Reading Municipal Light Board of Commissioners
Regular Session
230 Ash Street
Reading, MA 01867
February 26, 2015

Start Time of Regular Session: 7:30 p.m.
End Time of Regular Session: 9:40 p.m.

Commissioners:
David Talbot, Chairman
John Stempeck, Commissioner - Secretary Pro Tem
Dave Hennessy, Commissioner
Philip B. Pacino, Vice Chair
Thomas O'Rourke, Commissioner

Staff:
Coleen O'Brien General Manager
Robert Fournier, Accounting/Business Manager
William Seldon, Assist. Director of Integrated Resources
Jeanne Foti, Executive Assistant
Hamid Jaffari, Director of Engineering and Operations

Citizens' Advisory Board (CAB):
Mark Chrisos, Member

Call Meeting to Order
Chairman Talbot called the meeting to order and stated that the meeting was being videotaped; it is live in Reading only.

Opening Remarks
Chairman Talbot read the RMLD Board of Commissioners Code of Conduct.

Introductions
Chairman Talbot introduced the new CAB Member from North Reading, Mark Chrisos, and thanked him for his service.

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ıntroduction New RMLD Board Member – David Hennessy
Chairman Talbot introduced the new RMLD Commissioner, Dave Hennessey, and thanked him.

Public Comment
There was no public comment.

Commissioner Stempeck will be the Secretary this evening.

Approval of Board Minutes October 2, 2014 (Attachment 1)
Mr. Pacino made a motion seconded by Mr. O'Rourke to approve the October 2, 2014, as presented.
Motion carried: 5:0:0.

General Manager's Report – Ms. O'Brien – General Manager (Attachment 1)
Recent Storm Feedback
Ms. O'Brien provided feedback from the storms, now nicknamed snow apocalypse. Ms. O'Brien stated that with the back to back storms, RMLD actually had no outages. The team was ready in anticipation of the snow turning wet and heavy, but RMLD managed to get through the first few storms without any outages whatsoever. Ms. O'Brien thanked staff for being ready to go. Ms. O'Brien reported that during the most recent storm as the ice dams and icicles started breaking off, they hit and broke some SE cables as well as meters off houses.

Although not electrical, Ms. O'Brien reminded those houses who have natural gas that there are vents on the gas meter that must be dug out, homes with septic there is methane discharge pipes that should be shoveled out as well as gas and electric dryer vents. Sometimes when there are problems within the house gases that could be back-feeding into the house are not thought of. Ms. O'Brien also pointed out that bathroom vents that are on the roof can get blocked in due to the snow. Ms. O'Brien stated that RMLD had to dig some lines and vents due to gas fumes in the Line & Operations area. Mr. Stempeck added that the regulation for the gas from ome furnaces is three feet, unfortunately the snow is about six feet.

Ms. O'Brien stated that her presentation addresses all items found on the agenda under her report with the exception of the recent storm feedback, which has been already addressed. In addition, Mr. Tom Ollila, Integrated Resource Engineer, one of RMLD's recent hires, will explain RMLD's new Demand Response Program and Tangent.

General Manager's Report – Ms. O'Brien – General Manager (Attachment 1)
Brief Overview of RMLD's Roadmap

Ms. O'Brien reported that Mr. Seldon will present for Ms. Parenteau, who is on vacation and handle the Competitive Electricity topics followed, by Mr. Jaffari, RMLD's Director of Engineering and Operations, who will handle the Engineering & Operations section.

Ms. O'Brien noted that the title for presentation includes RMLD' Strategic Plan for 2008. RMLD Mission Statement: The RMLD is committed to providing excellent customer service including competitively priced electricity as a result of diligence in the areas of power supply, risk management, system reliability and flexibility, as well as overall business efficiency.

Ms. O'Brien stated that recently there was a company-wide staff meeting to remind everyone of the four bullets in the 2008 Strategic Plan.

RMLD 2008 Strategic bullets are as follows:

- Provide customers with a product mix that optimizes electric costs and maximizes value through energy efficiency and load management.
- Procure a long term diverse and environmentally responsive power supply portfolio including consideration of ownership of generation.
- Assure long term reliability of the RMLD distribution system.
- Enhance customer service to residential and commercial customers to the highest level.

Ms. O'Brien said that when she came on board, essentially the first bullet and half of the second bullet were being worked on diligently. She started working on the second half of bullet two, bullets three and four. Ms. O'Brien stated that has been RMLD's focus, the Organizational and Reliability Study is working in parallel.

Ms. O'Brien stated that we will now address what we have been doing that for the last year and a half. Ms. O'Brien pointed out that RMLD's Annual Reports were sent out in digital format. RMLD's motto in the Annual Report, was "Be Efficient, Get Greener and Go Paperless", demonstrating what have we been doing. Ms. O'Brien provided the example of efficiency measures at the RMLD: Residential Hot Water Program, Time of Use Rate, Energy Star Rebate Program, Reliability and Efficiency and Career Development Programs and Training, the Operating Standards, Safety Committee and Construction Standards, Organizational and Reliability Studies, Distribution and Substation Maintenance Programs, SharePoint communication system, creating a new Tech Services Group and a new Apprentice Line Worker Group and the Working Groups, which all fit into the categories "Be Efficient", "Get Greener", "Go Paperless."

Ms. O'Brien pointed out that for Energy Savings Measures RMLD has done the following: LED Streetlight Program, increasing renewable power supply portfolio, solar partnerships, peak demand reduction program, transformer load management and substation maintenance program, go paperless, let's move towards wireless data from communications internally with our customers within the electric system, the enhanced fiber network for the SCADA system, the distribution system, the new 500 Club AMI system, the responsive communications plan, the SharePoint, paperless billing and on line payments. The IPad for Commissioners decreases putting together the big Board books, this is how those models are targeted. Ms. O'Brien explained that the technology road map, the plan to get the system smarter in order that it communicates with the transmission system creates efficiencies such as the outage management to get the power restored in a timely fashion.

Ms. O'Brien reminded the Board that RMLD currently has an AMR system, not an AMI system. The 500 Club meter installations were delayed for those customers to be on an AMI system which is integrated on top of the fixed network and put AMI in areas where a two way communication is needed. Evaluate implementation of distribution generation, develop cyber security system for RMLD technology, which is a requirement and maintain reliability.

Mr. Seldon stated that for the energy efficiency programs, RMLD offers for the residential customers the renewable energy rebates and appliance rebates. We are more actively involved with the solar projects and have approximately thirty solar customers. Mr. Seldon continued with the programs for the commercial customers that include the Commercial Energy Initiative, which the Efficiency Engineers, Mr. Ollila and Ms. Shakespeare, are working diligently on with the many of the commercial customers as well lighting rebates. Mr. Seldon said that the RMLD offers a myriad of rate options to residential and commercial customers to cover efficiency. One program is the controlled hot water heater project that is currently in transition because RMLD is in the process of getting the hot water heaters under one uniform technology. Mr. Seldon stated that other efficiency programs include the Time of Use Rate, not only for residential customers, but also for the industrial and commercial customers. RMLD also offers interruptible rates.

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Brief Overview of RMLD's Roadmap

Mr. Ollila will review in detail the peak demand reduction program. Mr. Seldon highlighted the Economic Development, because ther than discussing revenue erosion because of the efficiency that is going on, RMLD is trying to meet this challenge. Some means o offset the declining revenue is offering technology that will help sell kilowatts hours such as the electric charging stations that Ms. Shakespeare has been working on. The RMLD has applied for and received a grant for this. RMLD has installed units at industrial commercial customers and hoping to grow that. RMLD is working with Sequentric systems which is wireless that is used for the hot water program and hope to expand this into other avenues.

RMLD's Peak Demand Reduction Program Lunch and Learn

Mr. Ollila reported that utility studies consistently rank RMLD rates as some of the lowest in the state. RMLD's challenge as managers of the organization is to continue that tradition. One of the ways RMLD does this is by working with the largest customers to mitigate the effects of cost pressures. Since 2008, RMLD has had several commercial energy efficiency programs that incentivize upgrading equipment to today's higher efficiency standards. However, last year RMLD added a new program aimed at reducing the peak demand of some of the largest commercial and municipal customers. Mr. Ollila explained that RMLD has been seeing increasing fees for capacity and transmission charges and almost all of the utility market forecasts indicate those will continue to rise in the near future. As a percentage of RMLD's overall wholesale costs those two items are becoming a much bigger piece of the pie. The goal of the Peak Demand Reduction Program is to help mitigate those increases. This has not hit full force yet, but it is coming so things are being put into place to help our customers deal with it.

Chairman Talbot suggested that since we have a new Commissioner, maybe the public does not know what a capacity charge or a transmission charge is. Mr. Ollila explained that RMLD's wholesale power costs are broken down into several "buckets" and with deregulation of the industry several years ago the industry was divided up into certain segments. These segments include power plants, which most people think of as the Seabrook nuclear plant or a coal fired generating plant, which is easiest to identify. There are three phases, the power plants, the transmission lines that take the power from the power plants to get onto the major distribution points and lastly is the distribution side. RMLD is in the distribution segment. All of the power that RMLD sells to customers, RMLD buys from the power plants and the transmission owners provide the power to RMLD. Thus, the capacity costs are tied to the building of the power plants themselves. Those are long term and highly capital intensive investments that must be bought out ahead of time because these are paid by the owners well in advance. The same holds true for the transmission side which is to cover the osts of the copper infrastructure to get the high voltage power from the power plant to the distribution centers. Mr. Ollila continued, ose two items are tied to the infrastructure to the plant and the wires, the feeding mechanisms that provide the power to RMLD.

Chairman Talbot clarified that, the capacity is a function of RMLD's peak day on a given month or over the year it is really just a single hour of the whole year for usage. Mr. Ollila answered that it is a single hour. That is the why the industry is structured that the rates customers pay to cover the capacity is determined by that one hour of the year when the entire system, all of ISO New England, is maxed out for what it planned for. From an engineering and systems point of view, it is not an optimal way to run a piece of equipment and size it for the worse case. Then most of the year it's running at thirty percent to forty percent capacity, but the way electricity works RMLD must be able to supply the demand in that worse case condition.

Chairman Talbot asked if capacity costs represent RMLD's capacity cost or RMLD's portion. Mr. Ollila answered that everybody that takes load must pay their portion and that is why ISO New England, at that peak hour, takes a snap shot of how much power all of the different users are using and that determines each user's "piece of the pie" for the next capacity year. Chairman Talbot explained that is why RMLD is doing this because if one hour can be knocked every month, especially the one in July which is the worst of the year, there is huge payoff probably a six figure cost savings.

Mr. Ollila pointed out that although RMLD is not a profit making entity, all of the cost that is incurred must be passed along to the customers. RMLD is trying to mitigate that, at least for those two items. Mr. Ollila stated that he would be happy to answer more detailed questions about this at some other time or set up a special session to discuss this topic.

Mr. Ollila said that two items, transmission and capacity are becoming a larger piece of the pie, in order to address this, the RMLD has set up a new program, the Peak Demand Reduction Program (PDR).

Mr. Ollila stated that RMLD's PDR Program offers commercial and municipal customers an opportunity to reduce their costs by adjusting their demand during a relatively few number of hours during the year. Customers can do that one of two ways, they can shed load by turning off equipment or adjusting set points or they can run onsite generators. In either case, the amount of power they are drawing from the RMLD's system is reduced and that is the goal of the program. When ISO New England is taking that picture MLD wants their load to be as low as possible. Mr. Ollila pointed out that the summer peak is the easiest one to identify because it is ne hot days in July and August when all the air conditioners are working. On the transmission side, the transmission peaks are determined the same way for that maximum usage period, but that is each month. Therefore, every month of the calendar year contains a transmission peak. Those peaks are more difficult to forecast because they are not that obvious. Participation in the program is one hundred percent voluntary if the customer decides to opt out of the program entirely or just for certain events there is no penalty associated with it.

General Manager's Report Ms. O'Brien – General Manager (Attachment 1)
RMLD's Peak Demand Reduction (PDR) Program Lunch and Learn

Mr. Ollila stated that this is really in the customer's favor. The economic benefit the customer can accrue for every megawatt of load the customer sheds, can equate to a total savings of $60,000 for that customer over the calendar year of the program.

Mr. Ollila added that this is a significant savings. It can be achieved by participating a few hours a month. The key is working with the customers to educate them on the value of the program and to enable them to have the equipment and/or processes in place to allow them to take advantage of this. Some of the modifications entail; communications gear, providing them the information about what their loads are or to tie into automated systems that adjust their air conditioners during those hours. That is what RMLD has been doing over the past six months, focusing more on the educational side. This involves introducing the program and running workshops. We had a work shop a few weeks ago where customers came in and we spent a couple of hours training them. RMLD is conducting many onsite visits, to perform energy audits to work with the customers to figure out what works best for their individual company.

Mr. Stempeck asked if the response has been good. Mr. Ollila answered, yes the response has been good and explained that this is a pilot project for our largest customers; i.e.; the 500 Club. RMLD has approximately ten to twelve of our larger commercial customers signed up with another ten to twenty in the process. The long term goal is to expand this program to all customers as well as projects on the residential side that could contribute to this. Primarily, the hot water heater program could be tied into a demand reduction approach.

Mr. Ollila continued explaining another big piece of the implementation side is setting up a web portal for all of the customers in the program in order for them to have a live picture of what their load is. At any given hour or during the day they can see what their load profile is, this also has automated tools that calculate what the effect was of any load shedding action that they take. If the RMLD calls a demand reduction event, customers can call it up the next day to see how many kilowatts they saved that translates into dollar savings. These web enabled tools are provided by RMLD at no cost to the customer for signing up for the program.

Mr. O'Rourke asked what the significance of the 500 Club is, what does that designate? Mr. Seldon explained that several years ago RMLD performed a study to define who the largest customers were and it was determined that the cutoff point was 500 kilowatts. The 500 Club is anybody that has a 500 kilowatt peak or greater. Mr. Ollila further explained the 500 Club is currently RMLD's top fifty customers. Much of his focus on the support side is working with those larger commercial customers to enroll them into this progra as well as supporting their ongoing day to day projects or issues.

Mr. O'Rourke asked if these customers are distributed evenly across the service towns. Mr. Ollila replied that these commercial customers are primarily Wilmington and North Reading, which is the bulk of the larger users. Analog is by far RMLD's biggest customer. Industrial Way and Ballardvale in Wilmington as well as River Park Drive in North Reading those are the three main centers of location for the commercial customers.

Chairman Talbot asked about municipalities and their buildings', do they get a chance to participate in this program. Mr. Ollila replied that the municipalities are included in this and he has talked with representatives from all of the towns. In Wilmington, Messrs. Hooper and Kelley have looked into the program, but have been preoccupied with building the new high school. Mr. Ollila stated that he has spoken to all the municipal facilities staff and made them aware of the program. Some of the school buildings have some pretty high peak demand loads, so they could benefit from it.

Chairman Talbot asked if the Town of Reading or the schools responded that they would like to garner these savings. Mr. Ollila responded that he is working with Kelly at the Reading High School although she is evaluating existing programs, but this will definitely be a piece of what she rolls out going forward. The Reading High School has already signed up for some energy efficiency programs that are pay for performance type contracts. One of the issues is they have to see how RMLD's program fits.

Mr. Ollila explained that the both the 500 Club and municipalities are eligible for the PDR program.

Chairman Talbot asked how much the Town of Reading could save with this program. Mr. Ollila replied that some of the Town of Reading's buildings were peaking at two or four hundred which could be a savings of as much as $25,000 total for all town buildings including the schools. It could easily be tens of thousands of dollars. A major push for RMLD now is to educate them and show them what they would have to do to implement the program. It is a relatively small amount of effort, but there are things that must be done.

Ms. O'Brien commented that the 500 Club is being focused on right now. Mr. Ollila commented that in order for RMLD to implement this program the customers' usage needs to be monitored which requires meters that are capable of recording and givi the feedback for that. There are other issues such as integrating their result into the billing system and crediting them. Those are the logistics that RMLD needs to sort through, but it is all certainly worth doing because this involves substantial dollars.

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RMLD's Peak Demand Reduction (PDR) Program Lunch and Learn

Chairman Talbot suggested that the CAB liaison report back to their towns to explain this savings opportunity and also report this formation at the next CAB meeting for all the members.

Mr. Stempeck asked how many of the customers that Mr. Ollila is working with would have these diesel generation capabilities. Mr. Ollila replied there are approximately twenty or thirty customers that have a generator, but a lot of them are fairly small. The generators they have are for emergency lights. The companies that have substantial generators are three or four. Charles River Laboratories has some large three or four megawatts of generators because of the nature of their business. RMLD is working with them to install some additional emissions equipment to allow those generators to be run in a non-emergency conditions. Most of those generators were only permitted to run under emergency conditions, so they cannot be run for economic reasons unless they are re permitted. RMLD is working through those issues with them and/or add additional emissions equipment in order that they can run them without violating any EPA guidelines. Mr. Ollila also noted that RMLD has been working with Analog to put in some additional generation which will be primarily customer funded.

Mr. Chrisos asked if these generators are primarily gas. Mr. Ollila responded that the generators are primarily gas, although there are a fair amount of diesel. All of the Charles River generators are diesel, but even those can be outfitted with enough gear that it meets all the EPA requirements.

Mr. O'Rourke commented that at the beginning of the presentation the 2008 Strategic Plan was discussed, is there is a process to revisit the strategic plan every five, seven or ten years. Ms. O'Brien replied that the recommendation is that every three to five years the Strategic Plan should be reevaluated to ensure it is in line with the most current technology, business plan or if the economics have changed. Mr. O'Rourke mentioned that with the new studies that are in process that this Strategic Plan will be revisited post studies. Ms. O'Brien said that after receiving the preliminary studies, recommendations will be discussed then addressed revising the Strategic Plan. From this, the long term Twenty Year Plan for both the system and the organization will be laid out.

Chairman Talbot stated that to an uninformed person the numbers look high, that somebody can receive $60,000 back from RMLD by turning off things, asked Mr. Ollila where do those numbers come from, i.e., $3.50 per kilowatt hour when normally RMLD is paying a dime. Mr. Ollila explained that it is based on the savings that RMLD achieves on the capacity charge. RMLD is sharing the total savings that the system gets with the customer. Every month Ms. Parenteau receives a bill from the ISO for transmission and capacity fees and it is all based on those numbers.

Mr. Jaffari explained the overall capacity and transmission charges are reduced from the total amount that RMLD pays ISO thus when RMLD saves, the customer saves. Chairman Talbot stated that he understands no checks are being issued as a result the customer's bills will decrease. RMLD is saving more than reducing, but we are sharing those cost savings with participating customers. Ms. O'Brien answered, that is correct.

Chairman Talbot asked since these are rates, who set those rates, isn't that the Board's job. Mr. Seldon answered that this is a pilot program at this point. Mr. Ollila stated those rates can be adjusted as the program develops and that the rates are based on the ISO capacity rates. Chairman Talbot stated that he wanted to know where the rates come from and if the RMLD gets a chance to set rates on what is going back to customers. Mr. Ollila used the example of the rebate checks RMLD issues to customers in order to lower their peak usage and that is all based on how much savings the system receives so it is just another form of a rebate program.

Mr. Stempeck stated that he understands what Chairman Talbot is asking, but noted this is not system wide, these are pilot programs, if it grows out of a pilot program that is substantial then that would likely trigger a revisiting of the rates and maybe reduce the overall peak, but everything is going the right way.

Ms. O'Brien stated there are competitive companies out there like EnerNoc that can come in and do the same type of thing. The RMLD wants its customers to come to them because with EnerNoc, RMLD would not get the reduction in the peak and not provide the customers sufficient incentive. The RMLD would still have to pay the peak price because that virtual generation they are creating by turning on their generator is worth the money.

Chairman Talbot explained that he is only getting down to a level of rate setting and giving back customers a certain rate and asked where that number comes from and when does the Board get involved. Mr. Seldon stated that the specific rate that RMLD is basing the credit on is a FERC filed rate which is dictated to RMLD. In clarification, Chairman Talbot asked, the $1.50 and the $3.50. Mr. Seldon concurred. Mr. Seldon answered that is actually twice that, that is just a calculated credit off a FERC filed rate.

Chairman Talbot stated that this is all great stuff and asked if RMLD has the technical capacity at this time to expand to a larger segment of customers? The average homeowner cannot get $60,000 off their bill, but get $60.00 off their annual bill, for example, $5.00 or $10.00 per month for turning off the air conditioner at 3:00 p.m.

General Manager's Report – Ms. O'Brien – General Manager (Attachment 1)
RMLD's Peak Demand Reduction (PDR) Program Lunch and Learn
Ms. O'Brien explained that right now RMLD is working with the 500 Club because that was the line of new meters with the two way communication. As those meters are being implemented into the 500 Club, or whoever wants to participate in that group, then there needs to be a discussion about how many of these meters RMLD wants to buy. There is the investment in the AMR System that RMLD does not want to eliminate, but that two way communication is what needs be targeted. The next level of customers that needs to be addressed will be the next level of usage. This entails looking at the cost to RMLD and what goes back to the customers. If RMLD needs to put more capital into changing out meters than the existing meters this is a decision that has to be made.

Mr. Ollila stated that on the residential side, the electric hot water heater pilot program currently has two hundred customers. That could be expanded to a more aggressive peak demand program. Although individual residences do not have substantial consumption, collectively it provides a reduction in the load. The homeowner is not actively involved, so implementation is easier whereas commercial customers are called reminding them to turn a machine off.

