TOWN OF READING

Town of Reading Meeting Posting with Agenda

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2019-06-19

Time: 6:30 PM

Agenda:

Building: Reading Municipal Light Building Location: Winfred Spurr Audio Visual Room

Address: 230 Ash Street

Purpose: General Business

Meeting Called By: Dennis Kelley, Chair

Notices and agendas are to be posted 48 hours in advance of the meetings excluding Saturdays, Sundays and Legal Holidays. Please keep in mind the Town Clerk's hours of operation and make necessary arrangements to be sure your posting is made in an adequate amount of time. A listing of topics that the chair reasonably anticipates will be discussed at the meeting must be on the agenda.

All Meeting Postings must be submitted in typed format; handwritten notices will not be accepted.

Topics of Discussion:

- 1. Call Meeting to Order D. Kelley, Chair
- 2. Approval of Minutes D. Kelley, Chair

Suggested Motion: Move that the Citizens' Advisory Board approve the Minutes of the March 21, 2019, and April 18, 2019, meetings as written.

- 3. General Manager's Update Coleen O'Brien
 - NEPPA Annual Meeting August 18-21, 2019
 - RMLD Solar Workshop June 20, 2019
- 4. E&O Report H. Jaffari, Director of Engineering & Operations
 - Meter Update
- 5. Power Supply Report C. Underhill, Director of Integrated Resources
- 6. Scheduling: CAB Meetings and Coverage for Commissioners Meeting D. Kelley, Chair
- 7. Adjournment D. Kelley, Chair

Attachment 1 - Agenda Item 2: Draft Minutes from March 21, 2019, Meeting

Town of Reading Meeting Minutes

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2019-03-21

Time: 6:30 PM

Version: Draft

Session: Open Session

General Managers Conference Room

Location:

Building: Reading Municipal Light Building

Address: 230 Ash Street

Purpose: General Business

Attendees: Members - Present:

Mr. Dennis Kelley, Chair (Wilmington); Mr. Jason Small, Vice Chair (North Reading); Mr. Vivek Soni, Secretary (Lynnfield); Mr. George Hooper (Wilmington)

Members - Not Present:

Mr. Neil Cohen (Reading)

Others Present:

Mr. Dave Hennessy (Board of Commissioners) Ms. Coleen O'Brien, Mr. Hamid Jaffari, Ms. Kathleen Rybak, Mr. Chuck Underhill

Minutes Respectfully Submitted By: Mr. Vivek Soni, Secretary

Topics of Discussion:

1. Call Meeting to Order – D. Kelley, Chair

Chair Kelley called the meeting of the Citizens' Advisory Board to order at 6:30 PM and noted that the meeting was being audio recorded.

2. Approval of Minutes – D. Kelley, Chair Materials: Draft Minutes from January 23, 2019, Meeting

Mr. Hooper made a **motion** that the Citizens' Advisory Board approve the Minutes of the January 23, 2019, meeting as written, seconded by Mr. Small. Hearing no further discussion, **motion carried 4:0:1** (4 in favor, 0 opposed, 1 absent).

3. Commissioners Meeting: Update from February Meeting – J. Small, Vice Chair

Mr. Small reported a lot of what was discussed at the BOC meeting had been discussed at the CAB meeting immediately prior to the Commissioners meeting. Mr. Small noted that Ms. O'Brien gave an update on the Organizational Study, and Mr. Jaffari reported on the reliability numbers.

4. General Manager's Update – C. O'Brien, General Manager

Lynnfield Town Meeting: Ms. O'Brien reported that she (and Mr. Underhill) met with the Lynnfield Town Administrator and then made the presentation at the Board of Selectmen's meeting. The Town Administrator asked about "green communities" conservation programs, which he has worked with in other communities. Ms. O'Brien noted that Mr.



Underhill will investigate any complimentary partnership that we may be able to do with "green communities." Solar initiatives were also discussed, and Mr. Underhill will lend support to the Town as appropriate. Ms. O'Brien reported that the Board of Selectmen presentation went well. Mr. Soni noted the Town Administrator and the Selectmen are very happy with RMLD, and that Ms. O'Brien did a great job on the presentation. The group discussed some of the challenges smaller towns have with program development and technical support given limited resources within the towns. Ms. O'Brien noted that RMLD can offer support through commercial audits and rebate programs but must be careful to remain within our scope when providing services and support.

