59%	7.31% 0.21% 0.03% 0.59%	6.78% 0.75% 0.09% 0.00% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00%	13.18% 35.46% 0.23% 0.10% 0.00%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL	53.04% 0.64% 0.19% 0.59% 1.64%	7.31% 0.21% 0.03% 0.59% 0.62%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%	9.90% 9.52% 0.11% 0.06% 0.00%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL TOTAL THIS YEAR TO DATE	53.04% 0.64% 0.19% 0.59% 1.64%	7.31% 0.21% 0.03% 0.59% 0.62%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE RESIDENTIAL	53.04% 0.64% 0.19% 0.59% 1.64%	7.31% 0.21% 0.03% 0.59% 0.62%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39% 8.01%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG	53.04% 0.64% 0.19% 0.59% 1.64% 100.00%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39% 8.01%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48% 49.45%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE RESIDENTIAL	53.04% 0.64% 0.19% 0.59% 1.64%	7.31% 0.21% 0.03% 0.59% 0.62%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39% 8.01%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS	53.04% 0.64% 0.19% 0.59% 1.64% 	7.31% 0.21% 0.03% 0.59% 0.62% 22.80%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39% 8.01% 6.60% 0.72% 0.07%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48% 49.45%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS	53.04% 0.64% 0.19% 0.59% 1.64% 	7.31% 0.21% 0.03% 0.59% 0.62% 22.80% 13.80% 7.23% 0.18% 0.03%	6.78% 0.75% 0.09% 0.00% 0.39% 8.01% 6.60% 0.72% 0.07% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10% 0.06%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE	53.04% 0.64% 0.19% 0.59% 1.64% 100.00% 44.62% 52.50% 0.54% 0.18% 0.58%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39% 8.01% 6.60% 0.72% 0.07% 0.00% 0.00%	9.90% 9.52% 0.11% 0.00% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10% 0.06% 0.00%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.00%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL	53.04% 0.64% 0.19% 0.59% 1.64% 100.00% 44.62% 52.50% 0.54% 0.18% 0.58% 1.58%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%	6.78% 0.75% 0.09% 0.00% 0.39% 8.01% 6.60% 0.72% 0.07% 0.00% 0.00% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10% 0.06% 0.06% 0.00% 0.18%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48% 49.45% 13.94% 35.56% 0.19% 0.09% 0.00% 0.44%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL	53.04% 0.64% 0.19% 0.59% 1.64% 100.00% 44.62% 52.50% 0.54% 0.18% 0.58% 1.58%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%	6.78% 0.75% 0.09% 0.00% 0.39% 8.01% 6.60% 0.72% 0.07% 0.00% 0.00% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10% 0.06% 0.06% 0.00% 0.18%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48% 49.45% 13.94% 35.56% 0.19% 0.09% 0.00% 0.44%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  LAST YEAR TO DATE	53.04% 0.64% 0.19% 0.59% 1.64% 100.00% 44.62% 52.50% 0.54% 0.18% 0.58% 1.58% 1.58%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%  22.42%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%  8.01%  6.60% 0.72% 0.07% 0.00% 0.00% 0.36%  7.75%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15% 19.74% 10.28% 8.99% 0.10% 0.06% 0.00% 0.18% 19.61%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.00% 0.44%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  LAST YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS	53.04% 0.64% 0.19% 0.59% 1.64% 100.00% 44.62% 52.50% 0.54% 0.18% 0.18% 1.58% 1.58%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%  22.42%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%  8.01%  6.60% 0.72% 0.07% 0.00% 0.00% 0.36%  7.75%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%  19.74%  10.28% 8.99% 0.10% 0.06% 0.00% 0.18%  19.61%  10.27% 8.53% 0.06%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.09% 0.44%  50.22%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  LAST YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS RV.ST.LIGHTS RV.ST.LIGHTS	53.04% 0.64% 0.19% 0.59% 1.64%  100.00%  44.62% 52.50% 0.54% 0.18% 0.18% 1.58%  100.00%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%  22.42%  13.74% 7.11% 0.12% 0.01%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%  8.01%  6.60% 0.72% 0.07% 0.00% 0.36%  7.75%  6.48% 0.72% 0.05% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%  19.74%  10.28% 8.99% 0.10% 0.06% 0.00% 0.18%  19.61%  10.27% 8.53% 0.06% 0.02%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.09% 0.44%  50.22%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  LAST YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS CO-OP RESALE SCHOOL  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS RV.ST.LIGHTS RV.ST.LIGHTS O-OP RESALE	53.04% 0.64% 0.19% 0.59% 1.64%  100.00%  44.62% 52.50% 0.54% 0.18% 0.58% 1.58%  100.00%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%  22.42%  13.74% 7.11% 0.12% 0.01% 0.56%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%  8.01%  6.60% 0.72% 0.07% 0.00% 0.36%  7.75%  6.48% 0.72% 0.05% 0.00% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%  19.74%  10.28% 8.99% 0.10% 0.06% 0.00% 0.18%  19.61%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.44%  50.22%
INDUS/MUNI BLDG PUB.ST.LIGHTS PRV.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  THIS YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS CO-OP RESALE SCHOOL  TOTAL  LAST YEAR TO DATE  RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS RESIDENTIAL INDUS/MUNI BLDG PUB.ST.LIGHTS RV.ST.LIGHTS RV.ST.LIGHTS	53.04% 0.64% 0.19% 0.59% 1.64%  100.00%  44.62% 52.50% 0.54% 0.18% 0.18% 1.58%  100.00%	7.31% 0.21% 0.03% 0.59% 0.62%  22.80%  13.80% 7.23% 0.18% 0.03% 0.58% 0.60%  22.42%  13.74% 7.11% 0.12% 0.01%	6.78% 0.75% 0.09% 0.00% 0.00% 0.39%  8.01%  6.60% 0.72% 0.07% 0.00% 0.36%  7.75%  6.48% 0.72% 0.05% 0.00%	9.90% 9.52% 0.11% 0.06% 0.00% 0.15%  19.74%  10.28% 8.99% 0.10% 0.06% 0.00% 0.18%  19.61%  10.27% 8.53% 0.06% 0.02%	13.18% 35.46% 0.23% 0.10% 0.00% 0.48%  49.45%  13.94% 35.56% 0.19% 0.09% 0.09% 0.44%  50.22%

