

**READING MUNICIPAL
LIGHT DEPARTMENT**

**BOARD
OF
COMMISSIONERS**

REGULAR SESSION

SEPTEMBER 29, 2016

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

230 Ash Street
Reading, MA 01867
September 29, 2016
7:30 p.m.

1. Call Meeting to Order

2. Opening Remarks

3. Introductions

4. Public Comment

- RMLD Citizens' Advisory Board
- Liaisons to RMLD Board
- Public Comment

5. Report of the Committee

ACTION ITEMS

a. Policy Committee – Commissioner Hennessy

- i. RMLD Policy 13, Revision 4, Facility Use
- ii. RMLD Policy 20, Revision 3, Family and Medical Leave
- iii. RMLD Policy 21, Revision 9, Non-Union Management Compensation and Benefits

b. Fiber Optic Committee – Commissioner Talbot

6. Report RMLD Board Member Attendance at RMLD Citizens' Advisory Board Meeting

Note: There was no Board representation at the CAB meeting on August 14, 2016.

7. Approval of Board Minutes (Attachment 1)
May 26, 2016, June 30, 2016, July 28, 2016

ACTION ITEM

8. General Manager's Report – Ms. O'Brien

9. Power Supply Report – June and July 2016 – Ms. Parenteau (Attachment 2)

10. Engineering and Operations Report – June and July 2016 – Mr. Jaffari (Attachment 3)

11. Financial Update – Ms. Markiewicz

12. RMLD Procurement Requests Requiring Board Approval (Attachment 4)

a. IFP 2017-12 Battery Bank

Suggested Motion:

Move that proposal 2017-12 for Battery Bank at Substation 4 be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager for a total cost of \$24,000.00.

b. IFP 2017-14 Service Cable 1/0

Suggested Motion:

Move that proposal 2017-14 for 1/0 Triplex Service Cable be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager. The term of the contract is for one (1) year with an option for additional second or third year at the sole discretion of the Reading Municipal Light Department for a total cost of \$507,600.00.

12. RMLD Procurement Requests Requiring Board Approval (Attachment 4)

c. IFB 2017-17 Sports Utility Vehicle with Trade-In

Suggested Motion:

Move that bid 2017-17 for one: Sport Utility Vehicle (SUV) with Trade-In be awarded to: Stoneham Motor Co. for \$22,606.00 as the lowest responsive and responsible bidder on the recommendation of the General Manager.

d. IFP 2017-18 Sicame Connectors

Suggested Motion:

Move that proposal 2017-18 for Sicame Insulation Piercing Connectors be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager. The term of the contract is for one (1) year with an option for additional second or third year at the sole discretion of the Reading Municipal Light Department for a total cost of \$306,000.00.

13. General Discussion

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

E-Mail responses to Account Payable/Payroll Questions
Rate Comparisons, August and September 2016

RMLD Board Meetings

Thursday, October 20, 2016

Thursday, December 15, 2016

RMLD Committee Meetings

Thursday, October 20, 2016 RMLD Audit Committee meets with Town of Reading Audit Committee

RMLD Board Policy Committee Meeting in November – To be determined.

CAB Meetings

Wednesday, October 12, 2016

14. Executive Session

Suggested Motion:

Move that the Board go into Executive Session to approve the Executive Session Meeting minutes of May 12, 2016, May 26, 2016, June 30, 2016, July 28, 2016 and discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

ACTION ITEM

15. Adjournment

Suggested Motion:

Move to adjourn the Regular Session.

ACTION ITEM

REGULAR SESSION MEETING
MINUTES
ATTACHMENT 1

Reading Municipal Light Board of Commissioners
Regular Session
230 Ash Street
Reading, MA 01867
May 26, 2016

Start Time of Regular Session: 6:35 p.m.

End Time of Regular Session: 8:36 p.m.

Commissioners:

Thomas O'Rourke, Chairman

David Talbot, Vice Chairman

John Stempeck, Commissioner - Absent

Philip B. Pacino, Vice Chairman

Dave Hennessy, Commissioner, Secretary Pro Tem

Staff:

Coleen O'Brien, General Manager

Hamid Jaffari, Director of E&O

Wendy Markiewicz, Assistant Director of Business Finance

Jane Parenteau, Director of Integrated Resources

Bob Fournier, Accounting/Business Manager

Priscilla Gottwald, Community Relations Manager

Patricia Mellino, Operational Assistant

Peter Price, Chief Engineer

Citizens' Advisory Board:

David Nelson, Vice Chair

Public:

Martha Moore, Reading Memorial High School

Terence Sheehan, Wilmington Middle School

Lorie Kelly, Lynnfield, Summer Street School

Christine Molle, North Reading, E. Ethel Little School - Absent

Call Meeting to Order

Chairman O'Rourke called the meeting to order and stated that the meeting was not live but being videotaped for distribution to Reading, North Reading, Lynnfield, and Wilmington.

Opening Remarks

Chairman O'Rourke read the RMLD Board of Commissioners Code of Conduct.

Introductions

Chairman O'Rourke welcomed David Nelson Citizens' Advisory Board (CAB) member.

Commissioner Hennessy will be the Secretary this evening.

Presentation - Winning Schools for RMLD's - LED's Save Energy Campaign

Chairman O'Rourke welcomed the winners of RMLD's LED's Save Energy Campaign. The campaign ran from January 15 through April 15. Its purpose was to educate customers about energy awareness and to encourage students and their families to help change the world, one energy savings step at a time, while supporting their schools in a friendly competition. Through this collaboration with twenty four public schools in our service territory RMLD invited the school parents to participate by purchasing energy efficient LED bulbs and power strips from RMLD's online store at a discount. At checkout parents checked off their child's school and the school in each town that received the most credits are the winners of a \$2,000 rebate towards ENERGY STAR equipment or appliances.

Congratulations to: Reading Memorial High School, represented by Martha Moore who teaches biology and is the Environmental Club Advisor, Wilmington Middle School, Assistant Principal Terence Sheehan, Lynnfield Summer Street School, Assistant Principal Lorie Kelly and North Reading E. Ethel Little School, unfortunately Principal, Christine Molle and her staff are attending an art night at the school this evening. Photos were taken earlier this afternoon.

Ms. Gottwald pointed out that the RMLD had the cooperation of all the Superintendents in all the towns RMLD serves. Chairman O'Rourke complimented Ms. Gottwald for her good work on this effort.

Chairman O'Rourke said that in RMLD's continuing effort to educate the public about energy efficiency, we hope you will join our efforts to help reduce RMLD's summer electrical peak and the cost of electricity to RMLD's customers. The summer demand peak season is June 1 through August 31. Approximately 25% of the electric bill is determined by how well RMLD conserves during that one true peak hour. That one hour, referred to as peak demand, occurs on a hot weekday afternoon in June through August, usually between the hours of 2 pm and 5 pm.

Presentation - Winning Schools for RMLD's - LED's Save Energy Campaign

Chairman O'Rourke stated that the defining hour represents the highest point of customer consumption of electricity for all of New England. The prediction of the peak is done by the Independent System Operator – New England (ISO-NE). Prediction of the peak may be called multiple times as the summer progresses to ensure that the actual peak is captured. For example, if a heat wave in early July brings the annual peak thus far, ISO-NE will call for the peak. Subsequently, later in July, if a more intense heat wave occurs, another peak is called.

RMLD asks you to voluntarily reduce electric use when peak electric demand is predicted. We are asking our customers through emails, texts, and social media (Twitter:@Reading Light) to join our initiative in helping reduce the summer peak. If you opt in to receive our notifications, we will be sending email blasts along with tweets, and possibly using town notification systems, when it appears a possible peak hour may occur.

You can help by postponing the use of appliances like washers and dryers until later in the day, shutting off pool pumps for a few hours, raising the setting on your air conditioning thermostat a few degrees or cooking dinner on the grill. As well, forwarding our notification will also help to get the word out. SHAVE THE PEAK.

Chairman O'Rourke congratulated Ms. Gottwald because she is the person behind the scenes that organizes the logistics for this and many other events. Chairman O'Rourke congratulated the school winners for putting the effort in and spreading the word to a younger generation, they are our best and brightest hope to change the world and they understand the environment.

Mr. Talbot asked if there is a formal system where schools are notified of peak days. Ms. O'Brien said that the RMLD is working with the Superintendents' office to send out a notification of the peak and will send the chain out. Mr. Talbot asked for all four towns. Ms. O'Brien responded that is correct. Ms. Gottwald stated that for the LED's Save Energy Campaign, the Superintendents approved this program and sent it to all the students' parents in the school. Mr. Talbot stated that it was a great job.

Report of the Committee – Audit Committee – Vice Chair Pacino

Mr. Pacino reported that the Town of Reading Audit Committee met on May 5, 2016. Melanson Heath presented the audit for the Town of Reading which includes the Light Department and Water Department. The Audit Committee accepted the Audit Report. There was one Management Letter comment on the use of the Reserve Funds by the School Department. There is more in the Reserve Funds than there should be. The Town Accountant said that she is working with the School Department in terms of taking care of that. Mr. Pacino pointed out that the auditors cautioned the Audit Committee that next year there will be a new GASB liability to be recognized, Post Employment Benefits is a large liability that will need to be recognized on the Balance Sheet.

Report of the General Manager

RMLD Open House, Thursday, October 6, 2016 – Ms. O'Brien

Ms. O'Brien reported that the upcoming RMLD Open House will occur during National Public Power Week, on October 6. The benefits of publicly owned utilities are recognized. RMLD is not sure what the format is, but have been demonstrating the safety of the employees and linemen. Last year we demonstrated the safety of the home. We are hoping to have fun things for children.

Ms. O'Brien said that they are thinking of different activities aimed at SHAVE THE PEAK. There is going to be a program for the third grades. The RMLD is currently checking with the schools to see if there is anything that can be done in the high schools. The T-Shirt program will be changed to an arts projects at the high school program. RMLD has artwork that is faded and the frames can be used. Drawings can showcase shave the peak, energy conservation and those types of themes. They will be voted on. It will be a reduction in cost from the T-Shirts. Also, looking for ideas for the Open House. Maybe decals on cars for Shave the Peak. The Board expressed interest in the continuation of the historical calendar.

Review of RMLD's Fiscal Year 2017 Capital Budget – Mr. Jaffari

Note: RMLD Board will take a vote on both the Fiscal Year 2017 Operating and Capital Budgets

Mr. Jaffari reported on the Fiscal Year 2017 Capital Budget. Mr. Jaffari said that he will provide an update of the distributed generation projects, then Ms. Parenteau will address RMLD rates as well as Terms and Conditions.

Chairman O'Rourke said that at the last RMLD Board meeting the Board RMLD's Fiscal Year 2017 Operating Budget was presented and conditionally approved. At the end of the discussion RMLD's Fiscal Year 2017 Capital and Operating Budgets will be approved.

Mr. Jaffari then addressed the Fiscal Year 2016 Capital Authorization Major Spending. Mr. Jaffari pointed out that the projects listed in green are a result of the Reliability Study performed by Booth & Associates in 2015. The red items are non completed projects such as Distributed Generation, GIS, and Power Quality Meters due to a myriad of reasons. The black items are projects that have been completed.

RMLD's Fiscal Year 2017 Capital Budget

Mr. Jaffari explained that the Distributed Generation bid went out, but was pulled back due to vendors taking so many exceptions. The bid technical specifications were reviewed to address some of the concerns and advertised yesterday for rebid. There were also some permitting requirements that were required. With the GIS there were a number of problems with RMLD's multiple databases that needed to be fixed and GIS data collection template needed to be reformatted accordingly. This bid was awarded last year to Davey's who ran into data collection problems delaying this project. Mr. Jaffari stated that the solution was to revamp the entire data collection process, but moving forward with the revised data collection format. The Power Quality Meters were not purchased due to the fact a new AMI mesh network was created and new meters are capable of recording power quality parameters where mesh exists. Instead of spending money on the equipment the network is capable of accomplishing most of this. There may be the need to purchase additional equipment for areas RMLD does not have access to until the mesh network is built. This will enable the RMLD to have the data that can be used for demand response programs.

Mr. Jaffari stated that \$10,596,000 was requested last year's (fiscal year 2016) Capital Budget and are estimating to spend \$7,227,000.

The project rollovers to fiscal year 2017 include: Distributed Generation, GIS and Power Quality Meters, which represents \$2,455,000. The projects on hold include: Master Facilities, 5W9 Circuit and Relay Replacement which represents \$323,000. The RMLD has been searching for the new Substation 5 in Wilmington and did not expend funds on the circuit until the RMLD has a definitive location for the substation. Chairman O'Rourke asked about the substation. Mr. Jaffari explained that the RMLD will purchase the land this year, fiscal year 2017, starting construction in fiscal year 2018 with completion fiscal year 2019. The Reliability Study (performed by Booth & Associates) suggested that the RMLD in fiscal year 2017 start the new substation because the current substation is getting old.

Mr. Hennessy asked do the rollovers indicate that the project was not completed. Mr. Jaffari responded that the funds are rolled over from fiscal year 2016 to fiscal year 2017 for various reasons such as Distributed Generation, which required more time for permitting and bidding process.

Mr. Jaffari added some of the budgeted items that lowered the spending in FY2017 were bids that came in lower than expected saving \$155,000. Additionally, using internal resources and lower construction costs resulted additional \$436,000 savings.

Mr. Jaffari stated that for fiscal year 2016 the budget was \$10,596,000 with estimated spending of \$7,227,000 resulting in a variance of \$3,369,000, with 62% of this amount belonging to the Distributed Generation project. RMLD went over the budgeted amount for some projects while it saved on others. The breakdown of these projects is as follows: Routine Construction was over due to the new transformer maintenance program, transformers that needed to be replaced due to leaking and failure. The spending for substation 4's Breakers Replacement was under the budgeted amount in FY2015 and FY2016. This bid amount for this project came in under budget by half and was completed in one year timeframe versus a two year timeframe which proved to be more cost effective. Lowell Street project went over the budgeted amount due to challenges with construction because of the ledge problem when setting the poles. Old Lynnfield Center also went over the budgeted amount because there were construction challenges with the drainage and services deeper than expected, causing rerouting of the lines.

Mr. Jaffari then addressed the fiscal year 2017 major spending projects. Mr. Jaffari stated those in green color represent the Reliability Study recommendations. These include: Distributed Generation \$2,720,000 seeking a 2-2.5 megawatt generator, New Wilmington Substation, \$250,000 land needs to be purchased and the RMLD currently has an offer in on a piece of land with the possibility of two land locations, (Relay Replacements, LED Streetlights, HVAC System Upgrade, Grid Modernization these amounts reflect what RMLD has estimated), GIS \$360,000, Step-Down Upgrades reflect the conversion from 4.16KV to 13.8KV which helps minimizes losses, which is a cost savings to the RMLD. URD Upgrade involves the upgrade of underground in all four communities. Routine Construction to be more proactive with maintenance such as tree trimming, transformer upgrades and cut out replacement. Padmount Switchgear replacements project: this project represents a proactive maintenance program, the RMLD has switchgears that are thirty to thirty five years old that are at the end of their useful life. The newer units provide demand response information which currently does not exist. Transformers and Capacitors in the industrial areas needed upgrading as part of the proactive maintenance program. These transformers are 1000KVA or 2000KVA costing \$30,000 to \$50,000. Rolling Stock project includes a material handler that costs \$250,000 that needs to be purchased, a new SUV and a trailers for reels of wire. AMI Mesh Network project: this project costs \$220,000 which includes the pilot that has been completed, the 500 club meters are 95% completed. These are meters that they were once read manually. The new meters are fixed network mesh technology, which by far are more advanced and capable of existing Itron meters. These meters will also provide for reading the end of the line voltage. This project has been successfully implemented and will be fully completed with the installation of a few remaining meters by the first week of June. The Mesh Network will be expanded to retrofit the Itron meters by changing the ERT module with the Eaton Cooper module, which allows for more data to come back to the RMLD's SCADA from the distribution feeders to implement demand response. In fiscal year 2017, the RMLD will retrofit 240 meters and this will be ongoing until all meters have been retrofitted with the new Eaton's mesh network technology. Substation 3 Relay Upgrades & SCADA Integration project: the existing relays are the original relays to when the substation was built, they need to be updated in order to achieve automation. MIS project: \$252,000 involves software and hardware.

RMLD's Fiscal Year 2017 Capital Budget

Mr. Jaffari stated that the IRD, \$10,000 represent data loggers required for demand response. Others projects (Facility Site Plan, 4W9 circuit upgrade, PM Switch Upgrade, Fiber Optics) worth \$1,172,000. The total budget amount for the Fiscal Year 2017 Capital Budget is \$9,406,217.

Ms. O'Brien stated that the Capital Budget on page 22, the Capital Layout there was a new column that was added "projected project variance." The column was added because projects that are done on the capital side that get extended or rolled over it speaks to the question what was approved versus what was spent.

In terms of the new column added to the Capital Budget, Ms. O'Brien noted that of all the budgets the two projects that RMLD went over budget were Cooks Farm for \$140,000 and Pole Line Upgrade for Lowell Street, Wilmington. Ms. O'Brien stated that Mr. Jaffari has previously explained why we went over budget on those projects.

Mr. Jaffari then addressed the Distributive Generation Pilot Project status. Mr. Jaffari reported that the RMLD was hoping to have already started this project, but the prior site under consideration did not work out. Currently, the engineering specifications have been revamped, with a consultant's review to ensure that there is nothing missing. A noise study was performed with the generator that will be included in the bid. The noise level tolerance will be 60DB at fifty feet. There is no noise from the generator at the street. Mr. Jaffari said that he and Ms. Parenteau had a site visit at Middleborough Gas & Electric and they could not hear the engine when running, only the traffic from the street. RMLD has performed soil testing with no environmental issues. The site preparation plan has been completed and building permit approved by the Town of North Reading. Mr. Jaffari pointed out that the RMLD will be having a meeting with the public in North Reading to notify them of what the project will entail. Mr. Jaffari noted that the bid for the project went out yesterday with the pre bid conference with the recommendation for the next Board meeting. The construction is anticipated to be completed by June 15, 2017.

Monies spent on the Distributive Generation Pilot Project are as follows: Fiscal Year 2016, \$14,100 engineering review and permit fees. Fiscal Year 2017, the cost for 2MW is approximately \$2 million, and for a 2.5MW unit the cost will be an additional \$300,000, Site preparation cost is estimated at \$285,900 for installing the pad, conduits, manholes and cables to the breaker. Gas needs to be brought inside the substation. National Grid originally estimated the cost to be \$325,000 then they lowered the numbers to \$123,000 upon further review and analysis. Miscellaneous costs, there are always unforeseen expenses, \$97,000. The total estimated cost for the DG project is \$2,720,000. This will help shave the peak through the SCADA. Mr. Jaffari noted as Ms. Parenteau has pointed out, capacity and transmission costs will be increasing significantly in 2017. To offset some of this cost we need to construct this project coupled as well as implementing our demand response.

Mr. Hennessy asked how many hours the unit will run each summer. Mr. Jaffari responded that with the permitting the RMLD asked for a minimum of 600 hours, 50 hours per month. Mr. Jaffari said that for the summer he is estimating no more than 100-150 hours. There is the monthly as well as the seasonal peak. You want to have the flexibility to use that. In the winter it is highly unlikely that it will be used, gas prices tend to be higher.

Ms. O'Brien asked Mr. Jaffari to explain the payback period. Mr. Jaffari responded that the payback period will be four to five years based on fiscal year 2017 transmission and capacity costs. The RMLD will receive a non financial credit from the ISO.

Ms. O'Brien clarified with Ms. Parenteau for shave the peak for next year the cost of one megawatt. Ms. Parenteau explained that the unit is a two megawatt unit. If you look at the peak period plus the transmission peak this would result in transmission and capacity savings. The average savings is over \$500,000 annually.