Legislative Rally in Washington, DC: Ms. O'Brien reported that she and Mr. Underhill attended the 2019 Public Power Legislative Rally in Washington, DC, as part of the NEPPA delegation. Delegates visited their legislators and/or staff and made appeals on three specific issues important to public utilities including:

- Pricing Volatility in the ISO Capacity Auction: Ms. O'Brien reported that delegates asked the legislators to push for a "blue ribbon committee" (including municipal managers, legislative representatives of environment, ISO, etc.) to address the constant fluctuation/instability of the capacity auctions at ISO.
- Tax Exempt Bonds: Opposition to changes in finance rules that would prohibit municipals from being able to refinance bonds or lose the tax exemption. Municipals pay for projects using bonds, so this change is not supported by public power.
- 5G Small Cell Deployment on Utility Poles: The FCC is considering designating wireless as a utility, which would require municipals to allow these attachments on their poles. This would present many problems including safety issues.

Ms. O'Brien noted that these legislative rallies are a great opportunity to remind the legislature of public power and the differences between them and investor owned utilities.

Storm Issues & Outages Update: Mr. Jaffari reviewed the outage incidents. There were five outages in January; the largest on Elm Street in North Reading as the result of a motor vehicle accident (approximately 1,270 customers out for 40 minutes). In February there were 13 small outages, the majority of which were the result of the wind storm on February 25th. March to date, there have been two outages. Chair Kelley complimented staff for getting through the storms with minimal disruption. The group discussed the OMS/IVR systems, which are in the final stages of production. Once launched, IVR will allow the public to access outage information from cell phones and personal devices.

5. Purchase Power Agreement – C. Underhill, Director of Integrated Resources Materials: Term Sheet for Purchase of Power from First Light Power Resources

Mr. Underhill presented terms of an agreement with First Light, which represents an opportunity to purchase another 3% of load in a renewable hydro-electric project (partially dispatchable). The net price is approximately \$51 a megawatt hour; the current average market price is between \$45 and \$50. This would bring RMLD's renewable portfolio up to 25% non-carbon. RMLD will get the associated RECS (Maine recs worth approximately \$1.25 each), however, the current plan is to sell them. RMLD would report them on the greenhouse gas emissions report as non-carbon, avoiding the issue of what constitutes renewable. Mr. Underhill reported that First Light also has a pumped hydro station, and RMLD is looking into the potential to develop a non-carbon peaker (at a later date).

Mr. Hooper made a **motion** that the Citizens' Advisory Board recommend to the RMLD Board of Commissioners to authorize the General Manager to finalize negotiations and execute a contract with First Light Power Resources for the output of the Shepaug and Stevenson Hydroelectric facilities, seconded by Mr. Soni. Hearing no further discussion, **motion carried 4:0:1** (four in favor, 0 opposed, 1 absent).

6. Integrated Resources Division Report – C. Underhill, Director of Integrated Resources *Materials: IRD Update Presentation Slides*

Mr. Underhill reviewed the data on the forward capacity pricing in the ISO auction (slide 2 of the IRD Presentation Slides) as part of the discussion about the Legislative Rally. The graph illustrates how prices have gone up and down (over the last 12 years). These price fluctuations make it extremely difficult for system planners to make decisions about acquiring resources or even running programs. Mr. Underhill went on to review slide 3, which shows the around the clock energy price – the forward price curve. These prices are very high in the winter because we are competing with gas for heating, and it drops in the summer (despite the load being high) because there is no heating demand for gas. The graph illustrates how volatile the market is and what we must consider when doing our planning work to stabilize our portfolio. Mr. Underhill stated that part of the discussion at the legislative rally was around the difficulty for a capital-intensive business (looking at a long-term strategy) to be able to make investment decisions when the market is as volatile as it is.

Mr. Underhill also reported that Millstone 3 was threatening to close because the prices that they were getting in the market were insufficient to cover their costs. They negotiated with a number of local utilities to put in place a price support agreement. With that in place, Millstone has agreed to keep the plant open for the time being. That unit supplies the equivalent energy output to 50% of the load in Connecticut, so that would have been a significant loss. The power out of that unit comes at 7/10th of a cent per kilowatt hour as opposed to 4.5 cents per kilowatt hour for the around-the-clock energy pricing.

7. Future CAB Agendas/New Business – D. Kelley, Chair

Mr. Hennessy noted that the April BOC meeting (currently scheduled for April 18th) will be rescheduled. Once the BOC meeting date is confirmed, the CAB will confirm a date for April. The May meeting is scheduled for May 16th to coincide with the BOC meeting.