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUDGETED REVENUE VARIANCE REPORT 9/30/2014

SCHEDULE F

SALES OF ELECTRICITY:	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
RESIDENTIAL	3,332,955.01	6,813,173.00	(3,480,217.99)	-51.08%
COMM AND INDUSTRIAL SALES PRIVATE STREET LIGHTING MUNICIPAL BUILDINGS	2,573,429.90	7,522,401.00	(4,948,971.10)	-65.79%
PUBLIC STREET LIGHTING	50,754.31	55,349.00	(4,594.69)	-8.30%
SALES FOR RESALE	37,765.79	97,824.00	(60,058.21)	-61.39%
SCHOOL	90,622.35	220,589.00	(129,966.65)	-58.92%
TOTAL BASE SALES	6,085,527.36	14,709,336.00	(8,623,808.64)	-58.63%
TOTAL FUEL SALES	10,386,553.45	10,752,311.00	(365,757.55)	-3.40%
TOTAL OPERATING REVENUE	16,472,080.81	25,461,647.00	(8,989,566.19)	-35.31%
FORFEITED DISCOUNTS	249,020.22	323,605.00	(74,584.78)	-23.05%
PURCHASED POWER CAPACITY	8,099,597.29	0.00	8,099,597.29	100.00%
ENERGY CONSERVATION - RESIDENTIAL ENERGY CONSERVATION - COMMERCIAL	75,062.94 115,522.51	80,170.00 122,000.00	(5,107.06) (6,477.49)	-6.37% -5.31%
NYPA CREDIT	(157,619.41)	(174,999.00)	17,379.59	-9.93%
TOTAL OPERATING REVENUES	24,853,664.36	25,812,423.00	(958,758.64)	-3.71%
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<sup>\* ( ) =</sup> ACTUAL UNDER BUDGET

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT SCHEDULE OF OPERATING EXPENSES 9/30/2014

SCHEDULE E

	MONTH	MONTH	LAST YEAR	CURRENT YEAR	YTD %
OPERATION EXPENSES:	LAST YEAR	CURRENT YEAR	TO DATE	TO DATE	CHANGE
PURCHASED POWER BASE EXPENSE	2,424,682.96	2,576,986.27	7,811,025.76	7,909,530.96	1.26%
PURCHASED FOWER BASE EXPENSE	2/121/002.50	2,310,300.21	7,011,023.70	1,303,330.30	1.20%
OPERATION SUP AND ENGINEERING EXP	44,470.64	43,416.10	132,154.69	129,050.92	-2.35%
STATION SUP LABOR AND MISC	6,742.17	12,483.78	27,001.79	34,898.30	29.24%
LINE MISC LABOR AND EXPENSE	42,755.50	45,564.01	160,485.30	141,194.39	-12.02%
STATION LABOR AND EXPENSE	35,871.02	34,024.06	121,955.72	109,539.88	-10.18%
STREET LIGHTING EXPENSE	6,799.51	9,779.82	16,627.25	28,406.76	70.84%
METER EXPENSE	12,591.25	14,795.33	42,963.09	43,856.56	2.08%
MISC DISTRIBUTION EXPENSE	30,154.36	31,795.62	81,911.70	86,260.06	5.31%
METER READING LABOR & EXPENSE	3,254.48	1,045.58	11,026.42	5,040.36	-54.29%
ACCT & COLL LABOR & EXPENSE	104,316.38	122,722.86	364,441.99	390,661.82	7.19%
UNCOLLECTIBLE ACCOUNTS	10,500.00	10,000.00	31,500.00	30,000.00	-4.76%
ENERGY AUDIT EXPENSE	32,558.81	29,055.55	107,744.30	92,531.23	-14.12%
ADMIN & GEN SALARIES	67,215.62	63,891.79	225,991.98	204,242.87	-9.62%
OFFICE SUPPLIES & EXPENSE	27,251.18	26,624.13	61,434.14	64,221.07	4.54%
OUTSIDE SERVICES	61,252.60	13,599.10	70,634.39	78,658.45	11.36%
PROPERTY INSURANCE	29,926.02	29,863.73	89,778.06	89,591.19	-0.21%
INJURIES AND DAMAGES	3,305.95	4,511.34	9,480.60	10,631.92	12.14%
EMPLOYEES PENSIONS & BENEFITS	172,913.94	221,356.62	832,793.43	764,003.11	-8.26%
MISC GENERAL EXPENSE	23,952.65	15,311.42	44,291.16	30,198.87	-31.82%
RENT EXPENSE	27,323.71	13,907.10	54,558.65	41,276.52	-24.34%
ENERGY CONSERVATION	35,810.00	28,744.36	81,145.00	65,496.16	-19.29%
TOTAL OPERATION EXPENSES	778,965.79	772,492.30	2,567,919.66	2,439,760.44	-4.99%
MAINTENANCE EXPENSES:					
M OF TRANSMISSION PLANT	227.08	227.10	681.24	681.30	0.01%
M OF STRUCT AND EQUIPMT	14,459.58	73,545.52	40,968.41	158,982.20	288.06%
MAINT OF LINES - OH	121,256.10	158,559.21	359,467.03	415,951.27	15.71%
MAINT OF LINES - UG	17,856.13	24,553.53	49,853.69	37,745.23	-24.29%
MAINT OF LINE TRANSFORMERS	71,367.07	20,945.46	73,450.55	27,842.96	0.00%
MAINT OF ST LT & SIG SYSTEM	(64.26)	(16.34)	(235.11)	(138.04)	-41.29%
MAINT OF GARAGE AND STOCKROOM	39,282.19	38,101.83	109,480.40	108,446.40	-0.94%
MAINT OF METERS	3,026.99	0.00	7,602.46	0.00	-100.00%
MAINT OF GEN PLANT	13,230.77	35,144.66	32,243.84	72,311.27	124.26%
TOTAL MAINTENANCE EXPENSES	280,641.65	351,060.97	673,512.51	821,822.59	22.02%
DEPRECIATION EXPENSE	314,969.55	321,788.79	944,908.65	965,366.37	2.17%
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PURCHASED POWER FUEL EXPENSE	2,168,234.24	2,358,565.60	8,399,833.69	8,414,519.55	0.17%
VOLUNTARY PAYMENTS TO TOWNS	116,666.67	118,000.00	350,000.01	354,000.00	1.14%
TOTAL OPERATING EXPENSES	6,084,160.86	6,498,893.93	20,747,200.28	20,904,999.91	0.76%