Ms. O'Brien pointed out that Chairman Talbot may be referring to a home area network that is on a Time of Use Rate. There is a box in the home where RMLD provides notification of the peak time, then the resident lowers their peak usage during that hour. Certainly RMLD can come up with a program to incentivize them as well, it is getting that two way communication to the home network, customer interest and how many meters would need to be changed out. Chairman Talbot stated that these are all great programs, but long overdue for energy savings measures. It is obviously a huge payback to the customer at the high level. Chairman Talbot asked if there is a bottom line that RMLD expects these programs to cost in terms of the give backs, but if we are going to give back it would good to see the two numbers. It would be good to determine what is being given back, but RMLD is also seeing this larger savings as this progresses.

Ms. O'Brien stated there can be charts of what the peaks are, but capacity/transmission will be going up significantly. Chairman Talbot asked for some projections for a sense of how much the Department is saving as well as the customers and improving RMLD's business.

Mesh Network – 500 Club
Mr. Jaffari said that RMLD is proposing approximately twenty megawatts over the next ten to twenty years for the Distributed Generation Installation Project. These are the meter generators that does not require heavy permitting such as emergency back-up generators which RMLD can run for a number of hours. The generators can run six hundred to one thousand hours during the peak which is going to activate the peak shaving unit. These units are being used as peak shaving during the peak this way RMLD could get credit for capacity and transmission. Mr. Jaffari stated that this is where the industry trend is moving towards. The benefits are the demand response, peak shaving and no loss of kilowatt hour sales. Also, the ISO New England is issuing credits for both the capacity and transmission all the customers will benefit.

The cost is approximately $1,000,000 to install per megawatt and the RMLD is working on two models. The first proposed model is customer owned, which the customer will pay for the installation and RMLD will be getting fifty percent of the ISO credit on capacity and transmission charges and the customer gets the other half. The second model is RMLD owned units at our substations. RMLD performed an analysis for four megawatts generators (2-2MW units) over a period of ten years, which results in a cost savings of approximately $5,700,000 or $570,000 annual savings for RMLD if this program is implemented.

Mr. Stempeck clarified return on investment is about five years, what is the equipment life. Mr. Jaffari explained that the equipment life is about ten to fifteen years. Mr. Jaffari explained that the credit that RMLD receives would be paying off the unit in the first five years and anything after that is free credit. This is a new technology trend. As you recall twenty to thirty years ago there were big mainframe computers, which are now replaced by small servers, notebooks, and IPads. It is the same concept where the big hefty power plants which will cost billions of dollars are now broken down into mini generators onsite in order to increase the reliability and economic cost benefits that will be associated with that.

Mr. Jaffari continued, the capacity and transmission credit costs will triple in 2017. ISO New England is predicting these units will be paid back faster than five years maybe three and a half to four years. There are two proposed models, the first is that the customer pays, the other is RMLD pays and would try to install those units at the substations. The limit is two and a half megawatts per feeder without getting into heavy permitting. These can be used during the peak in order to generate savings to the customers.

Mr. Jaffari stated that other municipals are looking into this are: Middleborough, Taunton, Braintree and West Boylston. These units are the micro turbines that have silencers, run very efficiently and are very cost effective. The noise level is approximately fifty decibels which is slightly audible at about ten to fifteen feet distance from the generator. Another positive is that RMLD will be able to operate these units from the SCADA.

Mr. O'Rourke stated that it sounds like this is an easy quick win for RMLD, what is the vision for these units. Mr. Jaffari said that he envisions about ten of these units at two megawatts each. Because we do not know whether these credits are sustained over time or not, RMLD will move toward this technology cautiously.

General Manager's Report – Ms. O'Brien – General Manager (Attachment 1)
Mesh Network – 500 Club

Mr. Jaffari said that it is anticipated to start with two megawatts per year and within the next ten years ramp it up to ten to twenty megawatts. By then, it will be clear how the marketplace is doing and whether it makes sense to continue investing or not. Mr. Jaffari noted that these units will be paid for at a faster rate than what they are estimated. The credit benefits everybody or at least we have the generating units that will be cutting down the capacity charges from our supplier in the area.

Mr. Stempeck stated that the substations sounds like the most logical place to put them. Mr. Jaffari explained these units can be put in government buildings as well. One of the sites RMLD is proposing and studying is the old retired substation site in Lynnfield due to its location. This site already has pipes that go out to Main Street. The new substation RMLD is proposing to build in Wilmington would be another site which could contain more of these units. Mr. Jaffari added that RMLD is in the process of studying and analyzing to ensure this technology will produce the predicted savings.

Mr. Chrisos asked if there have been discussions about any of the towns of where these will be sited. Mr. Jaffari answered, no we have not, because these units will be placed at our substations and we will get a construction permit for them. We are still in the discover stage, just an idea. Mr. Jaffari stated that he is proposing one unit at two megawatts for the fiscal year 2016 budget. That will result in an increase in the plant value and provide cost savings on the rates if completed before fiscal year 2017. The price of these units will go up in 2017 as ISO charges go up. Therefore the time to get started is now.

Chairman Talbot asked if these are gas generators. Mr. Jaffari answered that these are two types; gas and also diesel. The dual fuel will increase the cost, but dual fuel units are not efficient, opens itself to possible environmental limitations and permitting which we want to avoid. Chairman Talbot asked if those assumptions are based on today's possible prices or are they based on what they were two years ago being doubled what they are now and what they will be in future? Mr. Jaffari answered this is based on the old prices and the last price received was about six months ago based on whatever that price was six months ago. Mr. Seldon stated that these units will not be run continuously. Mr. Ollila stated that the fuel is a relatively small piece of the overall price.

Chairman Talbot stated that another technology that is getting better is batteries; lithium ion batteries. They have been dubious for grid storage and discharge, but they are getting much better rather quickly. The DOE has huge programs and there are all kinds of products coming out in grid batteries which would do exactly the same thing. The batteries can be triple charged overnight when power is dirt cheap and turn it on at 3pm to 5pm discharge them and do the same thing at night. Chairman Talbot stated that he would like to see a full analysis why this would be better than a lithium ion battery since this proposal is based on two to three years from now before putting one in. Mr. Jaffari stated that right now based the research reveals that they are not cost efficient and not justified economically yet. RMLD cannot benefit form battery storage units when compared with DGs because the technology is not there yet. Also, required is a huge field. The solar technology is also the same. We need huge amounts of land/roofs for these units and the maintenance cost is not cheap either. Mr. Jaffari pointed out that the generation cost/kilowatt hour for both solar and battery storage units are not cost justified yet. The return on investment on both technologies are more than fifteen years.

Mr. Stempeck stated that he is intrigued by the batteries as well and it would be great to perform a test in parallel, if it doesn't cost too much. The units are a proven technology that Mr. Jaffari is speaking about, it's been in the field and well tested, very reliable. The batteries are just coming out, they are huge, must be converted into AC with invertors and have all kinds of issues.

Chairman Talbot commented, point taken and asked if this expansion is the program that Mr. Ollila is speaking about. RMLD wants to knock the two megawatts off with this new fossil fuel generator that is put somewhere and the same two megawatts would become even further expansion. Chairman Talbot asked why not simply further expand the peak shaving offers to a deeper level, to the 500 Club and the 400 Club and go to the next level to continue this. Why would RMLD want to add this rather than just do it intelligently? Mr. Jaffari replied that incrementally RMLD is moving towards this technology. RMLD wants to take a low risk technology as Mr. Stempeck said, to maximize benefits.

Chairman Talbot commented that he gets the concept, but as with batteries he would like the analysis, before the Board gets a budget that includes a seven figure sum, go through permitting and local citing for a fossil fuel generator in this district.

Chairman Talbot stated that we have also explained how peak shaving could be done with expansion of peak shaving programs directed by measure. What the relative cost benefits and complexity is of doing either one because you are about to talk about the smart grid, which is amazing, which is exactly what to do and that is the future.

Mr. Stempeck stated that history repeats itself when he first came to Reading there was a bond issue for an incinerator, which was the hot new environmental technology that we never used. The town never used it although there was huge bond issue that needed to be paid off via taxes because the environment permits were not correct, but it was hot technology at the time. Mr. Stempeck stated that he likes the concept of this new technology, but is leery of it and agrees with Chairman Talbot that an analysis should be performed and it would be wonderful to do a trial test.

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Chairman Talbot stated that there will be a discussion at the Board level about this going forward and maybe the communities when they hear RMLD is installing a diesel generator. Mr. Jaffari added that the generators will be low pressure natural gas.

Mr. Chrisos stated that the proposed pipe line, the Kinder Morgan pipeline, going through the Town of North Reading is a big issue within the Town of North Reading. Mr. Chrisos suggested that RMLD start discussions early with the communities if they are going to propose the distributive generation sites. Mr. Jaffari stated that this is not any different from when home generators are purchased as a back-up, same concept on a larger scale, it does not consume much gas as it consumes low pressure gas. It is very efficient with limited operational hours, maybe only six hundred hours per year, maybe less. For that six hundred hours the economic benefit that comes with it justifies that. Ms. O'Brien pointed out that the Organizational and Reliability Study Consultants are also looking at this in parallel. The consultants will be making recommendations that are separate from RMLD's proposal although they will get this information in order to evaluate it and provide their opinion.

Mr. Jaffari continued with the grid modernization plan. This is a 30,000 foot plan that shows the next ten, fifteen, twenty years. There are three technologies, AMI, this is the home area network and this is the distribution automation or the distributed devices. Mr. Jaffari stated that as Ms. O'Brien explained, we do not completely have a full AMI technology. RMLD has invested close to $2,500,000 a few years ago with AMR technology, which is not full two-way communication capabilities. As a result, RMLD cannot implement some the technology driven devices. RMLD cannot have full two-way communication with office to meter and meter back to the office. There are sixty five meters in the 500 Club with usage at 500 kilowatt hours or more, Itron does not have any technology available for them or any solution. As a result of this, RMLD bid to employ technology and are looking into technology that could do two things at once, investing in AMI that could utilize the existing AMI Itron system without spending more money to change out all the meters. RMLD wanted that to be integrated into the new technology as well as being able to do all the demand response, distributive generation and get the distributed automation in place with this future trend in future technology. The reason for the distribution automation is the faster the outages are restored, the faster the meters will be restored and this results in more revenue for RMLD.

Mr. Jaffari continued that RMLD purchased the Eaton technology, which this system is a mesh network and will be able to handle the metering system needs as well as the demand response and home area network devices which the next generation of home appliances will be IP based therefore it can be run from IPad. This system will be able to handle the IP based technology and the band width large enough to bring the distribution devices and the electronic devices out in the field back to the office. The three systems will send the data into the data collector on the RMLD poles, the data collector with the fire wall will pass on to the switch that converts the signal into fiber. The fiber will jump on the RMLD fiber loop that is system wide with seventeen fiber nodes. As soon as the signal reaches one of the nodes the data will jump on this fiber network and it will be brought back to the servers in the office. Then the outage management system, SCADA system, AMI server, demand side management and the Cogsdale has all this data, the system will be able to feed all these servers with the data thus every server will get the related data needed for processing and integrity for all the information.

Mr. Jaffari noted that once the information comes to the host servers then it will be transferred into some type of service for architecture or enterprise service bus, which is a data super highway where every lane is dedicated for a certain data. It will not slow down the speed of the servers and data processing. Once that data comes in it will be classified to its proper destination, it will go to the customer information system integrity work order management system for reporting. This is the historical data, the real time data from the SCADA and outage management system will transfer to the real time bus that is a real time server that will come through the SCADA for processing for the default detection isolation registration system which means automatically the fault will be isolated in a matter of seconds, rather than hours, meaning the meters will be brought back to life faster. The Outage Management System (OMS) will have a map that shows the pockets of where the outages are and the system is smart that can detect what can be the possible problem, where the fault is and once the sensor senses the fault it can send a message to the IPad or to the field devices. This will allow the field person, to direct the trucks where the fault is. The fault will be automatically be isolated in order to make the repairs thus leading to a fast restoration of the system rather than having two thousand customers out of power, there will be only be fifty to one hundred customers.

Mr. Jaffari pointed out that there is the conservation voltage reduction which is another technique for savings to ensure that during peak time the demand for electronic devices is reduced by lowering the voltage, the electronic devices will not get damaged, but once the load is reduced the linear loads or the voltage or the current, chase one another will reduce the demand without damaging the appliances, but the nonlinear load will still have the voltage to keep up with the current. Then, there is the simulator which is for Engineers in order that they can simulate the data in the background for switching in a way to be more efficient, productive and less labor intensive which brings more savings. Another one is the power factor corrections. Right now RMLD has capacitors that are being manually operated which means during the peak time when we try to lower the demand of the system it is another way to save money and get less capacity transmission charges from ISO New England.

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Mr. Jaffari stated that currently, the field personnel have to go to the street to turn on the capacitors manually, however, once utomated they can be controlled through the SCADA. These will be programmed so when the load comes up these capacitors will come in at different locations and suppress the rising demand. The goal is for the next ten to twenty years bringing the data from the field, more intelligent data for processing more intelligently, to become efficient and more productive with the result being bringing more cost savings to the customers, this is the plan. The plan will be rolled out in pieces and the Board will be provided ongoing reports until the whole picture is completed

Mr. Stempeck asked Mr. Jaffari if he has these pieces ranked to the most important and which will be completed first. Mr. Jaffari replied, yes. Mr. Jaffari explained that this year RMLD upgraded the SCADA system and also purchased the OMS System that will be integrated with the CIS. This was done because the system had to be in place before the AMI System was implemented for testing to ensure all the data from the Itron as well as new AMI system could both be hosted in the server and the server integration would be seamless with the OMS System. Mr. Jaffari continued, that has been done in addition to purchasing a cyber-security firewalls this year.

Mr. Jaffari mentioned that going forward during next year there is a plan that shows the proposed location of field switches and electronic devices. This information has been given to Booth & Associates for a second opinion to make sure that the switches are located in optimal locations and they are adequate. Once this is reviewed by Booth & Associates they will provide us their recommendations, then that will be the template.

Chairman Talbot stated that all this is very technical and he understands the high concepts, it is outstanding that RMLD will have a smarter grid, which is the bottom line. For the average person who may be watching is the goal for RMLD to have faster responses to outages and smarter management of incidents and reliability or is it mostly so the demand can be more controlled noted in earlier points?

Mr. Jaffari stated the three things he would like people to take out of this meeting is, at the end of the day once this plan is implemented it is going to minimize the duration and the frequencies of the outages and that is the top goal, rather than being out for hours it will be restored within seconds. Right now, the section that is damaged we roll the trucks and everything from the station all he way to the last point on the circuit, for safety has to be inspected, switching must be done and then for the linemen to actually fix it iat takes a minimum forty-five minutes to one hour.

Chairman Talbot asked what the cost is to have it done this way. Mr. Jaffari replied that the overall cost over the next ten to fifteen or maybe twenty years will vary depending on the number of switches, number of technologies being used. It could cost anywhere from $10 million to $20 million dollars. A good things about stretching this plan over ten to twenty years is that RMLD will be able to keep up with the technology advancement. This is an open architecture so it cannot be called obsolete within five to ten years from now because it is adaptable, flexible and has the ability to be matched to anything.

Chairman Talbot asked to what extent right now is there a problem with longer duration and frequent numerous outages? His understanding was that there weren't a lot of outages. Mr. Jaffari agreed that there are not a lot of outages but there are maintenance issues that haven't been addressed such as the substations, switches and the transformers for years. Mr. Jaffari noted it is important to maintain the reliability by keeping up the maintenance as well as investing in the infrastructure.

Chairman Talbot asked if the fundamental infrastructure will need to be expanded in order to do this. Mr. Jaffari replied that the current infrastructure right now can respond to the needs of the system, but RMLD can benefit from expanding fiber loop to reach out all of our assets in the future. As we are expanding our fiber loop for leasing to contractors like Light Tower, we must choose the routes that are most beneficial to RMLD. Once these are built the ownership is transferred to the RMLD.

Chairman Talbot stated that he thinks that it is outstanding that the RMLD is going to have a smarter grid that the goal is that we have faster responses to outages, smarter management of incidents so there is more reliability or to control demand.

Chairman Talbot asked if the fiber infrastructure is going to be expanded to support the infrastructure to do this. Mr. Jaffari replied that the current infrastructure meets the needs of RMLD, but in the future we might need to expand. Chairman Talbot said that this is all great, is all for it and would like to see the push be more towards the intelligence that provides us the demand side management as a priority. The RMLD needs to look at other ways to generate revenue.

Ir. Jaffari stated that this plan will definitely help the Integrated Resource Department have more capabilities for implementing demand response and all of those energy savings. The RMLD needs to extract information from the field and customers back for processing into the office and does not want to depend on a third party. Currently, RMLD is utilizing Tangent for its demand response. The RMLD will not need Tangent or Interlock or anybody else, RMLD wants to have complete control over our own destiny. Chairman Talbot agreed that removing the middle man is a good goal.

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Mr. Pacino asked for the other priority items. Mr. Jaffari explained that the priorities include, (1) cutting down the duration and frequencies of the outages even though the reliability is good (2) Keeping up with the needed system maintenance, and (implementing DR for rate stabilization and keeping the rates as low as possible for our customers. The energy market prices are going up by 2017, NStar and National Grid have already increased their rates by 37%. Programs like these will help to keep the rates down. The big driver for implementing these plans is optimizing the efficiency and increasing productivity. Any time RMLD trucks roll out that means the customers are spending money and one of the goals for implementing the smart grid or grid moderation or inteli grid is that there are less truck rolls, less money spent on the operational expense.

Ms. O'Brien stated that this is all a road map, it is a vision, it has to be laid out in a schedule and it has to go through the budget process every year. We are just trying to formulate the long term plan. Chairman Talbot stated that the planning is long overdue and that this Board appreciates it. Mr. Pacino said that the Department has a blinking green light to go forward. Ms. O'Brien said that as Mr. Jaffari has pointed out, we look at the risk and the cost benefit. There will be no recommendations going forward without the figures.

Mr. Jaffari explained that the Substation Maintenance Program is another new program started at RMLD. This program was developed in order to prolong the life expectancy of assets. RMLD just completed Substation testing for all substations because some of the equipment hadn't been tested for years. During the testing they found a few problems and are in the process of fixing them. The formation of the Tech Services Group is another great thing for RMLD. We are now training the techs in order that they can perform those services. RMLD has just spent over $150,000 to hire outside consultants to do the testing at the substation and now the techs will be able to test all the equipment, with the exception of 115kV breakers and 115kV infrastructures, everything else will be done in-house. Relative to the Distribution System Maintenance Program, Mr. Jaffari explained there are seven programs that are initiated in order to keep up with maintenance. RMLD now has a transformer replacement program because we have some transformers that are aged, really old at forty to forty five years and the life expectancy of a transformer is based on the Institute of Electronic Engineers is approximately twenty years depending on the loading. The fact that some of the transformers have had leaking in the past was the contributing factor to the failures. Thus, that program identified all the transformers and the replacements in a reasonable manner because eighteen hundred transformers cannot be replaced in a year. Within the next five to six years all the transformers will be replaced and that will add more to the plant value.

Mr. Hennessy asked how many transformers are that old, thirty plus years old? Mr. Jaffari replied that there is a total of about 3,80 transformers and approximately 1,800 of those are over twenty years old. There are about three hundred padmounted transformers that contain large quantities of oil and have rusted. RMLD has paid close to $250,000 to $300,000 for oil clean-up. The oil leakage cost can range $20,000 to $50,000 depending upon the severity of the leak and we are trying to avoid that cost. We want to be proactive rather than reactive.

Mr. Jaffari explained that the Pole Testing Program noting there are approximately 6,400 poles that RMLD owns in the system within all four communities. Based on the USPA mandate, ten percent of the RMLD's own poles are supposed to be tested annually, which means 640 poles. All 640 poles have been tested, the ones that needed to be addressed immediately have been done and have a continuing process to replace them all until everything is addressed.

Mr. Jaffari stated that RMLD has a Manhole Inspection Program within the various parts of the towns and these are being inspected to make sure that RMLD's assets are complete, in good shape and if there are any sign of premature failure to address it before they actually fail.

Mr. Jaffari commented on the revamping of the Tree Trimming Program and that RMLD has a good program in place. The RMLD awarded the bid to one of the best contractors, Mayer Tree Services. We have visited all the towns with a presentation informing them RMLD would like to cut the trees back from five feet to an increase of seven feet. The justification for this is because in some areas the crews were going back twice just to keep up with the maintenance.

Mr. Jaffari stated that he will give a full report soon for the Porcelain Cutouts Replacement Program noting that approximately eight-five percent of the Porcelain Cutouts shatter in time with approximately twenty percent more left to complete. This will increase the safety and the durability of the system.

Mr. Jaffari reported on the Quarterly Inspections of the 13.8kV and 35kV feeders the RMLD wants to get to the areas that need addressing, i.e., if anything is going on in the system, if there is a broken spreader or something is seen visually that could potentially lead to a failure we want to address it before it happens. All the circuits in the system quarterly be patrolled to be check for obvio areas that need to be addressed, being proactive. The most important program initiated this year is the Infrared Scanner the substations and the underground facilities in the parks. RMLD has captured a few problems at the substations which have been addressed and fixed. Every month the crews go to the substations and compare the temperature changes. If they see there is a trend that something needs to be addressed it is addressed, again before it contributes to a failure.