Ms. O'Brien reminded the CAB that the RMLD fiscal year will now be on the calendar year and the budget, including any rate analysis, will be completed by the end of September for presentation. Ms. O'Brien noted that the towns were made aware of this change so that they can plan appropriately for their budgeting purposes; any change in rates would segue into their processes.

Ms. O'Brien reported that RMLD is looking at doing an EV study including the possibility of developing programs to utilize electric buses for peak shaving programs. Mr. Underhill will take charge in all of the components including any available grants and funding and working with the towns to assess their level of interest in participation. RMLD will be looking to build an EV support infrastructure. Mr. Underhill noted the initial investment in these charging stations will not be profitable for the first couple of years. Ms. O'Brien stated that the capital investment for dual charging stations is approximately \$30k per station (including all software); not to include construction/installation costs.

8. Adjournment – D. Kelley, Chair

Mr. Hooper made a motion to adjourn the Citizens' Advisory Board meeting, seconded by Mr. Small. Motion carried 4:0:1 (4 in favor, 0 opposed, 1 absent).

The CAB meeting adjourned at 7:23 PM.

As approved on ____

Attachment 2 - Agenda Item 2: Draft Minutes from April 18, 2019, Meeting

Town of Reading Meeting Minutes

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2019-04-18

Building: Reading Municipal Light Building

Address: 230 Ash Street

Purpose: General Business

Attendees: Members - Present:

Mr. Dennis Kelley, Chair (Wilmington); Mr. Jason Small, Vice Chair (North Reading); Mr. Vivek Soni, Secretary (Lynnfield); Mr. Neil Cohen (Reading); Mr. George Hooper (Wilmington)

Members - Not Present:

Others Present:

Ms. Coleen O'Brien; Mr. Hamid Jaffari, Ms. Wendy Markiewicz, Ms. Kathleen Rybak, Mr. Charles Underhill

Minutes Respectfully Submitted By: Mr. Vivek Soni, Secretary

Topics of Discussion:

1. Call Meeting to Order – D. Kelley, Chair

Chair Kelley called the meeting of the Citizens' Advisory Board to order at 6:30 PM and noted that the meeting was being audio recorded.

2. Approval of Minutes – D. Kelley, Chair Materials: Draft Minutes from the February 13, 2019, meeting.

Mr. Hooper made a **motion** that the Citizens' Advisory Board approve the Regular Session Minutes, and approve and release the Executive Session Minutes of the February 13, 2019, meeting as written, seconded by Mr. Cohen. Hearing no further discussion, **motion carried 5:0:0** (5 in favor, 0 opposed, 0 absent).

3. Financial Report – W. Markiewicz, Director of Business, Finance & Technology Materials: Draft Financial Report 6 Month Ended December 31, 2018, presentation slides; and Town of Reading, Massachusetts, Municipal Light Department Financial Statements 12/31/2018- Draft

Ms. Markiewicz reported that the auditors were at RMLD the first week of March, and the audit is in progress pending completion of the actuarial report. Ms. Markiewicz reviewed the presentation slides, which represent the draft six-month ending December 31, 2018, financials. Minor changes may take place in relation to OPEB and pension accounts. Slide 1 shows cash balances as of December 31, 2018, at \$52.1m; of that the operating fund is at \$18.3m. All other funds are considered restricted for specific items. The depreciation and construction funds combined are at \$10m; we intentionally got that to a point where we can fund the big projects such as the substation.



Time: 6:30 PM

Version: Draft

Location: Winfred Spurr Audio Visual Room

Session: Open Session

Ms. Markiewicz reviewed Slide 2 which shows the operating and maintenance (O&M) expenses. O&M came in under budget \$800k due to timing issues. Ms. Markiewicz noted that it is hard to follow the one-year projected budget that was put out last March: we were still in transition for the change in year-end and didn't have a good six-month budget. Ms. Markiewicz noted that timing of projects (planned for spring) and vacancies contribute to that \$800k. Slide 3 shows the capital fund balances how we are spending the money and what's in reserve for the capital fund. Ms. Markiewicz noted that the capital improvements themselves exceed (with the exception of FY15) the depreciation. Depreciation is held in reserve specifically for capital projects. The RMLD is continuously investing in the capital infrastructure by transferring money out of the operating account. You can see that capital improvements for FY16, 17 and 18 are significantly higher than the actual depreciation, which is in red. Depreciation alone is the only thing that really is a reserve for capital. At the end of the year we decide, based on the projected six-year plan, how much we need to put into the construction fund going forward in order to continue to fund the capital projects that we have planned out. Ms. O'Brien noted (as discussed previously), we ramped the rate of return up towards the 8% maximum for a few years in order to make those transfers (from the operating account) in order to meet the capital plan including the majority of the new substation.