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUDGETED OPERATING EXPENSE VARIANCE REPORT 9/30/2014

SCHEDULE G

OPERATION EXPENSES:	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
PURCHASED POWER BASE EXPENSE	7,909,530.96	7,920,600.00	(11,069.04)	-0.14%
OPERATION SUP AND ENGINEERING EXP	129,050.92	143,690.00	(14,639.08)	-10.19%
	34,898.30	26,837.00	8,061.30	30.04%
LINE MISC LABOR AND EXPENSE	141,194.39	166,761.00	(25,566.61)	-15.33%
STATION LABOR AND EXPENSE	109,539.88	97,640.00	11,899.88	12.19%
STREET LIGHTING EXPENSE	28,406.76	21,097.00	7,309.76	34.65%
METER EXPENSE MISC DISTRIBUTION EXPENSE METER READING LABOR & EXPENSE	43,856.56	55,826.00	(11,969.44)	-21.44%
	86,260.06	97,601.00	(11,340.94)	-11.62%
	5,040.36	7,805.00	(2,764.64)	-35.42%
ACCT & COLL LABOR & EXPENSE	390,661.82	433,610.00	(42,948.18)	-9.90%
UNCOLLECTIBLE ACCOUNTS	30,000.00	30,000.00	0.00	0.00%
ENERGY AUDIT EXPENSE	92,531.23	120,324.00	(27,792.77)	-23.10%
ADMIN & GEN SALARIES	204,242.87	208,646.00	(4,403.13)	-2.11%
OFFICE SUPPLIES & EXPENSE	64,221.07	75,300.00	(11,078.93)	-14.71%
OUTSIDE SERVICES	78,658.45	114,155.00	(35,496.55)	-31.10%
PROPERTY INSURANCE INJURIES AND DAMAGES EMPLOYEES PENSIONS & BENEFITS	89,591.19	113,352.00	(23,760.81)	-20.96%
	10,631.92	12,714.00	(2,082.08)	-16.38%
	764,003.11	798,924.00	(34,920.89)	-4.37%
MISC GENERAL EXPENSE RENT EXPENSE ENERGY CONSERVATION	30,198.87	83,846.00	(53,647.13)	-63.98%
	41,276.52	53,001.00	(11,724.48)	-22.12%
	65,496.16	194,170.00	(128,673.84)	-66.27%
TOTAL OPERATION EXPENSES	2,439,760.44	2,855,299.00	(415,538.56)	-14.55%
MAINTENANCE EXPENSES:				
MAINT OF TRANSMISSION PLANT MAINT OF STRUCT AND EQUIPMENT	681.30	750.00	(68.70)	-9.16%
	158,982.20	120,283.00	38,699.20	32.17%
	415,951.27	419,235.00	(3,283.73)	-0.78%
MAINT OF LINES - OH MAINT OF LINES - UG MAINT OF LINE TRANSFORMERS	37,745.23	32,739.00	5,006.23	15.29%
	27,842.96	39,000.00	(11,157.04)	-28.61%
MAINT OF ST LT & SIG SYSTEM MAINT OF GARAGE AND STOCKROOM MAINT OF METERS	(138.04)	2,470.00	(2,608.04)	-105.59%
	108,446.40	132,001.00	(23,554.60)	-17.84%
	0.00	15,607.00	(15,607.00)	-100.00%
MAINT OF GEN PLANT  TOTAL MAINTENANCE EXPENSES	72,311.27	804,292.00	17,530.59	71.33%
DEPRECIATION EXPENSE	965,366.37	972,999.00	(7,632.63)	-0.78%
PURCHASED POWER FUEL EXPENSE	8,414,519.55	9,056,605.00	(642,085.45)	-7.09%
VOLUNTARY PAYMENTS TO TOWNS	354,000.00	354,000.00	0.00	0.00%
TOTAL OPERATING EXPENSES	20,904,999.91	21,963,795.00	(1,058,795.09)	-4.82%