Mr. Talbot asked what the lifetime of the engines is. Mr. Jaffari responded that depending on the usage, it is anywhere from 15-30 years. The units will need to be maintained annually. Mr. Talbot clarified when you say four to five years does that include the operating expenses. Mr. Jaffari added the capital expense. Mr. Talbot asked what the operating expense is. Mr. Jaffari explained that in the bid they asked for warranties. There will be some warranties that cover both labor and parts. The annual maintenance cost is minimal. It would be between \$5,000 to \$10,000 maintenance for five years. Mr. Talbot asked what is the maximize time for the gas to be on. Ms. Parenteau replied probably no more than 200 hours, although the permitting was a higher amount. Mr. Talbot asked how much does it cost gas versus the gas costs at current prices to operate it because this is not factored in. Ms. Parenteau responded that is correct. The gas prices will be the market prices, the current price of gas is \$2 to \$3 per MMBTU. The heat rate because this is a peaking plant and will not run frequently, the heat rate needs to be looked at, but the outage costs to run is \$100 per megawatt hour and will be run for two to three hours to capture that peak period. Mr. Talbot asked if you run the unit 200 hours annually, what the gas cost is. Ms. Parenteau said that she did a breakdown and will provide it to him. Mr. Talbot commented that the four and a half year payback is great, but it does not include operating expenses, maintenance and the cost of the gas. Mr. Jaffari added that the maintenance will not be more than \$50,000 total. Mr. Hennessy added there is no maintenance. Ms. Parenteau said that there is limited maintenance, it is based on the number of hours the unit runs. Ms. Parenteau pointed out that one of RMLD's municipalities has a maintenance agreement to have someone look at the unit annually with a cost of \$10,000.

RMLD's Fiscal Year 2017 Capital Budget

Mr. Talbot pointed out that the operating costs and gas costs are so trivial it does not factor into this does not mean it is seven year payback, correct. Mr. Jaffari responded that the energy cost does not matter if you pay it ISO New England or pay energy cost to run the engine, it is the same. Ms. Parenteau said that it is market rates. The RMLD will compare the cost to run it versus the cost to buy it on the Spot Market. Mr. Talbot asked why not purchase the 2.5 megawatt unit. Mr. Jaffari said that he is receiving mixed signals from the vendors on the cost for 2 versus 2.5 megawatt unit. Mr. Jaffari said that the 2.5 megawatt unit is an extra \$300,000. Ms. Parenteau said that not all vendors produce 2.5 megawatt generators. Mr. Talbot asked is there a vendor that makes a 4 megawatt since site permitting, all infrastructure, the pipe and wires are being done. Ms. Parenteau explained that 2 is the optimum number given permitting restrictions, what we have to entail, if we go larger the requirements change. Ms. O'Brien said that this is a pilot and the RMLD may be possibly looking at one per town in the subsequent years if this works out well.

Mr. Jaffari said that RMLD would like to install two of these units at the same substation, on each side of the bus for a total of four or five megawatts for that substation. A 2.5 megawatt unit can be installed per feeder without permitting with maximum 2.5 megawatt per bus. Mr. Jaffari pointed out that the pilot is being performed to see the savings and perform analysis as a benchmark.

Chairman O'Rourke stated that he wanted to acknowledge Peter Lydecker from the Town of Reading Finance Committee. Chairman O'Rourke stated that Commissioner Stempeck will not be in attendance at the meeting this evening.

Chairman O'Rourke polled the Board to see if there were any further questions, there were none. Mr. Talbot asked if he could present another question, the North Reading CAB liaison was at the last Board meeting, there were meetings in towns, is North Reading all set with this project, the planning department and neighbors. Mr. Jaffari replied that the RMLD applied for the building permit which has been approved. Mr. Talbot asked if that means the neighbors were notified. Mr. Jaffari replied that there will be a public meeting with the neighbors. Notifications to abutters will be sent. The location for this meeting has to be determined, it will be either in North Reading or at the RMLD. This meeting will be informational to deal with all the aspects of the project with the abutters such as the benefits or any noise concerns. Mr. Talbot asked what the distance from the nearest residence is. Mr. Jaffari replied that it is several hundred feet. Mr. Jaffari pointed out that the noise study the RMLD performed it is 60 DdB at fifty feet. Mr. Talbot asked if there were any odors from emissions. Mr. Jaffari replied that this unit has a SCR with a filter that reduces the NO_x emission. Mr. Jaffari reported that at the site visit with Middleborough Gas and Electric they did not smell any gas or emissions when the unit was running. Mr. Talbot added that the odor comes with the start up because he has a methane gas which is normal, will this happen. Mr. Jaffari responded that this would be no different than the odor from a lawn mower. Mr. Jaffari said that this is not close to the residences, it is a valid question, but does not see this as an issue.

Mr. Pacino made a motion seconded by Mr. Hennessy to approve the Fiscal Year 2017 Capital Budget dated March 31, 2016, in the amount of \$9,406,217 on the recommendation of the General Manager.

Motion carried: 4:0:0.

RMLD's Fiscal Year 2017 Operating Budget

Note: This was presented at the RMLD Board meeting on May 12, 2016, no vote was taken.

Mr. Pacino made a motion seconded by Mr. Hennessy to approve the Fiscal Year 2017 Operating Budget dated March 31, 2016, with a Net Income of \$3,935,097 on the recommendation of the General Manager.

Motion carried: 3:0:1. Mr. Pacino abstained as he was not in attendance at the meeting.

Power Supply Report – Mr. Parenteau (Attachment 2)

Proposed Rate Adjustment

Ms. Parenteau reported that at the Operating Budget meeting it was discussed that in order for the RMLD to maintain its fiduciary responsibility there was going to be an overall necessary rate increase in the range of five to seven percent. Ms. Parenteau noted that as mentioned, she, Ms. O'Brien and Mr. Jaffari had spoken to all four towns Board of Selectmen in anticipation of this rate increase. The preliminary numbers had indicated a seven to nine percent increase. As the RMLD performed the budget process, firmer numbers came in for capacity and transmission as operating expenses, the overall rate structure is five to seven percent, which depends on customer class and usage. A residential customer that uses 500 kilowatts it would be a \$4.81 increase with the average increase of 6.6%. A medium size school will see an increase of 5.05%. It depends on how you use the electricity, the demand component for the commercials versus the energy and the overall structure. The Rate sheets included in the Board packet will be filed with the Department of Public Utilities, filed June 1 to be effective July 1 pending approval by the Board. Ms. Parenteau added that Chris Pollart was present at the last Board meeting providing an update on the Terms and Conditions, which is part of the Rate structure.

Mr. Talbot said that it is all the existing rates with the applicable rate increase. Ms. Parenteau replied that is correct. Ms. Parenteau explained that the Cost of Service Study is performed every three years. The RMLD looks at the rate class to see the impact of that. Probably next year, the RMLD will perform a full Cost of Service Study. Mr. Talbot clarified, can rate increases be used to incentivize demand reduction can that be done in future rates. Ms. Parenteau stated that this could be looked at for the next Cost of Service Study. Mr. Talbot said that the main agenda the rate increase is not shown.

Power Supply Report – Mr. Parenteau (Attachment 2)

Proposed Rate Adjustment

Ms. Parenteau responded the Board is voting on the Rates not on the rate increase. Ms. O'Brien said that this portion is sent out with the agenda, it would be impossible to put everything on the front page. Ms. O'Brien said that there will be a press release to follow. Mr. Talbot said that the rate increase should be on the agenda. Ms. Parenteau said that she hears Mr. Talbot's point, but it is difficult to say that it varies by how much power one uses. Ms. O'Brien stated that when one goes to the supporting documentation the amount of rate increase is found. Ms. O'Brien said that she will have Ms. Foti look into links. Mr. Talbot said that for next year. Ms. Parenteau said that the range can be five to seven percent. Mr. Talbot added that this is a large increase. Ms. Parenteau pointed out that the increase is driven by capacity and transmission. Chairman O'Rourke said that it is a good point. Mr. Talbot said that there can be discussion for the suggested demand reduction rates for next year prior to the rate being created.

RATE	TARIFF #
Residential Schedule A	MDPU #259
Residential Schedule RW	MDPU #260
Residential Time-of-Use Schedule A2	MDPU #261
Commercial Schedule C	MDPU #262
Industrial Time-of-Use Schedule I	MDPU #263
School Schedule SCH	MDPU #264
Private Lighting Schedule D	MDPU #265
Municipal LED Street Lighting	MDPU #266
Cooperative Resale Schedule G	MDPU #267
General Terms and Conditions (For All Classes of Service)	MDPU #268

Mr. Pacino made a motion seconded by Mr. Hennessy to approve the rates MDPU numbers #259, 260, 261, 262, 263, 264, 265, 266, 267 and 268 effective July 1, 2016 on the recommendation of the General Manager.

Motion carried: 4:0:0.

Presentation – Ms. Parenteau

RMLD's Demand Response Programs

Ms. Parenteau reported that she will be presenting all the programs RMLD does in terms of shaving the peak. Ms. Parenteau stated that a couple of meetings ago, it was discussed how important it is to get the message out to our customers and inform them of the advantages of curtailing the load during hot summer months and how that can translate into electricity savings to them over the course of the year.

Ms. Parenteau said that that she will provide an overview of RMLD's residential and commercial programs, the related costs to such programs, the potential demand, customer, and savings, barriers to achieving maximum reduction as well as communication methods.

Ms. Parenteau stated that the solar program is allowed for all of RMLD's customer classes. Currently, there is a little less than four megawatts of solar currently installed within RMLD's service territory. Two of those megawatts are within RMLD's power supply portfolio which are located in Wilmington that contributes to RMLD's peak reduction. The barrier to solar is that it peaks between 10:00 am and 2:00 pm. However, RMLD's summer peak occurs 2:00 pm to 5:00 pm which represents a bit of a disconnect; it does not achieve the maximum solar generation. Ms. Parenteau said that the RMLD looked at that and assumed a thirty percent capacity factor which means of that four megawatts the RMLD would be receiving 1.1 megawatts which is significant. Ms. Parenteau pointed out that the RMLD is looking at employing community solar. The RMLD is looking at a potential one megawatt project that will not be this summer potentially next summer, but will contribute to the peak shaving. Ms. Parenteau said that the cost RMLD does incur when customers install solar is that RMLD loses base revenue and the purchase power component of that. The purchase power is a pass through, it is power RMLD does not buy off the market however, the base component is no longer part of RMLD's operating revenue. The lost base revenue is \$93,523 due to solar installations by residential and commercial customers. Ms. Parenteau added that the RMLD has also paid out \$150,000 in rebates to residential and commercial customers which represent costs attributable to the program. From a customer savings point of view, based on a capacity factor of twelve to thirteen percent because in New England the sun does not shine as long. A five kilowatt system can assume to achieve between twelve to thirteen percent. The customer will be avoiding paying the RMLD for those hours when the sun is generating. Ms. Parenteau explained that the way the net metering works if customers are generating more than they are consuming, putting power back on the distribution system, the RMLD measures those on a monthly basis. The customer will receive a credit for those kilowatt hours they generate at the average fuel cost, which represent customer savings. For RMLD savings, the cost of capacity is approximately \$7 per kilowatt month which represents approximately \$97,550 of decreases capacity cost and for the four summer months (June to September) represents \$37,172 for a total of approximately \$135,000 of shave the peak savings from the solar program.

**Presentation – Ms. Parenteau
RMLD’s Demand Response Programs**

Mr. Hennessy asked how this technically works. If a customer has solar is there a switch. Ms. Parenteau replied that the way it is wired into the home it feeds into the house. It is consumed in the person’s home. If they are working and do not have the air conditioning on and it is a really sunny day, there is not sufficient load in the home, it transforms out of the meter and there are two channels. Channel A is everything that the customer purchases from us and Channel B measures any excess generation coming out. On a monthly basis the meter actually measures the kilowatt hours purchased and kilowatt hours sold back to the RMLD. Mr. Hennessy clarified that the meter senses how much power the customer needs that they are not generating for that home.

Ms. Parenteau pointed out that the next shave the peak program is a result of Mr. Talbot’s recommendation. Publicizing to our customers the value of shaving the peak.

Ms. Parenteau said that the RMLD is setting up a communications plan in terms of alerting RMLD’s customers, using RMLD’s website, customer e-mails, tweets, looking at Facebook, text messaging and press releases to educate the customers.

As far as residential customers, we looked at a couple of municipalities that are doing this. It has been determined that the average residential customer coincident with the peak demand uses 1.6 kilowatts. Based on that, if the residential customers are alerted and able to do something, a fifteen percent reduction can be achieved when they receive an e-mail or message. That translates into approximately a .24 kW per residential home on average. In order to get one hundred kilowatt reduction at least four hundred customers need to participate. The RMLD has approximately 26,000 residential customers, we could extrapolate that to see what the numbers achieve. Ms. Parenteau said that she wanted to quantify this for the Board. If the RMLD could achieve one hundred kilowatt hours of reduction that would equate to a little over \$8,000 capacity savings and about \$3,000 transmission for the summer period (June through September) that would be around \$11,600 per 100 kW of reduction. Mr. Talbot added that if this was ten times that then out of the 26,000 if 4,000 did something what would be the savings be. Ms. Parenteau replied that it would be \$111,000, it would be a megawatt. Mr. Talbot clarified that if a megawatt was worth \$200,000. Ms. Parenteau explained that number would reflect transmission for twelve months of the year. Ms. Parenteau said that capacity is a whole year credit, whereas four months of transmission. Mr. Talbot said that we can do better than 4,000. Ms. Parenteau stated that RMLD has 17,000 e-mails in house and gearing up to educate the customers. Mr. Talbot stated that when one of these peak reduction is sent out he is going to put a note on the Facebook page of the Reading network which has many people. Mr. Talbot said that he will state to look at this peak shaving alert from the RMLD, respond to me if you have done anything and send this out to your friend. This will be his own personal test because it is difficult to measure the effect of the push. He is hoping to get some feedback and report his findings to the Board.

Ms. Parenteau then addressed the programs for large commercials and municipalities. The RMLD has worked with its commercial customers to share some of the savings. The way it works, the RMLD has the Integrated Resource Engineers that go out that perform site visits to the customers’ facilities to work with them to achieve load reduction. There is a shared savings program. The RMLD economically incentivizes the customers to reduce their usage.

Ms. Parenteau said that the barrier to all RMLD programs is that it is a voluntary program there is no guarantee of load reduction. Ms. Parenteau pointed out that on the commercial side with the peak demand reduction program even when you provide businesses with economic incentives to reduce load unless it is an automated and easy to implement procedure the reduction will not happen. Ms. Parenteau explained that it is difficult to get facilities staff to adjust items due to the fact that employees complain about temperature increases. Ms. Parenteau stated that the RMLD is working very diligently with these customers to make this as streamlined as possible in order to achieve these results. Last year, the RMLD was able to shed a megawatt, the RMLD is endeavoring to increase that number this year. It does present a challenge because even though you try to economically incentivize programs there is still is a reluctance and resistance to making such changes.

Ms. Parenteau said the RMLD has a shave the peak electric hot water heater program. Currently there are 239 units installed. One of the problems the RMLD is encountering is with this system it relays on the internet connection of the homeowner. The RMLD through its software sends a signal to the water heater to shut off. Currently, of the 239 units the RMLD is only able to communicate with 123 units. The RMLD has sent out letters and asked customers to reset their modems which they have. It is has only increased by a couple of units. Ms. Parenteau explained that the RMLD is running into a situation where a protocol has to be developed to go into the customer’s home to verify if it is the load control module, the internet or what the connection problem is that is preventing communication to shut off the hot water heaters. The other issue with the water heaters is that they cycle. An average water heater runs for three hours daily. The RMLD is shutting off the water heaters for a two-hour period of time. Some of them would have not turned on whereas some of them would be turned on. Ms. Parenteau pointed out that with the 123 the percentages that are going on at 2:30 pm before the RMLD implements this fifteen to twenty-five percent. The RMLD is gathering data realizing that there are communications problems and trying to trouble shoot that before the RMLD makes a determination to sign up five hundred more customers. The program needs to work for the customer as well as RMLD. Mr. Talbot asked if customers could be put a timer that has the off between 3:00 pm to 5:00 pm, it is not just when RMLD sends the signal, is there a gadget the customer could put on and be rebated. Ms. Parenteau responded that she is not familiar with that technology.

**Presentation – Ms. Parenteau
RMLD’s Demand Response Programs**

Ms. Parenteau said that if the customer did that it would have to be in the customer’s home and RMLD will not have access to that. If it gets disconnected the RMLD has to be able to monitor that equipment to determine whether it is on or off, it would be challenging administratively. Ms. O’Brien clarified with Mr. Talbot that the RMLD should eliminate this program and sell timers that shut off between 3 pm to 5 pm. Mr. Talbot responded that he is not saying that. Mr. Talbot said that RMLD has identified that half of what it thinks is being controlled is not communicating, therefore the RMLD cannot shut off these units to realize the benefit. What he is asking in the meantime can the 123 customers be asked if the RMLD sets this in order that the unit is off between 3 pm to 5 pm. It is the same for the time for a light when you are vacation 9 pm to midnight. Ms. Parenteau commented that she is uncertain if an electrician should be installing it she does not know the installation. Mr. Talbot said that it argues why the RMLD needs better control, communication and fiber. Also, the RMLD does not have its own communications infrastructure.

Ms. Parenteau added that another shave the peak program is the electric vehicle charging stations. Ms. Parenteau pointed out that the RMLD currently owns an electric vehicle charging stations at one of its commercial sites. With the electric charging stations you have the capability of reducing the maximum amount of output or shut it off during peak periods. RMLD is looking to install electric charging stations in each of the four towns in the next four years as pilots. If the RMLD owns the charging stations it has the capability. It is small and you have to assume that not all cars will be charging. With the six charging stations that the RMLD currently has there to achieve an eighteen kilowatt reduction which equates to \$2,000. Mr. Pacino asked where the charging station is located. Ms. Parenteau replied that it is at Analog Devices for their employees, they wanted to offer this to their employees, but not own it.

Ms. Parenteau said that the next shave the peak reduction is distributed generation. The generation will assist in peak reduction. This is something that the RMLD can control, but is not on for this summer. In the future this will be part of RMLD’s shave the peak campaign.

Ms. Parenteau stated that as mentioned before many of the programs in the Integrated Resources Division is tied to peak demand. When working with commercial customers and they are looking at upgrading HVAC, lighting changes such as converting T8s to LEDs, which draw less demand. It takes RMLD’s base demand and reduces it. Rebates for customers are not tied out to how many kilowatt hours’ sales, but tied directly to the peak demand. The potential for fiscal year 2017 is 400 kW which is tied to both the lighting program and energy initiative. Ms. Parenteau explained that the lighting rebate is capped at \$20,000 per customer capped at with no more than fifty percent of the cost of the project. The energy initiative program is capped at \$50,000. There are significant dollars available to RMLD’s commercial and municipal customers.

Ms. Parenteau reported that the RMLD started out with a new vendor for residential home energy audit. Part of that energy audit the RMLD has instant savings where the customers receive twelve LED light bulbs and are encouraged to install them. There is a power strip and some night lights that provide instant savings to the customer when they convert from the incandescent or CFL lighting to LED’s. Ms. Parenteau stated that the RMLD performs approximately 350 residential energy audits annually, based on that the RMLD has reduced approximately 122 kilowatt hours of peak savings.

Ms. Parenteau continued stating that Shave the Peak also applies to Energy Star appliances because they use less electricity during the peak demand. This program is going to be revisited to ensure that the RMLD is incentivizing our customers to purchase the most efficient appliances. The reduction of demand savings for this program is 291kW.