In closing, Ms. Markiewicz noted that even though it appears (on the Financials) that kilowatt hour sales were up – once again it's a six-month timing issue. Ms. O'Brien asked that Mr. Underhill address the seasonal fluctuation (in sales) when he presents.

4. E&O Update – H. Jaffari, Director of Engineering & Operations

Outage Update: Mr. Jaffari reported six outages in March (two tree-related, two animal, one underground equipment failure, and one unknown; four in Wilmington, one each in Lynnfield and Reading). There have been eight outages to date in April (two motor vehicle accidents, four tree-related, one underground equipment failure, and one weather related; five in Wilmington, two in Lynnfield, and one in Reading). Reliability indices are all doing very well; below the national and regional averages.

OMS/IVR: Mr. Jaffari reported that the OMS is 90% complete and the IVR is in the programming phase. Staff is currently working through software integration issues. The next phase will be data collection for how customers would like to be notified of outages (phone, text or any combination of those). An outage map (including location, estimated time of restoration and number of customers impacted) will also be available for the public to view using their computers or mobile devices. Mr. Jaffari noted that he is hoping to roll the IVR out by the end of the year.

Ms. O'Brien asked Mr. Jaffari to speak about the limitations of some of the meters to integrate with the OMS/IVR systems. Mr. Jaffari reported that of the ~29,866 meters in the system, ~3,600 are older Itron (AMR) meters (including TOU, commercial and industrial). These meters have design limitations; they do not have last-gasp technology, which would allow them to send a message to the OMS when they go out, and/or they cannot be retrofit with an Eaton module to enable two-way communication through the mesh network. Mr. Jaffari reported that staff is working on a plan to address this issue.

Ms. O'Brien reported that replacing these 3,600 meters will cost approximately \$1.6m over six years. Staff must prioritize this issue with the other work that needs to be done, as well as consideration for anticipated technology advances. Mr. Soni asked what the distribution is (by town) for the 3,600 meters. Ms. O'Brien said that she had that information and would forward it to the CAB.

Battery Storage Project: Mr. Jaffari reported that the battery storage project is going very well and by the end of May the unit should be connected. We took the

opportunity during construction at the site to upgrade some of the underground feeders/cables out of the station.

Mr. Hooper ask about the performance of new LED street lights. Mr. Jaffari noted there are no problems that he is aware of. The group discussed the impact the conversion has had on maintenance (staff time). Ms. O'Brien reported that the flood light conversion is still in progress, and the Troubleman is currently working on numbering the lights, which will aid in reconciliation efforts.

5. Update on IRD Initiatives – C. Underhill, Director of Integrated Resources Materials: RMLD Capacity Programs Savings (presentation slides)

Mr. Underhill (as requested earlier in the meeting) explained why sales (load) are different the first half of the year from the last half of the year (calendar). Traditionally, January, February and June are high-load months (in the first half of the year), and then (in the second half of the year) July, August, most of September and December are high-load months. There are more high-load months in the last half of the year than in the first half of the year, plus summer months are higher load than winter months. Therefore, a disproportionate amount of sales are reported in the last half of the year than in the first half of the year. However, RMLD had higher than projected retail sales in November and December (2018), which were weather driven sales events. January and February (2019) were not quite as cold as is normally expected, so sales dropped right back down again. Therefore, we ended up with essentially the same sales over the winter as we were expecting, but they occurred in different months, and therefore, in a different financial reporting period.

Mr. Underhill then presented a summary report on the capacity programs noting there are three components to the capacity/transmission management program. The first is "Shred the Peak," which is a voluntary response to alerts sent out by RMLD. A little over 2,000 residential customers participate last summer. Mr. Underhill noted that RMLD does not directly measure that participation, so he used estimates (0.5 kW per customer) based on his experience with other peak response programs and the current set of dollars for capacity savings. To date RMLD estimated savings is about \$84,360 from the residential capacity program.