<sup>\* ( ) =</sup> ACTUAL UNDER BUDGET

# TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT BUDGETED OPERATING EXPENSE VARIANCE REPORT 9/30/2014

	RESPONSIBLE SENIOR	2015	ACTUAL	REMAINING BUDGET	REMAINING
OPERATION EXPENSES:	MANAGER	ANNUAL BUDGET	YEAR TO DATE	BALANCE	BUDGET &
PURCHASED POWER BASE EXPENSE	JP	28,889,014.00	7,909,530.96	20,979,483.04	72.62%
OPERATION SUP AND ENGINEERING EXP	KS	583,668.00	129,050.92	454,617.08	77.89%
STATION SUP LABOR AND MISC	KS	108,848.00	34,898.30	73,949.70	67.94%
LINE MISC LABOR AND EXPENSE	KS	657,259.00	141,194.39	516,064.61	78.52%
STATION LABOR AND EXPENSE	KS	398,849.00	109,539.88	289,309.12	72.54%
STREET LIGHTING EXPENSE	KS	82,907.00	28,406.76	54,500.24	65.74%
METER EXPENSE	KS	247,938.00	43,856.56	204,081.44	82.31%
MISC DISTRIBUTION EXPENSE	KS	402,885.00	86,260.06	316,624.94	78.59%
METER READING LABOR & EXPENSE	KS	30,922.00	5,040.36	25,881.64	83.70%
ACCT & COLL LABOR & EXPENSE	RF	1,705,333.00	390,661.82	1,314,671.18	77.09%
UNCOLLECTIBLE ACCOUNTS	RF	120,000.00	30,000.00	90,000.00	75.00%
ENERGY AUDIT EXPENSE	JP	488,284.00	92,531.23	395,752.77	81.05%
ADMIN & GEN SALARIES	CO	842,170.00	204,242.87	637,927.13	75.75%
OFFICE SUPPLIES & EXPENSE	CO	301,000.00	64,221.07	236,778.93	78.66%
OUTSIDE SERVICES	CO	351,650.00	78,658.45	272,991.55	77.63%
PROPERTY INSURANCE	KS	453,200.00	89,591.19	363,608.81	80.23%
INJURIES AND DAMAGES	KS	49,059.00	10,631.92	38,427.08	78.33%
EMPLOYEES PENSIONS & BENEFITS	KS	2,746,619.00	764,003.11	1,982,615.89	72.18%
MISC GENERAL EXPENSE	CO	240,727.00	30,198.87	210,528.13	87.46%
RENT EXPENSE	KS	212,000.00	41,276.52	170,723.48	80.53%
ENERGY CONSERVATION	JP	778,812.00	65,496.16	713,315.84	91.59%
TOTAL OPERATION EXPENSES		10,802,130.00	2,439,760.44	8,362,369.56	77.41%
MAINTENANCE EXPENSES:					
IT OF TRANSPIRATION BY AND	<b>V</b> O	2 000 00	601 20	0.210.50	
AT OF TRANSMISSION PLANT	KS KS	3,000.00	681.30	2,318.70	77.29%
MAINT OF STRUCT AND EQUIPMT	KS	484,026.00	158,982.20	325,043.80	67.15%
MAINT OF LINES - OH MAINT OF LINES - UG	KS	1,675,794.00	415,951.27	1,259,842.73	75.18%
MAINT OF LINES - UG MAINT OF LINE TRANSFORMERS	KS	130,694.00	37,745.23	92,948.77	71.12%
MAINT OF ST LT & SIG SYSTEM	KS	9,745.00	27,842.96 (138.04)	128,157.04 9,883.04	82.15%
MAINT OF GARAGE AND STOCKROOM	KS	567,531.00	108,446.40	459,084.60	101.42%
MAINT OF METERS	KS	43,290.00	0.00	43,290.00	80.89% 100.00%
MAINT OF GEN PLANT	RF	170,180.00	72,311.27	97,868.73	57.51%
TOTAL MAINTENANCE EXPENSES		3,240,260.00	821,822.59	2,418,437.41	74.64%
DEPRECIATION EXPENSE	RF	3,892,000.00	965,366.37	2,926,633.63	75.20%
PURCHASED POWER FUEL EXPENSE	JР	36,249,653.00	8,414,519.55	27,835,133.45	76.79%
VOLUNTARY PAYMENTS TO TOWNS	RF	1,416,000.00	354,000.00	1,062,000.00	75.00%
TOTAL OPERATING EXPENSES		84,489,057.00	20,904,999.91	63,584,057.09	75.26%

### TOWN OF READING, MASSACHUSETTS MUNICIPAL LIGHT DEPARTMENT PROFESSIONAL SERVICES 9/30/2014

#### PROFESSIONAL SERVICES BY PROJECT

ITEM	DEPARTMENT	ACTUAL	BUDGET
1 RMLD AND PENSION TRUST AUDIT FEES 2 LEGAL-FERC/ISO/POWER/OTHER	ACCOUNTING INTEGRATED RESOURCES	4,647.24 13,800.06	35,000.00 34,575.00
3 NERC COMPLIANCE AND AUDIT	E & O	3,270.00	2,625.00 3,375.00
4 LEGAL 5 LEGAL-GENERAL	ENGINEERING GM	50,013.95	13,251.00
6 LEGAL SERVICES 7 SURVEY RIGHT OF WAY/ ENVIRONMENTAL	HR BLDG. MAINT.	6,927.20 0.00	15,999.00 2,580.00
8 INSURANCE CONSULTANT/OTHER TOTAL	GEN. BENEFIT	0.00 78,658. <b>4</b> 5	6,750.00 114,155.00

PROFESSIONAL SERVICES BY VENDOR	ACTUAL
MELANSON HEATH & COMPANY	2,170.00 2,230.00
PLM ELECTRIC POWER COMPANY RUBIN AND RUDMAN	58,720.40
UTILTIY SERVICES INC. CHOATE HALL & STEWART	3,270.00 1,117.20
WILLIAM F. CROWLEY- ATTORNEY DUNCAN & ALLEN	2,477.24 8,673.61
TOTAL	78,658.45

RMLD
DEFERRED FUEL CASH RESERVE ANALYSIS
9/30/14

DATE	GROSS CHARGES	REVENUES	NYPA CREDIT	MONTHLY DEFERRED	TOTAL DEFERRED
Jun-14					4,132,694.96
Jul-14	3,287,589.94	3,782,699.41	(35,898.34)	459,211.13	4,591,906.09
Aug-14	2,768,364.01	3,844,854.74	(47,884.92)	1,028,605.81	5,620,511.90
Sep-14	2,358,565.60	2,758,999.30	(73,836.15)	326,597.55	5,947,109.45

RMLD
BUDGET VARIANCE REPORT
FOR PERIOD ENDING SEPTEMBER 30, 2014

DIVISION	ACTUAL	BUDGET	VARIANCE	% CHANGE
BUSINESS DIVISION	2,472,060	2,531,391	(59,332)	-2.34%
INTEGRATED RESOURCES AND PLANNING	171,827	349,069	(177,242)	-50.78%
ENGINEERING AND OPERATIONS	1,188,179	1,212,605	(24,426)	-2.01%
FACILITY	1,138,216	1,260,707	(122,491)	-9.72%
GENERAL MANAGER	194,665	216,782	(22,116)	-10.20%
SUB-TOTAL	5,164,947	5,570,554	(405,606)	-7.28%
PURCHASED POWER BASE	7,909,531	7,920,600	(11,069)	-0.14%
PURCHASED POWER FUEL	8,414,520	9,056,605	(642,085)	-7.09%
TOTAL	21,488,998	22,547,759	(1,058,761)	-4.70%

# M.G.L. CHAPTER 30B BIDS BOARD REFERENCE TAB E

230 Ash Street P.O. Box 150 Reading, MA 01867-0250

Tel: (781) 944-1340 Fax: (781) 942-2409 Web: www.rmld.com

November 4, 2014

Town of Reading Municipal Light Board

Subject: S&C SCADA-Mate CX Switch

On October 8, 2014 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and The Central Register requesting proposals for S&C SCADA-Mate CX Switch for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

Power Sales Group JF Gray & Associates

Hasgo Power Sales HD Supply

MVA Power, Inc.