Ms. Parenteau pointed out relative to the shave the peak municipal grant program, on April 30 the RMLD filed a final report with DOER on the municipal light grant received. The RMLD received \$250,000 grant money. The grant money was split up three ways: \$125,000 for the LED street lighting program, \$50,000 LED residential rates and \$75,000 towards the commercial lighting rebates with the incentive doubling for both interior and exterior LED lighting. The municipal street light does not contribute to the summer peak, it happens between 2:00 pm to 5:00 pm and lighting does not come until after 8:00 pm during the summer. It does help during the winter period with transmission, the commercial and residential lighting are included as well. Mr. Talbot asked you pay the towns not to turn on the streetlights between 3:00 to 4:00 pm in July that would be good.

Ms. Parenteau said that she is unsure how aggressive the Board wants to be. They look at all these programs, currently the RMLD does not have distributed generation to help with the peak. Depending on how many customers RMLD can reach out to in June in conjunction with gearing up a communication plan. The goal is to have the residential and commercial customers get involved with shaving the peak because there are significant savings opportunities. Mr. Talbot thanked Ms. Parenteau, the presentation was outstanding and very impressive. Mr. Talbot said that we now need to get customers on board for peak reduction. Chairman O’Rourke asked Ms. Parenteau to keep a score card to see how RMLD is doing with the peak reduction. Ms. Parenteau said that she will keep the Board informed. Chairman O’Rourke thanked the staff for their efforts. Mr. Talbot asked Mr. Lydecker to get the word out on shaving the peak.

General Discussion

There was none.

Regular Session Meeting Minutes
May 26, 2016

RMLD Board Meetings

Thursday, June 9, 2016

Thursday, July 14, 2016

RMLD Board Policy Committee Meeting

Mr. Pacino reported that Ms. Foti is trying to set up a Policy Committee meeting.

RMLD Fiber Optic Committee Meeting

To be determined.

CAB Meetings

Wednesday, June 1 2016, Regular Meeting

Chairman O'Rourke asked that as an action item Jeanne Foti is to e-mail the Board members asking for availability to attend this meeting.

Chairman O'Rourke thanked for the good work Ms. Mellino does when covering for Ms. Foti. Ms. Mellino thanked the Board members.

Executive Session

At 8:12 p.m. Mr. Pacino made a motion seconded by Mr. Hennessy that the Board go into Executive Session to discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

Chairman O'Rourke called for a poll of the vote:

Mr. Pacino, Aye; Mr. Talbot, Aye; Chairman O'Rourke, Aye; and Mr. Hennessy; Aye.

Motion carried 4:0:0.

Adjournment

At 8:36 p.m. Mr. Talbot made a motion seconded by Mr. Hennessy that the RMLD Board of Commissioners move to adjourn the Regular Session.

Motion carried 4:0:0.

A true copy of the RMLD Board of Commissioners minutes
as approved by a majority of the Commission.

Dave Hennessy, Secretary Pro Tem
RMLD Board of Commissioners

Reading Municipal Light Board of Commissioners

Regular Session

230 Ash Street

Reading, MA 01867

June 30, 2016

Start Time of Regular Session: 7:30 p.m.

End Time of Regular Session: 10:10 p.m.

Commissioners:

Thomas O'Rourke, Chairman

David Talbot, Commissioner

Dave Hennessy, Commissioner

Philip B. Pacino, Vice Chairman

John Stempeck, Commissioner Secretary Pro Tem

Staff:

Coleen O'Brien, General Manager

Bob Fournier, Accounting/Business Manager

Jane Parenteau, Director of Integrated Resources

Jeanne Foti, Executive Assistant

Hamid Jaffari, Director of Engineering and Operations

Public:

Peter Lydecker, Mark Dockser

Michael T. Smerczynski

Climate Action Committee:

Ron D'Addario, Chair, David Zeek, Member, Ron Porter, Member, Jeffrey Emerson, Associate Member

Gina Snyder, Associate Member

Call Meeting to Order

Chairman O'Rourke called the meeting to order and stated that the meeting was being videotaped, it is not a live broadcast. Alexander will be this evening's videographer. Chairman O'Rourke welcomed him and thanked him for his service. Viewers can check at www.RCTV.org for more information and replay times. This meeting will also be played on YouTube tomorrow. The meeting is also being videotaped for distribution for community television stations in North Reading, Wilmington and Lynnfield.

Introductions

Chairman O'Rourke read the RMLD Board of Commissioners Code of Conduct. Chairman O'Rourke acknowledged and welcomed Mark Dockser, Ray Porter, Peter Lydecker, David Zeek, Jeffrey Emerson, Ron D'Addario. Chairman O'Rourke thanked them for their participation. Chairman O'Rourke stated that there will be no CAB representation at the meeting this evening.

Chairman O'Rourke stated that Mr. Hennessy needs to leave early due to a previous engagement.

Report of the Board Committee – Mr. Hennessy

Policy Committee

Mr. Hennessy reported that the Policy Committee met before the RMLD Board meeting and will be voting on new draft policies soon.

Report of the Chairman of the Board

General Manager Vehicle Allowance

This was discussed at the General Manager Committee meeting on October 20, 2015, vote is required.

Chairman O'Rourke reported that the General Manager Vehicle Allowance will be taken out of order. Chairman O'Rourke explained that the General Manager's agreement includes an opportunity for a vehicle to use. Evaluation of the costs and administration consistent with what other businesses are doing has been performed. The cost and benefit analysis and the benefit to the RMLD as well as the General Manager were evaluated. The analysis demonstrates a break even whether there is a vehicle provided by the RMLD or vehicle allowance. By surrendering a company vehicle, it will free up a vehicle for organization use. The arrangement provides for a fixed monthly allowance that is all inclusive of operating expenses, insurance as well as the cost of maintenance for the vehicle. Mr. Talbot added that this would be approximately 18,000 miles at the federal rate. When all else is added the allowance is on track. Chairman O'Rourke said that after a year the General Manager will have the option of a company vehicle and the General Manager can then opt out for an RMLD vehicle.

Mr. Pacino made a motion seconded by Mr. Talbot that the RMLD Board of Commissioners propose to the General Manager an amendment to the Reading Municipal Light Department General Manager Employment Agreement, dated June 26, 2013, which will give the General Manager the option, exercisable at her discretion, to receive a monthly vehicle allowance of \$800.00 for a 4 wheel or all-wheel drive vehicle, which amount would also cover capital, operating, maintenance and insurance expenses.

Motion carried 5:0:0.

Mr. Hennessy left the meeting at this point.

Fiber Optic Committee Meeting

Chairman O'Rourke reported that the Fiber Optic Committee needs a vote to be taken to reinstate the committee. The committee has been spending time analyzing the opportunities that fiber optics have for the RMLD.

Mr. Talbot reported that the members are Mr. Pacino and Mr. Talbot and polled any other Board members that have interest in the Fiber Optic Committee, in which case there was none.

Mr. Talbot stated that the Fiber Optic Committee has had a couple of meetings and discussed having a small trial to explore what the costs would be to provide high speed services to businesses in Wilmington. It is a small contract in which there are some questions about, how to perform the quick and dirty analysis. Mr. Talbot added that the Fiber Optic Committee should reconvene for one meeting on how to finalize the questions on one small exploratory trial.

Chairman O'Rourke said that he would like the Fiber Optic Committee to look at the feasibility and may need a more robust survey that includes the other towns. Ms. O'Brien said that she and Mr. Jaffari have a little bit of concern about what the scope is. What was identified in the scope in the Fiber Optic Committee, she is not sure if that was conveyed properly to the potential consultant. Ms. O'Brien said that when this committee reconvenes, what we want to get out of this, is the small test area. Ms. O'Brien stated that she has no problem implementing it, but there were changes in the scope. Ms. O'Brien would like to clarify with the committee to see if this is what they want. Mr. Talbot said that this can be handled at the committee meeting.

Mr. Pacino made a motion to reinstate the Fiber Optic Committee seconded by Mr. Stempeck with a mandate that it make a report back to the Board by the September meeting after which it will expire.

Motion carried 4:0:0.

Public Comment

Chairman O'Rourke said that the Climate Action Committee is present and can now speak. There will be a presentation on solar, and he does not want to take away the option.

Mr. Talbot commented that there could be give and take with members of the community during that presentation which could serve as a time to communicate.

Ms. Snyder stated that she is an Associate Member of the Climate Action Committee and is very excited to hear what Mr. Ollila has to say and the Climate Action Committee is excited about this concept and the presentation.

Chairman O'Rourke polled those present for any other comments, there were none.

Report RMLD Board Member Attendance at RMLD Citizens' Advisory Board Meeting Vice Chair Pacino attended the CAB meeting on June 1, 2016.

Mr. Pacino reported that he attended the CAB meeting on June 1, 2016. The community solar update and the RMLD's Electric Service Policy and Requirements Handbook were presented. Also discussed was the Annual NEPPA Conference attendance. There was discussion on the generator project in North Reading in terms of what the town is looking for such as the paving of the driveway which is in open discussion with the Department.

Chairman O'Rourke asked RMLD Board Commissioner, Mr. John Stempeck to act as Board Secretary for this evening's meeting.

RMLD Citizens' Advisory Board

Chairman O'Rourke stated that there was no RMLD Citizens' Advisory Board member present. Chairman O'Rourke pointed out that the CAB has representation from each town RMLD serves. The CAB attends RMLD Board meetings and the RMLD Board attends the CAB meetings.

Mr. Pacino said that the CAB inquired if there is a Reading representative on the CAB. Mr. Pacino pointed that Mr. Mancuso recently left the CAB. Ms. O'Brien explained that the CAB representative is appointed by the Board of Selectmen. The RMLD will check into this.

General Manager's Report – Ms. O'Brien

Ms. O'Brien reported that National Public Power Week is the first week of October. The RMLD will be having its Open House. All employees will be participating in the design of it this year. A couple of years ago, the RMLD had more of line construction tangible displays. Last year was more internal educational displays with a big top theme. We are looking for a theme. The theme of the annual report is going to be "shave the peak" with artwork at the Open House. Ideas such as shave the beard or the Italian ice for children. Any ideas can be brought forward. Chairman O'Rourke said that it is a great event. Ms. O'Brien added that last year there were the electrical cars. Maybe there can be solar panels displays as well.

General Manager's Report – Ms. O'Brien

Mr. O'Brien said that when Mr. Fournier reports on the Financials, the auditors were in and the physical inventory has been completed.

Power Supply Report – March and April 2016 – Ms. Parenteau (Attachment 1)

Ms. Parenteau reported that she will be presenting the March and April 2016 purchase power. Kilowatt hours purchased from March 2012 to March 2016 show that there was a significant decrease this past March, a 7.2% reduction in kilowatt hours purchased. On the preliminary side for the fiscal year with some preliminary estimates for May and June, RMLD's annual sales are down a little less than 3%. The RMLD forecast had anticipated a 1% decrease, it is 2% higher than projected.

RMLD's energy cost for March ranges to a little under 6¢ which occurred in 2014 to a low of 4¢ which occurred this past March. Costs have been coming down which is reflected in a lower Fuel Charge which is assigned to customers only on a monthly basis. Transmission for March is increasing steadily which the RMLD has spoken about in many meetings. Transmission is expected to increase on a range from 6% to 10% annually. March 2012 to March 2016 there is slight variation, but the trend is upward in terms of transmission costs which are passed to the customer.

The month of April reflects the first quarter of the calendar year or the third quarter of the fiscal year. Energy, capacity and transmission costs are reflected on a quarterly basis. As typically occurs in New England because of the natural gas constraint, RMLD's energy costs are high in the winter period (January to February). As the RMLD gets into warmer weather those costs tend to decrease significantly in March and April.

Capacity costs are \$1.4 to \$1.6 million monthly. These costs are consistent over the first quarter. Transmission for the first quarter, it fluctuates based on the peak demand, the rate is steady with the range of \$834,000 with a high of \$996,000.

Mr. Stempeck asked the if there is a root cause for the transmission costs are going up. Ms. Parenteau responded that the transmission is socialized in the New England region. The ISO implements that through a regional network service charge or an RNS charge. As transmission companies build more transmission all the ratepayers in the New England region absorb that cost. Ms. Parenteau pointed out that the RMLD is fighting these costs at the FERC on the return that transmission companies are able to earn which are in excess of 11% to 12%. The RMLD has been working with its legal counsel to try to get this adjusted to a more reasonable rate, 10% to 11%.

Chairman O'Rourke stated that he wanted to acknowledge the interest, commitment and passion of the Climate Committee. The work they are performing is value added for the community and environment at large. Chairman O'Rourke stated that any information or suggestions will be acknowledged, brought forward. At the conclusion of the meeting there can be a separate focus discussion.

Community Solar Update – Mr. Ollila

Mr. Ollila thanked the Board for the opportunity to provide an update on the community shared solar efforts. Mr. Ollila said that this has taken longer than initially anticipated; we have been working on this for well over a year. It has gone through several iterations since inception. Mr. Ollila said that now the RMLD has a strong viable program which we are ready to launch. After the meeting, assuming that the Board gives the final go ahead, we can then publicize the program.

Chairman O'Rourke asked if the slides would be available. Mr. Ollila responded yes, and he has provided the same presentation at a recent CAB meeting as well as to the Reading Climate Advisory Committee (CAC) a week ago.

Mr. Ollila said that the program will be called Solar Choice. Solar Choice is RMLD's implementation of the more general concept, community shared solar. The community shared solar concept has been around five to ten years. This concept is relatively new in Massachusetts, but several communities and ad hoc groups have had success with community solar projects. One of the recent RMLD milestones was getting approval from Massachusetts Department of Energy Resources (DOER), who reviewed RMLD's implementation of the program and certified the RMLD does meet the guidelines of community shared solar. Mr. Ollila said that the certification from the DOER is economically valuable for rooftop applications, it dramatically increases the value of the SRECs. A solar PV system's SRECs are normally categorized at .9, but if the same system is deemed community solar it is 1, an extra 10% of the SREC value. This is additional value that helps to pay for the program and allows the cost savings to be passed on to the end users.

Mr. Ollila said that the first step in Solar Choice is that the site owner and RMLD select a developer to finance, engineer, procure, construct, own and operate the system. The array itself is owned and operated by a private developer. The RMLD negotiates the PPA with the developer, approves the system specs, the interconnect and then RMLD solicits residential customers to join the program. One of the requirements of DOER is that this has to be an "opt in" program. The main advantage of having the system privately owned is that it allows the private developer to take advantage of the various federal and state tax incentives. The RMLD as a municipal entity would not be entitled to these tax incentives. Mr. Talbot said that it states that the facility is privately owned, but also states it is a privately owned site. Mr. Talbot asked if the site is in Wilmington. Mr. Ollila responded that the RMLD does have a specific site in mind for its first project which is on a private building in Wilmington. A PPA was negotiated with that developer who will make lease payments to the site owner.

Community Solar Update – Mr. Ollila

Mr. Ollila explained that the RMLD's original intent was to work with the towns and build a system like this on a town building. For many reasons it was not a good time and fit for the towns the RMLD spoke with. During the evolution of the program, the way it was structured was no different for the RMLD whether it was private or public. Mr. Talbot stated that the difference is if it is on a town site, the town receives the lease payment, and the town receives the revenue. Mr. Ollila replied that is correct. Mr. Talbot asked who decided at the town level not to do that. Mr. Ollila said that it is up to the town manager, facilities manager and/or whoever is taking leadership in the project for the town. Mr. Talbot asked if this would involve Town Meeting. Mr. Ollila said that he does not believe that Town Meeting needs to vote this, only notification. Mr. Pacino pointed out this would not go before Town Meeting unless the town was borrowing money for this project. RMLD did not have to go through an RFP process because it is not purchasing any hardware. It was a private developer that approached the RMLD. Mr. Talbot asked what the lease payment amount is. Mr. Ollila responded that recent market prices for such leases have been in the range of \$15,000 to \$30,000 per megawatt. Mr. Ollila said that it is a lease payment and that the property owner does not own the solar project's SRECS. All the power goes into the RMLD grid. Mr. Talbot asked if a town had five acres of land a town entity could receive a six figure revenue from the lease of the site in theory. Mr. Ollila said that the way the program is structured there is no difference whether the site owner is private or the town, they would both receive the same benefit. For the project in Wilmington, the town will receive a personal property tax on the equipment. Mr. Pacino asked what that amount might be. Mr. Ollila responded that tax is typically in the range of ~1% of the value of the solar PV system, or approximately \$5,000 to \$10,000 annually for systems of this size. Mr. Talbot asked if that is a Wilmington specific thing. Mr. Ollila responded that it would be specific for each town and their tax assessment department. Mr. Talbot stated that hypothetically if Jordan's and Home Depot installed a solar PV system, then in theory Reading could receive that tax revenue. Mr. Pacino pointed out that the capital can be provided by the private developer. The towns may not have the capital for such projects.

Mr. Ollila said that for the RMLD site in Wilmington, the site owner receives a lease payment for renting their property. This initial phase of Solar Choice will be limited to the first 500 RMLD residential customers to sign up. It is an opportunity for our customers to benefit from clean, renewable solar energy who may not have the capital or their home is not optimum for solar. The major economic benefit is that it is a fixed price hedge for the long term. The solar contracts are for twenty years with the hedge over inflation a major advantage. The town of Wilmington will receive a property tax payment. The direction from the Board is to increase RMLD's renewables and this project will assist in achieving that. The participant fee is estimated to be approximately \$6/month. In year two it is estimated that they will also start to receive \$9/month in credits, which yields a net savings of ~\$3/month. A typical residential electric user will save approximately \$300 over ten years. Mr. Stempeck asked if the ten-year savings is inflation adjusted. Mr. Ollila said that yes, inflation escalators were added to the Fuel Charge rate. What the residential customer will be doing with this program is paying the premium cost based on the difference between the PPA rate and the Fuel Charge rate. The program stands on its own and is not subsidized by residential customers not in the program. From the RMLD's standpoint it is revenue neutral. Mr. Stempeck asked if this shaves the peak. Mr. Ollila responded that this will shave the peak. Also a consideration is the increase in SREC value because it is a community solar project. The economic benefit is in the savings in capacity and transmission. Mr. Stempeck said that this does not stop in ten years. Mr. Ollila explained that the PPA is for twenty years. Mr. Ollila said that the RMLD is thinking of making the program enrollment for ten years, but with the option to continue after the initial ten-year period. The RMLD's intent is to have 500 customers sign up with others on a waiting list. Mr. Ollila said that the RMLD plans to end the Green Choice program which consists of 150-200 customers who will be able to replace it with this Community Solar program.

Mr. D'Addario said that he is the Chair of the Reading Climate Advisory Committee (CAC) for a short time, since his term expires this month. Mr. D'Addario said that he is totally behind the Community Solar program and solar coming to the RMLD. Mr. D'Addario added that Mr. Ollila made this presentation at a recent CAC meeting. Part of the savings with solar is emissions is when we look at global warming. The state has mandated to reduce the carbon emissions 25% by 2020. The cost of solar has come down exponentially. Green Mountain Power is selling Tesla batteries for homes in Vermont as backup or can be used to shave the peak. In five years, someone with solar could use battery storage and be independent from a utility. Mr. D'Addario stated that the utilities in New York and Massachusetts are trying to decouple the way they make money away from selling kilowatt hours, capacity and transmission. The CAC is questioning how we reconcile it; we are all on the same page. Global warming indicates that something is going on worldwide. New York has a system where it is performance based, not based on the kilowatt hours sold, but on distributed energy. Mr. D'Addario said that the CAC asks itself how do we begin with Community Shared solar so it can be implemented. Mr. D'Addario stated that our salvation is going to be energy conservation, solar, wind and geothermal. He would like to see that paradigm shift with community solar. As solar rates come down it could be less expensive than fossil fuel. Mr. D'Addario said that he would like to see the RMLD be the champion of residential solar, the quicker the better.