The second program is the large commercial/industrial response program; customers are compensated for interrupted load, but then we measure them much more closely in terms of what they do. Tangent Energy Solutions runs the monitoring and the alerting component of the program. RMLD estimated savings is \$84,545 for the year (\$29,215 in capacity and \$55,330 in transmission; the \$29k in capacity savings compares to the \$84k capacity savings from the residential program).

Mr. Underhill noted that residential is about 30% of the total retail sales. However, because the peak is shifting to later in the day (out of the daily business cycle and when more residential customers are turning on lights, cooking, etc.) we are seeing a decrease in the contribution (to the peak reduction) from commercial/industrial (approximately 30%) and an increase in the contribution (to the peak. Mr. Underhill noted that he plans to look at that and get a much more accurate number once we pull some of the hourly profile data out of the AMI metering system.

Mr. Underhill reported that since its inauguration, the generator (the third program) has saved \$525,000, of which roughly \$200,000 is capacity savings at peak and \$325,000 is transmission savings. Chair Kelley asked about the cost of natural gas, and operating and maintenance costs for the unit. Mr. Underhill noted that the savings was net of the costs. In 2018 natural gas costs were approximately \$35,000 to respond to all of the events that were called; however, not every event is an actual transmission peak. Labor costs in 2018 were \$29,500, which includes operating the unit and having somebody at the site during the summer to monitor for over-heating

at the structure. Mr. Jaffari noted that initially staff was sent to the unit to operate the unit and make sure that it was functioning properly. The unit is now being operated from the SCADA in the Control Room (which is staffed 24/7). RMLD is working with Milton CAT to resolve ventilation issues.

Ms. O'Brien noted the estimated payback was 6-7 years (if we hit every month's peak, as well as the annual peak). Mr. Jaffari noted that there was an early peak in the first year (June 13, 2017) just prior to commissioning, so the savings were not captured. Mr. Soni asked if the payback for the unit was on track. Mr. Jaffari noted it is currently tracking a bit faster than planned, but we are being conservative. Mr. Underhill noted one of the issues in how you calculate the savings is that there is a deferred benefit; we will start to receive the capacity credit on our bills beginning June 1 to May 31 (for when we ran the unit last summer). Mr. Small asked if that (payback) considers capacity costs coming down; will the return on investment be extended? Ms. O'Brien noted that we did not calculated the payback based on when the capacity peaked - it was normalized. Mr. Underhill stated that capacity costs came down to \$3.80 a kW month from a high of just over \$10 a couple of years ago. As far forward as those numbers were available, they were included in the calculation. They have fallen off, and there is likely to be an extension in the last year or so of some amount. Mr. Underhill noted we will be able to carry those projections forward and revisit the savings analysis once we get our budget from Energy New England.

Mr. Underhill then provided a review of the Community Solar PPA's. RMLD has generated 5,053,942 kWh and has avoided 3,638,838 pounds of carbon production. Mr. Underhill reported that staff is working on another community solar project but will be taking a slightly different approach this time. Ms. O'Brien noted the RECS are different and that makes the financials different.

6. Scheduling: CAB Meetings and Coverage for Commissioners Meeting – D. Kelley, Chair

The next scheduled Commissioners meeting is April 24th – Mr. Hooper will cover. The May Commissioners meeting is (tentatively) scheduled for May 16th - Mr. Soni will cover. The CAB will meet at 6:30 pm (prior to the Commissioners meeting).

Ms. O'Brien stated that she has asked each division manager to provide their full report to the CAB on a rotating basis, and then each of the other managers will provide brief "fun facts" at the meeting.