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Mr. Jaffari then reported on the Building and Grounds Maintenance Plan which includes a truck maintenance study that is underway to review and make recommendations on the fleet. This program will be started soon. We are also looking for improvements to the building and keeping up with the maintenance of all the buildings. The HVAC system, is obsolete and that is being replaced in order to have a sound system.

Mr. Jaffari stated that Succession Planning and Career Development Planning is something Ms. O'Brien started when she joined RMLD, which is a great plan. Every employee in the organization has a Career Development Plan for them. This will ensure that all the most important assets in the organization have the skills necessary to carry us into the future. Since every employee has a Career Development Plan that lists the skills required in order to be prepared for the upcoming technology as well as provides a roadmap to make it to the next level. That is why we are very pro training that will be a cost savings to avoid unnecessary consulting fees.

Mr. Stempeck asked how this program is being received by the employees. Mr. Jaffari replied that the employees like it because there is incentive for them and that is part of the employee retention plan. The organization is providing the opportunity to learn more, be more efficient and productive to do their jobs. Mr. Jaffari stated that this year alone there has been fifteen or twenty trainings with some of these trainings offered by the manufacturers at a very reasonable cost. They come in to provide us the training required which represents cost savings because of no travel costs. RMLD has brought in the best instructors in the field such as Energy Council of New England (ECNE) and Northeast Public Power Association (NEPPA). RMLD now uses the experts in the field rather than sending employees out for training costing $7,000 to $8,000 per person. Having the instructor come to the RMLD we can train ten or fifteen employees at one time which cuts costs.

Ms. O'Brien added that at the beginning the employees were a little bit hesitant because the program changed to performance based for step raises, but as Mr. Jaffari stated, we have to identify the skill sets for current and future employees. Also, as Mr. Jaffari stated we could look at all the career developments, see the same people need the same type of training, bring instructors in as opposed to sending employees out. Ms. O'Brien stated that there were a few areas that RMLD was not compliant, those have been corrected. For example, the Linemen, it is RMLD that certifies the linemen to be Journeymen. If the RMLD does not have a Career Development Program that makes sure employees understand who have time and grade to learn all the aspects to become a Journeyman, similar to Local 104, then we really shouldn't be in a position to be certifying them. Now we have a full certifiable program for both, the Linemen and the Substation Technicians. Ms. O'Brien stated that at the beginning the employees were a little apprehensive because they were not required to have much training. We are doing this in such a way that is encouraging. The concept is more like you'll learn more, have a better skill set and someday when you retire you'll have more skills that you can take into your retirement. From that perspective it has been well received. Mr. Stempeck stated that it could be more attractive for bringing employees in, as well as a benefit that you care enough about them to want to ensure their training and that is part of a benefit package for new employees.

Ms. O'Brien stated that career development can be used for existing employees, also when hiring a new employee. Now we will know where employees fall on the scale for their skill sets. It is on the SharePoint, and you can check things out like a library, put them back in. When we get the dashboards fixed we will have a SharePoint that the Board can have to access this information.

Mr. O'Rourke stated that what Ms. O'Brien mentioned doesn't sound like it's remedial, on one hand you have training as part of the performance management process and this sounds like more development. It's the power of the employees that they have skills you can use now or in a future position. Ms. O'Brien stated that now the employee is accountable and wants to get to the next step, therefore wants to get that training completed. Management has a responsibility to make sure the employee receives the training. We are all working together in order that each employee can succeed, be safe and that is the goal.

Mr. O'Rourke asked if these goals get in their performance reviews, if they don't accomplish it or is that not the case. Ms. O'Brien replied if not accomplished, employees would not get their next step raise. Ms. O'Brien added that with middle management without step raises we are going in the direction to create steps. Mr. O'Rourke noted that there is no negative consequence, but is more in line with career plan so if they want to get ahead, this is the template and this is how they get to the next step. Mr. O'Rourke stated that it sounds like a good program because some programs are remedial and address performance gaps in this feels more like real career development, preparing for the job and/or future job.

Ms. O'Brien educated the Board on how she explained this program to the employees. Mr. O'Rourke stated that the fact there is a career development for each employee is very ambitious and commendable.

Mr. Jaffari stated that lastly, we are looking into updating or revising our operational policies and procedures to ensure that they are reflective of the best practice. That is another way to become efficient and productive.

General Manager's Report – Ms. O'Brien – General Manager (Attachment 1)
Update on Organizational and Reliability Study

Mr. Jaffari stated that the recommendations from the Organization and Reliability Study, will have a ten to twenty year long plan. The studies will be completed late March and are currently eighty percent completed. RMLD has been working closely with Leidos as well as Booth & Associates to ensure their recommendations will be provided to the Board for an opportunity to review what RMLD needs to address. Mr. Jaffari stated that the recommended changes and goals will be put into a five year plan. Every year when the budget is submitted the recommendations will be submitted until completion. RMLD also needs to revise the 2008 Strategic Plan. As Ms. O'Brien stated, usually every three to five years these plans should be updated. It is time that RMLD's Strategic Plan be revisited.

Mr. O'Rourke suggested that perhaps the Board review should be performed in a manner similar to the budget process. It might be helpful to have some advanced materials for the Board to review, that would ease with the presentations on these studies.

Ms. O'Brien pointed out that the plan is to have presentations to the Board on both studies. Leidos flies in from Texas, due to the snow storms they tried for three weeks to get here. Leidos is now scheduled to be at the RMLD March 9, 2015. Currently, we have a preliminary draft data to review with them and then will be in a better position to review the benchmarking and current situation at that time.

Power Supply Report – January 2015– Mr. Seldon (Attachment 2)

Mr. Seldon reported that his highlight is the metered load portion which is the energy, noting that the metered load for the month is 61,599,102 kilowatt hours. The chart compares the Fiscal Year 2014 to Fiscal Year 2015, RMLD was metering a little bit more load last year, whether that was due to efficiency measures, or a combination of both it looks like it is not a lot of kilowatt hour reduction, but there is some kilowatt hour reduction. The majority of the months, September was pretty lean for the both years. Mr. Seldon stated that he is confident that February will come in higher because we've had a historically cool February. When Mr. Fournier and he looked at the actuals we were almost at last year's level today with two more days to go, thus should be at 4,000,000 kilowatts hours over what it was last year. The good news is that what we budgeted for energy purposes for the winter and the actual fuel numbers are coming in a little lower. On an energy side, that is always good to see. Mr. Seldon stated that he wanted to show the ISO New England interchange numbers show up on the overall portfolio. Basically, at any given time that piece of the pie is what is out in the Spot Market, everything else we have under contract, which is the piece of the energy part of our portfolio that would seeing the spikes if all of a sudden we had a real bad cold snap and prices went up. Mr. Seldon pointed out that in the winter time around fifteen percent of our portfolio has the ability to fluctuate, the other parts are locked in.

Mr. Hennessy asked if that is consistent year after year or just this year. Mr. Seldon replied that is an actual fifteen percent of what January looks like for us for this year and typically we try to narrow the gaps in the winter and in the summer it leaves less open to the swings in the market and let it get a broader on the shoulder months when it does not matter so much that is the goal.

Mr. Seldon went on the next slide which was a comparison for what was budgeted for capacity costs, highlighting that the larger portion which is the actual capacity costs, but the reasoning for that is about eight months ago, it was reported that we transferred our Hydro Quebec transmission rates over to Energy New England to market for us. They did market the product and we just have not seen the capacity payment for January come in yet so that line will go down as soon as the capacity payment comes in. The actuals in the budgeted line will be closer together. Mr. Seldon then pointed out the transmission costs for the first six or seven months of the fiscal year and where the actuals are compared to what was budgeted. It is basically lagging by one month from where we had budgeted, no big surprises in transmission costs. Mr. Stempeck clarified, on the previous charge it shows we made money by having someone else market it? Mr. Seldon replied, yes we did, for at least this year it will work out in RMLD's favor.

Chairman Talbot stated that at some point he would like to see a curve of what we are selling and how it has drifted down or is flat. Apparently, there are some new developments that were put in. He would like to see a twenty year curve at some point showing what we sell monthly, or total monthly sales by month for ten or twenty years. Mr. Ollila stated that RMLD has been looking at that especially over the last ten or fifteen years.

Chairman Talbot stated that he is curious to see what that looks like and if there is any way to correct it. Mr. Ollila added that there are a number of variables that contribute to it, some of the major ones are weather and we are looking into ways to break it down to separate out those different effects. They are looking to see what the weather effect, what the economic effect and what is the fuel charge effect. Mr. Seldon stated that we are also going to drill down to the customer class.

Mr. Seldon said that overall there are less kilowatt hour sales. Chairman Talbot stated that he would just like to see a simple curve of what has been sold over the last ten to fifteen years represented in a number, the bottom line for the month.

The commission members liked the chart format for the presentation.

Financial Report – January 2015 – Mr. Fournier (Attachment 3)
Mr. Fournier reported that during the month of January, RMLD had a net loss, a negative change in assets, of approximately $200,000, which decreased the Net Income to $2.8 million. Budgeted Net Income was projected at a little over $2 million resulting et Income being over budget by about $750,000 or 36%. The reason this came under budget is because the Fuel Expense is about $2 million higher than Fuel Revenue. At the end of the year, that is a pass through and it is reflective of the timing of that particular month. The numbers look a little better through the first seven months. The actual Fuel Revenue exceeded the Fuel Expenses by $965,000. The Base Revenues are under budget by $230,000 or about 1.7%. The actual Base Revenues came in at $12.9 million compared to the budget amount of $13.1 million.

Mr. Fournier pointed out the budget reflected on chart, the reforecast numbers show seven months actual and five months projected for the remainder of the year, the budget numbers will not be met, but are close. One of the things Ms. O'Brien has implemented over the last several months is monthly meetings to go over the numbers. As we project out for the rest of this fiscal year, the budgeted numbers will not be met as stands, different factors go into that. The RMLD will make about 6% of the allowable 8%. On the expenses, year to date Purchase Power Base Expenses are over budget by $250,000 or 1.5%. The actual Purchase Power Base costs came in at $17.1 million versus the budgeted cost of $16.9 million. On the Operating and Maintenance side combined we are over budget by about $5,000 or less than one tenth of a percent. The actual and budgeted expenses came in at $8.3 million. Mr. Fournier continued noting on the chart, the budgeted amount projecting out the rest of this year the RMLD will come close to hitting its operating and maintenance expenses. These charts demonstrate that RMLD had a big decrease in actual expenses compared to the budget with a big discrepancy in the month of July even though the budget was exceeded. When flattened out through the whole twelve months of the fiscal year the RMLD will come close to what was budgeted.

Mr. Stempeck stated that a three month rolling average it would actually smooth out a lot of those peaks. Mr. Fournier stated that the budgeted numbers going forward and are very close. July was an anomaly, but the some savings compensated for the over budget in the succeeding months, but overall for the twelve months we should be in good shape. The cash position, Operating Funds are at $11.5 million, the Capital Fund balance is at $5.8 million, the Rate Stabilization is at $6.7 million, Deferred Fuel is a little over $5 million and the Energy Conservation Fund is at $500,023. On the general information side, the year-to date kilowatt hour sales are 414,554,425, which is $3.27 million, or about 1% behind last year's actual figure. That gap which is due to the cold weather. On the Budget Variance side, cumulative within the five divisions, came under budget by about $20,000. RMLD is in the middle of the budget season, the capital and operating budgets are due the end of next month.

ngineering and Operations Report – January 2015 – Mr. Jaffari (Attachment 4)
Mr. Jaffari reported on the Engineering and Operations Report during the month of January $100,057 was spent. That brings the total year to date to $1,810,740. The maintenance programs for part of December and January were slow due to the weather constraints.

The padmount transformer replacements were completed as follows: single phase 11.36% and three phase 6.41%. The overhead single phase, 8.62% and three phase 3.33%. Pole testing 645 poles have been inspected, which represents 10% of the system.

Mr. Jaffari stated that the results of the pole testing are as follows: 390 which passed, 233 failed with 21 replaced (the rest are being re-evaluated because some tested marginal) and 22 that were condemned have all been replaced. There have been 17 of 43 transfers completed to date.

Mr. Jaffari reported that for Quarterly Inspection, lists the circuits that have been inspected. These circuits were are listed and there were not many problems found. In some areas there were some vines that were climbing the poles and were removed from the base of the poles. The Manhole Inspection is pending due to this year's extreme winter weather. It is difficult to reach the manholes on the streets and sidewalks therefore, will be put hold until better weather conditions. The Porcelain Cutouts Replacements are approximately 88% complete, with 314 needed to be done in order to finish the program.

The Substation Programs are checked monthly and have not found any issues. Under the Substation Maintenance Program there are two breakers that need to be tested as well as the bushings at the 35kV Transformers at Station 4 which needs to be replaced.

Mr. Jaffari explained the System Reliability report uses indices to define how well the system is performing. All categories are doing well compared against the national and regional average and they are all well below, which means we are doing well compared to other systems in durations and outages.

Mr. Jaffari reported that the System Average Interruption Duration Index (SAIDI) for 2014 there is a spike which is higher than the regional average due to pole hits. For the month of January, across the board we are doing very well, no pole hits. The System verage Information Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI) and we haven't had much outages to report, but those numbers go up in spring and summer. Mr. Jaffari then reported on the reliability and the cause of the outages, the average of the last five or six years with the contributing factors to the outages which 28% trees, 24% wildlife and 36% equipment where the transformers could fail or maybe the porcelain cutout. All of those maintenance related issues help decrease the incidents for equipment and the trees. Once we implement the maintenance and make progress these numbers will shrink.

Engineering and Operations Report – January 2015 – Mr. Jaffari (Attachment 4)
Mr. Hennessy asked about the outages related to wildlife. Mr. Jaffari replied that RMLD uses animal life guards for the devices, but somehow the animals still manage to chew them.

Budget Review Meeting Dates
Ms. O'Brien stated that in an attempt to limit the amount of meetings, she e-mailed the CAB Chairman, Mr. George Hooper, and asked if the budget review meetings could be combined with the RMLD Board. Mr. Hooper prefers not to combine the meetings. Ms. O'Brien stated that Budget meetings and a Policy Review Committee meeting need to be scheduled. Ms. O'Brien reported that she and Mr. Jaffari will not be at the March 26 meeting, they are on vacation. Ms. Jane Parenteau will be acting General Manager during that timeframe and Mr. Peter Price will give the Operations and Engineering report. Ms. O'Brien noted that she and Mr. Jaffari will complete the budgets prior to departing for vacation.

Mr. Pacino clarified what was the need for a Policy Committee meeting to take place. The Policy Committee members agreed to meet on March 5, 2015 at 7:30 a.m.

General Discussion
There was none.

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

RMLD Board Meetings

Thursday, March 26, 2015 and Thursday, April 30, 2015

CAB Meetings
Wednesday, March 11, 2015
Wednesday, April 15, 2015 – Budget Meeting – Wilmington and Wednesday, April 22, 2015 – Budget Meeting

Executive Session
At 9:35 p.m. Mr. Pacino made a motion seconded by Mr. O'Rourke that the Board go into Executive Session to approve the Executive Session meeting minutes of October 2, 2014 and return to Regular Session for the sole purpose of adjournment.
Motion carried 5:0:0.
Chairman Talbot called for a poll of the vote:
Mr. Pacino, Aye; Chairman Talbot, Aye; Mr. Stempeck, Aye; Mr. O'Rourke, Aye and Mr. Hennessy; Aye.
Motion carried 5:0:0.

Adjournment
At 9:40 p.m. Mr. Pacino made a motion seconded by Mr. O'Rourke to adjourn the Regular Session.
Motion carried 5:0:0.

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

RMLD Goals and Objectives Consistent with RMLD's 2008 Strategic Plan

Coleen O'Brien, GM
Hamid Jaffari, Director of E&O
Jane Parenteau, Director of IRD

Date: February 12, 2015

Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

Attachment 1

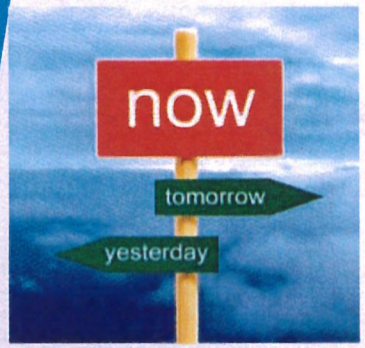
RMLD Mission Statement

Mission Statement: The RMLD is committed to providing excellent customer service including competitively priced electricity as a result of diligence in the areas of power supply risk management, system reliability and flexibility, as well as overall business efficiency.

RMLD 2008 Strategic Plan

- Provide customers with a product mix that optimizes electric costs and maximizes value through energy efficiency and load management.
- Procure a long term diverse and environmentally responsive power supply portfolio including consideration of ownership of generation.
- Assure long term reliability of the RMLD distribution system.
- Enhance customer service to residential and commercial customers to the highest level.

How Are We Meeting The Goals And Objectives?



- BE EFFICIENT: Achieve maximum productivity and system efficiency with minimum wasted effort or expense. *Residential hot water program, Time of use Rate Program, Energy Star Rebate appliance Program, GIS platform for safety, reliability and efficiency, Career Development Programs and training, Operating Standards, Safety Committee, Construction Standards, Organizational and Reliability Studies, Distribution and Substation Maintenance Programs, SHAREPOINT, Technical Services Group, Apprentice Lineworker Program, working groups, etc.*
- GET GREENER: Preserve the environment through non-polluting and energy saving measures. *LED street light program, increase renewable power supply portfolio, solar partnerships, Peak demand reduction programs, Transformer Load Management, Substation Maintenance Programs, etc.*
- GO PAPERLESS: Move towards wireless data for improved communication internally, with our customers and within the electric system. *Enhanced fiber network communication for SCADA, distribution equipment, AMR and AMI Mesh Network, Responsive Communication Plan utilizing reverse 911 systems in all 4 towns, SHAREPOINT, AMI Mesh Network, Paperless billing, on-line payments etc.*

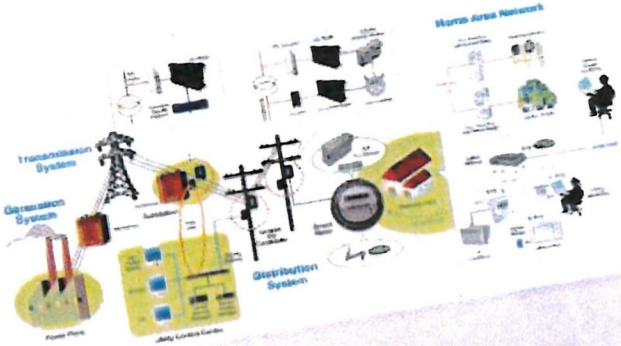
How Are We Meeting The Goals And Objectives?

- Performing long term Organizational and Reliability Studies
- Financial budget to actuals; improving operating ratio
- Continuing to Provide Exceptional Customer Service
- Competitively Priced Electricity
  - Provide Balanced Purchase Power Portfolio
  - Develop Customer Programs to hedge increased expenses
- Developing Technology Roadmap
- Implementing Proactive Maintenance Programs
- Maintaining Reliability
- Continuously Improving Work Processes
- Developing Employee Career Development Plans and Succession Planning
- Studying usage, profitability and potential expansion of RMLD's Fiber Network

How Are We Meeting The Goals And Objectives?

- Continue with inter/intra communications including internal and external customer dashboards
- Unbundled rates and bills
- Operational and Financial user friendly statements, graphs and charts
- Six year Capital and Expense budgets
- Responsive Communication Plan
- Public Power Educational Open Houses
- Bi annual presentations to the towns
- Working Group meetings
- Staff meetings
- Quarterly Safety Committee meetings
- Development of Operational Procedures

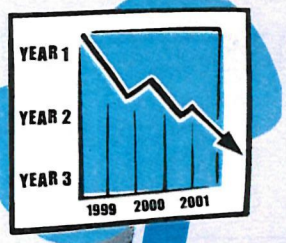
Technology Roadmap (20 Year Plan)



- Create a Smarter System Technology Roadmap
- Develop & Implement a GIS Overhaul Plan
- Install AMI/DA RF-Mesh Networking
- Expand Demand Response Programs
- Evaluate Implementation of Distribution Generation
- Develop Cyber Security System for RMLD's Technology
- Maintain Reliability Indices (SAIDI, CAIDI, SAIFI)

Competitively Priced Electricity

- **Efficiency Programs**
  - Expansion of energy efficiency installations
- **Distributive Generation**
  - Installation of Peaking units within RMLD service territory
- **Rate Options:**
  - Controlled water heater technology upgrade
  - Time-of-Use Rate
  - Interruptible Rate



Competitively Priced Electricity

- **Demand Response**
  - Peak Demand Reduction Program (Commercial/Municipal/Industrial)
  - Residential – HAN to control air conditioning, pool pumps, etc
- **Renewable Technologies**
  - Community Solar (Potential replacement for Green Choice)
  - Development of Solar Policy which guides the installation of local solar installed within RMLD service territory
- **Economic Development**
  - Attract and retain new customers
  - Promote new technologies (Electric Vehicles, Heat Pumps, etc)

RMLD Overview – Commercial Programs

RMLD is committed to providing excellent customer service while delivering reliable, competitively priced electricity.

RMLD offers several energy efficiency programs to help Commercial & Municipal customers reduce overall energy use and mitigate rising electricity cost trends.