Mr. Talbot thanked Mr. D'Addario for his statement and his commitment to the community. The fundamental conflict comes back to organizations such as the RMLD where the business model is to sell electricity and that is in conflict with the societal need. A lot of carbon emissions are attributable to electricity generation. It is a tough problem, state and federal policies need to help to make those economics work. Mr. Talbot said that he has been in touch with Concord Municipal Light Plant for a study he is performing. They have the most sophisticated municipal smart grid in the state. They have put out a request for proposal for strategic planning consulting services which dovetails, as a public power entity CMLP, embraces its responsibility to serve the public interest recognizing that public interest imperative to protect our current and future customers from the profound consequences of climate change.

Community Solar Update – Mr. Ollila

Simultaneously we wish to continue our proud tradition of meeting our customers' needs at the highest quality of services in order to achieve both these goals. In the second century of their operations they want to change their business model, structures, policies and procedures, infrastructure, power supply, services, communication practices, rates and strategic partnerships. Mr. Talbot is following that process and hopefully bringing that into Reading. There is one municipal out there that is going forward with this and they have a fiber structure that can enable the communications and rapid movement of power. If a home generates more than it uses, it needs a two-way meter. If you are storing it, you need two-way communication to the storage medium. Mr. Talbot said that Mr. Jaffari is working on how RMLD can do this. The RMLD does not have a smart grid infrastructure in Reading. Mr. Talbot stated that as a board these topics can be advanced.

Mr. D'Addario added that he would like to see the RMLD be part of the installation and ownership of solar. Mr. D'Addario commented that there are solar companies that have failed, but if RMLD were to sell solar, rent the batteries it has cache within the community. There would be no concern of RMLD going bankrupt.

Chairman O'Rourke thanked Mr. D'Addario. Mr. Talbot added that the RMLD has a great new initiative to shave the peak. It is a big effort by the Department to shave the peak which can be done in the near term.

Mr. Stempeck stated that found in *Consumer Reports* this month there is an article that has a very good analysis of the cost of residential solar.

Mr. Zeek will soon be replacing Mr. D'Addario as Chair of the CAC. Mr. Zeek said that as a resident of Reading he is pretty excited with RMLD's solar project and would like to subscribe to it. He hopes this is the first of several that the RMLD installs. Also, use solar for shaving the peak. Mr. Zeek stated that he was impressed with Mr. Ollila's presentation when he came to the CAC meeting. Mr. Zeek said that he is a little disappointed that the first installation is not Reading. He hopes the second solar installation is not too far behind. As a member of the CAC, he would like to echo some of Mr. D'Addario's comments. The CAC is also looking at its own action plan for the future. For the CAC to be effective it has to align with Reading as well as the RMLD. It will only work if it is a partnership. What they would like to pursue with the RMLD is that the RMLD become more of a service partner with its customers, not just a supplier of electricity, but a supplier of electric services. Light bulbs and water heaters are good that also cut the demand. If one of RMLD's customers purchases an electric vehicle and charges it at home that will require 300 kilowatt hours per month. Mr. Zeek added that Mr. Porter added a heat pump, but increased his energy usage by 400 kWh/month. It is doubling their usage. RMLD could be leading that charge with its business model to make it not just a supplier, but a partner.

Mr. Talbot asked if there are rebates for a ground source heat pump. Ms. Parenteau reported that the RMLD has rebates for electric vehicle charging stations, RMLD will pay up to half the cost of the charging station including installation capped at \$1,500 per installation. On the geothermal side, the RMLD has a rebate that will pay up to \$4,500. Mr. Talbot asked how many customers have availed themselves of the heat pump. Ms. Parenteau reported that less than ten customers have. Mr. Talbot clarified is that for the whole history of the rebate. Ms. Parenteau responded that is correct. Mr. Zeek said that it would be good to have a charging station downtown. Ms. Parenteau said that charging stations have been put in the capital budget for the next four years. Mr. Talbot said that the CAC does not need the RMLD's approval to promote these programs because they reduce carbon emissions. It would be good if there were advocates for this technology. Mr. Zeek said that their committee wants to promote these things with RMLD's participation. Mr. Zeek said that a municipal entity has the power to do things on its own that are optimal for the local businesses, communities and customers.

Mr. Porter said that he has the heat pump at his residence. The value of that is the power he draws from RMLD that is from renewable sources. He has given up fossil fuel at his residence. It is a win-win to put in a ground source heat pump when the energy that comes from the utility is from a renewable energy source. Mr. Porter stated that he and Mr. Zeek will be making a presentation on RCTV and do consider the CAC as a voice for the projects.

Chairman O'Rourke stated that he appreciates all the feedback. On behalf the commissioners, he thanked the committee for all the input.

Mr. Dockser asked about the Reading sites; has Mr. Ollila surveyed sites that would be possible for revenue generated? Mr. Ollila explained that over the course of the last year and a half he has met with the town manager, facilities staff. There are at least three sites that can be in Reading. Every project is a mix of potential, investment and logistics. The first project should be a "showcase", but a strong mix of attributes did not emerge for any of the town projects. Mr. Ollila explained that the combination of roof top and canopy for the Reading high school could supply as much as 1.3 megawatts of solar output and could potentially generate approximately \$30,000 to \$40,000 of lease revenue for Reading. Mr. Dockser clarified that the risk is owned by the private group. Mr. Ollila said that is correct. The liability and insurance is on the developer who also signs the PPA. The developer only gets paid if they deliver power. The impetus is on them to keep the system working as efficiently as possible.

Chairman O'Rourke thanked Mr. Ollila.

RMLD Electric Service Policy and Requirements Handbook – Mr. Shah

Mr. Shah reported that he has been working on developing the RMLD Electric Service Policy and Requirements Handbook with a team of RMLD employees. This handbook is a tool not only for RMLD employees, but customers as well. This will be available on RMLD's website and is a searchable PDF. It will be reviewed every two years or if standards or practices need to be updated. The handbook contains such items as temporary electric services.

Chairman O'Rourke asked does the Handbook have any relation to the Terms and Conditions.

Ms. O'Brien said that the Terms and Conditions are the contract between the RMLD and its customers that are taking service. It is not an overlap, but filed RMLD rates and Terms and Conditions are found in the Handbook. In addition, the schedule referenced in the Terms and Conditions fee schedule has been added to the Handbook and kept at prevailing wage. As Mr. Shah stated, this is intended to be a mechanism for RMLD's customers and internally for consistency, how does the RMLD operate? How do you get a service connection? Ms. O'Brien pointed out over the last one hundred years there have been handshakes, but this brings everything together for consistency and safety when operating an electric utility.

Chairman O'Rourke thanked Mr. Shah.

Engineering and Operations Report – March and April 2016 – Mr. Jaffari (Attachment 2)

Mr. Jaffari reported on the Engineering and Operations report for the months of March and April. On the capital improvement projects for March and April there was substantial completion on projects. Routine construction the year to date monies spent were \$1,288,977. Routine maintenance there have been a number of maintenance improvements initiated to improve the assets at RMLD. For the Transformer Replacement program padmount 17% and overhead 13% replaced. Pole inspections, 169 poles replaced, 94 the transfers have been completed by the RMLD. Visual inspection of overhead lines is performed to identify potential problems or failures have been completed on twenty-one circuits. Manhole inspections 277 have been inspected. Porcelain cutout replacements 91% complete with 257 remaining to be replaced.

Trees trimmed are as follows: March – 268, April – 160 and year to date 2,281 spans. Substation maintenance on a monthly basis this is performed. In April and May there were no hot spots found.

The RMLD owns approximately 16,000 poles, 50% owned by RMLD and 50% by Verizon. The custodial (who maintains the poles) of the poles in Reading it is split, North Reading, RMLD, Lynnfield, Verizon and Wilmington, Verizon. Lynnfield four transfers, Reading forty-eight transfers, North Reading eighteen transfers, one set pole and forty-six pole removals, Wilmington, forty-three transfers, four poles pull and one guy wire installation.

The reliability indices SAIDI, CAIDI and SAIFI are well below regional and national average. The outage causes 37% equipment, 30% trees and 20% wildlife.

Financial Report – March and April 2016 – Mr. Fournier (Attachment 3)

In the absence of Ms. Markiewicz, Mr. Fournier will be presenting the Financial Report.

Mr. Fournier reported that he is presenting the April Financials prepared by Ms. Markiewicz. The change in Net Assets for April which represents the first ten months of the fiscal year, is \$1.1 million over budget expectations, the main factor driving that is Base Revenue is up by \$244,000, Operating Expenses are down \$232,000. A big piece of this is Energy Conservation is down \$193,000, legal \$87,000 monies not spent yet or a timing issue. The Maintenance is down \$566,000 which due to projects not started or in the case of the hazardous material there have not been any major spills, representing a cost savings of \$200,000. Base Revenue is up \$244,000 compared to budget. Kilowatt hour sales are down 11 million compared to last year's actual, the rate increase to help offset some of the decreasing kilowatt sales.

Purchased Power Fuel and Purchased Power when compared to budget to actual are close to what was budgeted. The Operating and Maintenance expense the savings were Energy Conservation below budget at \$193,000. The RMLD uses this money for the customers for conservation programs. Transformers \$200,000, Tree Trimming \$200,000 no major events or storms. Legal is down \$87,000. Cash is at \$35 million which a little more than a third represents the operating fund.

Mr. Fournier said that Ms. O'Brien stated the auditors were out earlier this week. Inventory was counted over the weekend. The auditors tested the inventory and came up with the same number as the employees submitted. The auditors will be out again in the beginning of August.

Mr. Fournier stated that Mr. Stempeck asked for ratios and bad debt analysis. Mr. Fournier called four other utilities and obtained their Department of Public Utilities report. RMLD's percentages are in line with other four utilities. The net income does not represent the eight percent return. RMLD is the largest of the four benchmarked. On the bad debt expense it looks like it represents 2/10 of 1% of the operating revenue whereas the RMLD is a .1%. Some of the utilities had just changed their bad debt policy and increased significantly because they were cleaning it up. It takes one large commercial customer going bankrupt to skew the numbers.

Financial Report – March and April 2016 – Mr. Fournier (Attachment 3)

In the absence of Ms. Markiewicz, Mr. Fournier will be presenting the Financial Report.

RMLD's five-year average for bad debt is \$64,000. It is due to the tremendous work of the credit and collections performed at the RMLD.

Chairman O'Rourke congratulated Mr. Fournier for all his support at the RMLD. Chairman O'Rourke wished Mr. Fournier a happy adventure in his retirement. Mr. Fournier stated that it has been a wonderful experience and a privilege to serve our customers for the twenty-seven years he has been at the RMLD.

Chairman O'Rourke noted that he received an e-mail from Town of Reading Executive Assistant, Paula Schena, that last year the Board of Selectmen formed 'Reading 2020 working groups' to begin work on a five-year planning exercise for the town. The Board invites you and your board/committee to attend the joint Selectmen/CPDC Zoning Charrette on Tuesday July 19, 2016 at 6:00pm at the Pleasant Street Center. This important community discussion will help shape the downtown and other areas of Reading as we all look ahead to the year 2020 and beyond.

General Discussion

There was none.

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

E-Mail responses to Account Payable/Payroll Questions

Rate Comparisons, April and May 2016

RMLD Board Meetings

Thursday, July 28, 2016

No Board meeting in August.

RMLD Board Policy Committee Meeting

To be determined.

CAB Meetings

Wednesday, July 13, 2016

Executive Session

At 9:45 p.m. Mr. Pacino made a motion seconded by Mr. Stempeck that the Board go into Executive Session to approve the Executive Session Meeting minutes of January 28, 2016, discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

Chairman O'Rourke called for a poll of the vote:

Mr. Pacino, Aye; Mr. Talbot, Aye; Chairman O'Rourke, Aye; and Mr. Stempeck, Aye.

Motion carried 4:0:0.

Adjournment

At 10:10 p.m. Mr. Pacino made a motion seconded by Mr. Stempeck to adjourn the Regular Session.

Motion carried 4:0:0.

A true copy of the RMLD Board of Commissioners minutes
as approved by a majority of the Commission.

John Stempeck, Secretary Pro Tem
RMLD Board of Commissioners

Reading Municipal Light Board of Commissioners

Regular Session

230 Ash Street

Reading, MA 01867

July 28, 2016

Start Time of Regular Session: 7:30 p.m.

End Time of Regular Session: 9:18 p.m.

Commissioners:

Thomas O'Rourke, Chairman - Absent

Philip B. Pacino, Commissioner

Dave Hennessy, Commissioner Secretary - Pro Tem

David Talbot, Vice Chair - Chairman

John Stempeck, Commissioner

Staff:

Coleen O'Brien, General Manager

Hamid Jaffari, Director of Engineering and Operations

Wendy Markiewicz, Senior Accountant

Jeanne Foti, Executive Assistant

Jane Parenteau, Director of Integrated Resources

Call Meeting to Order

Chairman Pacino called the meeting to order and stated that the meeting was being videotaped, it is not a live broadcast. The meeting is also being videotaped for distribution for community television stations in North Reading, Wilmington and Lynnfield.

Opening Remarks

Chairman Pacino read the RMLD Board of Commissioners Code of Conduct.

Chairman O'Rourke will not be in attendance at the meeting, Vice Chair Pacino will be Chairman at this meeting,

Public Comment

There was no public comment.

RMLD Citizens' Advisory Board

There was no RMLD Citizens' Advisory Board member present.

Liaisons to RMLD Board

There were no liaisons present.

Report RMLD Board Member Attendance at RMLD Citizens' Advisory Board Meeting

Note: Vice Chair Pacino attended the CAB meeting on July 13, 2016.

Chairman Pacino reported that he attended the last CAB meeting. The wholesale power supply was discussed and it was a good meeting.

Report of the Committee

Policy Committee – Commissioner Hennessy

Mr. Hennessy reported that the Policy Committee met before the meeting, RMLD Policy Number 6, Drug and Alcohol Free Workplace policy was updated to reflect current law especially in the regards to certain prescription and nonprescription drugs, including medical marijuana.

Mr. Hennessy made a motion seconded by Mr. Stempeck to approve the revisions made to RMLD Policy Number 6, Revision 2, Drug and Alcohol Workplace.

Motion carried 4:0:0.

Approval of Board Minutes

January 28, 2016 and March 31, 2016

Mr. Stempeck made a motion seconded by Mr. Hennessy to approve the January 28, 2016 minutes, as presented.

Motion carried 4:0:0.

Mr. Stempeck made a motion seconded by Mr. Hennessy to approve the March 31, 2016 minutes, as presented.

Motion carried 4:0:0.

Chairman Pacino said that Mr. Hennessy will be the Secretary this evening.

General Manager's Report – Ms. O'Brien

Ms. O'Brien reported that the RMLD held an Informational Forum on the gas generator and the benefits of peak shaving using this type of generation technology. This was held on Tuesday, July 26, 2016 at 7:00 pm, Edith A O'Leary Senior Center, North Reading. There was no public attendance. Ms. O'Brien said that the gas generator should be installed by June 2017. Chairman Pacino said that he and the RMLD Citizens' Advisory Board member Mark Chrisos were in attendance.

Ms. O'Brien stated that Vehicle Day is August 8 from about 10:15-12:15, 5 Central Street in North Reading. Ms. O'Brien stated that there is no surplus to report on. Also, there will be no RMLD Board meeting in August.

Power Supply Report – May 2016 – Ms. Parenteau (Attachment 1)

Ms. Parenteau presented the May power supply report provided in the Commissioner packets covering power supply changes, energy cost, fuel charges and collections, fuel reserve balance, spot market purchases, capacity costs, demand as well as the percentage of RMLD's renewable projects.

Ms. Parenteau reported that the majority of RMLD's portfolio is purchased by a layering and laddering approach. For the month of May, 54.8% of RMLD's portfolio is representative of system energy, with RMLD's renewable increasing, 11.7% hydro, 2.8% wind and .5% solar. The renewables represent approximately 15% of the portfolio in May. Nuclear represented 13.8% and natural gas 1.8%. Ms. Parenteau pointed out that comparing the renewables May 2015 to May 2016 there was more hydro generated in 2016 than 2015. The RMLD had Jericho Wind that came online in October 2015. Saddleback Mountain was in the portfolio as well in 2015. The solar portion represents a two megawatt solar array located at 1 Burlington Place, Wilmington in which the RMLD is buying the off take of that project which came online at the end of last year.

Ms. Parenteau stated that the average cost of the portfolio for May was a little over 3.5¢. The wind and solar have a higher cost which is anticipated. The directive on renewable projects is to review such projects to try to find economic and competitively effective renewables to include in the portfolio. Mr. Hennessy asked where the directive comes from. Ms. Parenteau responded Ms. O'Brien and the RMLD have a Sustainable Energy Policy. The policy contains the specific sustainability target percentages.

RMLD RFP for Wholesale Power Supply

Ms. Parenteau reported that at the July 13 Citizens' Advisory Board (CAB) meeting, the same report for RMLD's layering and laddering approach of procuring power supply was presented. Ms. Parenteau explained that the RMLD needs to procure monthly on peak and monthly off peak, as well as what needs to be procured pending Board approval. This methodology is being used to hedge power supply costs. Ms. Parenteau said that the prices have come down from July 6 to July 28 by approximately \$800,000 which is a very attractive time to lock in competitive prices. A year ago, the average cost was \$47 per megawatt hour for the year period, the energy prices are currently under \$38.52, which is representative of the fact the RMLD is accurately timing the market.

Mr. Stempeck made a motion seconded by Mr. Hennessy that the RMLD Board of Commissioners authorize the General Manager to execute one or more Power Supply Agreements in accordance with RMLD's Wholesale Power Supply Plan for power supply purchases for a period not to exceed 2017 through 2020 and in amounts not to exceed 13 megawatts in 2017, 16 megawatts in 2018, 20 megawatts in 2019, and 23 megawatts in 2020, as presented by the Director of Integrated Resources and on the recommendation of the General Manager.

Motion carried 4:0:0.

Chairman Pacino pointed out that the CAB approved this at its meeting on July 13, 3:0:1.

On another matter, Ms. O'Brien said that there was a topic brought up with the CAB relative to the minutes. It is really important that if someone makes a meaningful comment that it goes on record, she asked the CAB if the minutes could be consolidated, not verbatim with being consistent with RMLD's goals of being more efficient. Mr. Pacino pointed out the minutes are not supposed to be transcription, but a summarization of what has been said. The minutes can be amended to add statements. The Board was in agreement.

Engineering and Operations Report – May 2016 – Mr. Jaffari (Attachment 2)

Mr. Jaffari presented the May report included in the Commissioner packet covering the monthly capital improvement projects, routine construction, routine maintenance, double poles, NJUNS and an update on the reliability reporting.

Mr. Jaffari reported that the capital improvement and routine construction projects spending in May was \$115,307, bringing the year to date spending to \$1,404,284.

RMLD has initiated seven preventative maintenance programs to maintain its assets and improve the operating conditions. These programs are: **Transformer Replacement:** 17.36% of aged padmount transformers and 13.31 % of aged overhead transformers have been replaced, **Pole Inspection:** 172 poles replaced, 96 transfers have been completed, **Visual Inspection of Overhead Lines:** 21 circuits inspected to identify potential problems or failures, no problems found, **Manhole Inspection:** 397 manholes have been

Engineering and Operations Report – May 2016 – Mr. Jaffari (Attachment 2)

inspected since inception, **Porcelain Cutout Replacements:** 91% system wide have been replaced with 257 in need of replacement, **Tree Trimming:** 187 spans year to date totaling 2,461 spans trimmed and **Substation Maintenance:** this is a monthly maintenance program for substations and industrial parks with no hot spots found.