**WESCO** 

MetroWest Robinson Sales

**HD Industrial Services** 

Siemens

Shamrock Power

Power Tech-UPSC **EL Flowers & Associates** 

Genergy

Bids were received from WESCO, Graybar Electric Company and Stuart C. Irby.

The bids were publicly opened and read aloud at 11:00 a.m. October 29, 2014 in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2015-06 for S&C SCADA-Mate CX Switch be awarded to:

### Stuart C. Irby for a total cost of \$55,070.00

Item (desc.)	Qty	<b>Unit Cost</b>	Total Net Cost
Item 1 - S&C Switch	2	\$27,505.00	\$55,010.00
Option #6 - Compressioni Connectors	2	\$30.00	\$60.00

as the lowest qualified bidder on the recommendation of the General Manager.

The FY15 Capital Budget allocation for the purchase of these units under the Distribution Protection & Automation project was estimated at \$69,000.

Coleen O'Brien

Hamid Jaffari

Peter Price

S&C SCADA-Mate CX Switch Bid 2015-06

Bidder	Delivery Date	Unit Cost	Oty	Total Net Cost	Meet Specification Firm requirement Price		All forms filled out	Certified Check or Bid Bond	Exceptions to stated bid requirements	Authorized signature	
Stuart C. Irby	:				yes	yes	yes	yes	yes	yes	
Item 1 - S&C Switch Option #6 - Compressioni Connectors	14-18 weeks	\$27,505.00 \$30.00	0 0	\$55,010.00 \$60.00 \$55,070.00	Exceptions:	"Field se	rvice and o	ptional item	,010.00 \$60.00 Exceptions: "Field service and optional items are extra cost. See attached." ,070.00	See attached."	
WESCO Item 1 Switch Option #6 - Compressioni Connectors	14-16 weeks	\$27,645.00 \$29.10	00	\$55,290.00	yes	yes	yes	yes	0	yes	
Graybar Electric Company	0,000.00	00 349 709	c	0.000	yes	yes	yes	yes	yes	yes	
Option #6 - Compressioni Connectors	o weeks	\$27,645.00	7 7	\$55,360.00	Exceptions: Refers to pages 2 & 3 of S&C's quote.	Refers to	pages 2 8	3 of S&C's	quote.		

Engineering Note: All exceptions are acceptable.



230 Ash Street P.O. Box 150 Reading, MA 01867-0250

Tel: (781) 944-1340 Fax: (781) 942-2409 Web: www.rmld.com

November 4, 2014

Town of Reading Municipal Light Board

Subject: Single Phase Pole Mounted Transformers

On October 8, 2014 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle requesting proposals Single Phase Pole Mounted Transformers for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

Power Sales Group EDI Hughes Supply, Inc. Power Tech-UPSC

Stuart C. Irby

WESCO Yale Electric

Ward Transformer Sales Hasgo Power

Hasgo Powe HD Supply

Graybar Electric Company Shamrock Power Sales, Inc.

Jordan Transformer Robinson Sales MVA Power, Inc

Bids were received from WESCO, Power Sales Group, Stuart C. Irby and Graybar Electric Company.

The bids were publicly opened and read aloud at 11:00 a.m. October 29, 2014 in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2015-08 for Single Phase Pole Mounted Transformers be awarded to:

# Power Sales Group for a total cost of \$3,300.00

Item (desc.)		Qty	Unit Cost	Total Net Cost
Item 1 (5 Kva)	Howard	6	\$550.00	\$3,300.00

## WESCO for a total cost of \$75,880.00

Item (desc.)		Qty	<b>Unit Cost</b>	Total Net Cost
Item 2 (37 1/2 Kva)	Cooper Power	40	\$1,204.00	\$48,160.00
Item 3 (50 Kva)	Cooper Power	20	\$1,386.00	\$27,720.00

as the lowest qualified bidder on the recommendation of the General Manager.

The FY15 Capital Budget allocation for the purchase of these units under the Transformer project was estimated at \$84,000 for 60 units. This quantity will bring the RMLD inventory back up to the necessary level. The total for this bid is \$79,180.

Coleen O'Brien

Hamid Jaffari

Peter Price

Single Phase Pole Mounted Transformers Bid 2015-08

Meet  Total Net Specification Specification Firm All forms Check or stated bid Authorized  Delivery Date Unit Cost Oty Cost requirement Data Sheets Price filled out Bid Bond requirements signature	16 weeks ARO         \$631.00         6         \$3,786.00           16 weeks ARO         \$1,204.00         \$0         \$27,720.00           16 weeks ARO         \$1,386.00         \$27,720.00           \$79,666.00         \$79,666.00	16 weeks ARO         \$550.00         6         \$3,300.00           16 weeks ARO         \$1,771.00         20         \$35,420.00           16 weeks ARO         \$1,771.00         20         \$35,420.00	16 weeks ARO \$760.00 6 \$4,560.00 16 weeks ARO \$1,429.00 40 \$57,160.00 16 weeks ARO \$1,429.00 40 \$57,160.00
Manufacturer	Cooper Power Cooper Power Cooper Power	<b>Howard</b> Howard Howard	Central Maloney Central Maloney
Bidder	WESCO Item 1 (5 Kva) Item 2 (37 1/2 Kva) Item 3 (50 Kva)	Power Sales Item 1 (5 Kva) Item 2 (37 1/2 Kva) Item 3 (50 Kva)	Stuart C. Irby Item 1 (5 Kva) Item 2 (37 1/2 Kva) Item 3 (50 Kva)

Non-Responsive

Graybar Electric Item 1 (5 Kva) Item 2 (37 1/2 Kva) Item 3 (50 Kva)

Non responsive bidders: Graybar Electric Disqualification based on more than one bid for the same work from an individual, firm, partnership or corporation.