- Commercial Energy Initiative Program (CEIP)
- Commercial Lighting Rebate Program (CLRP)
- Electric Vehicle Charging Station Rebate Program
- Peak Demand Reduction Program (PDR)

New for 2014

Area Electric Rate Comparison – December 2014

	COMMERCIAL 7,300 kWh's 25 kW Demand	INDUSTRIAL - TOU 109,500 kWh's 250 kW Demand 80/20 Split
READING MUNICIPAL LIGHT DEPT.		
TOTAL BILL	$931.14	$710,967.52
PER KWH CHARGE	$0.12755	$0.10334
NATIONAL GRID		
TOTAL BILL	$1,742.04	$1,495,629.96
PER KWH CHARGE	$0.23864	$0.21740
% DIFFERENCE	87.09%	110.37%
NSTAR COMPANY		
TOTAL BILL	$1,087.25	$1,026,007.61
PER KWH CHARGE	$0.14894	$0.14914
% DIFFERENCE	16.77%	44.31%
PEABODY MUNICIPAL LIGHT PLANT		
TOTAL BILL	$1,032.39	$714,893.12
PER KWH CHARGE	$0.14142	$0.10391
% DIFFERENCE	10.87%	0.55%
WAKEFIELD MUNICIPAL LIGHT DEPT.		
TOTAL BILL	$1,184.54	$938,760.30
PER KWH CHARGE	$0.16227	$0.13646
% DIFFERENCE	27.21%	32.04%

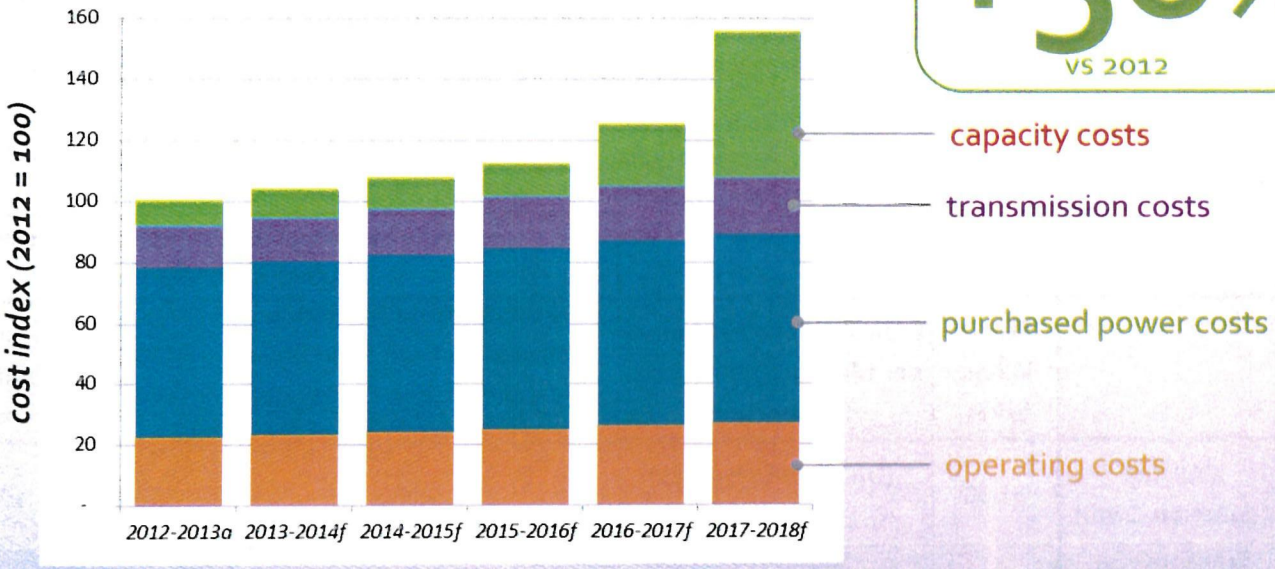
Wholesale cost trends - NEMA

Capacity and transmission costs are becoming a larger percentage of RMLD's total wholesale costs and need to be actively managed

total costs increase

+56%

vs 2012



Source(s): ISO-NE auction Feb 2014; NEPOOL Reliability Aug2014; select municipality budgets; Tangent analysis

Source(s): ISO-NE auction Feb 2014; NEPOOL Reliability Aug2014; select municipality budgets; Tangent analysis

Peak Demand Reduction (PDR) Program Overview

- ✓ Utility market price forecasts show **increasing fees for capacity and transmission charges**
- ✓ RMLD's new PDR Program offers Commercial and Municipal customers an opportunity to reduce costs by adjusting demand during a relatively few, critical peak hours.
- ✓ Participation is 100% voluntary with no penalties for "opting out".

Economic Incentive

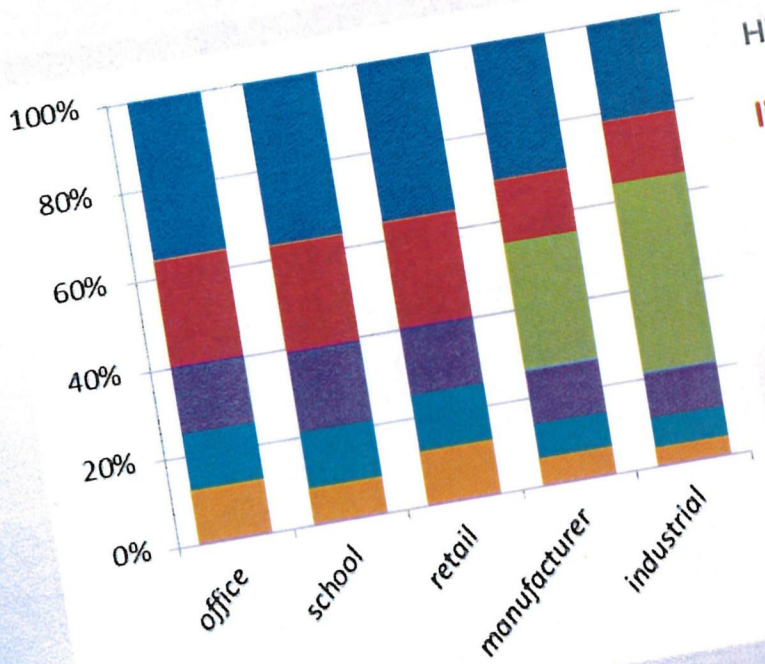
- $3.50 monthly bill credit per kW of demand relief provided by customer during the peak transmission demand hour.
- $1.5 monthly bill credit per kW of demand relief provided by customer during the ISO NE ICAP peak demand hour.

Minimal Operational Impact

- The customer will be provided with access to the TangentAMP Demand Management platform, providing critical insight into their energy usage on a near real-time basis.
- Customer will receive an on-site energy infrastructure and generation assessment.
- Customer will receive an energy usage and demand profile analysis highlighting strategies for demand reduction and opportunities for program participation.

			Example to Show Value of PDR Credits assuming a Load Reduction of 1 MW			
	Credit Value, $/kW	Typical # of Called Events per Month, Usually 2 hrs in Duration	Peak Demand Reduction Achieved by Load Shedding or Local Generation During Peak Hour, kW	Monthly Credit, $	Potential Months of Credit	Annual Value of Credits
ICAP Tag Reduction Credit	$1.50	3 (Only during Summer Months)	1,000	$1,500	12	$18,000
Transmission Peak Reduction Credit	$3.50	3 or 4	1,000	$3,500	12	$42,000
Totals				$5,000		$60,000

Typical Load Mix by Building Type



HVAC
- Ventilation fans
- Exhaust fans
- Chillers
- Compressors
- RTUs
- Pumps

lighting

process
- Electric heat
- Pumps
- Presses
- Conveyors
- Chill water systems
- Idle equipment

plug load
- Electronics
- Video displays
- Standby systems

refrig/cook/clean /water heating

other

HVAC and lighting are noteworthy loads – good place to look for load shedding

source(s): EIA and Tangent data; Tangent analysis

7/3/2014 0:00
7/2/2014 23:00
7/2/2014 22:00
7/2/2014 21:00
7/2/2014 20:00
7/2/2014 19:00
7/2/2014 18:00
7/2/2014 17:00
7/2/2014 16:00
7/2/2014 15:00
7/2/2014 14:00
7/2/2014 13:00
7/2/2014 12:00
7/2/2014 11:00
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2100
2050
2000
1950
1900
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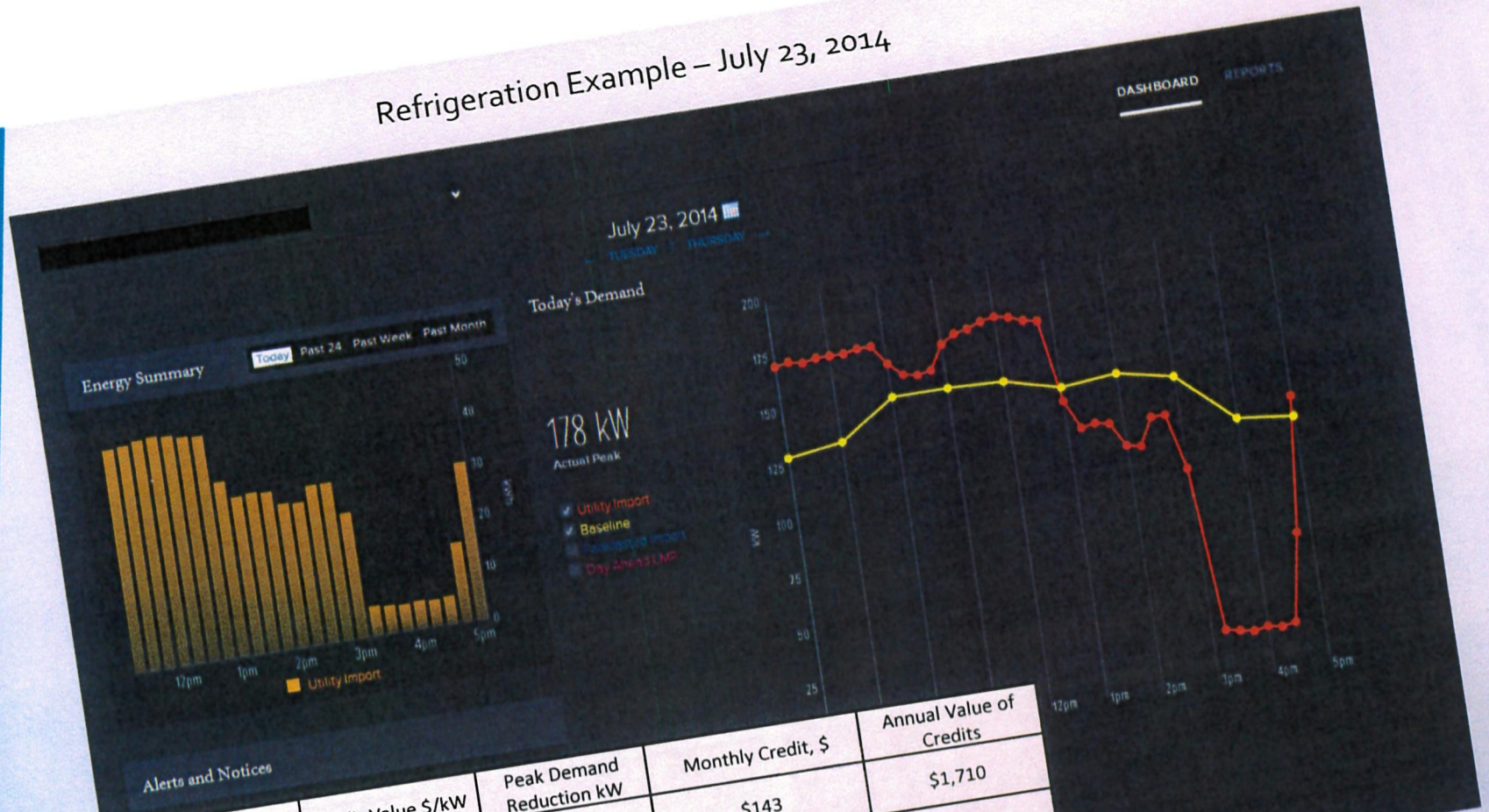
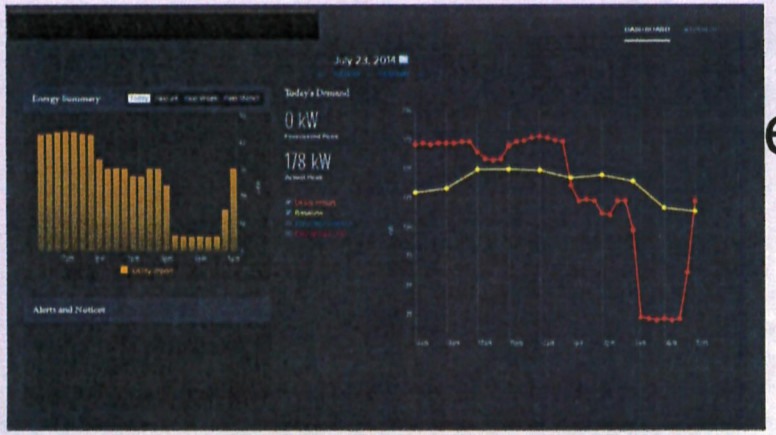
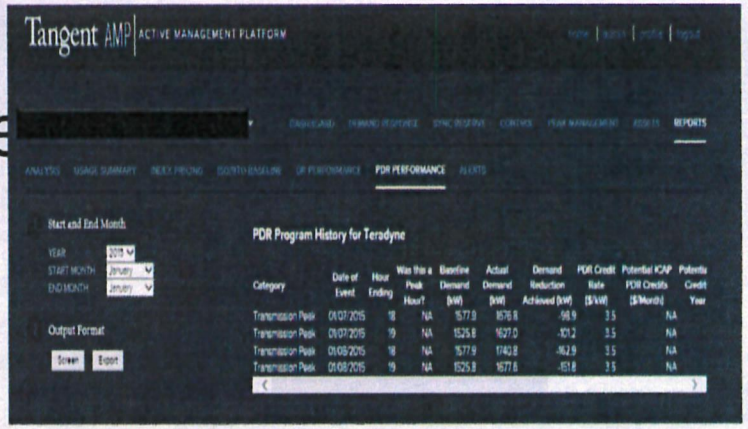
1700
1650
1600
1550

Refrigeration Example – July 23, 2014

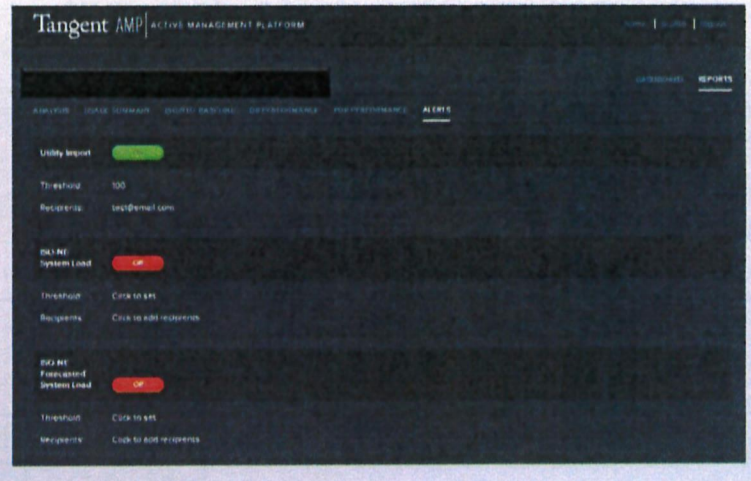


	Credit Value $/kW	Peak Demand Reduction kW	Monthly Credit, $	Annual Value of Credits
iCAP Tag Reduction Credit	$1.50	95	$143	$1,710
Transmission Peak Reduction Credit	$3.50		$333	$3,990
Totals			**$476**	**$5,700**


July 23, 2014
Energy Summary
Today's Demand
0 kW
178 kW
Alerts and Notices


Tangent AMP | ACTIVE MANAGEMENT PLATFORM
REPORTS
PDR PERFORMANCE
Start and End Month
YEAR
START MONTH
END MONTH
Output Format
Screen
Export
PDR Program History for Teradyne
Category
Date of Event
Hour Ending
Was this a Peak Hour?
Baseline Demand (kW)
Actual Demand (kW)
Demand Reduction Achieved (kW)
PDR Credit Rate ($/kW)
Potential KAP PDR Credits ($/Month)
Potential Credit Year
Transmission Peak 01/07/2015 18 NA 1577.9 1676.8 -98.9 3.5 NA
Transmission Peak 01/07/2015 19 NA 1525.8 1627.0 -101.2 3.5 NA
Transmission Peak 01/08/2015 18 NA 1577.9 1740.8 -162.9 3.5 NA
Transmission Peak 01/08/2015 19 NA 1525.8 1677.6 -151.8 3.5 NA


Tangent AMP | ACTIVE MANAGEMENT PLATFORM
REPORTS
ANALYSIS
Meters
Start and End Dates
Interval
Output Format
Graph
Export

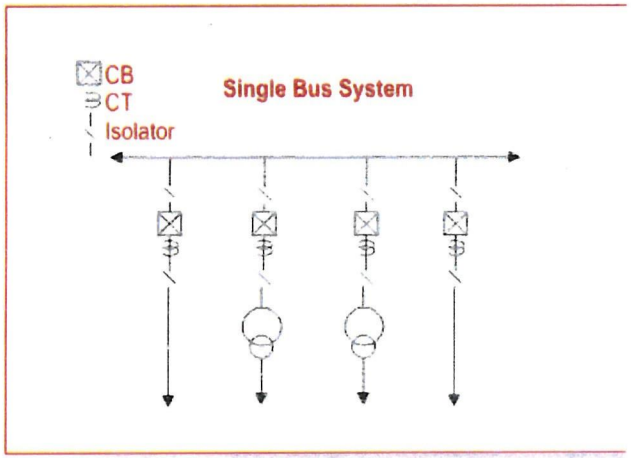

Tangent AMP | ACTIVE MANAGEMENT PLATFORM
REPORTS
ALERTS
Utility Import
Threshold
Recipients
DG LINE System Load
Click to edit recipients

Proposed Distributive Generation Installation (20MW)

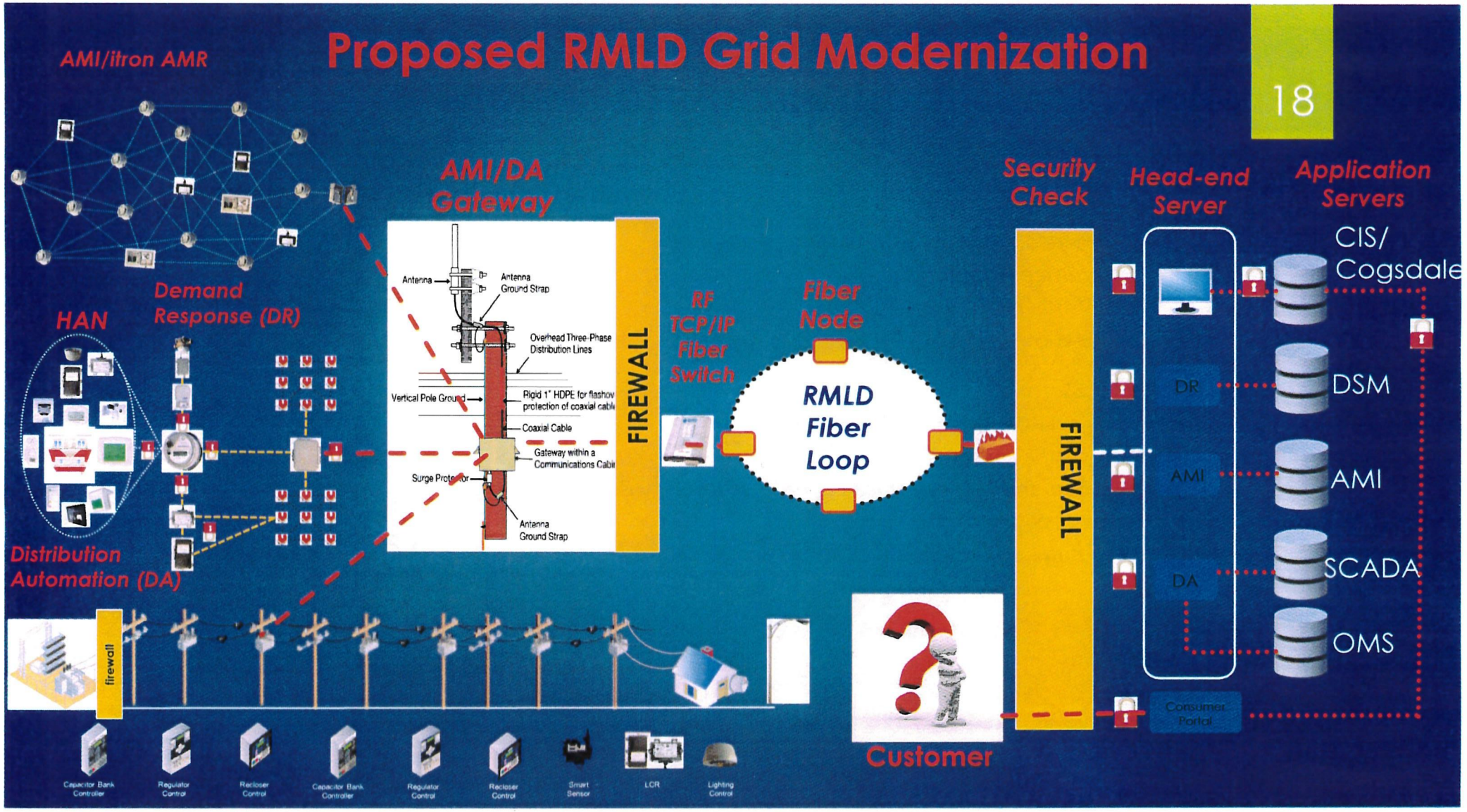
- **Where?**
  - *Commercial & Industrial customer locations*
  - *Government Buildings*
  - *RMLD substations*
- **How many units? TBD (2-20 MW)**
- **Benefits:**
  - Demand Response/Peak Shaving
  - *No loss of Kwh sales*
  - *New England ISO estimated **Credits** (**Capacity** & **Transmission**):*
  - *Providing Load Shedding capability for ISO upon demand*
- **Cost**