Mr. Jaffari reported there are approximately 16,000 poles in all four communities, 50% owned by RMLD and 50% by Verizon. The custodial (who maintains the poles) of the poles in Reading is split between RMLD and Verizon, North Reading is RMLD's custodial, and Lynnfield and Wilmington are Verizon's custodial areas. Refer to the NJUNs report for a more detailed break out of poles: transfers, set, removal and guy installation.

On another matter Mr. Talbot asked how RMLD's efforts to shave the peak has turned out, with the public's response is there any measures on that because there have been many warm days. Ms. Parenteau said that it is too early to say, ISO's preliminary peak occurred at 18:00 July 22 at approximately 24,000 megawatts. Ms. Parenteau stated that is as of right now.

The reliability indices for SAIDI, CAIDI and SAIFI are well below the regional and national average. The outage causes were 26% equipment, 44% trees and 20% wildlife.

Financial Report – May 2016 – Ms. Markiewicz (Attachment 3)

Ms. Markiewicz presented the May financial report included in the Commissioner packet. Ms. Markiewicz said that the Net Income was \$332,716, increasing year to date Net Income to \$3.9 million. The year to date budgeted Net Income was \$2.5 million resulting in Net Income being over budget \$1.4 million or 55%. Year to date Base Revenues exceeded the budgeted amount by \$189,000 or under 1%. Actual Base Revenues \$21.3 million compared to the budgeted amount of \$21.1 million. Year to date Purchase Power Base Expense was over budget by \$1.3 million or 4.9%. Actual Purchase Power Base cost was \$28.2 million, the budgeted amount is \$26.9 million.

Purchase Power Fuel Expense was under budget by \$1.6 million. The actual Purchase Power Fuel cost was \$29.9 million, the budgeted amount is \$31.5 million. The Operating and Maintenance expenses were under budget by \$739,000 or 5.5%. The Operating and Maintenance expenses were \$12.6 million, the budgeted amount \$13.3 million.

Cash is at \$38.3 million, Operating Fund \$15.1 million, Capital Fund \$4.5 million, Rate Stabilization Fund \$6.8 million, Deferred Fuel \$5.1 million and the Energy Conservation Fund \$781,734. Year to date kilowatt hour sales 618 million kilowatt hours which is 15.7 million kilowatt hours, 2.48% less than last year's actual figures.

Mr. Hennessy commented that RMLD is doing well. Ms. Markiewicz said that is due to the fact there have not been any major significant events such as storms or major oil spills.

Chairman Pacino asked about the status of the audit. Ms. Markiewicz explained that the audit process is ongoing with the auditors coming in the week of August 8 with Mr. Fournier also assisting.

RMLD Procurement Requests Requiring Board Approval (Attachment 4)

RFP 2016-24 Distributed Generation

Mr. Jaffari reported that this project was rebid and the bid has provided a cost savings of \$300,000. The RMLD will be taking the optional seven-year warranty for parts and labor, the maintenance will be paid separately. The payback is five to seven years.

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2016-24 Distributed Generation be awarded to Milton CAT as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$2,008,538.00.

Motion carried 4:0:0.

IFP 2017-02 1kV Padmounted Switchgear

Mr. Stempeck made a motion seconded by Mr. Hennessy Move that bid 2017-02 for 15kV Padmounted Switchgear be awarded to Trayer Engineering Corp. as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$226,100.00.

Motion carried 4:0:0.

IFP 2017-03 S&C SCADA-Mate CX Switch

Mr. Stempeck made a motion seconded by Mr. Hennessy Move that bid 2017-03 for S&C SCADA-Mate CX Switch be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$114,720.00.

Motion carried 4:0:0.

RMLD Procurement Requests Requiring Board Approval (Attachment 4)

IFP 2017-04 S&C IntelliRupter Pulse Closer

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-04 for S&C IntelliRupter Pulse Closer be awarded to WESCO as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$73,940.00.

Motion carried 4:0:0.

IFB 2017-05 Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-05 for Hourly Rates for Professional Manpower, Vehicles, Trade Tools, and Equipment for Underground Electrical Distribution Construction and Maintenance be awarded to McDonald Electrical Corporation as the lowest responsive and eligible bidder on the recommendation of the General Manager.

Motion carried 4:0:0.

IFP 2017-06 Cooper Power System or Compatible Meters and Equipment for AMI Mesh Network System Expansion and Mitigation

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-06 for Cooper Power System or Compatible Meters and Equipment for the AMI Mesh Network System Expansion and Migration be awarded to Eaton as the lowest responsive and responsible bidder on the recommendation of the General Manager for a total cost of \$119,531.76.

Motion carried 4:0:0.

IFB 2017-08 Bus Insulation at Station 5

Mr. Stempeck made a motion seconded by Mr. Hennessy that bid 2017-08 for Bus Insulation at Substation 5 be awarded to Powerline Contractors, Inc. as the lowest responsive and eligible bidder on the recommendation of the General Manager for a total cost of \$57,332.00.

Motion carried 4:0:0.

General Discussion

There was none.

BOARD MATERIAL AVAILABLE BUT NOT DISCUSSED

E-Mail responses to Account Payable/Payroll Questions

Rate Comparisons, June and July 2016

RMLD Board Meetings

Thursday, September 29, 2016

Thursday, October 27, 2016

RMLD Board Policy Committee Meeting

To be determined, early September timeframe.

Fiber Optic Committee Meeting

To be determined, early September timeframe.

CAB Meetings

Wednesday, September 14, 2016, Commissioner Hennessy will attend this meeting.

Executive Session

At 8:08 p.m. Mr. Stempeck made a motion seconded by Mr. Hennessy that the Board go into Executive Session to approve the Executive Session Meeting minutes of March 31, 2016 and to discuss strategy with respect to collective bargaining and return to Regular Session for the sole purpose of adjournment.

Chairman Pacino called for a poll of the vote:

Mr. Hennessy; Aye; Chairman Pacino, Aye; Mr. Stempeck, Aye; and Mr. Talbot, Aye.

Motion carried 4:0:0.

Adjournment

At 9:18 p.m. Mr. Stempeck made a motion seconded by Mr. Hennessy to adjourn the Regular Session.

Motion carried 4:0:0.

A true copy of the RMLD Board of Commissioners minutes
as approved by a majority of the Commission.

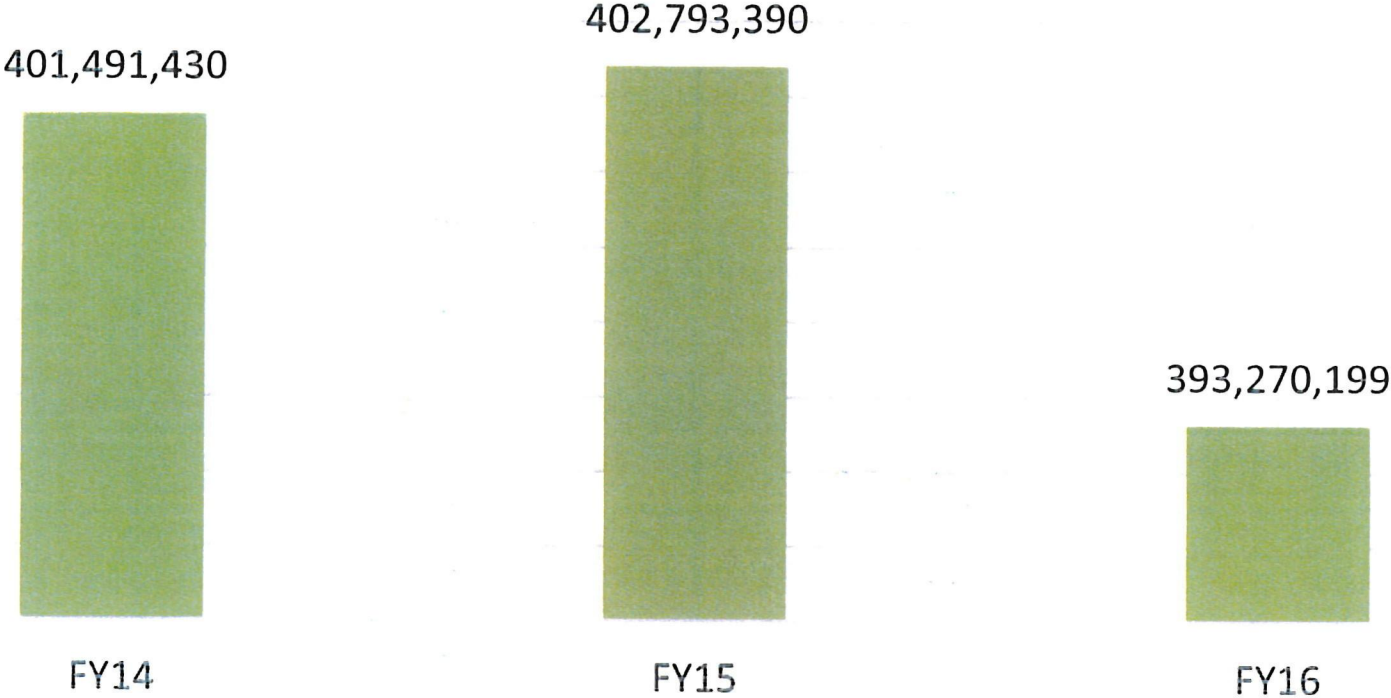
Dave Hennessy, Secretary Pro Tem
RMLD Board of Commissioners

POWER SUPPLY REPORT
ATTACHMENT 2

***Municipal Buildings kWh Sales
3 year period***



***Industrial & Commercial kWh Sales
3 year period***



*Residential kWh Sales
3 year period*

255,355,200



FY14

254,474,614



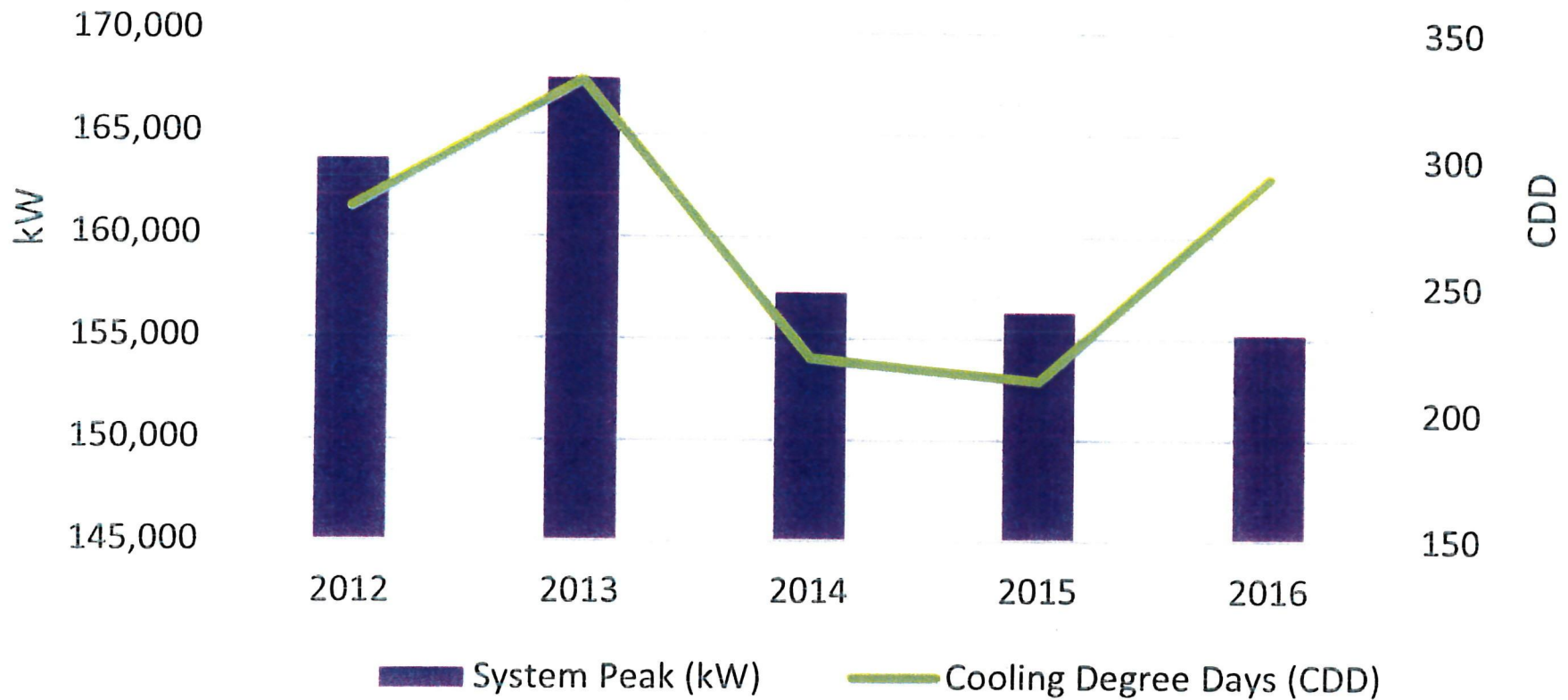
FY15

247,410,097

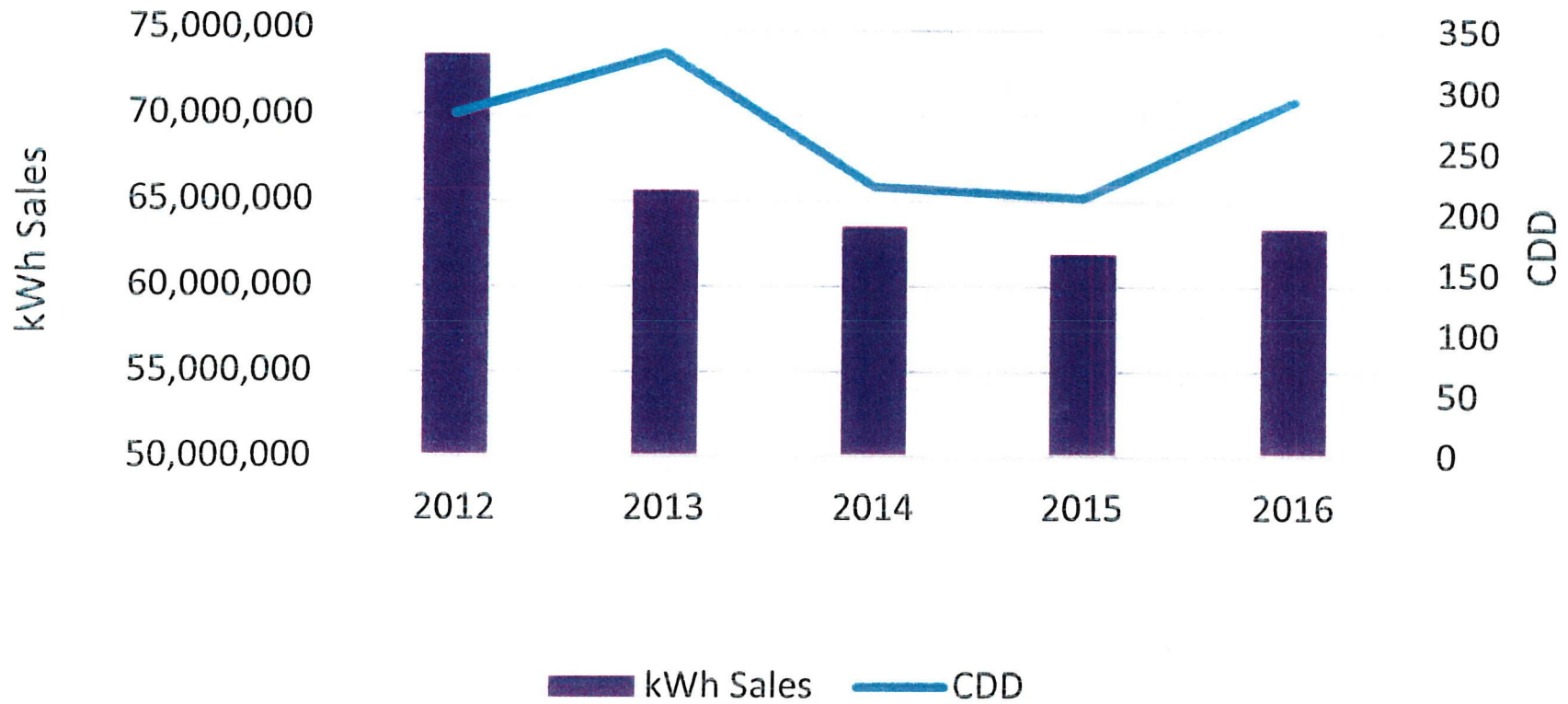


FY16

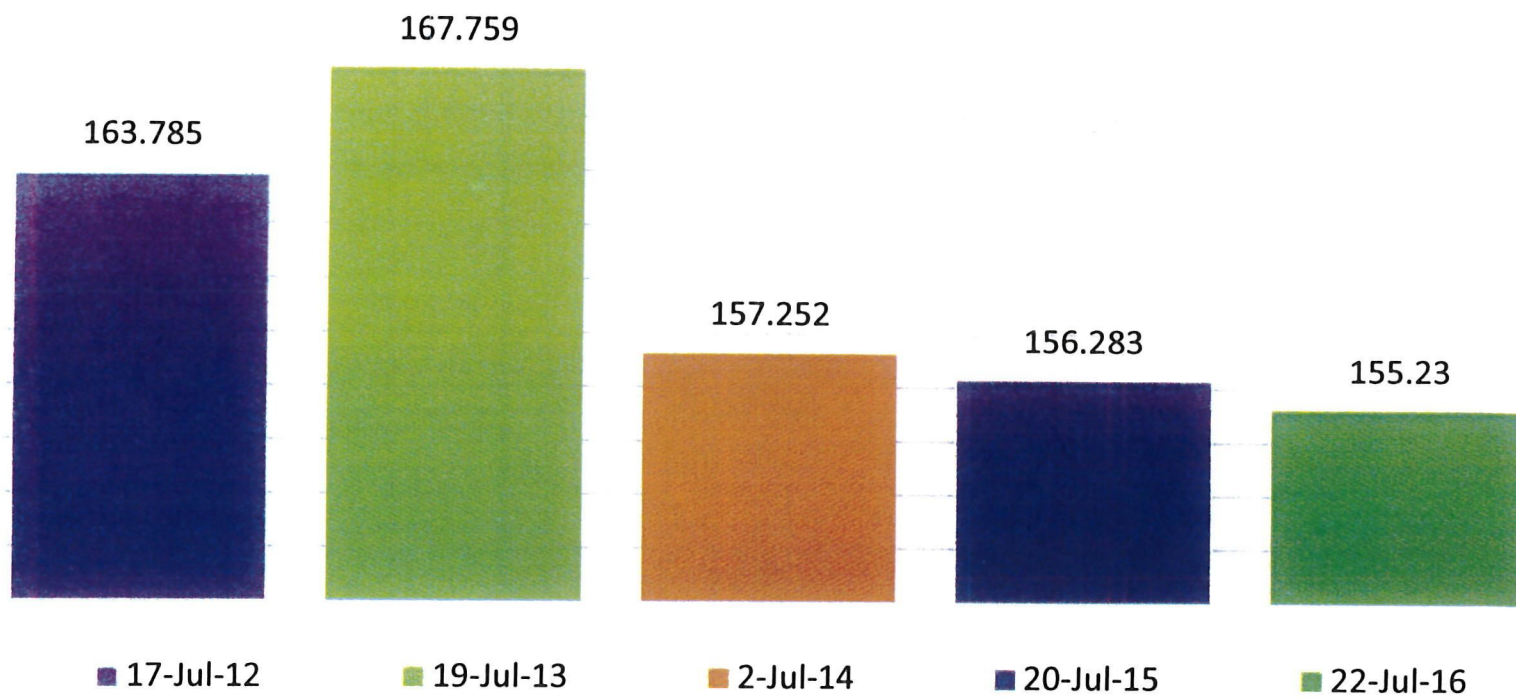
System Peak (kW) vs. Cooling Degree Days (CDD) July 2012 - 2016





kWh Sales vs. Cooling Degree Days (CDD) July 2012-2016



JULY HISTORICAL PEAK (mW) 2012 - 2016



To: Coleen O'Brien

From:  Maureen McHugh, Jane Parenteau 

Date: September 14, 2016

Subject: Purchase Power Summary – June, 2016

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

ENERGY

The RMLD's total metered load for the month was 60,333,004 kWh, which is a .23% decrease from the June, 2015 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	2,182,721	\$6.71	3.65%	\$14,646	0.60%
Seabrook	5,714,345	\$6.32	9.56%	\$36,114	1.48%
Stonybrook Intermediate	203,787	\$86.18	0.34%	\$17,563	0.72%
Shell Energy	10,959,600	\$63.46	18.33%	\$695,547	28.56%
NYPA	2,209,455	\$4.92	3.70%	\$10,871	0.45%
ISO Interchange	7,987,089	\$29.18	13.36%	\$233,099	9.57%
NEMA Congestion	0	\$0.00	0.00%	-\$23,773	-0.98%
Coop Resales	6,935	\$162.32	0.01%	\$1,126	0.05%
BP Energy	9,474,000	\$46.90	15.85%	\$444,331	18.25%
Hydro Projects*	724,329	\$86.67	1.21%	\$62,779	2.58%
Braintree Watson Unit	167,277	\$63.97	0.28%	\$10,701	0.44%
Saddleback/Jericho Wind	1,649,904	\$99.24	2.76%	\$163,739	6.72%
One Burlington Solar	442,916	\$70.00	0.74%	\$31,004	1.27%
Exelon	17,952,400	\$39.72	30.03%	\$713,028	29.28%
Stonybrook Peaking	102,656	\$236.89	0.17%	\$24,319	1.00%
Monthly Total	59,777,414	\$40.74	100.00%	\$2,435,093	100.00%