230 Ash Street P.O. Box 150 Reading, MA 01867-0250

Tel: (781) 944-1340 Fax: (781) 942-2409 Web: www.rmld.com

November 4, 2014

Town of Reading Municipal Light Board

Subject: Three Phase Pole Mounted Transformers

On October 8, 2014 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle requesting proposals Three Phase Pole Mounted Transformers for the Reading Municipal Light Department.

An invitation to bid was emailed to the following:

Power Sales Group	WESCO	Graybar Electric Company
EDI	Yale Electric	Shamrock Power Sales, Inc.
Hughes Supply, Inc.	Ward Transformer Sales	Jordan Transformer
Power Tech-UPSC	Hasgo Power	Robinson Sales
Stuart C. Irby	HD Supply	MVA Power, Inc

Bids were received from WESCO and Power Sales Group.

The bids were publicly opened and read aloud at 11:00 am October 29, 2014 in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2015-09 for Three Phase Pole Mounted Transformers be awarded to:

#### WESCO for a total cost of \$79,096.00

Item (desc.)	Qty	<u>Manufacturer</u>	Unit Cost	Total Net Cost
1 (45 kVa 13800 Δ 277/480)	1	Power Partners	\$3,575.00	\$3,575.00
2 (75 kVa 13800 Δ 277/480)	1	Power Partners	\$4,189.00	\$4,189.00
3 (112 kVa 13800 Δ 120/208)	6	Power Partners	\$4,870.00	\$29,220.00
4 (150 kVa 13800 Δ 120/208)	6	Power Partners	\$6,136.00	\$36,816.00
5 (150 kVa 13800 Δ 277/480)	1	<b>Power Partners</b>	\$5,296.00	\$5,296.00

as the lowest qualified bidder on the recommendation of the General Manager.

The FY15 Capital Budget allocation for the purchase of these units under the Transformer project was estimated at \$60,000 for 10 units. This quantity was intended for commercial projects and to bring the RMLD inventory back up to the necessary level. The Department will actually need 15 units to bring the inventory up to the necessary level, at a cost of \$79,096.

Coleen O'Brien

Hamid Vaffari

Peter Price

Three L. Je Pole Mounted Transformers Bid 2015-09

pa	, io			
Authorized signature	yes th mineral o	yes	yes	yes
Exceptions to stated bid requirements	yes yes yes yes yes yes yes yes yes Exceptions as stated: Nameplates: Our nameplate is engraved as follows: 'Filled with mineral oil that contained less than 1 ppm PCB at time of manufacture.' Engineers Note: This exception is acceptable.	2	2	2
Certified Check or Bid Bond	yes yes  late is engraved as follows: '  1 ppm PCB at time of manuf  This exception is acceptable.	yes	yes	yes
All forms filled out	yes plate is en 11 ppm PC	yes	yes	yes
Firm	yes Is stated: Our namel I less than	yes	yes	yes
Specification Data Sheets	yes yes  Exceptions as stated: Nameplates: Our name that contained less than	yes	yes	yes
Meet Specification requirement	yes	yes	yes	yes
Total Net Cost	\$3,575.00 \$4,189.00 \$29,220.00 \$36,816.00 \$5,296.00 \$79,096.00	\$4,960.00 \$5,345.00 \$33,462.00 \$36,660.00 \$5,995.00 \$86,422.00	\$3,770.00 \$4,914.00 \$34,956.00 \$7,333.00 \$97,533.00	\$5,172.00 \$5,532.00 \$40,896.00 \$51,252.00 \$8,158.00
de de	<b>00</b>	00-		
Unit Cost	\$3,575.00 \$4,189.00 \$4,870.00 \$6,136.00 \$5,296.00	\$4,960.00 \$5,345.00 \$5,577.00 \$6,110.00 \$5,995.00	\$3,770.00 \$4,914.00 \$5,826.00 \$7,760.00 \$7,333.00	\$5,172.00 \$5,532.00 \$6,816.00 \$8,542.00 \$8,158.00
Delivery Date	10 weeks ARO 10 weeks ARO 10 weeks ARO 11 weeks ARO 10 weeks ARO	12-14 weeks ARO 12-14 weeks ARO 12-14 weeks ARO 12-14 weeks ARO	15 12-14 weeks ARO 12-14 weeks ARO 12-14 weeks ARO 12-14 weeks ARO	10 weeks ARO
Manufacturer	Power Partners Power Partners Power Partners Power Partners	CG Power CG Power CG Power CG Power	Silicon Steel SJ6215 Howard Howard Howard Howard Howard	Amorphous SJ6216 Howard Howard Howard Howard Howard
Bidder	WESCO Item 1 (45 kVa 13800 Delta 277/480) Item 2 (75 kVa 13800 Delta 277/480) Item 3 (112 kVa 13800 Delta 120/208) Item 4 (150 kVa 13800 Delta 120/208) Item 5 (150 kVa 13800 Delta 277/480)	Stuart C. Irby Item 1 (45 kVa 13800 Delta 277/480) Item 2 (75 kVa 13800 Delta 277/480) Item 3 (112 kVa 13800 Delta 120/208) Item 4 (150 kVa 13800 Delta 120/208) Item 5 (150 kVa 13800 Delta 277/480)	Power Sales Item 1 (45 kVa 13800 Delta 277/480) Item 2 (75 kVa 13800 Delta 277/480) Item 3 (112 kVa 13800 Delta 120/208) Item 4 (150 kVa 13800 Delta 120/208) Item 5 (150 kVa 13800 Delta 277/480)	Power Sales Item 1 (45 kVa 13800 Delta 277/480) Item 2 (75 kVa 13800 Delta 277/480) Item 3 (112 kVa 13800 Delta 120/208) Item 4 (150 kVa 13800 Delta 120/208) Item 5 (150 kVa 13800 Delta 277/480)



#### Reading Municipal Light Department RELIABLE POWER FOR GENERATIONS

230 Ash Street P.O. Box 150 Reading, MA 01867-0250

Tel: (781) 944-1340 Fax: (781) 942-2409 Web: www.rmld.com

November 4, 2014

Town of Reading Municipal Light Board

Subject: 750 MCM Cable

On October 15, 2014 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle and on October 13, 2014 in the Commonwealth of Massachusetts' Good and Services Bulletin requesting proposals for the 750 MCM Cable for the Reading Municipal Light Department.