  Capital Cost **$2Millon/2 Mws**

  ROI **≈5.4years**



Proposed RMLD Grid Modernization



Proposed RMLD Grid Modernization Integration Model

MIS

Integrated Resource Planning
Customer Service
Accounting
MIS
AMI

Application Servers

CIS Cogsdale

DSM

AMI

SCADA

OMS

SOA/ESB

Multi Speak

Real Time Bus

Web Services

CIS
Billing
IWMS
Reports

Corporate Environment

DSM:DR & DEN

SCADA Dispatch

FDIR
OMS & IVR
CVR
Simulator
PF correction

Real-Time Environment

Proactive Maintenance Programs

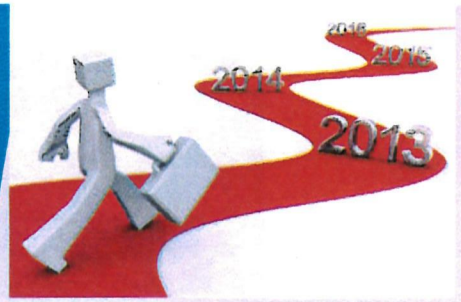
- **Comprehensive Substation Maintenance Program**
  - **Development of a Cyclic Substation Maintenance Program**
  - **Formation of Technical Services (TS) Group**

- **Distribution System Maintenance Program**

  Developed & Revitalized Seven (7) Maintenance Programs:

  - ✓ XFMR Replacement Program
  - ✓ Pole Testing
  - ✓ Manhole Inspection
  - ✓ Tree Trimming
  - ✓ Porcelain C/O replacement
  - ✓ Quarterly Inspection of 13.8kV/35kV Feeders
  - ✓ Infrared Scan of Substations & Major UG Facilities (i.e. River Parks, Analog Devices, and Ballardvale Area)

- **Buildings and Grounds Maintenance Plan**



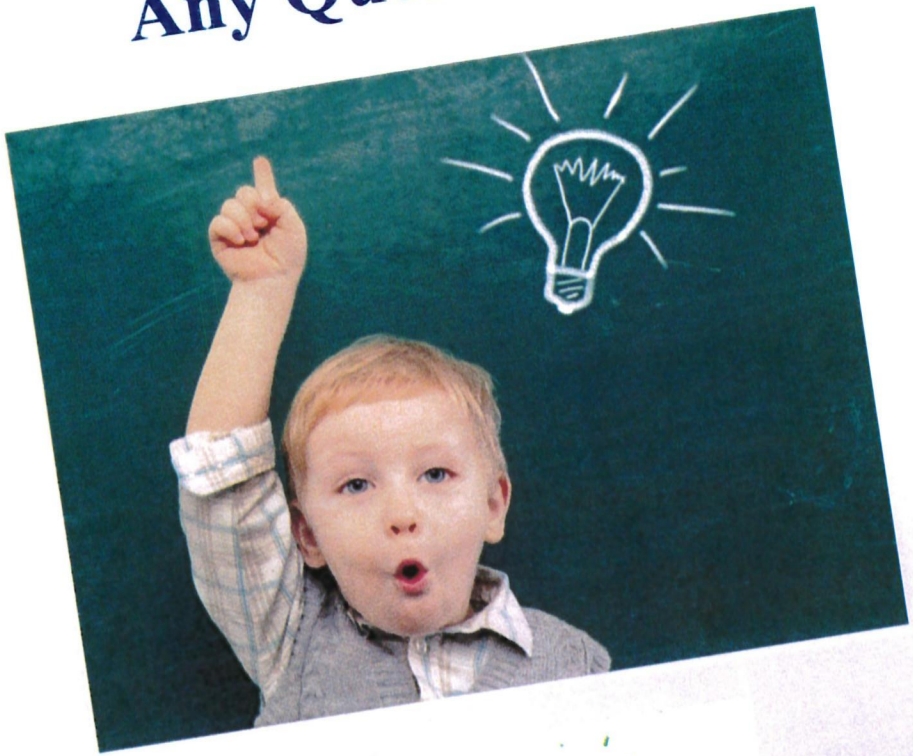
Succession Planning & Career Development Plan

- **Enhance Employees Skills to Meet Technological Advancements:**
  - Develop a comprehensive Career Development Plan (CDP)
  - Provide necessary Technological Tools & Training for Planning, Design, and Implementation
- **Create/Update RMLD Policies & Procedures that are reflective of industry standards and demands**

What is next?

- Organizational and Reliability Study recommendations. Develop 10-20 long term plans addressing each of the said topics.
  - Review
  - Analyze
  - Implement
- Revise 2008 Strategic Plan.

Any Questions?



To: Coleen O'Brien

From: Maureen McHugh, Jane Parenteau WPS for JP

Date: February 20, 2015

Subject: Purchase Power Summary – January, 2015

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of January, 2015.

ENERGY

The RMLD's total metered load for the month was 61,599,102 kWh, which is a 1.19% decrease from the January, 2014 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	3,713,872	$6.70	6.01%	$24,893	0.72%
Seabrook	5,889,780	$6.69	9.53%	$39,380	1.14%
Stonybrook Intermediate	171,123	$215.96	0.28%	$36,956	1.07%
Shell Energy	7,828,200	$70.72	12.67%	$553,649	16.01%
NextEra	9,462,000	$74.29	15.32%	$702,923	20.32%
NYPA	2,576,940	$4.92	4.17%	$12,679	0.37%
ISO Interchange	8,826,747	$87.02	14.29%	$768,107	22.20%
NEMA Congestion	0	$0.00	0.00%	-$114,191	-3.30%
Coop Resales	13,029	$226.74	0.02%	$2,954	0.09%
BP Energy	9,643,800	$47.73	15.61%	$460,299	13.31%
Summit Hydro/Collins/Pioneer	2,756,518	$73.95	4.46%	$203,831	5.89%
Braintree Watson Unit	121,521	$199.19	0.20%	$24,206	0.70%
Swift River Projects	2,261,267	$22.21	3.66%	$225,502	6.52%
Exelon	8,512,200	$60.86	13.78%	$518,012	14.97%
Stonybrook Peaking	0	$0.00	0.00%	$0	0.00%
Monthly Total	61,776,997	$55.99	100.00%	$3,459,198	100.00%

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for the month of January, 2015.

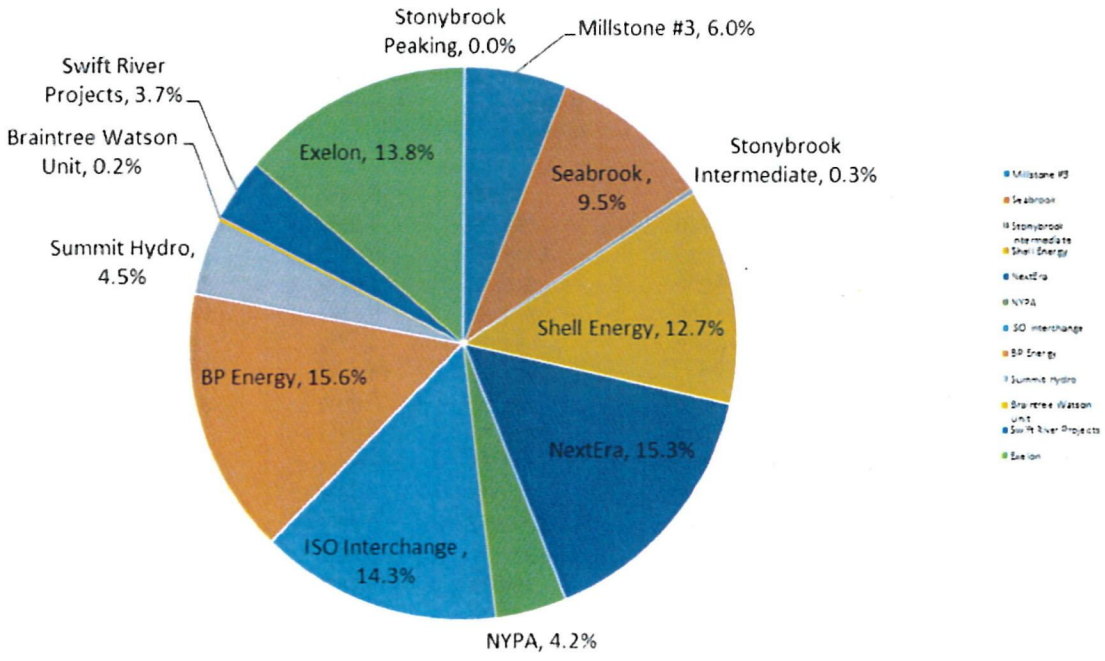
Table 2

Resource	Amount of Energy (kWh)	Cost of Energy ($/Mwh)	% of Total Energy
ISO DA LMP * Settlement	9,955,363	81.01	16.11%
RT Net Energy ** Settlement	-1,128,617	33.97	-1.83%
ISO Interchange (subtotal)	8,826,747	87.02	14.29%

* Independent System Operator Day-Ahead Locational Marginal Price

** Real Time Net Energy

JANUARY 2015 ENERGY BY RESOURCE



CAPACITY

The RMLD hit a demand of 109,061 kW, which occurred on January 8, at 6 pm. The RMLD's monthly UCAP requirement for January, 2015 was 209,812 kWs.

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

Table 3

Source	Amount (kWs)	Cost ($/kW-month)	Total Cost $	% of Total Cost
Millstone #3	4,950	34.42	$170,356	11.07%
Seabrook	7,919	39.88	$315,783	20.51%
Stonybrook Peaking	24,981	2.01	$50,266	3.27%
Stonybrook CC	42,925	7.76	$333,022	21.63%
NYPA	4,019	4.19	$16,834	1.09%
Hydro Quebec	0	0	$21,550	1.40%
Nextera	60,000	5.65	$339,000	22.02%
Braintree Watson Unit	10,520	10.77	$113,290	7.36%
ISO-NE Supply Auction	54,498	3.29	$179,193	11.64%
Total	209,812	$7.34	$1,539,294	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	$24,893	$170,356	$195,250	3.91%	3,713,872	0.0526
	Seabrook	$39,380	$315,783	$355,162	7.11%	5,889,780	0.0603
	Stonybrook Intermediate	$36,956	$333,022	$369,978	7.40%	171,123	2.1621
	Hydro Quebec	$0	$21,550	$21,550	0.43%	-	0.0000
	Shell Energy	$553,649	$0	$553,649	11.08%	7,828,200	0.0707
	NextEra	$702,923	$339,000	$1,041,923	20.84%	9,462,000	0.1101
*	NYPA	$12,679	$16,834	$29,512	0.59%	2,576,940	0.0115
	ISO Interchange	$768,107	$179,193	$947,300	18.95%	8,826,747	0.1073
	Nema Congestion	-$114,191	$0	-$114,191	-2.28%	-	0.0000
	BP Energy	$460,299	$0	$460,299	9.21%	9,643,800	0.0477
*	Summit Hydro/Collins/Pioneer	$203,831	$0	$203,831	4.08%	2,756,518	0.0739
	Braintree Watson Unit	$24,206	$113,290	$137,495	2.75%	121,521	1.1315
*	Swift River Projects	$225,502	$0	$225,502	4.51%	2,261,267	0.0997
	Coop Resales	$2,954	$0	$2,954	0.06%	13,029	0.2267
	Exelon Energy	$518,012	$0	$518,012	10.36%	8,512,200	0.0609
	Stonybrook Peaking	$0	$50,266	$50,266	1.01%	-	0.0000
	Monthly Total	$3,459,198	$1,539,294	$4,998,493	100.00%	61,776,997	0.0809
*	**Renewable Resources**					**12.29%**	

RENEWABLE ENERGY CERTIFICATES (RECs)

Table 5 shows the amount of banked and projected RECs for the Swift River Hydro Projects through December 2014, as well as their estimated market value. In January 2015 the RMLD sold 8456 2014 RECs for $409,180.

Table 5
Swift River RECs Summary
Period - July 2014 - January 2015

	Banked RECs	Projected RECs	Total RECs	Est. Dollars
Woronoco	0	1,872	1,872	$89,856
Pepperell	1,342	2,562	3,904	$187,392
Indian River	638	1,457	2,095	$100,560
Turners Falls	1,609	504	2,113	$0
RECs Sold			0	$0
Grand Total	3,589	6,395	9,984	$377,808

TRANSMISSION

The RMLD's total transmission costs for the month of January, 2015 were $812,385. This is a decrease of 11.19% from the December transmission cost of $812,385. In January, 2014 the transmission costs were $989,607.

Table 6

	Current Month	Last Month	Last Year
Peak Demand (kW)	109,061	109,529	112,204
Energy (kWh)	61,776,997	58,942,336	61,774,795
Energy ($)	$3,459,198	$2,754,213	$3,161,945
Capacity ($)	$1,539,294	$1,415,709	$1,365,300
Transmission($)	$721,439	$812,385	$989,607
Total	$5,719,932	$4,982,307	$5,516,852

Dt: February 25, 2015

To: RMLB, Coleen O'Brien, Jeanne Foti

Fr: Bob Fournier

Sj: January 31, 2015 Report

The results for the first seven months ending January 31, 2015, for the fiscal year 2015 will be summarized in the following paragraphs.

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

*For the month of January, the net loss or the negative change in net assets was $196,863 decreasing the year to date net income to $2,855,653. The year to date budgeted net income was $2,097,231, resulting in net income being over budget by $758,422 or 36.1%. Actual year to date fuel revenues exceeded fuel expenses by $965,650.

2) Revenues: (Page 3A)

*Year to date base revenues were under budget by $231,391 or 1.7%. Actual base revenues were $12.9 million compared to the budgeted amount of $13.1 million.

3) Expenses: (Page 12A)

*Year to date purchased power base expense was over budget by $246,143 or 1.5%. Actual purchased power base costs were 17.1 million and budgeted power base costs were $16.9 million.

*Year to date operating and maintenance (O&M) expenses combined were over budget by $5,327 or .06%. Actual and budget O&M expenses were $8.3 million.

*Depreciation expense and voluntary payments to the Towns were on budget.

4) Cash: (Page 9)

*Operating Fund was at $11,519,798.
* Capital Fund balance was at $5,825,309.
* Rate Stabilization Fund was at $6,756,780.
* Deferred Fuel Fund was at $5,098,344.
* Energy Conservation Fund was at $523,143.

5) General Information:

*Year to date kwh sales (Page 5) were 414,554,245 which is 3.27 million kwh or .8%, behind last year's actual figure.

Budget Variance:

*Cumulatively, the five divisions were under budget by $20,398 or .16%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF NET ASSETS
1/31/2015

		PREVIOUS YEAR	CURRENT YEAR
ASSETS			
CURRENT			
UNRESTRICTED CASH	(SCH A P.9)	10,941,912.04	11,522,798.06
RESTRICTED CASH	(SCH A P.9)	16,727,989.33	21,412,555.78
RESTRICTED INVESTMENTS	(SCH A P.9)	850,000.00	1,292,906.26
RECEIVABLES, NET	(SCH B P.10)	6,203,587.62	8,526,102.90
PREPAID EXPENSES	(SCH B P.10)	1,432,221.97	2,427,520.14
INVENTORY		1,484,913.45	1,490,441.14
TOTAL CURRENT ASSETS		37,640,624.41	46,672,324.28
NONCURRENT			
INVESTMENT IN ASSOCIATED CO	(SCH C P.2)	31,379.32	26,993.75
CAPITAL ASSETS, NET	(SCH C P.2)	69,863,386.54	69,512,012.08
TOTAL NONCURRENT ASSETS		69,894,765.86	69,539,005.83
TOTAL ASSETS		107,535,390.27	116,211,330.11
LIABILITIES			
CURRENT			
ACCOUNTS PAYABLE		5,862,730.00	6,948,038.36
CUSTOMER DEPOSITS		713,375.92	839,254.91
CUSTOMER ADVANCES FOR CONSTRUCTION		399,624.15	565,058.48
ACCRUED LIABILITIES		52,294.21	211,120.34
TOTAL CURRENT LIABILITIES		7,028,024.28	8,563,472.09
NONCURRENT			
ACCRUED EMPLOYEE COMPENSATED ABSENCES		2,885,367.88	2,918,870.73
TOTAL NONCURRENT LIABILITIES		2,885,367.88	2,918,870.73
TOTAL LIABILITIES		9,913,392.16	11,482,342.82
NET ASSETS			
INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT		69,863,386.54	69,512,012.08
RESTRICTED FOR DEPRECIATION FUND	(P.9)	4,555,865.98	5,825,309.97
UNRESTRICTED		23,190,168.74	29,391,665.24
TOTAL NET ASSETS	(P.3)	97,621,998.11	104,728,987.29
TOTAL LIABILITIES AND NET ASSETS		107,535,390.27	116,211,330.11

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
NONCURRENT ASSET SCHEDULE
1/31/2015

SCHEDULE C

	PREVIOUS YEAR	CURRENT YEAR
SCHEDULE OF INVESTMENTS IN ASSOCIATED COMPANIES		
NEW ENGLAND HYDRO ELECTRIC	3,261.87	2,975.74
NEW ENGLAND HYDRO TRANSMISSION	28,117.45	24,018.01
TOTAL INVESTMENTS IN ASSOCIATED COMPANIES	31,379.32	26,993.75
SCHEDULE OF CAPITAL ASSETS		
LAND	1,265,842.23	1,265,842.23
STRUCTURES AND IMPROVEMENTS	6,430,835.66	6,108,069.51
EQUIPMENT AND FURNISHINGS	12,719,213.58	12,423,666.11
INFRASTRUCTURE	49,447,495.07	49,714,434.23
TOTAL CAPITAL ASSETS, NET	69,863,386.54	69,512,012.08
TOTAL NONCURRENT ASSETS	69,894,765.86	69,539,005.83

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS
1/31/2015

	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
OPERATING REVENUES: (SCH D P.11)					
BASE REVENUE	3,710,000.73	1,869,424.05	27,306,136.67	12,939,211.71	-52.61%
FUEL REVENUE	2,487,172.37	2,845,745.09	18,324,954.30	20,738,447.56	13.17%
PURCHASED POWER CAPACITY	70,193.46	2,526,828.66	234,927.19	17,564,396.05	7376.53%
FORFEITED DISCOUNTS	91,316.20	76,469.60	552,684.56	467,992.73	-15.32%
ENERGY CONSERVATION REVENUE	54,410.15	56,535.32	411,264.98	405,562.39	-1.39%
GAW REVENUE	55,283.59	0.00	417,615.74	0.00	-100.00%
NYPA CREDIT	(88,308.33)	(100,190.60)	(360,980.63)	(482,453.42)	33.65%
TOTAL OPERATING REVENUES	6,380,068.17	7,274,812.12	46,886,602.81	51,633,157.02	10.12%
OPERATING EXPENSES: (SCH E P.12)					
PURCHASED POWER CAPACITY	1,365,299.61	1,541,650.35	10,253,099.08	9,870,582.68	-3.73%
PURCHASED POWER TRANSMISSION	982,261.69	805,943.23	6,869,568.82	7,265,172.90	5.76%
PURCHASED POWER FUEL	3,161,945.22	3,456,178.99	18,961,412.59	19,290,344.43	1.73%
OPERATING	863,006.66	1,003,026.29	5,638,642.09	6,423,655.11	13.92%
MAINTENANCE	276,902.81	208,813.65	1,669,338.60	1,920,847.36	15.07%
DEPRECIATION	314,969.55	321,788.79	2,204,786.85	2,252,521.53	2.17%
VOLUNTARY PAYMENTS TO TOWNS	116,666.67	118,000.00	815,183.67	816,754.00	0.19%
TOTAL OPERATING EXPENSES	7,081,052.21	7,455,401.30	46,412,031.70	47,839,878.01	3.08%
OPERATING INCOME	(700,984.04)	(180,589.18)	474,571.11	3,793,279.01	699.31%
NONOPERATING REVENUES (EXPENSES)					
CONTRIBUTIONS IN AID OF CONST	3,361.74	3,500.00	26,428.62	80,861.92	205.96%
RETURN ON INVESTMENT TO READING	(191,768.42)	(194,405.26)	(1,342,378.92)	(1,360,836.76)	1.38%
INTEREST INCOME	2,384.73	10,660.93	25,765.51	81,545.81	216.49%
INTEREST EXPENSE	(251.19)	(248.88)	(2,937.10)	(3,042.07)	3.57%
OTHER (MDSE AND AMORT)	5,447.43	164,218.44	123,370.10	263,845.22	113.86%
TOTAL NONOPERATING REV (EXP)	(180,825.71)	(16,274.77)	(1,169,751.79)	(937,625.88)	-19.84%
CHANGE IN NET ASSETS	(881,809.75)	(196,863.95)	(695,180.68)	2,855,653.13	-510.78%
NET ASSETS AT BEGINNING OF YEAR			98,317,178.79	101,873,334.16	3.62%
NET ASSETS AT END OF JANUARY			97,621,998.11	104,728,987.29	7.28%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUSINESS-TYPE PROPRIETARY FUND
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS
1/31/2015