*Pepperell, Woronoco, Indian River, Turner Falls, Collins, Pioneer, Hosiery Mills, Summit Hydro

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

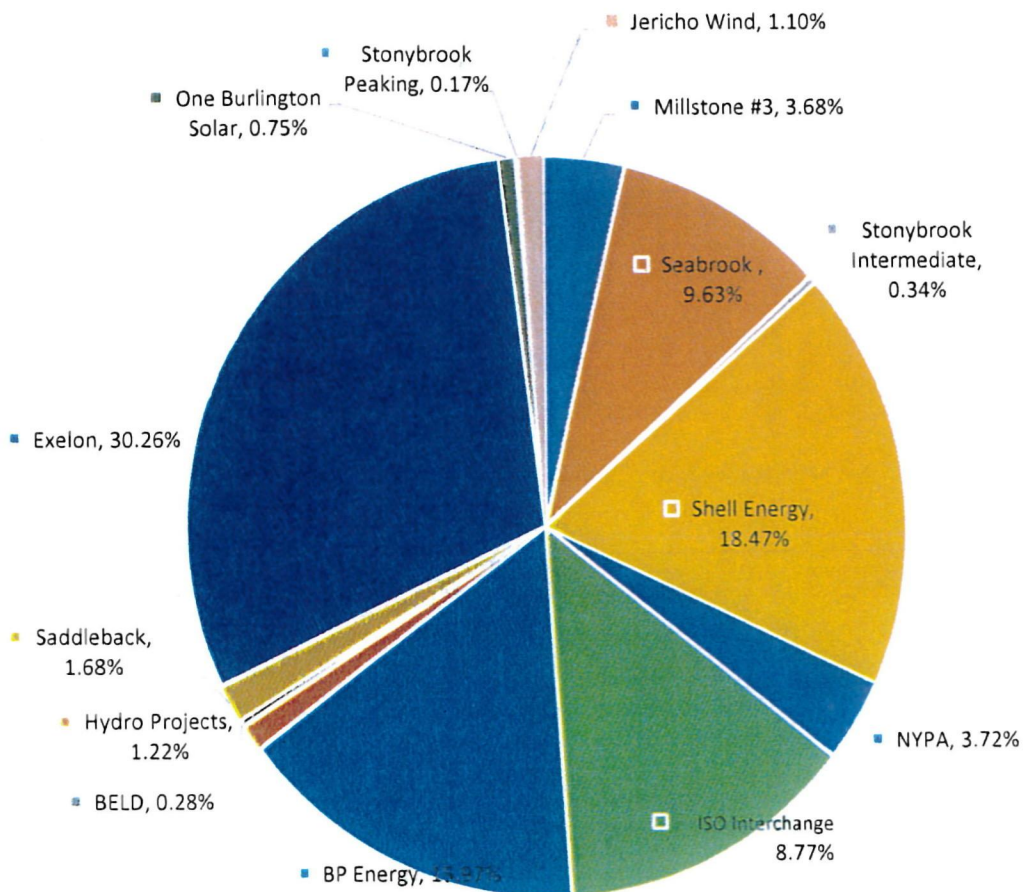
Table 2

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP *	8,779,182	\$31.94	14.69%
Settlement			
RT Net Energy **	(792,093)	(\$56.71)	-1.33%
Settlement			
ISO Interchange (subtotal)	7,987,089	\$29.20	13.36%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

JUNE 2016 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 132,148 kW, which occurred on June 20, at 5 pm. The RMLD's monthly UCAP requirement for June, 2016 was 230,684 kW.

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

Table 3

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	30.76	\$152,274	8.29%
Seabrook	7,909	36.29	\$286,988	15.62%
Stonybrook Peaking	24,981	1.73	\$43,288	2.36%
Stonybrook CC	42,925	6.98	\$299,755	16.32%
NYPA	0	0.00	\$16,834	0.92%
Hydro Quebec	0	0	\$12,418	0.68%
Nextera	60,000	6.15	\$369,000	20.09%
Braintree Watson Unit	10,520	12.39	\$130,390	7.10%
ISO-NE Supply Auction	79,399	6.62	\$525,779	28.63%
Hydro Projects	0	0.00	\$0	0.00%
Total	230,684	\$8.04	\$1,836,726	100.00%

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

Table 4

Resource	Energy	Capacity	Total cost	% of Total Cost	Amt of Energy (kWh)	Cost of Power (\$/kWh)
Millstone #3	\$14,646	\$152,274	\$166,920	3.91%	2,182,721	0.0765
Seabrook	\$36,114	\$286,988	\$323,102	7.56%	5,714,345	0.0565
Stonybrook Intermediate	\$17,563	\$299,755	\$317,318	7.43%	203,787	1.5571
Hydro Quebec	\$0	\$12,418	\$12,418	0.29%	-	0.0000
Shell Energy	\$695,547	\$0	\$695,547	16.28%	10,959,600	0.0635
NextEra	\$0	\$369,000	\$369,000	8.64%	-	0.0000
* NYPA	\$10,871	\$16,834	\$27,704	0.65%	2,209,455	0.0125
ISO Interchange	\$233,099	\$525,779	\$758,877	17.76%	7,987,089	0.0950
Nema Congestion	-\$23,773	\$0	-\$23,773	-0.56%	-	0.0000
BP Energy	\$444,331	\$0	\$444,331	10.40%	9,474,000	0.0469
* Hydro Projects	\$62,779	\$0	\$62,779	1.47%	724,329	0.0867
Braintree Watson Unit	\$10,701	\$130,390	\$141,091	3.30%	167,277	0.8435
* Saddleback/Jericho	\$163,739	\$0	\$163,739	3.83%	1,649,904	0.0992
* One Burlington Solar	\$31,004	\$0	\$31,004	0.73%	442,916	0.0700
Coop Resales	\$1,126	\$0	\$1,126	0.03%	6,935	0.1623
Exelon Energy	\$713,028	\$0	\$713,028	16.69%	17,952,400	0.0397
Stonybrook Peaking	\$24,319	\$43,288	\$67,606	1.58%	102,656	0.6586
Monthly Total	\$2,435,093	\$1,836,726	\$4,271,818	100.00%	59,777,414	0.0715
* Renewable Resources					8.41%	

RENEWABLE ENERGY CERTIFICATES (RECs)

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

Table 5
RECs Summary
Period - January 2016 - June 2016

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	0	6,302	6,302	\$157,550
Pepperell	0	2,621	2,621	\$65,525
Indian River	0	1,409	1,409	\$35,225
Turners Falls	0	1,135	1,135	\$0
Saddleback	0	3,237	3,237	\$80,925
Jericho	0	2,980	2,980	\$74,500
Sub total	0	17,684	17,684	413,725
RECs Sold	\$0		0	\$0
Grand Total	0	17,684	17,684	\$413,725

TRANSMISSION

The RMLD's total transmission costs for the month of June, 2016 were \$1,125,879. This is an increase of 30.06% from the May transmission cost of \$865,693. In June, 2015 the transmission costs were \$1,094,390.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	132,148	120,445	133,390
Energy (kWh)	59,777,414	54,601,915	60,483,802
Energy (\$)	\$2,435,093	\$1,944,922	\$2,572,724
Capacity (\$)	\$1,855,672	\$1,549,085	\$1,439,583
Transmission(\$)	\$1,125,879	\$865,693	\$1,094,390
Total	\$5,416,644	\$4,359,700	\$5,106,698

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	FY07-15	25,966	102,495,709	\$ 2,557,553		5,550,957		\$ 1,732,385	\$ 1.59	\$ 5,334.73	\$ 6,376,125
Current	FY16	275	1,110,220	\$ 37,802	\$ 11.45	66,613	\$ 0.06	\$ 241,989	\$ 0.22	\$ 738.75	\$ (129,898)
Residential											
Total to date	FY07-15	4,513	3,642,362	\$ 787,845		329,349		\$ 718,531	\$ 0.20	\$ 159.22	\$ 398,663
Current	FY16	137	62,511	\$ 18,791	\$ 11.45	3,751	\$ 0.06	\$ 76,535	\$ 2.09	\$ 956.38	\$ (108,253)
Total											
Total to date	FY07-15	30,479	106,138,071	\$ 3,020,981		5,740,107		\$ 2,846,612	\$ 0.03	\$ 93.40	\$ 5,914,476
Current	FY16	412	1,172,731	\$ 56,593	\$ 11.45	70,364	\$ 0.06	\$ 318,524	\$ 0.32	\$ 900.00	\$ (243,739)

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

Table 8		Washing Machine		Refrigerator		Dishwasher		Dehumidifier		Central A/C		Window A/C		Thermostat		Audits		Renewable		Air Source Heat Pump		HP Water Heater		Fan		
Year	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars
2007																										
2008	86	\$ 4,300	47	\$ 2,350	55	\$ 2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23	\$ 230	107	\$ 14,940										
2009	406	\$ 20,300	259	\$ 12,950	235	\$ 11,750	40	\$ 1,000	41	\$ 4,100	50	\$ 1,250	114	\$ 1,140	107	\$ 14,940										
2010	519	\$ 25,950	371	\$ 18,550	382	\$ 19,100	37	\$ 925	64	\$ 6,400	49	\$ 1,225	127	\$ 1,270	64	\$ 8,960	6	\$ 20,700								
2011	425	\$ 21,250	383	\$ 19,150	313	\$ 15,650	47	\$ 1,175	57	\$ 5,700	65	\$ 1,625	118	\$ 1,180	180	\$ 26,960	4	\$ 18,000								
2012	339	\$ 16,950	354	\$ 17,700	289	\$ 14,450	38	\$ 950	44	\$ 4,400	56	\$ 1,400	105	\$ 1,050	219	\$ 32,731	3	\$ 14,000				9	\$ 2,250	3	\$ 30	
2013	285	\$ 14,250	336	\$ 18,800	311	\$ 15,550	29	\$ 725	24	\$ 2,400	54	\$ 1,350	57	\$ 570	375	\$ 75,000	3	\$ 15,000	19	\$ 1,900	4	\$ 1,000	5	\$ 50		
2014	322	\$ 16,100	333	\$ 16,650	298	\$ 14,900	27	\$ 675	38	\$ 3,800	76	\$ 1,900	83	\$ 1,245	363	\$ 72,600	4	\$ 17,250	20	\$ 2,000	11	\$ 2,750	7	\$ 70		
2015	257	\$ 12,850	256	\$ 12,800	261	\$ 13,050	26	\$ 650	27	\$ 2,700	36	\$ 900	41	\$ 615	314	\$ 62,800	7	\$ 19,000	24	\$ 2,400	12	\$ 3,000	3	\$ 30		
2016	160	\$ 8,000	141	\$ 7,050	213	\$ 10,650	29	\$ 725	26	\$ 2,600	17	\$ 425	42	\$ 630	247	\$ 43,225	0	\$ -	17	\$ 1,700	0	\$ -	3	\$ 30		
Total	2799	\$ 139,950	2480	\$ 124,000	2357	\$ 117,850	280	\$ 7,000	338	\$ 33,800	413	\$ 10,325	710	\$ 7,930	1976	\$ 352,156	27	\$ 103,950	80	\$ 8,000	36	\$ 9,000	21	\$ 210		

To: Coleen O'Brien

From:  Maureen McHugh, Jane Parenteau 

Date: September 20, 2016

Subject: Purchase Power Summary – July, 2016

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

ENERGY

The RMLD's total metered load for the month was 72,801,695 kWh, which is a .91% increase from the July, 2015 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	3,678,061	\$6.71	5.02%	\$24,680	0.77%
Seabrook	5,899,743	\$6.32	8.05%	\$37,286	1.16%
Stonybrook Intermediate	5,287,760	\$35.05	7.22%	\$185,353	5.76%
Shell Energy	14,447,400	\$64.12	19.72%	\$926,332	28.79%
NYPA	2,163,720	\$4.92	2.95%	\$10,646	0.33%
ISO Interchange	3,188,288	\$47.34	4.35%	\$150,941	4.69%
NEMA Congestion	0	\$0.00	0.00%	\$12,833	0.40%
Coop Resales	20,615	\$175.11	0.03%	\$3,610	0.11%
BP Energy	12,193,600	\$46.90	16.65%	\$571,880	17.78%
Hydro Projects*	150,079	\$72.56	0.20%	\$10,890	0.34%
Braintree Watson Unit	683,036	\$61.63	0.93%	\$42,098	1.31%
Saddleback/Jericho Wind	1,305,355	\$91.94	1.78%	\$120,014	3.73%
One Burlington Solar	424,170	\$70.00	0.58%	\$29,692	0.92%
Exelon	23,775,400	\$45.60	32.46%	\$1,084,230	33.70%
Stonybrook Peaking	29,274	\$233.33	0.04%	\$6,831	0.21%
Monthly Total	73,246,501	\$43.92	100.00%	\$3,217,314	100.00%

*Pepperell, Woronoco, Indian River, Turner Falls, Collins, Pioneer, Hosiery Mills, Summit Hydro

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

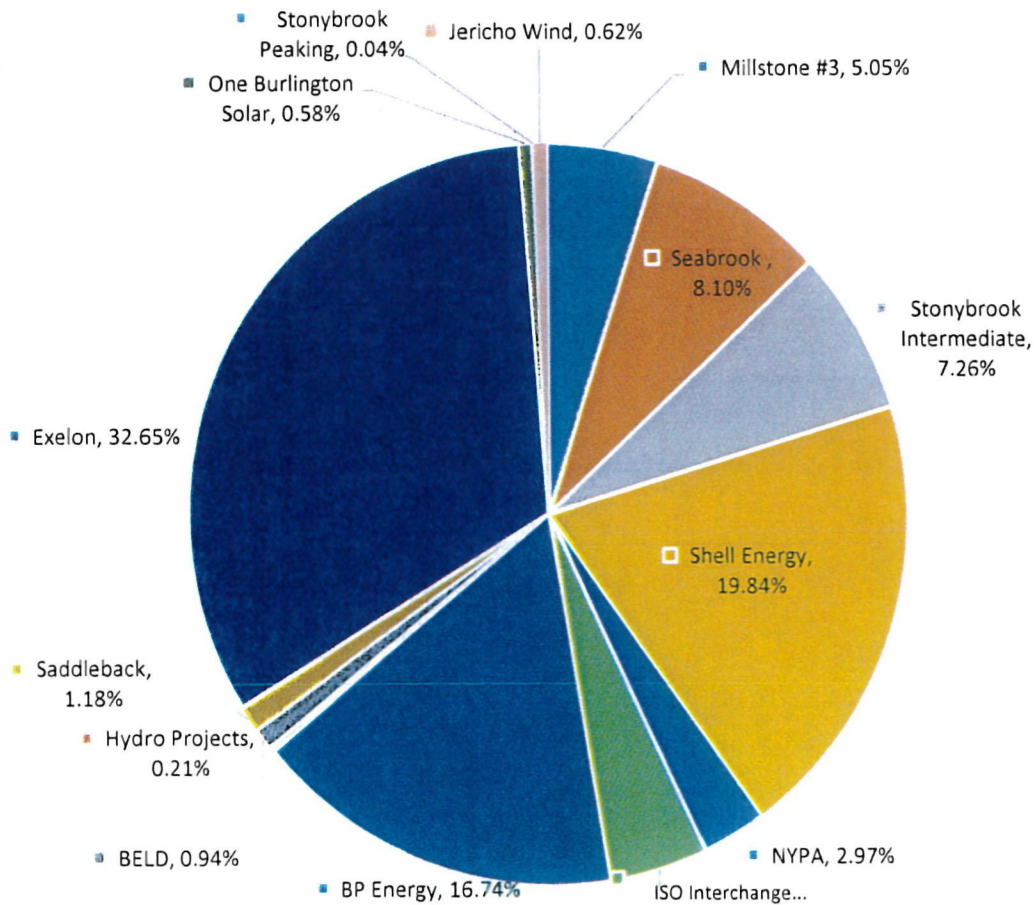
Table 2

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP * Settlement	6,142,598	\$29.91	8.39%
RT Net Energy ** Settlement	(2,954,310)	(\$10.18)	-4.03%
ISO Interchange (subtotal)	3,188,288	\$47.34	4.35%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

JULY 2016 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 155,230 kW, which occurred on July 22, at 5 pm. The RMLD's monthly UCAP requirement for July, 2016 was 230,684 kW.