Specifications were emailed to the following:

The Okonite Company Arthur J. Hurley Company Power Sales Group Anixter Wire & Cable **USA Power Cable** 

**WESCO** Hasgo Power HD Supply, Inc. Yusen Assoc

Eupen Cable

Yale Electrical Supply Pirelli Cables & Systems Hendrix Wire & Cable Corp E.L. Flowers

Power & Tel. Enterprise

Graybar Electric Company Shamrock Power Sales Inc. Champion Wire & Cable General Cable

Stuart C. Irby

Bids were received from Stuart C. Irby, Arthur J. Hurley Company, Yale Electric East, LLC, The Okonite Company and WESCO.

The bids were publicly opened and read aloud at 11:00 a.m. November 3, 2014 in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2015-11 for 750 MCM cable be awarded to: Arthur J. Hurley Company, Inc. for a total cost of \$139,590.00

Item 1

Quantity 9.900'

Description

750 MCM CU 15 kV concentric neutral power cable

Total Cost

\$139,590.00

as the lowest qualified bidder on the recommendation of the General Manager.

This purchase is to replenish inventory that was used for two cable faults on circuits 3W14 and 3W6.

Coleen O'Brien

Hamid Jaffar

Peter Price

File: Bid/FY15/750 MCM UG Cable/2015-11

750 MCM Cable Bid 2015-11

Bidder	Manufacturer	Delivery Date	Total Cost	Firm	All forms filled out	Certified Check or Bid Bond
Arthur J. Hurley Company, Inc. Item 1 - 9,900' 750 MCM CU, concentric neutral power cable	Okonite	8 weeks ARO	139,590.00	yes	yes	yes
WESCO Item 1 - 9,900' 750 MCM CU, concentric neutral power cable	General Cable	11 weeks ARO	144,856.80	yes	yes	yes
Okonite Item 1 - 9,900' 750 MCM CU, concentric neutral power cable	Okonite	8 weeks ARO	148,282.20	yes	yes	yes
Stuart C Irby Item 1 - 9,900' 750 MCM CU, concentric neutral power cable	Prysmian	12-16 weeks ARO 149,210.00	149,210.00	ou	yes	yes
Yale Electric East LLC Item 1 - 9,900' 750 MCM CU, concentric neutral power cable	General Cable	10 weeks ARO	172,636.00	yes	yes	yes

2015-11 750 MCM Cable Analysis

# BOARD MATERIALS AVAILABLE BUT NOT DISCUSSED

#### Jeanne Foti

From:

Jeanne Foti

ent:

Thursday, November 13, 2014 7:50 AM

To:

RMLD Board Members Group

Subject:

Account Payable Warrant and Payroll

Good morning.

In an effort to save paper, the following timeframes had no Account Payable and Payroll questions.

## **Account Payable Warrant - No Questions**

September 26, October 3, October 10, October 17, October 24, October 31 and November 7.

## Payroll - No Questions

October 6, October 20 and November 3.

This e-mail will be printed for the Board Book for the RMLD Board meeting on November 21, 2014.

Jeanne Foti
Pading Municipal Light Department
Recutive Assistant
230 Ash Street
Reading, MA 01867

781-942-6434 Phone 781-942-2409 Fax

Please consider the environment before printing this e-mail.

TOWN OF READING MUNICIPAL LIGHT DEPARTMENT RATE COMPARISONS READING & SURROUNDING TOWNS	DEPARTMENT ROUNDING TOWNS			July-14			INDIISTRIAI - TOI
	RESIDENTIAL 750 kWh's	RESIDENTIAL-TOU 1500 kWh's 75/25 Split	RES. HOT WATER 1000 kWh's	COMMERCIAL 7,300 kWh's 25.000 kW Demand	SMALL COMMERCIAL 1,080 kWh's 10.000 kW Demand	SCHOOL RATE 35000 kWh's 130.5 kW Demand	109,500 kWh's 250.000 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE	<b>\$111.17</b>	\$196.32	<b>\$137.51</b>	\$988.22	\$187.87	\$4,620.25	\$764,765.99
	\$0.14823	\$0.13088	\$0.13751	\$0.13537	\$0.17395	\$0.13201	\$0.11116
NATIONAL GRID TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$120.78 \$0.16104 8.64%	\$239.71 \$0.15981 22.10%	\$161.03 \$0.16103 17.10%	<b>\$1,196.29</b> \$0.16388 21.05%	\$171.61 \$0.15890 -8.65%	<b>\$5,331.37</b> \$0.15232 15.39%	\$902,817.58 \$0.13123 18.05%
NSTAR COMPANY TOTAL BILL PER KWH CHARGE % DIFFERENCE	<b>\$144.10</b> \$0.19213 29.62%	\$284.76 \$0.18984 45.04%	\$189.99 \$0.18999 38.16%	<b>\$1,46.04</b> \$0.19809 46.33%	\$200.39 \$0.18555 6.67%	\$8,627.02 \$0.24649 86.72%	\$992,826.05 \$0.14431 29.82%
PEABODY MUNICIPAL LIGHT PLANT TOTAL BILL PER KWH CHARGE % DIFFERENCE	<b>\$91.27</b>	\$176.77	\$119.77	\$993.12	\$148.85	<b>\$4,904.88</b>	\$677,880.87
	\$0.12170	\$0.11784	\$0.11977	\$0.13604	\$0.13783	\$0,14014	\$0.09853
	-17.90%	-9.96%	-12.90%	0.50%	-20.77%	6.16%	-11.36%
MIDDLETON MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE % DIFFERENCE	<b>\$99.77</b>	\$198.39	<b>\$132.64</b>	\$959.51	<b>\$168.44</b>	<b>\$4,762.93</b>	\$807,171.40
	\$0.13303	\$0.13226	\$0.13264	\$0.13144	\$0.15596	\$0.13608	\$0.11733
	-10.26%	1.05%	-3.54%	-2.91%	-10.34%	3.09%	5.54%
WAKEFIELD MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE % DIFFERENCE	<b>\$119.24</b>	\$220.92	\$149.38	\$1,129.79	\$180.88	\$5,298.08	\$887,163.30
	\$0.15898	\$0.14728	\$0.14938	\$0.15477	\$0.16749	\$0.15137	\$0.12896
	7.25%	12.53%	8.63%	14.33%	-3.72%	14.67%	16.00%