	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE*	% CHANGE
OPERATING REVENUES: (SCH F P.11B)				
BASE REVENUE	12,939,211.71	13,170,603.00	(231,391.29)	-1.76%
FUEL REVENUE	20,738,447.56	22,268,444.00	(1,529,996.44)	-6.87%
PURCHASED POWER CAPACITY	17,564,396.05	17,548,623.00	15,773.05	100.00%
FORFEITED DISCOUNTS	467,992.73	671,510.00	(203,517.27)	-30.31%
ENERGY CONSERVATION REVENUE	405,562.39	417,825.00	(12,262.61)	-2.93%
NYPA CREDIT	(482,453.42)	(408,331.00)	(74,122.42)	18.15%
TOTAL OPERATING REVENUES	51,633,157.02	53,668,674.00	(2,035,516.98)	-3.79%
OPERATING EXPENSES: (SCH G P.12A)				
PURCHASED POWER CAPACITY	9,870,582.68	9,577,035.00	293,547.68	3.07%
PURCHASED POWER TRANSMISSION	7,265,172.90	7,312,577.00	(47,404.10)	-0.65%
PURCHASED POWER FUEL	19,290,344.43	22,253,071.00	(2,962,726.57)	-13.31%
OPERATING	6,423,655.11	6,411,256.00	12,399.11	0.19%
MAINTENANCE	1,920,847.36	1,927,919.00	(7,071.64)	-0.37%
DEPRECIATION	2,252,521.53	2,270,331.00	(17,809.47)	-0.78%
VOLUNTARY PAYMENTS TO TOWNS	816,754.00	826,000.00	(9,246.00)	-1.12%
TOTAL OPERATING EXPENSES	47,839,878.01	50,578,189.00	(2,738,310.99)	-5.41%
OPERATING INCOME	3,793,279.01	3,090,485.00	702,794.01	22.74%
NONOPERATING REVENUES (EXPENSES)				
CONTRIBUTIONS IN AID OF CONST	80,861.92	150,000.00	(69,138.08)	-46.09%
RETURN ON INVESTMENT TO READING	(1,360,836.76)	(1,360,835.00)	(1.76)	0.00%
INTEREST INCOME	81,545.81	58,331.00	23,214.81	39.80%
INTEREST EXPENSE	(3,042.07)	(1,750.00)	(1,292.07)	73.83%
OTHER (MDSE AND AMORT)	263,845.22	161,000.00	102,845.22	63.88%
TOTAL NONOPERATING REV (EXP)	(937,625.88)	(993,254.00)	55,628.12	-5.60%
CHANGE IN NET ASSETS	2,855,653.13	2,097,231.00	758,422.13	36.16%
NET ASSETS AT BEGINNING OF YEAR	101,873,334.16	101,873,334.16	0.00	0.00%
NET ASSETS AT END OF JANUARY	104,728,987.29	103,970,565.16	758,422.13	0.73%

* ( ) = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
RECONCILIATION OF CAPITAL FUNDS
1/31/2015

SOURCE OF CAPITAL FUNDS:

DEPRECIATION FUND BALANCE 7/1/14	4,130,584.59
CONSTRUCTION FUND BALANCE 7/1/14	1,000,000.00
INTEREST ON DEPRECIATION FUND FY 15	12,632.66
DEPRECIATION TRANSFER FY 15	2,252,521.53
TOTAL SOURCE OF CAPITAL FUNDS	7,395,738.78

USE OF CAPITAL FUNDS:

LESS PAID ADDITIONS TO PLANT THRU JANUARY	1,570,428.81
GENERAL LEDGER CAPITAL FUNDS BALANCE 1/31/15	5,825,309.97

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SALES OF KILOWATT HOURS
1/31/2015

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES	23,543,268	23,519,829	159,621,466	155,521,685	-2.57%
COMM. AND INDUSTRIAL SALES	29,157,811	31,327,972	240,358,620	240,458,635	0.04%
PRIVATE STREET LIGHTING	76,611	79,972	522,817	553,396	5.85%
TOTAL PRIVATE CONSUMERS	52,777,690	54,927,773	400,502,903	396,533,716	-0.99%
MUNICIPAL SALES:					
STREET LIGHTING	240,064	242,710	1,678,350	1,699,775	1.28%
MUNICIPAL BUILDINGS	833,573	877,249	5,555,240	5,622,101	1.20%
TOTAL MUNICIPAL CONSUMERS	1,073,637	1,119,959	7,233,590	7,321,876	1.22%
SALES FOR RESALE	248,102	248,384	2,033,042	2,020,077	-0.64%
SCHOOL	1,171,117	1,407,377	8,054,809	8,678,576	7.74%
TOTAL KILOWATT HOURS SOLD	55,270,546	57,703,493	417,824,344	414,554,245	-0.78%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
KILOWATT HOURS SOLD BY TOWN
1/31/2015

		TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
MONTH						
	RESIDENTIAL	23,519,829	7,689,445	3,326,327	5,616,456	6,887,601
	COMM & IND	31,327,972	3,934,121	255,393	4,735,884	22,402,574
	PVT ST LIGHTS	79,972	13,418	1,524	24,882	40,148
	PUB ST LIGHTS	242,710	81,549	32,769	42,685	85,707
	MUNI BLDGS	877,249	267,192	166,602	129,442	314,013
	SALES/RESALE	248,384	248,384	0	0	0
	SCHOOL	1,407,377	431,908	272,403	262,560	440,506
	TOTAL	57,703,493	12,666,017	4,055,018	10,811,909	30,170,549
YEAR TO DATE						
	RESIDENTIAL	155,521,685	48,418,009	22,561,349	35,807,724	48,734,603
	COMM & IND	240,458,635	29,586,953	1,890,375	37,036,415	171,944,892
	PVT ST LIGHTS	553,396	93,610	10,668	173,708	275,410
	PUB ST LIGHTS	1,699,775	571,190	229,526	298,750	600,309
	MUNI BLDGS	5,622,101	1,423,815	1,179,468	1,005,993	2,012,825
	SALES/RESALE	2,020,077	2,020,077	0	0	0
	SCHOOL	8,678,576	2,943,174	1,819,853	1,384,200	2,531,349
	TOTAL	414,554,245	85,056,828	27,691,239	75,706,790	226,099,388
LAST YEAR TO DATE						
	RESIDENTIAL	159,621,466	50,631,452	22,579,896	36,816,392	49,593,726
	COMM & IND	240,358,620	29,771,228	1,968,350	37,235,744	171,383,298
	PVT ST LIGHTS	522,817	91,903	9,740	157,092	264,082
	PUB ST LIGHTS	1,678,350	564,734	227,500	293,407	592,709
	MUNI BLDGS	5,555,240	1,442,815	1,109,454	1,015,956	1,987,015
	SALES/RESALE	2,033,042	2,033,042	0	0	0
	SCHOOL	8,054,809	2,883,359	1,837,664	972,440	2,361,346
	TOTAL	417,824,344	87,418,533	27,732,604	76,491,031	226,182,176

KILOWATT HOURS SOLD TO TOTAL

		TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
MONTH						
	RESIDENTIAL	40.76%	13.33%	5.76%	9.73%	11.94%
	COMM & IND	54.29%	6.82%	0.44%	8.21%	38.82%
	PVT ST LIGHTS	0.14%	0.02%	0.00%	0.04%	0.08%
	PUB ST LIGHTS	0.42%	0.14%	0.06%	0.07%	0.15%
	MUNI BLDGS	1.52%	0.46%	0.29%	0.22%	0.55%
	SALES/RESALE	0.43%	0.43%	0.00%	0.00%	0.00%
	SCHOOL	2.44%	0.75%	0.47%	0.46%	0.76%
	TOTAL	100.00%	21.95%	7.02%	18.73%	52.30%
YEAR TO DATE						
	RESIDENTIAL	37.52%	11.68%	5.44%	8.64%	11.76%
	COMM & IND	58.00%	7.14%	0.46%	8.93%	41.47%
	PVT ST LIGHTS	0.13%	0.02%	0.00%	0.04%	0.07%
	PUB ST LIGHTS	0.41%	0.14%	0.06%	0.07%	0.14%
	MUNI BLDGS	1.36%	0.34%	0.28%	0.24%	0.50%
	SALES/RESALE	0.49%	0.49%	0.00%	0.00%	0.00%
	SCHOOL	2.09%	0.71%	0.44%	0.33%	0.61%
	TOTAL	100.00%	20.52%	6.68%	18.25%	54.55%
LAST YEAR TO DATE						
	RESIDENTIAL	38.20%	12.12%	5.40%	8.81%	11.87%
	COMM & IND	57.53%	7.13%	0.47%	8.91%	41.02%
	PVT ST LIGHTS	0.12%	0.02%	0.00%	0.04%	0.06%
	PUB ST LIGHTS	0.40%	0.14%	0.05%	0.07%	0.14%
	MUNI BLDGS	1.33%	0.35%	0.27%	0.24%	0.47%
	SALES/RESALE	0.49%	0.49%	0.00%	0.00%	0.00%
	SCHOOL	1.93%	0.69%	0.44%	0.23%	0.57%
	TOTAL	100.00%	20.94%	6.63%	18.30%	54.13%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
FORMULA INCOME
1/31/2015

TOTAL OPERATING REVENUES	(P.3)	51,633,157.02
ADD:		
POLE RENTAL		0.00
INTEREST INCOME ON CUSTOMER DEPOSITS		2,787.32
LESS:		
OPERATING EXPENSES	(P.3)	(47,839,878.01)
CUSTOMER DEPOSIT INTEREST EXPENSE		(3,042.07)
FORMULA INCOME (LOSS)		3,793,024.26

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
GENERAL STATISTICS
1/31/2015

	MONTH OF JAN 2014	MONTH OF JAN 2015	% CHANGE 2014.	% CHANGE 2015	YEAR JAN 2014	THRU JAN 2015
SALE OF KWH (P.5)	55,270,546	57,703,493	-1.42%	-0.78%	417,824,344	414,554,245
KWH PURCHASED	61,774,795	61,776,997	-1.32%	-4.46%	437,908,739	418,371,883
AVE BASE COST PER KWH	0.038002	0.024955	3.55%	-39.66%	0.039101	0.023593
AVE BASE SALE PER KWH	0.067124	0.032397	0.88%	-52.24%	0.065353	0.031212
AVE COST PER KWH	0.089187	0.080901	-1.96%	-15.41%	0.082401	0.069701
AVE SALE PER KWH	0.112124	0.081714	-4.64%	-25.61%	0.109211	0.081238
FUEL CHARGE REVENUE (P.3)	2,487,172.37	2,845,745.09	-13.31%	13.17%	18,324,954.30	20,738,447.56
LOAD FACTOR	75.42%	77.60%				
PEAK LOAD	112,204	109,061				

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF CASH AND INVESTMENTS
1/31/2015

SCHEDULE A

	PREVIOUS YEAR	CURRENT YEAR
UNRESTRICTED CASH		
CASH - OPERATING FUND	10,938,912.04	11,519,798.06
CASH - PETTY CASH	3,000.00	3,000.00
TOTAL UNRESTRICTED CASH	10,941,912.04	11,522,798.06
RESTRICTED CASH		
CASH - DEPRECIATION FUND	4,568,442.83	5,825,309.97
CASH - TOWN PAYMENT	308,435.09	312,405.25
CASH - DEFERRED FUEL RESERVE	1,612,048.46	5,098,344.67
CASH - RATE STABILIZATION FUND	6,702,132.09	6,756,780.52
CASH - UNCOLLECTIBLE ACCTS RESERVE	200,000.00	200,000.00
CASH - SICK LEAVE BENEFITS	2,035,867.88	1,707,316.51
CASH - HAZARD WASTE RESERVE	150,000.00	150,000.00
CASH - CUSTOMER DEPOSITS	713,575.92	839,254.91
CASH - ENERGY CONSERVATION	437,487.06	523,143.95
TOTAL RESTRICTED CASH	16,727,989.33	21,412,555.78
INVESTMENTS		
SICK LEAVE BUYBACK	850,000.00	1,292,906.26
TOTAL CASH BALANCE	28,519,901.37	34,228,260.10

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF ACCOUNTS RECEIVABLE
1/31/2015

SCHEDULE B

SCHEDULE OF ACCOUNTS RECEIVABLE	PREVIOUS YEAR	CURRENT YEAR
RESIDENTIAL AND COMMERCIAL	2,390,003.10	3,182,778.67
ACCOUNTS RECEIVABLE - OTHER	81,174.01	185,999.32
ACCOUNTS RECEIVABLE - LIENS	37,169.47	37,433.70
ACCOUNTS RECEIVABLE - EMPLOYEE ADVANCES	892.14	892.14
SALES DISCOUNT LIABILITY	(224,197.44)	(233,751.34)
RESERVE FOR UNCOLLECTIBLE ACCOUNTS	(239,476.16)	(269,518.87)
TOTAL ACCOUNTS RECEIVABLE BILLED	2,045,565.12	2,903,833.62
UNBILLED ACCOUNTS RECEIVABLE	4,158,022.50	5,622,269.28
TOTAL ACCOUNTS RECEIVABLE, NET	6,203,587.62	8,526,102.90

SCHEDULE OF PREPAYMENTS		
PREPAID INSURANCE	1,376,413.77	1,388,734.37
PREPAYMENT PURCHASED POWER	(437,058.23)	556,401.78
PREPAYMENT PASNY	242,260.90	259,957.39
PREPAYMENT WATSON	236,081.83	209,726.49
PURCHASED POWER WORKING CAPITAL	14,523.70	12,700.11
TOTAL PREPAYMENT	1,432,221.97	2,427,520.14

ACCOUNTS RECEIVABLE AGING JANUARY 2015:

RESIDENTIAL AND COMMERCIAL	3,182,778.67
LESS: SALES DISCOUNT LIABILITY	(233,751.34)
GENERAL LEDGER BALANCE	2,949,027.33

CURRENT	2,523,985.62	85.59%
30 DAYS	315,200.25	10.69%
60 DAYS	61,037.37	2.07%
90 DAYS	9,215.60	0.31%
OVER 90 DAYS	39,588.49	1.34%
TOTAL	2,949,027.33	100.00%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING REVENUE
1/31/2015

SCHEDULE D

SALES OF ELECTRICITY:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
RESIDENTIAL SALES	2,890,566.06	2,224,111.00	19,487,125.62	14,826,171.91	-23.92%
COMM AND INDUSTRIAL SALES	3,027,825.03	2,257,329.78	24,222,617.63	17,294,119.99	-28.60%
PRIVATE STREET LIGHTING	5,768.87	9,549.01	38,765.85	66,126.49	70.58%
TOTAL PRIVATE CONSUMERS	5,924,159.96	4,490,989.79	43,748,509.10	32,186,418.39	-26.43%
MUNICIPAL SALES:					
STREET LIGHTING	27,103.76	29,865.45	187,220.01	209,030.65	11.65%
MUNICIPAL BUILDINGS	91,793.96	67,624.07	614,291.81	445,635.00	-27.46%
TOTAL MUNICIPAL CONSUMERS	118,897.72	97,489.52	801,511.82	654,665.65	-18.32%
SALES FOR RESALE	28,240.80	21,078.97	229,803.05	172,862.46	-24.78%
SCHOOL	125,874.62	105,610.86	851,267.00	663,712.77	-22.03%
SUB-TOTAL	6,197,173.10	4,715,169.14	45,631,090.97	33,677,659.27	-26.20%
FORFEITED DISCOUNTS	91,316.20	76,469.60	552,684.56	467,992.73	-15.32%
PURCHASED POWER CAPACITY	70,193.46	2,526,828.66	234,927.19	17,564,396.05	7376.53%
ENERGY CONSERVATION - RESIDENTIAL	23,554.34	23,532.17	159,705.06	155,586.76	-2.58%
ENERGY CONSERVATION - COMMERCIAL	30,855.81	33,003.15	251,559.92	249,975.63	-0.63%
GAW REVENUE	55,283.59	0.00	417,615.74	0.00	-100.00%
NYPA CREDIT	(88,308.33)	(100,190.60)	(360,980.63)	(482,453.42)	33.65%
TOTAL REVENUE	6,380,068.17	7,274,812.12	46,886,602.81	51,633,157.02	10.12%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING REVENUE BY TOWN
1/31/2015

MONTH	TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
RESIDENTIAL	2,224,111.00	730,057.37	312,435.31	529,406.71	652,211.61
INDUS/MUNI BLDG	2,324,953.85	337,657.22	34,687.75	371,058.95	1,581,549.93
PUB.ST.LIGHTS	29,865.45	10,014.23	4,024.08	5,272.05	10,555.09
PRV.ST.LIGHTS	9,549.01	1,571.38	185.16	3,080.19	4,712.28
CO-OP RESALE	21,078.97	21,078.97	0.00	0.00	0.00
SCHOOL	105,610.86	33,223.67	20,239.28	20,097.28	32,050.63
TOTAL	4,715,169.14	1,133,602.84	371,571.58	928,915.18	2,281,079.54
THIS YEAR TO DATE					
RESIDENTIAL	14,826,171.91	4,637,538.10	2,135,880.29	3,405,283.77	4,647,469.75
INDUS/MUNI BLDG	17,739,754.99	2,480,723.03	250,885.12	2,873,065.99	12,135,080.85
PUB.ST.LIGHTS	209,030.65	70,099.61	28,168.56	36,876.85	73,885.63
PRV.ST.LIGHTS	66,126.49	10,985.44	1,296.12	21,505.70	32,339.23
CO-OP RESALE	172,862.46	172,862.46	0.00	0.00	0.00
SCHOOL	663,712.77	227,966.60	137,732.49	108,174.40	189,839.28
TOTAL	33,677,659.27	7,600,175.24	2,553,962.56	6,444,906.72	17,078,614.75
LAST YEAR TO DATE					
RESIDENTIAL	19,487,125.62	6,209,263.78	2,742,397.42	4,494,522.29	6,040,942.13
INDUS/MUNI BLDG	24,836,909.44	3,383,964.02	338,426.72	3,984,142.57	17,130,376.13
PUB.ST.LIGHTS	187,220.01	60,853.47	24,024.38	33,256.28	69,085.88
PRV.ST.LIGHTS	38,765.85	6,743.84	707.32	12,057.48	19,257.21
CO-OP RESALE	229,803.05	229,803.05	0.00	0.00	0.00
SCHOOL	851,267.00	306,691.52	190,629.70	106,567.18	247,378.60
TOTAL	45,631,090.97	10,197,319.68	3,296,185.54	8,630,545.80	23,507,039.95

PERCENTAGE OF OPERATING INCOME TO TOTAL

MONTH	TOTAL	READING	LYNNFIELD	NO.READING	WILMINGTON
RESIDENTIAL	47.17%	15.48%	6.63%	11.23%	13.83%
INDUS/MUNI BLDG	49.31%	7.16%	0.74%	7.87%	33.54%
PUB.ST.LIGHTS	0.63%	0.21%	0.09%	0.11%	0.22%
PRV.ST.LIGHTS	0.20%	0.03%	0.00%	0.07%	0.10%
CO-OP RESALE	0.45%	0.45%	0.00%	0.00%	0.00%
SCHOOL	2.24%	0.70%	0.43%	0.43%	0.68%
TOTAL	100.00%	24.04%	7.88%	19.70%	48.38%
THIS YEAR TO DATE					
RESIDENTIAL	44.02%	13.77%	6.34%	10.11%	13.80%
INDUS/MUNI BLDG	52.68%	7.37%	0.74%	8.53%	36.03%
PUB.ST.LIGHTS	0.62%	0.21%	0.08%	0.11%	0.22%
PRV.ST.LIGHTS	0.20%	0.03%	0.00%	0.06%	0.10%
CO-OP RESALE	0.51%	0.51%	0.00%	0.00%	0.00%
SCHOOL	1.97%	0.68%	0.41%	0.32%	0.56%
TOTAL	100.00%	22.57%	7.58%	19.14%	50.71%
LAST YEAR TO DATE					
RESIDENTIAL	42.73%	13.61%	6.01%	9.85%	13.26%
INDUS/MUNI BLDG	54.43%	7.42%	0.74%	8.73%	37.54%
PUB.ST.LIGHTS	0.40%	0.13%	0.05%	0.07%	0.15%
PRV.ST.LIGHTS	0.08%	0.01%	0.00%	0.03%	0.04%
CO-OP RESALE	0.50%	0.50%	0.00%	0.00%	0.00%
SCHOOL	1.86%	0.67%	0.42%	0.23%	0.54%
TOTAL	100.00%	22.34%	7.22%	18.91%	51.53%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED REVENUE VARIANCE REPORT
1/31/2015