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

Table 3

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,950	17.25	\$85,410	5.65%
Seabrook	7,909	9.46	\$74,791	4.95%
Stonybrook Peaking	24,981	3.05	\$76,136	5.04%
Stonybrook CC	42,925	7.09	\$304,126	20.11%
NYP&A	0	0.00	\$16,834	1.11%
Hydro Quebec	0	0	\$16,709	1.11%
Nextera	60,000	6.15	\$369,000	24.40%
Braintree Watson Unit	0	0.00	\$41,269	2.73%
ISO-NE Supply Auction	89,919	5.87	\$527,840	34.91%
Total	230,684	\$6.53	\$1,512,114	100.00%

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

Table 4

Resource	Energy	Capacity	Total cost	% of Total Cost	Amt of Energy (kWh)	Cost of Power (\$/kWh)
Millstone #3	\$24,680	\$85,410	\$110,089	2.33%	3,678,061	0.0299
Seabrook	\$37,286	\$74,791	\$112,077	2.37%	5,899,743	0.0190
Stonybrook Intermediate	\$185,353	\$304,126	\$489,479	10.35%	5,287,760	0.0926
Hydro Quebec	\$0	\$16,709	\$16,709	0.35%	-	0.0000
Shell Energy	\$926,332	\$0	\$926,332	19.59%	14,447,400	0.0641
NextEra	\$0	\$369,000	\$369,000	7.80%	-	0.0000
* NYP&A	\$10,646	\$16,834	\$27,479	0.58%	2,163,720	0.0127
ISO Interchange	\$150,941	\$527,840	\$678,781	14.35%	3,188,288	0.2129
Nema Congestion	\$12,833	\$0	\$12,833	0.27%	-	0.0000
BP Energy	\$571,880	\$0	\$571,880	12.09%	12,193,600	0.0469
* Hydro Projects	\$10,890	\$0	\$10,890	0.23%	150,079	0.0726
Braintree Watson Unit	\$42,098	\$41,269	\$83,367	1.76%	683,036	0.1221
* Saddleback/Jericho	\$120,014	\$0	\$120,014	2.54%	1,305,355	0.0919
* One Burlington Solar	\$29,692	\$0	\$29,692	0.63%	424,170	0.0700
Coop Resales	\$3,610	\$0	\$3,610	0.08%	20,615	0.1751
Exelon Energy	\$1,084,230	\$0	\$1,084,230	22.93%	23,775,400	0.0456
Stonybrook Peaking	\$6,831	\$76,136	\$82,966	1.75%	29,274	2.8341
Monthly Total	\$3,217,314	\$1,512,114	\$4,729,428	100.00%	73,246,501	0.0646
* Renewable Resources					5.52%	

RENEWABLE ENERGY CERTIFICATES (RECs)

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

Table 5
RECs Summary
Period - January 2016 - June 2016

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	0	6,679	6,679	\$166,975
Pepperell	0	3,440	3,440	\$86,000
Indian River	0	1,675	1,675	\$41,875
Turners Falls	0	1,135	1,135	\$0
Saddleback	0	4,194	4,194	\$104,850
Jericho	0	3,428	3,428	\$85,700
Sub total	0	20,551	20,551	485,400
RECs Sold	\$0		0	\$0
Grand Total	0	20,551	20,551	\$485,400

TRANSMISSION

The RMLD's total transmission costs for the month of July, 2016 were \$1,215,292. This is an increase of 7.94% from the June transmission cost of \$1,125,879. In July, 2015 the transmission costs were \$1,180,976.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	155,230	132,148	156,283
Energy (kWh)	73,246,501	59,777,414	72,163,068
Energy (\$)	\$3,217,314	\$2,435,093	\$3,492,950
Capacity (\$)	\$1,506,547	\$1,855,672	\$1,538,517
Transmission(\$)	\$1,215,292	\$1,125,879	\$1,180,976
Total	\$5,939,153	\$5,416,644	\$6,212,442

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	FY07-15	25,966	102,495,709	\$ 2,557,553		5,550,957		\$ 1,732,385	\$ 1.59	\$ 5,334.73	\$ 6,376,125
Current	FY16	275	1,110,220	\$ 37,802	\$ 11.45	66,613	\$ 0.06	\$ 241,989	\$ 0.22	\$ 738.75	\$ (129,898)
Residential											
Total to date	FY07-15	4,513	3,642,362	\$ 787,845		329,349		\$ 718,531	\$ 0.20	\$ 159.22	\$ 398,663
Current	FY16	137	62,511	\$ 18,791	\$ 11.45	3,751	\$ 0.06	\$ 76,535	\$ 2.09	\$ 956.38	\$ (108,253)
Total											
Total to date	FY07-15	30,479	106,138,071	\$ 3,020,981		5,740,107		\$ 2,846,612	\$ 0.03	\$ 93.40	\$ 5,914,476
Current	FY16	412	1,172,731	\$ 56,593	\$ 11.45	70,364	\$ 0.06	\$ 318,524	\$ 0.32	\$ 900.00	\$ (243,739)

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

Table 8		Washing Machine		Refrigerator		Dishwasher		Dehumidifier		Central A/C		Window A/C		Thermostat		Audits		Renewable		Air Source Heat Pump		HP Water Heater		Fan		
Year	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars	QTY	Dollars
2007																										
2008	86	\$ 4,300	47	\$ 2,350	55	\$ 2,750	7	\$ 175	17	\$ 1,700	10	\$ 250	23	\$ 230	107	\$ 14,940										
2009	406	\$ 20,300	259	\$ 12,950	235	\$ 11,750	40	\$ 1,000	41	\$ 4,100	50	\$ 1,250	114	\$ 1,140	107	\$ 14,940										
2010	519	\$ 25,950	371	\$ 18,550	382	\$ 19,100	37	\$ 925	64	\$ 6,400	49	\$ 1,225	127	\$ 1,270	64	\$ 8,960	6	\$ 20,700								
2011	425	\$ 21,250	383	\$ 19,150	313	\$ 15,650	47	\$ 1,175	57	\$ 5,700	65	\$ 1,625	118	\$ 1,180	180	\$ 26,960	4	\$ 18,000								
2012	339	\$ 16,950	354	\$ 17,700	289	\$ 14,450	38	\$ 950	44	\$ 4,400	56	\$ 1,400	105	\$ 1,050	219	\$ 32,731	3	\$ 14,000				9	\$ 2,250	3	\$ 30	
2013	285	\$ 14,250	336	\$ 16,800	311	\$ 15,550	29	\$ 725	24	\$ 2,400	54	\$ 1,350	57	\$ 570	375	\$ 75,000	3	\$ 15,000	19	\$ 1,900	4	\$ 1,000	5	\$ 50		
2014	322	\$ 16,100	333	\$ 16,650	298	\$ 14,900	27	\$ 675	38	\$ 3,800	76	\$ 1,900	83	\$ 1,245	363	\$ 72,600	4	\$ 17,250	20	\$ 2,000	11	\$ 2,750	7	\$ 70		
2015	257	\$ 12,850	256	\$ 12,800	261	\$ 13,050	26	\$ 650	27	\$ 2,700	36	\$ 900	41	\$ 615	314	\$ 62,800	7	\$ 19,000	24	\$ 2,400	12	\$ 3,000	3	\$ 30		
2016	160	\$ 8,000	141	\$ 7,050	213	\$ 10,650	29	\$ 725	26	\$ 2,600	17	\$ 425	42	\$ 630	247	\$ 43,225	0	\$ -	17	\$ 1,700	0	\$ -	3	\$ 30		
Total	2799	\$ 139,950	2480	\$ 124,000	2357	\$ 117,850	280	\$ 7,000	338	\$ 33,800	413	\$ 10,325	710	\$ 7,930	1976	\$ 352,156	27	\$ 103,950	80	\$ 8,000	36	\$ 9,000	21	\$ 210		

ENGINEERING AND OPERATIONS
REPORT
ATTACHMENT 3



Engineering & Operations Report

RMLD Board of Commissioners Meeting

September 29, 2016

July 2016 Reporting Period

Hamid Jaffari, Director of Engineering & Operations

Capital Improvement Projects

Construction Projects:		% Complete Status	July	YTD
106	Underground Facilities Upgrades (URDs, Manholes, etc.) - All Towns <ul style="list-style-type: none"> Lucaya Estates, Wilmington Judith Drive, North Reading North Hill Estates, North Reading 	On-going	\$44,774	\$44,774
108	Relay Replacement – Station 4 (GAW)	60%	\$214	\$214
	Service Installations – Residential and Commercial: This item includes new or upgraded overhead and underground services.	On-going	\$9,445	\$9,445
115	Fault Indicators	n/a	\$1,340	\$1,340
131	LED Street Light Conversion	46%	\$39,811	\$39,811
134	Substation Test Equipment	n/a	\$7,129	\$7,129

Routine Construction

	July	YTD
Pole Setting/Transfers	\$15,212	\$15,212
Overhead/Underground	\$82,633	\$82,633
Projects Assigned as Required <ul style="list-style-type: none"> • AT&T (Salem Street/Woburn Street) 	\$3,369	\$3,369
Pole Damage/Knockdowns - Some Reimbursable <ul style="list-style-type: none"> • Work was done to repair or replace eight poles. 	\$6,670	\$6,670
Station Group	\$0	\$0
Hazmat/Oil Spills <ul style="list-style-type: none"> • Main Street, Lynnfield 	\$365	\$365
Porcelain Cutout Replacement Program	\$0	\$0
Lighting (Street Light Connections)	\$0	\$0
Storm Trouble	\$4,340	\$4,340
Underground Subdivisions (new construction) <ul style="list-style-type: none"> • Parsons Avenue, Lynnfield 	\$4,698	\$4,698
Animal Guard Installation	\$210	\$210
Miscellaneous Capital Costs	\$15,480	\$15,480
TOTAL:	<u>\$132,977</u>	<u>\$132,977</u>

Routine Maintenance

➤ Transformer Replacement (through July 2016)

Pad mount 19.95% Overhead 14.05%

➤ Pole Inspection (as of 9/8/2016)

180 poles have been replaced 102 of 180 transfers have been completed

➤ Visual Inspection of OH Lines (as of 9/8/2016)

Inspected circuits 5W8, 5W9, 5W5, 4W10, 5W4, 4W28, 4W5, 4W6, 3W8, 3W18, 4W13, 4W12, 3W15, 4W24, 4W28, 5W4, 3W6, 3W7, 3W14, 3W5, 4W7, 4W9, 4W4, 4W23

➤ Manhole Inspection (as of 8/31/16)

614 manholes have been inspected.

➤ Porcelain Cutout Replacements (through July 2016)

91% complete 256 remaining to be replaced

➤ Tree Trimming

July: 66 spans trimmed

YTD: 66 spans trimmed

➤ Substation Maintenance

Infrared Scanning – July complete - no hot spots found

Double Poles

► Ownership: 16,000 (approximately)

50% RMLD

50% Verizon

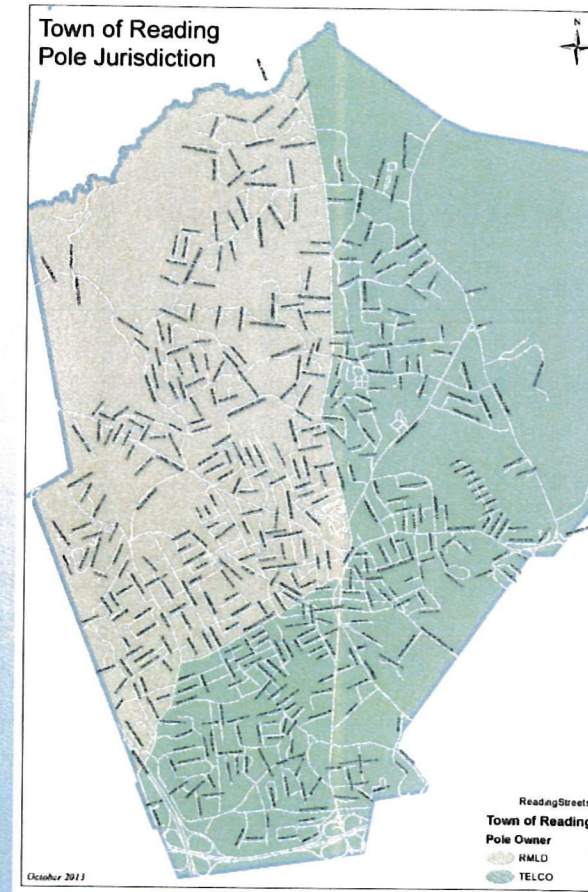
► Custodial:

Reading – split (see map)

North Reading – RMLD

Lynnfield – Verizon

Wilmington - Verizon



NJUNS

"Next to Go" as of September 19, 2016

LYNNFIELD

NTG Member and JobType	Count of Ticket
LFLDFD	2
Lynnfield Fire Department TRANSFER	2
RMLD	4
Reading Municipal Light Department TRANSFER	4
VZNESEA	13
Verizon	
TRANSFER	6
PULL POLE	6
DROPWORK	1
(blank)	
Grand Total	19

NORTH READING

NTG Member and JobType	Count of Ticket
NGMA	1
National Grid TRANSFER	1
NRDGFDD	41
North Reading Fire Department TRANSFER	41
RMLD	60
Reading Municipal Light Department	
TRANSFER	15
SET POLE	1
PULL POLE	44
VZNEDR	100
Verizon	
TRANSFER	7
PULL POLE	10
DROPWORK	83
(blank)	
Grand Total	202

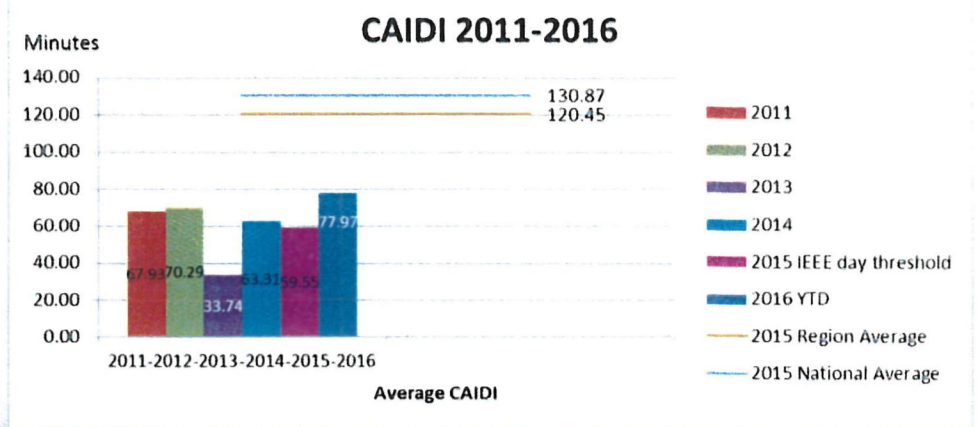
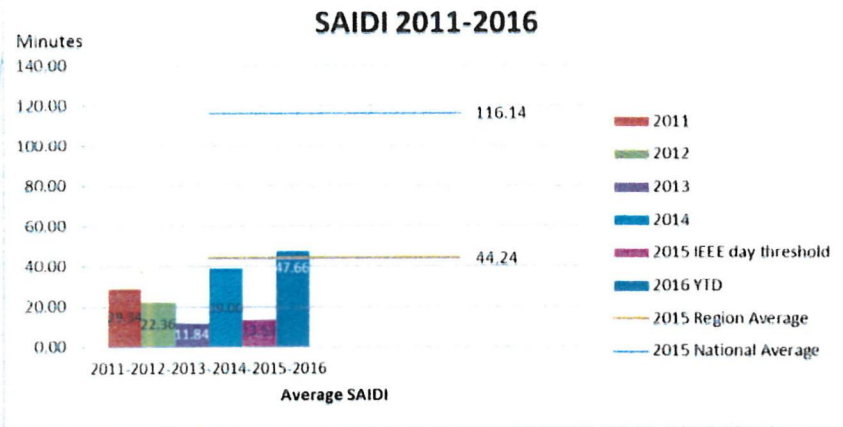
READING

NTG Member and JobType	Count of Ticket
CMCTNR	12
Comcast TRANSFER	12
NP3PMA	10
Non-participating 3rd Party Attacher - Massachusetts TRANSFER	10
RDNGFD	4
Reading Fire Department TRANSFER	4
RMLD	84
Reading Municipal Light Department	
TRANSFER	54
PULL POLE	30
VZNESEA	129
Verizon	
TRANSFER	7
PULL POLE	24
DROPWORK	98
(blank)	
Grand Total	239

WILMINGTON

NTG Member and JobType	Count of Ticket
NGMA	2
National Grid TRANSFER	2
NP3PMA	10
Non-participating 3rd Party Attacher - Massachusetts TRANSFER	10
RMLD	47
Reading Municipal Light Department	
TRANSFER	42
PULL POLE	4
INSTL GUY	1
VZBMA	1
Verizon Business TRANSFER	1
VZNEDR	75
Verizon	
TRANSFER	2
PULL POLE	19
DROPWORK	54
WMGNFD	71
Wilmington Fire Department TRANSFER	71
(blank)	
Grand Total	206

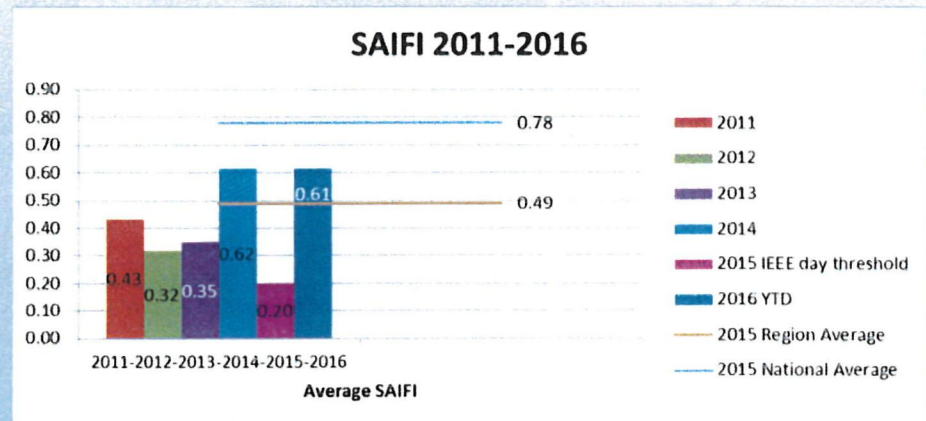
RMLD Reliability Indices



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

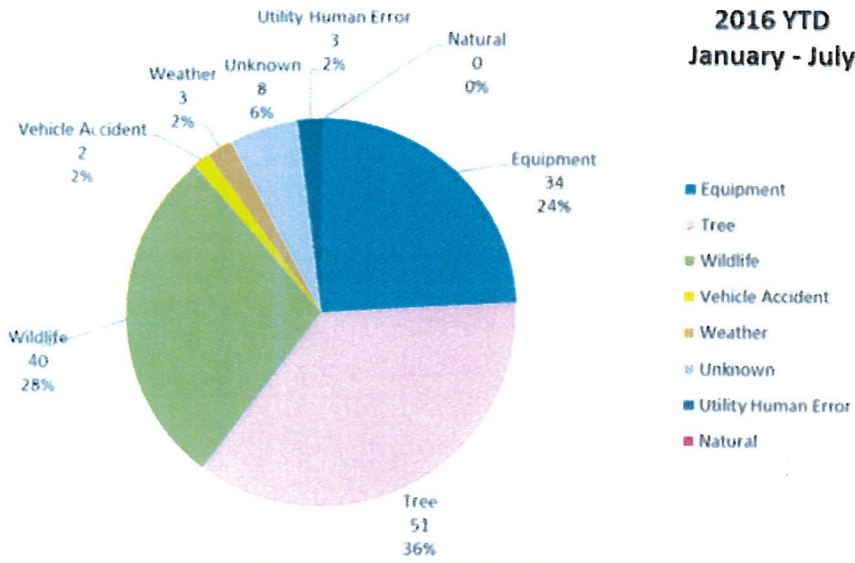
$$CAIDI(\text{Minutes}) = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Interrupted}}$$

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

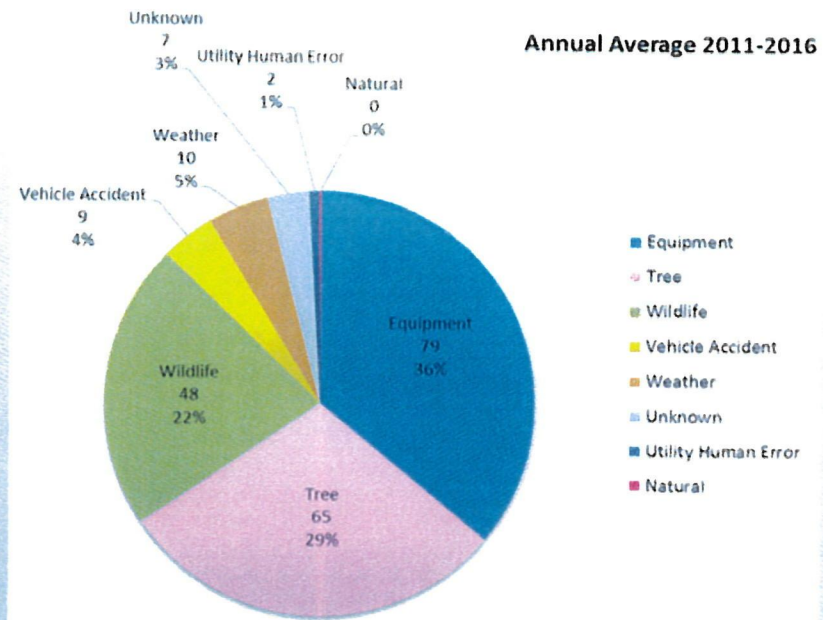


Outages Causes

**2016 YTD
January - July**



Annual Average 2011-2016



Questions ?