TOWN OF READING MUNICIPAL LIGHT DEPARTMENT RATE COMPARISONS READING & SURROUNDING TOWNS	DEPARTMENT ROUNDING TOWNS			August-14			INDUSTRIAL - TOLL
	RESIDENTIAL 750 kWh's	RESIDENTIAL-TOU 1500 kWh's 75/25 Split	RES. HOT WATER 1000 kWh's	COMMERCIAL 7,300 kWh's 25.000 kW Demand	SMALL COMMERCIAL 1,080 kWh's 10.000 kW Demand	SCHOOL RATE 35000 kWh's 130.5 kW Demand	109,500 kWh's 250,000 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE	<b>\$107.23</b> \$0.14297	\$188.43 \$0.12562	\$132.25 \$0.13225	\$951.72 \$0.13037	\$182.47 \$0.16895	\$4,445.25 \$0.12701	\$764,765.99 \$0.11116
NATIONAL GRID TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$120.78 \$0.16104 12.64%	\$239.71 \$0.15981 27.21%	\$161.03 \$0.16103 21.76%	\$1,196.29 \$0.16388 25.70%	\$171.61 \$0.15890 -5.95%	\$5,331.37 \$0.15232 19.93%	\$902,817.58 \$0.13123 18.05%
NSTAR COMPANY TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$144.10 \$0.19213 34.39%	\$284.76 \$0.18984 51.12%	\$189.99 \$0.18999 43.65%	\$1,446.04 \$0.19809 \$1.94%	\$200.39 \$0.18555 9.83%	\$8,627.02 \$0.24649 94.07%	\$992,826.05 \$0.14431 29.82%
PEABODY MUNICIPAL LIGHT PLANT TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$91.27 \$0.12170 -14.88%	\$176,77 \$0.11784 -6.19%	\$119.77 \$0.11977 -9.44%	\$993.12 \$0.13604 4.35%	\$148.85 \$0.13783 -18.42%	\$4,904.88 \$0.14014 10.34%	\$677,880.87 \$0.09853 -11.36%
MIDDLETON MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$99.77 \$0.13303 -6.95%	\$198.39 \$0.13226 5.28%	\$132.64 \$0.13264 0.29%	\$959.51 \$0.13144 0.82%	\$168.44 \$0.15596 -7.69%	<b>\$4,762.93</b> \$0.13608 7.15%	\$807,171.40 \$0.11733 5.54%
WAKEFIELD MUNICIPAL LIGHT DEPT. TOTAL BILL PER KWH CHARGE % DIFFERENCE	\$119.24 \$0.15898 11.20%	\$220.92 \$0.14728 17.24%	\$149.38 \$0.14938 12.95%	\$1,129.79 \$0.15477 18.71%	\$180.88 \$0.16749 -0.87%	\$5,298.08 \$0.15137 19.19%	\$887,163.30 \$0.12896 16.00%

250.000 kW Demand INDUSTRIAL - TOU \$902,817.58 \$0.13123 \$807,171.40 109,500 kWh's \$992,826.05 \$887,163.30 \$764,765.99 \$677,880.87 \$0.12896 80/20 Split \$0.11116 \$0.14431 \$0.09853 18.05% -11.36% 29.82% 5.54% 130.5 kW Demand SCHOOL RATE **\$4,762.93** \$0.13608 \$0.15137 29.37% 35000 kWh's \$4,095.25 \$5,298.08 \$4,904.88 \$8,627.02 \$0.24649 \$0.14014 \$5,331.37 \$0.15232 110.66% 16.30% 19.77% 30.18% SMALL COMMERCIAL 10.000 kW Demand **\$180.88** \$0.16749 1,080 kWh's **\$168.44** \$0.15596 \$200.39 \$171.67 **\$171.61** \$0.15890 \$0.13783 16.74% \$148.85 0.03% -13.29% 5.37% -1.88% September-14 25.000 kW Demand COMMERCIAL **\$1,129.79** \$0.15477 7,300 kWh's \$1,196.29 \$1,446.04 \$0.13144 \$878.72 \$0.19809 \$959.51 \$0.16388 \$0.13604 \$993.12 28.57% 36.14% 13.02% 9.19% 64.56% RES. HOT WATER **\$120.76** \$0.12076 **\$149.38** 1000 kWh's \$0.16103 \$0.18999 \$0.11977 \$132.64 \$0.13264 \$161.03 \$189.99 33.34% 57.32% \$119.77 23.70% 9.84% -0.82% RESIDENTIAL-TOU **\$220.92** \$0.14728 1500 kWh's \$171.20 \$0.13226 \$0.18984 \$0.11784 75/25 Split \$0.15981 \$198.39 29.04% \$284.76 \$176.77 \$239.71 40.02% 66.33% 15.88% 3.25% RATE COMPARISONS READING & SURROUNDING TOWNS RESIDENTIAL **\$144.10** \$0.19213 \$0.12170 **\$119.24 \$0.15898** \$98.61 \$0.16104 TOWN OF READING MUNICIPAL LIGHT DEPARTMENT \$0.13303 750 kWh's \$120.78 \$99.77 46.13% 20.92% \$91.27 -7.44% 1.18% MIDDLETON MUNICIPAL LIGHT DEPT. WAKEFIELD MUNICIPAL LIGHT DEPT. PEABODY MUNICIPAL LIGHT PLANT READING MUNICIPAL LIGHT DEPT. PER KWH CHARGE NSTAR COMPANY NATIONAL GRID % DIFFERENCE % DIFFERENCE % DIFFERENCE % DIFFERENCE % DIFFERENCE TOTAL BILL TOTAL BILL TOTAL BILL TOTAL BILL TOTAL BILL TOTAL BILL