SCHEDULE F

	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
SALES OF ELECTRICITY:				
RESIDENTIAL	6,969,343.57	6,890,231.00	79,112.57	1.15%
COMM AND INDUSTRIAL SALES PRIVATE STREET LIGHTING MUNICIPAL BUILDINGS	5,530,064.16	5,767,892.00	(237,827.84)	-4.12%
PUBLIC STREET LIGHTING	136,228.95	205,530.00	(69,301.05)	-33.72%
SALES FOR RESALE	70,362.64	80,762.00	(10,399.36)	-12.88%
SCHOOL	233,212.39	226,188.00	7,024.39	3.11%
TOTAL BASE SALES	12,939,211.71	13,170,603.00	(231,391.29)	-1.76%
TOTAL FUEL SALES	20,738,447.56	22,268,444.00	(1,529,996.44)	-6.87%
TOTAL OPERATING REVENUE	33,677,659.27	35,439,047.00	(1,761,387.73)	-4.97%
FORFEITED DISCOUNTS	467,992.73	671,510.00	(203,517.27)	-30.31%
PURCHASED POWER CAPACITY	17,564,396.05	17,548,623.00	15,773.05	100.00%
ENERGY CONSERVATION - RESIDENTIAL	155,586.76	159,622.00	(4,035.24)	-2.53%
ENERGY CONSERVATION - COMMERCIAL	249,975.63	258,203.00	(8,227.37)	-3.19%
NYPA CREDIT	(482,453.42)	(408,331.00)	(74,122.42)	18.15%
TOTAL OPERATING REVENUES	51,633,157.02	53,668,674.00	(2,035,516.98)	-3.79%

* ( ) = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
SCHEDULE OF OPERATING EXPENSES
1/31/2015

SCHEDULE E

OPERATION EXPENSES:	MONTH LAST YEAR	MONTH CURRENT YEAR	LAST YEAR TO DATE	CURRENT YEAR TO DATE	YTD % CHANGE
PURCHASED POWER CAPACITY	1,365,299.61	1,541,650.35	10,253,099.08	9,870,582.68	-3.73%
PURCHASED POWER TRANSMISSION	982,261.69	805,943.23	6,869,568.82	7,265,172.90	5.76%
TOTAL PURCHASED POWER	2,347,561.30	2,347,593.58	17,122,667.90	17,135,755.58	0.08%
OPERATION SUP AND ENGINEERING EXP	40,891.03	43,671.73	298,055.94	309,364.06	3.79%
STATION SUP LABOR AND MISC	10,239.83	16,426.47	64,538.00	93,661.10	45.13%
LINE MISC LABOR AND EXPENSE	104,572.60	122,812.61	485,784.93	492,564.08	1.40%
STATION LABOR AND EXPENSE	39,766.62	46,128.61	289,483.75	300,699.20	3.87%
STREET LIGHTING EXPENSE	6,906.53	7,347.04	43,509.39	54,610.66	25.51%
METER EXPENSE	20,293.55	19,992.92	124,167.60	110,806.86	-10.76%
MISC DISTRIBUTION EXPENSE	32,036.79	41,345.86	206,788.42	259,715.59	25.59%
METER READING LABOR & EXPENSE	1,505.38	1,857.25	16,742.36	10,574.12	-36.84%
ACCT & COLL LABOR & EXPENSE	114,625.47	160,739.32	874,747.30	1,051,962.91	20.26%
UNCOLLECTIBLE ACCOUNTS	10,500.00	10,000.00	73,500.00	70,000.00	-4.76%
ENERGY AUDIT EXPENSE	25,837.91	35,221.03	212,529.80	237,222.29	11.62%
ADMIN & GEN SALARIES	64,648.11	68,901.79	495,013.22	487,363.14	-1.55%
OFFICE SUPPLIES & EXPENSE	24,663.81	27,558.30	161,890.92	174,445.83	7.76%
OUTSIDE SERVICES	51,730.30	28,395.44	260,247.00	239,243.82	-8.07%
PROPERTY INSURANCE	21,558.27	31,070.39	201,114.26	210,252.92	4.54%
INJURIES AND DAMAGES	2,838.89	3,070.27	22,642.04	26,070.72	15.14%
EMPLOYEES PENSIONS & BENEFITS	236,738.23	247,934.19	1,295,814.23	1,757,985.52	35.67%
MISC GENERAL EXPENSE	10,747.29	17,569.24	109,003.58	99,315.42	-8.89%
RENT EXPENSE	14,434.09	14,514.48	110,269.77	98,117.43	-11.02%
ENERGY CONSERVATION	28,471.96	58,469.35	292,799.58	339,679.44	16.01%
TOTAL OPERATION EXPENSES	863,006.66	1,003,026.29	5,638,642.09	6,423,655.11	13.92%
MAINTENANCE EXPENSES:					
MAINT OF TRANSMISSION PLANT	227.08	227.08	1,589.58	1,589.58	0.00%
MAINT OF STRUCT AND EQUIPMT	13,441.16	29,640.30	105,294.10	332,251.43	215.55%
MAINT OF LINES - OH	142,129.76	127,359.96	941,448.98	1,039,748.23	10.44%
MAINT OF LINES - UG	29,761.23	311.96	120,434.50	77,479.82	-35.67%
MAINT OF LINE TRANSFORMERS	1,420.78	0.00	87,218.31	60,065.12	0.00%
MAINT OF ST LT & SIG SYSTEM	46.14	(8.06)	(358.27)	(92.54)	-74.17%
MAINT OF GARAGE AND STOCKROOM	77,194.56	43,995.58	319,811.02	271,799.85	-15.01%
MAINT OF METERS	867.67	0.00	11,288.34	0.00	-100.00%
MAINT OF GEN PLANT	11,814.43	7,286.83	82,612.04	138,005.87	67.05%
TOTAL MAINTENANCE EXPENSES	276,902.81	208,813.65	1,669,338.60	1,920,847.36	15.07%
DEPRECIATION EXPENSE	314,969.55	321,788.79	2,204,786.85	2,252,521.53	2.17%
PURCHASED POWER FUEL EXPENSE	3,161,945.22	3,456,178.99	18,961,412.59	19,290,344.43	1.73%
VOLUNTARY PAYMENTS TO TOWNS	116,666.67	118,000.00	815,183.67	816,754.00	0.19%
TOTAL OPERATING EXPENSES	7,081,052.21	7,455,401.30	46,412,031.70	47,839,878.01	3.08%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED OPERATING EXPENSE VARIANCE REPORT
1/31/2015

SCHEDULE G

OPERATION EXPENSES:	ACTUAL YEAR TO DATE	BUDGET YEAR TO DATE	VARIANCE *	% CHANGE
PURCHASED POWER CAPACITY	9,870,582.68	9,577,035.00	293,547.68	3.07%
PURCHASED POWER TRANSMISSION	7,265,172.90	7,312,577.00	(47,404.10)	-0.65%
TOTAL PURCHASED POWER	17,135,755.58	16,889,612.00	246,143.58	1.46%
OPERATION SUP AND ENGINEERING EXP	309,364.06	340,379.00	(31,014.94)	-9.11%
STATION SUP LABOR AND MISC	93,661.10	62,083.00	31,578.10	50.86%
LINE MISC LABOR AND EXPENSE	492,564.08	391,744.00	100,820.08	25.74%
STATION LABOR AND EXPENSE	300,699.20	232,832.00	67,867.20	29.15%
STREET LIGHTING EXPENSE	54,610.66	48,499.00	6,111.66	12.60%
METER EXPENSE	110,806.86	137,030.00	(26,223.14)	-19.14%
MISC DISTRIBUTION EXPENSE	259,715.59	228,941.00	30,774.59	13.44%
METER READING LABOR & EXPENSE	10,574.12	18,019.00	(7,444.88)	-41.32%
ACCT & COLL LABOR & EXPENSE	1,051,962.91	999,160.00	52,802.91	5.28%
UNCOLLECTIBLE ACCOUNTS	70,000.00	70,000.00	0.00	0.00%
ENERGY AUDIT EXPENSE	237,222.29	284,688.00	(47,465.71)	-16.67%
ADMIN & GEN SALARIES	487,363.14	485,591.00	1,772.14	0.36%
OFFICE SUPPLIES & EXPENSE	174,445.83	175,700.00	(1,254.17)	-0.71%
OUTSIDE SERVICES	239,243.82	219,695.00	19,548.82	8.90%
PROPERTY INSURANCE	210,252.92	264,488.00	(54,235.08)	-20.51%
INJURIES AND DAMAGES	26,070.72	28,866.00	(2,795.28)	-9.68%
EMPLOYEES PENSIONS & BENEFITS	1,757,985.52	1,667,606.00	90,379.52	5.42%
MISC GENERAL EXPENSE	99,315.42	179,631.00	(80,315.58)	-44.71%
RENT EXPENSE	98,117.43	123,669.00	(25,551.57)	-20.66%
ENERGY CONSERVATION	339,679.44	452,635.00	(112,955.56)	-24.96%
TOTAL OPERATION EXPENSES	6,423,655.11	6,411,256.00	12,399.11	0.19%
MAINTENANCE EXPENSES:				
MAINT OF TRANSMISSION PLANT	1,589.58	1,750.00	(160.42)	-9.17%
MAINT OF STRUCT AND EQUIPMENT	332,251.43	281,352.00	50,899.43	18.09%
MAINT OF LINES - OH	1,039,748.23	975,373.00	64,375.23	6.60%
MAINT OF LINES - UG	77,479.82	76,259.00	1,220.82	1.60%
MAINT OF LINE TRANSFORMERS	60,065.12	117,000.00	(56,934.88)	-48.66%
MAINT OF ST LT & SIG SYSTEM	(92.54)	5,695.00	(5,787.54)	-101.62%
MAINT OF GARAGE AND STOCKROOM	271,799.85	338,275.00	(66,475.15)	-19.65%
MAINT OF METERS	0.00	33,132.00	(33,132.00)	-100.00%
MAINT OF GEN PLANT	138,005.87	99,083.00	38,922.87	39.28%
TOTAL MAINTENANCE EXPENSES	1,920,847.36	1,927,919.00	(7,071.64)	-0.37%
DEPRECIATION EXPENSE	2,252,521.53	2,270,331.00	(17,809.47)	-0.78%
PURCHASED POWER FUEL EXPENSE	19,290,344.43	22,253,071.00	(2,962,726.57)	-13.31%
VOLUNTARY PAYMENTS TO TOWNS	816,754.00	826,000.00	(9,246.00)	-1.12%
TOTAL OPERATING EXPENSES	47,839,878.01	50,578,189.00	(2,738,310.99)	-5.41%

* ( ) = ACTUAL UNDER BUDGET

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
BUDGETED OPERATING EXPENSE VARIANCE REPORT
1/31/2015

OPERATION EXPENSES:	RESPONSIBLE SENIOR MANAGER	2015 ANNUAL BUDGET	ACTUAL YEAR TO DATE	REMAINING BUDGET BALANCE	REMAINING BUDGET %
PURCHASED POWER CAPACITY	JP	16,332,282.00	9,870,582.68	6,461,699.32	39.56%
PURCHASED POWER TRANSMISSION	JP	12,556,732.00	7,265,172.90	5,291,559.10	42.14%
TOTAL PURCHASED POWER		28,889,014.00	17,135,755.58	11,753,258.42	40.68%
OPERATION SUP AND ENGINEERING EXP	HJ	583,668.00	309,364.06	274,303.94	47.00%
STATION SUP LABOR AND MISC	HJ	108,848.00	93,661.10	15,186.90	13.95%
LINE MISC LABOR AND EXPENSE	HJ	657,259.00	492,564.08	164,694.92	25.06%
STATION LABOR AND EXPENSE	HJ	398,849.00	300,699.20	98,149.80	24.61%
STREET LIGHTING EXPENSE	HJ	82,907.00	54,610.66	28,296.34	34.13%
METER EXPENSE	HJ	247,938.00	110,806.86	137,131.14	55.31%
MISC DISTRIBUTION EXPENSE	HJ	402,885.00	259,715.59	143,169.41	35.54%
METER READING LABOR & EXPENSE	HJ	30,922.00	10,574.12	20,347.88	65.80%
ACCT & COLL LABOR & EXPENSE	RF	1,705,333.00	1,051,962.91	653,370.09	38.31%
UNCOLLECTIBLE ACCOUNTS	RF	120,000.00	70,000.00	50,000.00	41.67%
ENERGY AUDIT EXPENSE	JP	488,284.00	237,222.29	251,061.71	51.42%
ADMIN & GEN SALARIES	CO	842,170.00	487,363.14	354,806.86	42.13%
OFFICE SUPPLIES & EXPENSE	CO	301,000.00	174,445.83	126,554.17	42.04%
OUTSIDE SERVICES	CO	351,650.00	239,243.82	112,406.18	31.97%
PROPERTY INSURANCE	HJ	453,200.00	210,252.92	242,947.08	53.61%
INJURIES AND DAMAGES	HJ	49,059.00	26,070.72	22,988.28	46.86%
EMPLOYEES PENSIONS & BENEFITS	HJ	2,746,619.00	1,757,985.52	988,633.48	35.99%
MISC GENERAL EXPENSE	CO	240,727.00	99,315.42	141,411.58	58.74%
RENT EXPENSE	HJ	212,000.00	98,117.43	113,882.57	53.72%
ENERGY CONSERVATION	JP	778,812.00	339,679.44	439,132.56	56.38%
TOTAL OPERATION EXPENSES		10,802,130.00	6,423,655.11	4,378,474.89	40.53%
MAINTENANCE EXPENSES:					
MAINT OF TRANSMISSION PLANT	HJ	3,000.00	1,589.58	1,410.42	47.01%
MAINT OF STRUCT AND EQUIPMT	HJ	484,026.00	332,251.43	151,774.57	31.36%
MAINT OF LINES - OH	HJ	1,675,794.00	1,039,748.23	636,045.77	37.95%
MAINT OF LINES - UG	HJ	130,694.00	77,479.82	53,214.18	40.72%
MAINT OF LINE TRANSFORMERS	HJ	156,000.00	60,065.12	95,934.88	61.50%
MAINT OF ST LT & SIG SYSTEM	HJ	9,745.00	(92.54)	9,837.54	100.95%
MAINT OF GARAGE AND STOCKROOM	HJ	567,531.00	271,799.85	295,731.15	52.11%
MAINT OF METERS	HJ	43,290.00	0.00	43,290.00	100.00%
MAINT OF GEN PLANT	RF	170,180.00	138,005.87	32,174.13	18.91%
TOTAL MAINTENANCE EXPENSES		3,240,260.00	1,920,847.36	1,319,412.64	40.72%
DEPRECIATION EXPENSE	RF	3,892,000.00	2,252,521.53	1,639,478.47	42.12%
PURCHASED POWER FUEL EXPENSE	JP	36,249,653.00	19,290,344.43	16,959,308.57	46.78%
VOLUNTARY PAYMENTS TO TOWNS	RF	1,416,000.00	816,754.00	599,246.00	42.32%
TOTAL OPERATING EXPENSES		84,489,057.00	47,839,878.01	36,649,178.99	43.38%

TOWN OF READING, MASSACHUSETTS
MUNICIPAL LIGHT DEPARTMENT
PROFESSIONAL SERVICES
01/31/2015

PROFESSIONAL SERVICES BY PROJECT

ITEM	DEPARTMENT	ACTUAL	BUDGET	VARIANCE
1 RMLD AND PENSION TRUST AUDIT FEES	ACCOUNTING	33,582.24	35,000.00	(1,417.76)
2 LEGAL-FERC/ISO/POWER/OTHER	INTEGRATED RESOURCES	82,303.00	80,675.00	1,628.00
3 NERC COMPLIANCE AND AUDIT	E & O	9,340.00	6,125.00	3,215.00
4 LEGAL	ENGINEERING	6,844.50	7,875.00	(1,030.50)
5 LEGAL-GENERAL	GM	89,979.25	30,919.00	59,060.25
6 LEGAL SERVICES	HR	17,194.83	37,331.00	(20,136.17)
7 SURVEY RIGHT OF WAY/ ENVIRONMENTAL	BLDG. MAINT.	0.00	6,020.00	(6,020.00)
8 INSURANCE CONSULTANT/OTHER	GEN. BENEFIT	0.00	15,750.00	(15,750.00)
TOTAL		239,243.82	219,695.00	19,548.82

PROFESSIONAL SERVICES BY VENDOR

	ACTUAL
MELANSON HEATH & COMPANY	29,920.00
PLM ELECTRIC POWER COMPANY	9,969.50
RUBIN AND RUDMAN	155,030.44
UTILTIY SERVICES INC.	9,340.00
CHOATE HALL & STEWART	9,184.08
WILLIAM F. CROWLEY- ATTORNEY	2,477.24
HUDSON RIVER ENERGY GROUP	2,925.62
STONE CONSULTING	1,000.00
TRI COUNTY APPRAISAL OF SOUTH FLORIDA	525.00
DUNCAN & ALLEN	18,871.94
TOTAL	239,243.82

RMLD
DEFERRED FUEL CASH RESERVE ANALYSIS
01/31/15

DATE	GROSS CHARGES	REVENUES	NYPA CREDIT	MONTHLY DEFERRED	TOTAL DEFERRED
Jun-14					4,132,694.96
Jul-14	3,287,589.94	3,782,699.41	(35,898.34)	459,211.13	4,591,906.09
Aug-14	2,768,364.01	3,844,854.74	(47,884.92)	1,028,605.81	5,620,511.90
Sep-14	2,358,565.60	2,758,999.30	(73,836.15)	326,597.55	5,947,109.45
Oct-14	2,290,434.18	2,425,374.16	(74,545.03)	60,394.95	6,007,504.40
Nov-14	2,374,999.11	2,418,013.33	(68,098.89)	(25,084.67)	5,982,419.73
Dec-14	2,754,212.60	2,662,761.53	(81,999.49)	(173,450.56)	5,808,969.17
Jan-15	3,456,178.99	2,845,745.09	(100,190.60)	(710,624.50)	5,098,344.67

RMLD
BUDGET VARIANCE REPORT
FOR PERIOD ENDING JANUARY 31, 2015

DIVISION	ACTUAL	BUDGET	VARIANCE	% CHANGE
BUSINESS DIVISION	5,917,125	5,848,385	68,740	1.18%
INTEGRATED RESOURCES AND PLANNING	659,205	817,999	(158,794)	-19.41%
ENGINEERING AND OPERATIONS	3,029,823	2,868,556	161,267	5.62%
FACILITY	2,688,576	2,772,043	(83,467)	-3.01%
GENERAL MANAGER	482,926	491,070	(8,144)	-1.66%
SUB-TOTAL	12,777,655	12,798,053	(20,398)	-0.16%
PURCHASED POWER CAPACITY	9,870,583	9,577,035	293,548	3.07%
PURCHASED POWER TRANSMISSION	7,265,173	7,312,577	(47,404)	-0.65%
PURCHASED POWER FUEL	19,290,344	22,253,071	(2,962,727)	-13.31%
TOTAL	49,203,755	51,940,736	(2,736,981)	-5.27%

READING MUNICIPAL LIGHT DEPARTMENT
FY 15 CAPITAL BUDGET VARIANCE REPORT
FOR PERIOD ENDING JANUARY 31, 2015

	PROJ	DESCRIPTION	TOWN	ACTUAL COST JAN	YTD ADDITIONS	ANNUAL BUDGET	REMAINING BALANCE
		CONSTRUCTION:					
	101	5W9 Reconductoring - Ballardvale Area	W		9,862	253,000	243,138
	102	Pole Line Upgrade Lowell Street	W	17,069	60,697	173,000	112,304
	104	Upgrade Old Lynnfield Center URDs (Cook's Farm)	LC		26,847	217,000	190,153
	105	4W5 - 4W6 Tie	R			70,000	70,000
	106	URD Upgrades	ALL		48,109	319,000	270,891
	107	Step-down Area Upgrades	ALL	2,803	30,150	203,000	172,850
	212	Force Account West Street	R			224,000	224,000
		SUB-TOTAL		**19,871**	**175,665**	**1,459,000**	**1,283,335**
		STATION UPGRADES:					
	108	Relay Replacement Project - Gaw Station #4	R			50,000	50,000
*	110	Station 3 - Replacement of Service Cutouts	NR		2,192		
	130	Remote Terminal Unit (RTU) Replacement - Station 3	NR			85,000	85,000
		SUB-TOTAL		**-**	**2,192**	**135,000**	**135,000**
		NEW CUSTOMER SERVICES:					
	112	New Service Installations (Commercial / Industrial)	ALL		12,465	57,000	44,535
	113	New Service Installations (Residential)	ALL	10,208	87,874	260,000	172,126
		SUB-TOTAL		**10,208**	**100,339**	**317,000**	**216,661**
		ROUTINE CONSTRUCTION:					
	114	Routine Construction	ALL	**101,357**	**1,081,740**	**947,000**	**(134,740)**
		SPECIAL PROJECTS / CAPITAL PURCHASES:					
	103	Distribution Protection and Automation	ALL			69,000	69,000
	116	Transformers and Capacitors	ALL			444,000	444,000
	117	Meter Purchases (Including "500 Club")	ALL		55,171	127,000	71,829
	122	Engineering Analysis Software and Data Conversion	ALL			55,000	55,000
	125	GIS	ALL			150,000	150,000
	126	Communication Equipment (Fiber Optic)	ALL			30,000	30,000
*	131	LED Street Light Pilot Program	ALL		26,250	37,000	10,751
	132	Outage Management Software and Integration	ALL			85,000	85,000
	133	Predictive Asset Management Program	ALL			80,000	80,000
	134	Substation Test Equipment	ALL			121,000	121,000
	135	Arc Flash Study	ALL			35,000	35,000
	137	SCADA System Upgrade - Hardware	ALL		20,332	63,000	42,668
		SUB-TOTAL		**-**	**101,753**	**1,296,000**	**1,194,248**
		OTHER CAPITAL PROJECTS:					
	118	Rolling Stock Replacement	ALL			434,000	434,000
	119	Security Upgrades All Sites	ALL	5,012	6,470	61,000	54,530
	120	Great Plains / Cogsdale Upgrade	ALL		32,500	350,000	317,500
	121	HVAC System Upgrade - 230 Ash Street	R		10,900	399,000	388,100
	123	Oil Containment Facility Construction	LC		11,168	80,000	68,832
	127	Hardware Upgrades	ALL		19,387	102,000	82,613
	128	Software and Licensing	ALL		28,316	122,000	93,684
	129	Master Facilities Site Plan	R			50,000	50,000
	136	Organizational / Reliability Studies	ALL			100,000	100,000
		SUB-TOTAL		5,012	108,741	1,698,000	1,589,259
		TOTAL CAPITAL BUDGET		$ 136,449	$ 1,570,429	$ 5,852,000	$ 4,283,763