RMLD PROCUREMENT
REQUIRING BOARD APPROVAL
ATTACHMENT 4

RMLD



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.rml.com

September 23, 2016

Town of Reading Municipal Light Board

Subject: Battery Bank at Substation 4

On August 24, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle, the Commonwealth of MA Central Register and it was sent to ECNE requesting proposals for Battery Bank at Substation 4.

An invitation to proposals was emailed to the following:

Power Tech dba UPSC	JF Gray & Associates	Shamrock Power
Hasgo Power Sales	Robinson Sales	E.L Flowers & Associates
Power Sales Group	MetroWest	HD Industrial Srvs.
Genergy	WESCO	Siemens Industry, Inc.
Graybar Electric	Stuart Irby	Fantasia Associates, Inc.
Mesa Technical Associates	SBS LLC	

Proposals were received from WESCO, SBS LLC, Genergy, Stuart Irby, Graybar Electric and Mesa Technical Associates.

The proposals were publicly opened and read aloud at 11:00 a.m., September 14, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that proposal 2017-12 for Battery Bank at Substation 4 be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager.

<u>Item (desc.)</u>	<u>Total Cost</u>
Battery Bank and associated equipment with 16-amp charger	\$24,000.00

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Capital Budget allocation for the purchase of this item under the Station 4: Battery Bank Upgrade project was estimated at \$42,200.

A handwritten signature in black ink, appearing to read "COLEEN O'BRIEN".

Coleen O'Brien

A handwritten signature in black ink, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in blue ink, appearing to read "Nick D'Alleva".

Nick D'Alleva

Battery Bank at Substation 4
IFP 2017-12

Bidder	Total Price	Manufacturer	Delivery	Meet Specification requirement	Firm Price	All forms filled out	Certified Check or Bid Bond	Exceptions to stated bid requirements	Authorized signature
WESCO									
Battery bank - 12 amp charger	\$23,800.00	C&D Technologies and UniPower LLC	7-9 weeks	yes	yes	yes	yes	no	yes
Battery bank - 16 amp charger	\$24,000.00								
<hr/>									
SBS, LLC									
Battery bank - 12 amp charger	\$26,321.00	SBS, LLC	4 weeks	yes	yes	yes	yes	yes	yes
Battery bank - 16 amp charger	\$27,067.00			Exception:	List of clarifications attached to proposal.				
<hr/>									
Genergy									
Battery bank - 12 amp charger	\$28,612.00	Hoppecke	6-7 weeks	yes	yes	yes	yes	yes	yes
Battery bank - 16 amp charger	\$29,284.00			Exception:	List of exceptions attached to proposal.				

Non-responsive bidders:

Graybar Electric	Used incorrect proposal form
Stuart Irby	Used incorrect proposal form
Mesa Technical	Used incorrect proposal form



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

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

September 23, 2016

Town of Reading Municipal Light Board

Subject: 1/0 Triplex Service Cable

On August 24, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle, the Commonwealth of MA Central Register and it was sent to ECNE requesting proposals for 1/0 Triplex Service Cable.

An invitation for proposals was emailed to the following:

- | | | |
|---------------------------|-------------------------|------------------------------|
| Pirelli Cables & Systems | The Okonite Company | General Cable |
| USA Power Cable | WESCO | Graybar Electric Company |
| Yale Electric Supply | Power & Tel. Enterprise | Arthur Hurley Company |
| Shamrock Power Sales Inc. | HD Supply, Inc. | Power Sales Group |
| Champion Wire and Cable | Yusen Associates | Hendrix Wire and Cable Corp. |
| Anixter Wire & Cable | E.L. Flowers | Hasgo Power |
| Eupen Cable | Stuart Irby | |

Proposals were received from WESCO, Graybar Electric Company, Stuart Irby, Arthur Hurley Company and Yale Electric Supply.

The proposals were publicly opened and read aloud at 11:00 a.m., September 8, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

Due to a tie WESCO and Graybar Electric Company were invited to participate in a 2nd Heat. The proposals were publicly opened and read aloud at 2:30 p.m., on September 13, 2016, in the Town of Reading Municipal Light Department's R&C Conference Room, 230 Ash Street, Reading, Massachusetts.

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

Move that proposal 2017-14 for 1/0 Triplex Service Cable be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager. The term of the contract is for one (1) year with an option for additional second or third year at the sole discretion of the Reading Municipal Light Department.

<u>Item (desc.)</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Total Cost</u>
Year 1	\$0.75	216,000	\$162,000.00
Year 2	\$0.80	216,000	\$172,800.00
Year 3	\$0.80	216,000	\$172,800.00
Three-year total price			<u>\$507, 600.00</u>

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Operating Budget will be charged for the 1/0 Triplex Service Cable.

A handwritten signature in black ink, appearing to read "COLEEN O'BRIEN".

Coleen O'Brien

A handwritten signature in black ink, appearing to read "Hamid Jaffari".

Hamid Jaffari

A handwritten signature in blue ink, appearing to read "Peter Price".

Peter Price

1/0 Triplex Service Cable
Bid 2017-14

Bidder	Unit Cost	Qty	Total Cost	Manufacturer	Delivery Date	Firm Price	All forms filled out	Certified Check or Bid Bond	Exceptions to stated bid requirements	Authorized signature
WESCO										
Year 1	\$0.76	216,000	\$164,160.00	General Cable	8 weeks on initial order	yes	yes	yes	no	yes
Year 2	\$0.80	216,000	\$172,800.00							
Year 3	\$0.80	216,000	\$172,800.00							
Three year total price			<u>\$509,760.00</u>							
Graybar Electric Company										
Year 1	\$0.78	216,000	\$168,480.00	CME	12 weeks	yes	yes	yes	no	yes
Year 2	\$0.79	216,000	\$170,640.00							
Year 3	\$0.79	216,000	\$170,640.00							
Three year total price			<u>\$509,760.00</u>							
Arthur Hurley Company										
Year 1	\$0.819	216,000	\$176,904.00	General Cable	As required	yes	yes	yes	no	yes
Year 2	\$0.862	216,000	\$186,192.00							
Year 3	\$0.907	216,000	\$195,912.00							
Three year total price			<u>\$559,008.00</u>							

Stuart Irby - non responsive

Note: Due to expiration of quote.

Yale Electric Supply - non-responsive

Note: Due to conditional bid.

**1/0 Triplex Service Cable
Bid 2017-14 - 2ND HEAT**

<u>Bidder</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Cost</u>	<u>Manufacturer</u>	<u>Delivery Date</u>	<u>Firm Price</u>	<u>All forms filled out</u>	<u>Certified Check or Bid Bond</u>	<u>Exceptions to stated bid requirements</u>	<u>Authorized signature</u>
WESCO						yes	yes	yes	no	yes
Year 1	\$0.75	216,000	\$162,000.00	General Cable	8 weeks					
Year 2	\$0.80	216,000	\$172,800.00		on initial					
Year 3	\$0.80	216,000	\$172,800.00		order					
Three year total price			<u>\$507,600.00</u>							

Graybar Electric - *non-responsive*

Note: Due to conditional bid.

RMLD



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.rml.com

September 26, 2016

Town of Reading Municipal Light Board

Subject: IFB 2017-17 Sport Utility Vehicle (SUV) with Trade-In

On August 24, 2016 a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Chronicle and on the Energy Council of the Northeast (ECNE) website soliciting bids for one Sport Utility Vehicle (SUV) with Trade-In (2005 Toyota Prius).

An invitation to bid was sent to the following sixteen companies:

Bonnell Ford	Central Chrysler Dodge Jeep Ram of Raynham	Fleet Electric
Inter-State Ford Truck Sales, Inc.	Lannon Chevrolet	LDV USA
Liberty Chevrolet, Inc.	MHQ Municipal Vehicles	Moore GMC Truck, Inc.
O'Connor Motors	Place Motors, Inc.	Sentry Ford
Stoneham Ford	Tri State Truck Center	Woburn Foreign Motors

Bids were received from three companies: Central Chrysler Dodge Jeep Ram of Raynham, Colonial Chevrolet, and Stoneham Motor Co.

The bids were publicly opened and read aloud at 11:00 a.m. on September 14, 2016 in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2017-17 for one: Sport Utility Vehicle (SUV) with Trade-In be awarded to: **Stoneham Motor Co. for \$22,606.00** as the lowest responsive and responsible bidder on the recommendation of the General Manager.

The FY2017 Capital Budget amount for this item is \$35,000.00.

Paul McGonagle

Hamid Jaffari

Coleen O'Brien

Sport Utility Vehicle (SUV) with Trade-In

Bid 2017-17

<u>Bidder</u>	<u>Sport Utility Vehicle Price Before Trade</u>	<u>Trade-In Value</u>	<u>Sport Utility Vehicle Price Less Trade (2005 Toyota Prius)</u>	<u>Warranties</u>	<u>Delivery Date ARO</u>	<u>Responsive Bidder</u>	<u>Exceptions</u>
Central Chrysler Dodge Jeep Ram of Raynham	\$25,695.00	\$3,000.00	\$22,695.00	Yes	12-16 weeks	Yes	Yes ¹
Colonial Chevrolet	\$26,922.00	\$4,000.00	\$22,922.00	Yes	12-14 weeks	Yes	Yes ²
Stoneham Motor Co.	\$27,653.00	\$5,007.00	**\$22,606.00	Yes	10-12 weeks	Yes	No

Exceptions

¹ **Exceptions (2):** 1.29 Standard Auto headlamps (not offered in this trim level) and 3.4 Operator, Maintenance and Service Manual (2017 not available at this time).

² **Exceptions (2):** 1.20 AM/FM single-disc CD player with clock (no CD player) and 3.4 Operator, Maintenance and Service Manual (no longer available).

Sport Utility Vehicle Price Less Trade (2005 Toyota Prius)

****On the submitted Bid Form,** Stoneham Motor Company's written word amount of Twenty Two Thousand, Six Hundred and Six differed from the written figure amount of \$22,646. Written words take precedence in the bid, Stoneham Motor Company agreed to \$22,606 as the final price with trade.



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

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

September 23, 2016

Town of Reading Municipal Light Board

Subject: Sicame Insulation Piercing Connectors

On August 24, 2016, a bid invitation was placed as a legal notice in the Middlesex East section of the Daily Times Chronicle, the Commonwealth of MA Central Register and it was sent to ECNE requesting proposals for Sicame Insulation Piercing Connectors.

An invitation for proposals was emailed to the following:

Power Tech dba UPSC	JF Gray & Associates	Shamrock Power
Hasgo Power Sales	Robinson Sales	E.L Flowers & Associates
Power Sales Group	MetroWest	HD Industrial Svcs.
Genergy	WESCO	Siemens Industry, Inc.
Graybar Electric Company	Stuart Irby	Omicron Electronics Corp. USA
Eaton Cooper	Elster	Mueller Systems
Itron	Silver Spring Networks	

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

The proposals were publicly opened and read aloud at 11:00 a.m., September 8, 2016, in the Town of Reading Municipal Light Department's Board Room, 230 Ash Street, Reading, Massachusetts.

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

Move that proposal 2017-18 for Sicame Insulation Piercing Connectors be awarded to WESCO as the most advantageous and responsive proposer on the recommendation of the General Manager. The term of the contract is for one (1) year with an option for additional second or third year at the sole discretion of the Reading Municipal Light Department.

<u>Item (desc.)</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Total Cost</u>
Year 1	\$8.50	12,000	\$102,000.00
Year 2	\$8.50	12,000	\$102,000.00
Year 3	\$8.50	12,000	\$102,000.00
Three-year total price			<u>\$306,000.00</u>

RMLD



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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

The FY17 Operating Budget will be charged for the Sicame Insulation Piercing Connectors.

A handwritten signature in black ink, appearing to read "C. O'Brien", written over a horizontal line.

Coleen O'Brien

A handwritten signature in black ink, appearing to read "Hamid Jaffari", written over a horizontal line.

Hamid Jaffari

A handwritten signature in blue ink, appearing to read "Peter Price", written over a horizontal line.

Peter Price

**Sicame Insulation Piercing Connectors
Bid 2017-18**

Bidder	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Cost</u>	<u>Delivery Date</u>	<u>Firm Price</u>	<u>All forms filled out</u>	<u>Certified Check or Bid Bond</u>	<u>Exceptions to stated bid requirements</u>	<u>Authorized signature</u>
<hr/>									
WESCO					yes	yes	yes	no	yes
Year 1	\$8.50	12,000	\$102,000.00	in stock					
Year 2	\$8.50	12,000	\$102,000.00						
Year 3	\$8.50	12,000	\$102,000.00						
Three year total price			<u>\$306,000.00</u>						
<hr/>									
Graybar Electric Company					yes	yes	yes	no	yes
Year 1	\$8.96	12,000	\$107,520.00	3 weeks					
Year 2	\$8.96	12,000	\$107,520.00						
Year 3	\$8.97	12,000	\$107,640.00						
Three year total price			<u>\$322,680.00</u>						
<hr/>									
Stuart Irby					yes	yes	yes	no	yes
Year 1	\$9.50	12,000	\$114,000.00	2-3 weeks					
Year 2	\$9.50	12,000	\$114,000.00						
Year 3	\$9.50	12,000	\$114,000.00						
Three year total price			<u>\$342,000.00</u>						
<hr/>									

BOARD MATERIAL AVAILABLE
BUT NOT DISCUSSED

Jeanne Foti

From: Jeanne Foti
Sent: Monday, September 26, 2016 6:10 AM
To: RMLD Board Members Group
Subject: Account Payable and Payroll Questions

Good morning.

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

Account Payable Warrant – No Questions

July 22, July 29, August 5, August 12, August 19, August 26, September 2, September 9, September 16 and September 23.

Payroll – No Questions

July 25, August 8, August 22, September 6 (Monday, September 5 Labor Day) and September 19.

This e-mail will be printed for the Board Packet for the RMLD Board meeting on September 29, 2016.

Jeanne Foti
Reading Municipal Light Department
Executive 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

August-16

	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	INDUSTRIAL - TOU 109,500 kWh's 250,000 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$114.51	\$197.53	\$139.71	\$1,013.50	\$200.14	\$4,709.60	\$757,070.59
PER KWH CHARGE	\$0.15267	\$0.13169	\$0.13971	\$0.13884	\$0.18531	\$0.13456	\$0.11005
NATIONAL GRID							
TOTAL BILL	\$132.40	\$266.91	\$176.52	\$1,260.46	\$181.10	\$4,903.32	\$1,372,630.80
PER KWH CHARGE	\$0.17653	\$0.17794	\$0.17652	\$0.17267	\$0.16769	\$0.14009	\$0.19952
% DIFFERENCE	15.62%	35.12%	26.35%	24.37%	-9.51%	4.11%	81.31%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$148.80	\$284.75	\$196.25	\$1,477.61	\$202.60	\$7,655.11	\$1,113,175.35
PER KWH CHARGE	\$0.19839	\$0.18983	\$0.19625	\$0.20241	\$0.18759	\$0.21872	\$0.16181
% DIFFERENCE	29.95%	44.15%	40.47%	45.79%	1.23%	62.54%	47.04%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	\$91.88	\$177.36	\$120.37	\$979.25	\$155.05	\$4,838.38	\$663,672.19
PER KWH CHARGE	\$0.12250	\$0.11824	\$0.12037	\$0.13414	\$0.14357	\$0.13824	\$0.09647
% DIFFERENCE	-19.76%	-10.21%	-13.84%	-3.38%	-22.53%	2.73%	-12.34%
MIDDLETON MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$98.74	\$201.66	\$132.75	\$959.51	\$168.44	\$4,762.93	\$807,171.40
PER KWH CHARGE	\$0.13165	\$0.13444	\$0.13275	\$0.13144	\$0.15596	\$0.13608	\$0.11733
% DIFFERENCE	-13.77%	2.09%	-4.98%	-5.33%	-15.84%	1.13%	6.62%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$122.99	\$228.42	\$154.38	\$1,166.29	\$186.28	\$5,473.08	\$921,561.30
PER KWH CHARGE	\$0.16398	\$0.15228	\$0.15438	\$0.15977	\$0.17249	\$0.15637	\$0.13396
% DIFFERENCE	7.41%	15.64%	10.50%	15.07%	-6.92%	16.21%	21.73%

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

September-16

	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	INDUSTRIAL - TOU 109,500 kWh's 250,000 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$114.11	\$196.74	\$139.18	\$1,013.50	\$200.14	\$4,709.60	\$757,070.59
PER KWH CHARGE	\$0.15214	\$0.13116	\$0.13918	\$0.13884	\$0.18531	\$0.13456	\$0.11005
NATIONAL GRID							
TOTAL BILL	\$132.40	\$266.91	\$176.52	\$1,260.46	\$181.10	\$4,903.32	\$1,372,630.80
PER KWH CHARGE	\$0.17653	\$0.17794	\$0.17652	\$0.17267	\$0.16769	\$0.14009	\$0.19952
% DIFFERENCE	16.03%	35.67%	26.83%	24.37%	-9.51%	4.11%	81.31%
EVERSOURCE(NSTAR)							
TOTAL BILL	\$148.80	\$284.75	\$196.25	\$1,477.61	\$202.60	\$7,655.11	\$1,113,175.35
PER KWH CHARGE	\$0.19839	\$0.18983	\$0.19625	\$0.20241	\$0.18759	\$0.21872	\$0.16181
% DIFFERENCE	30.40%	44.74%	41.01%	45.79%	1.23%	62.54%	47.04%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	\$91.88	\$177.36	\$120.37	\$979.25	\$155.05	\$4,838.38	\$663,672.19
PER KWH CHARGE	\$0.12250	\$0.11824	\$0.12037	\$0.13414	\$0.14357	\$0.13824	\$0.09647
% DIFFERENCE	-19.48%	-9.85%	-13.51%	-3.38%	-22.53%	2.73%	-12.34%
MIDDLETON MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$98.74	\$201.66	\$132.75	\$959.51	\$168.44	\$4,762.93	\$807,171.40
PER KWH CHARGE	\$0.13165	\$0.13444	\$0.13275	\$0.13144	\$0.15596	\$0.13608	\$0.11733
% DIFFERENCE	-13.47%	2.50%	-4.62%	-5.33%	-15.84%	1.13%	6.62%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	\$122.99	\$228.42	\$154.38	\$1,166.29	\$186.28	\$5,473.08	\$921,561.30
PER KWH CHARGE	\$0.16398	\$0.15228	\$0.15438	\$0.15977	\$0.17249	\$0.15637	\$0.13396
% DIFFERENCE	7.78%	16.10%	10.92%	15.07%	-6.92%	16.21%	21.73%