Attachment 4

* completed project

READING MUNICIPAL LIGHT DEPARTMENT

Engineering and Operations
Monthly Report

January 2015

CAPITAL IMPROVEMENTS

	Construction Projects:	% Complete FY14-15 Status	Month	YTD
102	Pole Line Upgrade- Lowell Street, Wilmington Engineering plans completed. Construction has begun (as of 1/14/15).	15%	$17,069	$60,696
107	Step-down Area Upgrades – All Towns: • Vine Street Area, Reading	On-going	$2,803	$30,149
	New Customer Service Connections:			
112	Service Installations – Commercial/Industrial:	On-going	n/a	$12,465
113	Service Installations – Residential: This item includes new or upgraded overhead and underground services.	On-going	$10,208	$87,874
	Special Projects/Capital Purchases:			

Routine Construction:	Jan	YTD
Pole Setting/Transfers	45,929	252,765
Overhead/Underground	34,196	317,667
Projects Assigned as Required • Analog Devices, Wilmington (charging station)	480	218,813
Pole Damage/Knockdowns • Work was done to repair or replace three (3) damaged poles.	1,526	28,849
Station Group		24,165
Hazmat/Oil Spills		3,831
Porcelain Cutout Replacement Program	278	5,068
Lighting (Street Light Connections)	1,631	12,681
Storm Trouble	1,071	33,597
Underground Subdivisions (new construction)		44,055
Animal Guard Installation	423	5,812
Miscellaneous Capital Costs	15,823	134,437
TOTAL:	$ 101,357	$ 1,081,740

MAINTENANCE PROGRAMS

Aged/Overloaded Transformer Replacement through 12/31/14

Padmount:

Single-Phase: 11.36% replaced (of those over 20 years old)
Three-Phase: 6.41% replaced (of those over 20 years old)

Overhead:

Single-Phase: 8.62% replaced (of those over 20 years old)
Three-Phase: 3.33% replaced (of those over 20 years old)

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

Year-one inspection complete: 645 poles tested (~10%)

- 390 silver tag (PASSED)
- 233 red tag (FAILED): *21 have been replaced (as of 2/20/15)*
- 22 double red tag (CONDEMNED): *22 have been replaced*

17 of 43 transfers have been completed (as of 2/20/15)

13.8kV/35kV Feeders – Quarterly Inspections

5W8, 5W9, 5W4, 5W5, 4W7, 4W23, 3W8, 3W18, 3W6, 3W13, 3W5, 3W15, 4W5, 4W6, 4W13, 4W10, 4W12, 4W16

Miscellaneous branches and vines were found and removed.

Manhole Inspections

Pending.

Porcelain Cutout Replacements (with Polymer)

As of January 2015, there are 314 remaining porcelain cutouts to be replaced. 88% complete.

Substations:

Infared Scanning (Monthly)

Station 3	Scanning complete through January – no hot spots found
Station 4	Scanning complete through January – no hot spots found
Station 5	Scanning complete through January – no hot spots found

Substation Maintenance Program

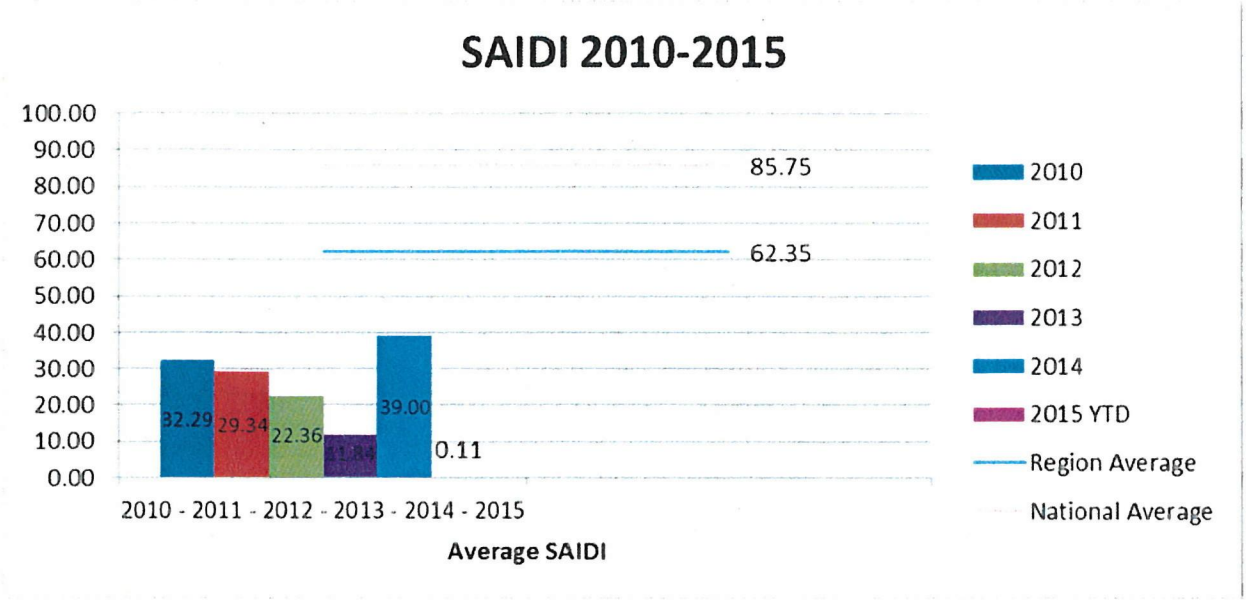
- *Inspection of all three stations by UPG in progress. 95% complete*

SYSTEM RELIABILITY

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

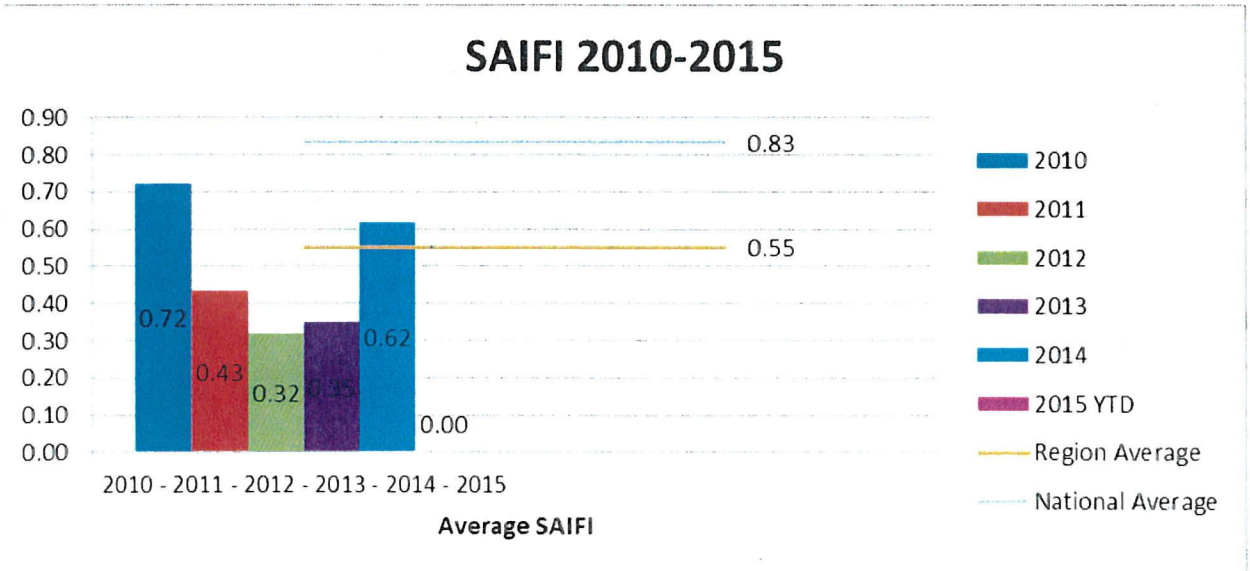
SAIDI (System Average Interruption Duration Index) is defined as the average interruption duration (in minutes) for customers served by the utility system during a specific time period.

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



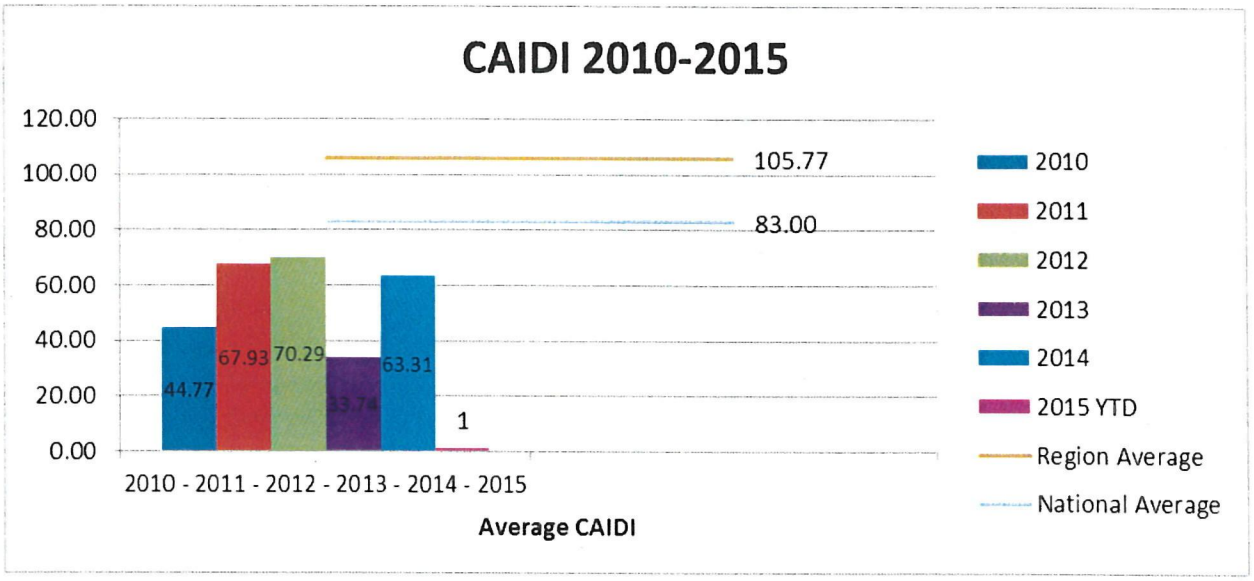
SAIFI (System Average Interruption Frequency) is defined as the average number of instances a customer on the utility system will experience an interruption during a specific time period.

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



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

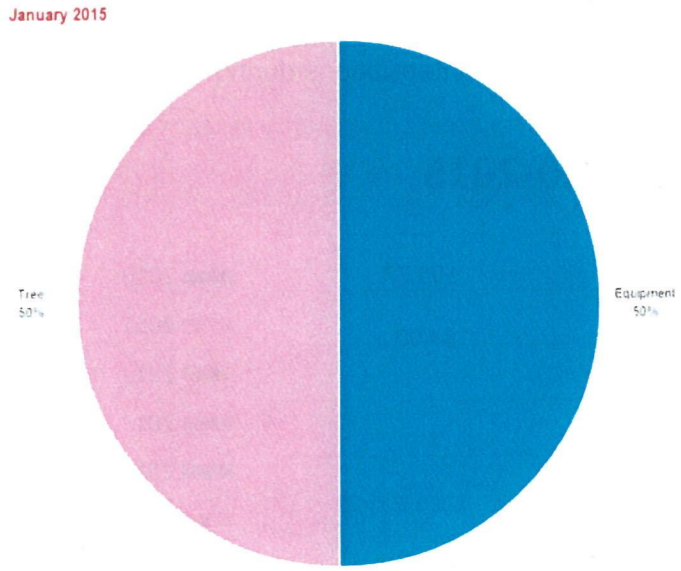
CAIDI = the sum of all customer interruption durations during that time period ÷ the number of customers that experienced one or more interruptions during that time period.



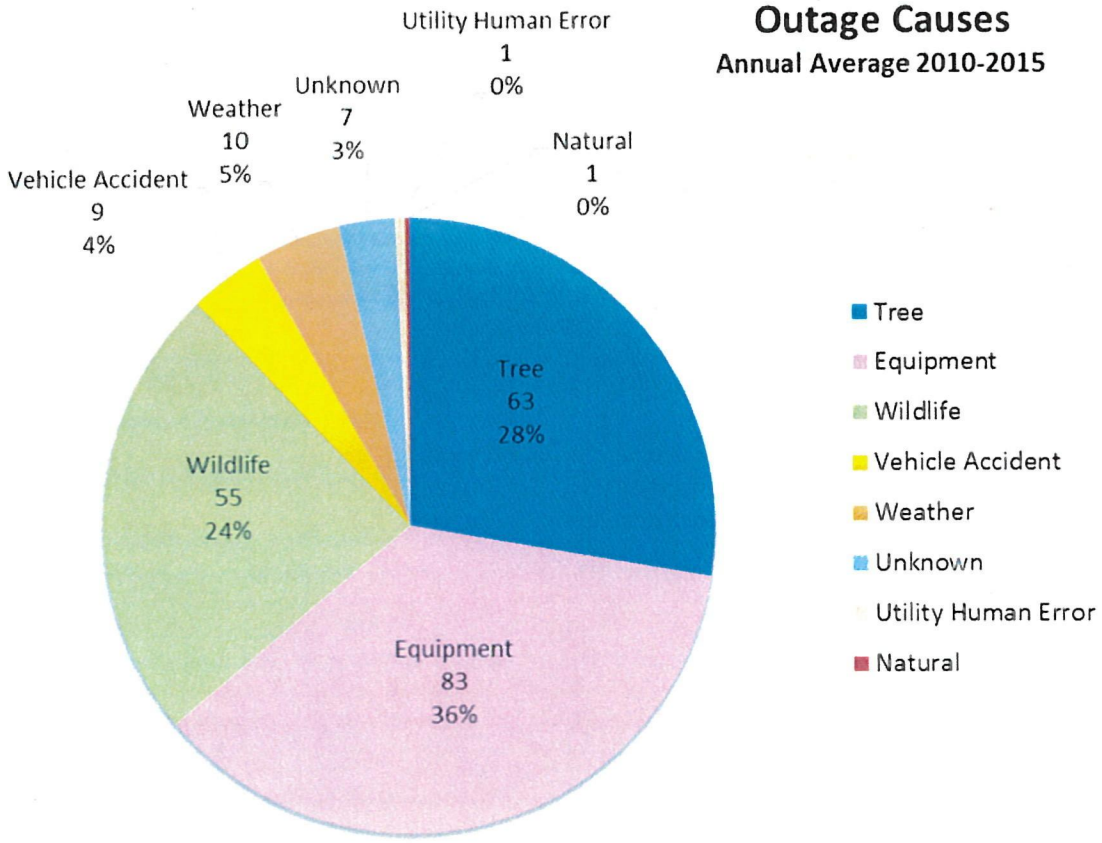
This matric reflects the average customer experience (minutes of duration) during an outage.

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

Outages Causes Calendar YTD (from eReliability website)



Outage Cause	Count
Equipment	2
Tree	2
Total	4



Jeanne Foti

m: Jeanne Foti
Sent: Thursday, February 19, 2015 9:27 AM
To: RMLD Board Members Group
Subject: Account Payable Warrant and Payroll

Good morning.

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

Account Payable Warrant – No Questions

January 23, January 30, February 6 and February 13.

Payroll – No Questions

January 26 and February 9.

This e-mail will be printed for the Board Book for the RMLD Board meeting on February 26, 2015.

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

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

Jeanne Foti

From: Coleen O'Brien
Sent: Thursday, February 26, 2015 9:39 AM
To: RMLD Board Members Group
Cc: Jeanne Foti
Subject: ACCOUNTS PAYABLE QUESTIONS

Categories: Blue Category

Good morning: Chairman Talbot had provided me these questions based on reviewing the AP Warrant.

1. **Can the RMLD check to see if they can garner a better pricing for long distance landline telephone service.**

   It is my understanding that the town and the RMLD share a Federal ID number and therefore there may be certain limitations to RMLD having its own separate long distance plan. We will be discussing how the RMLD can reduce its long distance calling costs with both Verizon as well as the town. I can keep the Board apprised of the progress on this analysis.

2. **The RMLD has three year contracts for the single-purpose dispatch radios and mobile phones that have push-to-talk, can these be combined.**

   The three radio contracts cover the entire radio system, repeaters, dispatch radios, and maintenance. The primary function of the radio system is to provide a required reliable and dedicated frequency communication for electric circuit and substation switching. Radio coverage, unlike cell phone coverage, is critical when vendors submit bids for the system; with demonstrated capability for 100% coverage through adequate repeaters within the entire service territory. A cell phone system can be utilized as the back-up to a radio system for limited switching, only if a push to talk group feature can be enabled without delay in transmitting the command, without dead zones, and have sufficient group capacity for the number of employees/trucks who may be assigned to the switching order. The plan was to eliminate the older flip phones with push to talk smart phones to combine a number of other smart features; however the smart phones still have problems with the push to talk application including delay and battery drain. The RMLD continues to evaluate efficiencies in communication systems to ensure proper electric system operations for the safety of the employees and the system.

3. **RMLD pays for Internet service, however, owns its own Internet-connected fiber infrastructure. Can the RMLD bring Internet service in-house and provide this to other Town departments in order for both entities to save money.**

   As part of the Organizational and Reliability Studies, maximizing the use of RMLD's fiber internally to enhance operation and reliability of its electric system and communication with its electric customers is being evaluated (Demand Response, Outage Management System, etc.). The studies will also address whether utilizing strands of the RMLD dark fiber loop for other core businesses could have a benefit. Recommendations on this topic would be at higher elevations and a dedicated study would be required to address your question specifically.

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

February-15

	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	**$102.72**	**$179.42**	**$126.24**	**$931.14**	**$179.42**	**$4,346.55**	**$710,967.52**
PER KWH CHARGE	$0.13696	$0.11961	$0.12624	$0.12755	$0.16613	$0.12419	$0.10334
NATIONAL GRID							
TOTAL BILL	**$180.78**	**$360.39**	**$241.03**	**$1,742.04**	**$252.35**	**$6,955.02**	**$1,218,770.78**
PER KWH CHARGE	$0.24104	$0.24026	$0.24103	$0.23864	$0.23366	$0.19871	$0.17716
% DIFFERENCE	75.99%	100.86%	90.92%	87.09%	40.65%	60.01%	71.42%
NSTAR COMPANY							
TOTAL BILL	**$182.85**	**$333.51**	**$241.66**	**$1,482.43**	**$233.37**	**$7,735.54**	**$1,693,296.44**
PER KWH CHARGE	$0.24380	$0.22234	$0.24166	$0.20307	$0.21608	$0.22102	$0.24613
% DIFFERENCE	78.01%	85.88%	91.42%	59.21%	30.07%	77.97%	138.17%
PEABODY MUNICIPAL LIGHT PLANT							
TOTAL BILL	**$85.31**	**$165.44**	**$112.02**	**$999.91**	**$141.97**	**$4,937.43**	**$684,278.90**
PER KWH CHARGE	$0.11375	$0.11029	$0.11202	$0.13697	$0.13146	$0.14107	$0.09946
% DIFFERENCE	-16.94%	-7.79%	-11.27%	7.39%	-20.87%	13.59%	-3.75%
MIDDLETON MUNICIPAL LIGHT DEPT.							
TOTAL BILL	**$99.77**	**$198.39**	**$132.64**	**$959.51**	**$168.44**	**$4,762.93**	**$807,171.40**
PER KWH CHARGE	$0.13303	$0.13226	$0.13264	$0.13144	$0.15596	$0.13608	$0.11733
% DIFFERENCE	-2.87%	10.57%	5.07%	3.05%	-6.12%	9.58%	13.53%
WAKEFIELD MUNICIPAL LIGHT DEPT.							
TOTAL BILL	**$126.74**	**$235.92**	**$159.38**	**$1,202.79**	**$191.68**	**$5,648.08**	**$955,959.30**
PER KWH CHARGE	$0.16898	$0.15728	$0.15938	$0.16477	$0.17749	$0.16137	$0.13896
% DIFFERENCE	23.38%	31.49%	26.25%	29.17%	6.84%	29.94%	34.46%