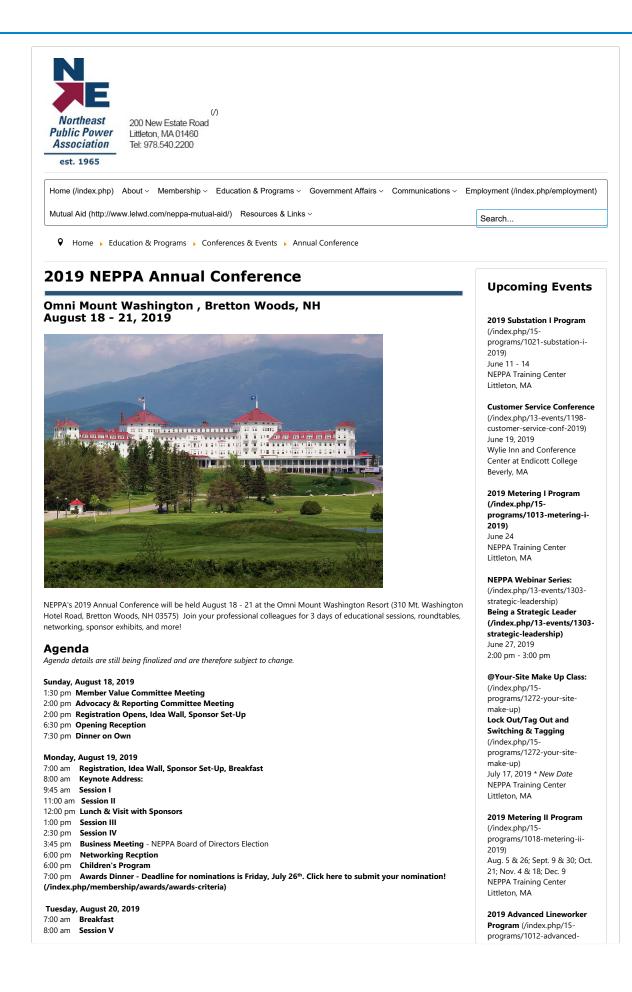
7. Adjournment – D. Kelley, Chair

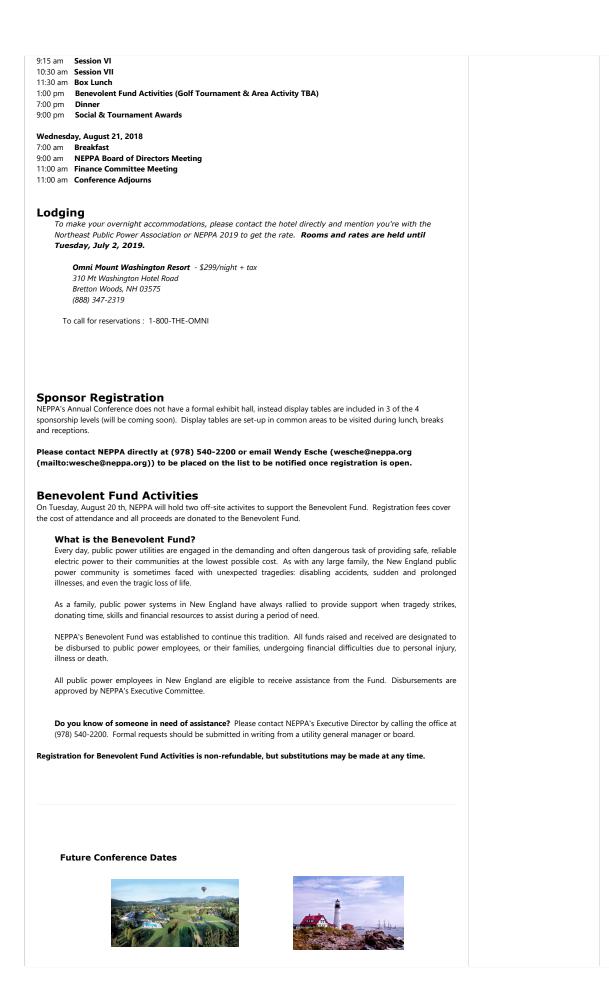
Mr. Hooper made a **motion** to adjourn the Citizens' Advisory Board meeting, seconded by Mr. Cohen. **Motion carried 5:0:0** (5 in favor, 0 opposed, 0 absent).

The CAB meeting adjourned at 7:31 PM.

As approved on _____

Attachment 3 - Agenda Item 3: NEPPA Annual Meeting





Attachment 4 - Agenda Item 4: E&O Report and Meter Update

ENGINEERING & OPERATIONS REPORT

Hamid Jaffari, Director of Engineering & Operations

RMLD Citizens Advisory Board

June 19, 2019

Major Construction Projects

Recently Completed

Station 4 – 4W5/4W12 Getaway Improvements at Station 4 (Capital Project) The overhead portion of this project was recently completed and the new lines have been energized and

brought online. The entire project is now complete ahead of schedule. **Status: Complete**







Station 3 – Battery Storage Project (Capital Project)

E&O has worked side by side with IRD to bring the BESS (Battery Energy Storage System) online. The capital construction portion of this project is now complete. E&O will continue to support IRD for technical related issues surrounding the BESS for dispatching and other needs as required. **Status:** *Complete*



Jonspin Road Switchgear Replacement (Capital Project)

On May 4th crews replaced pad-mounted switchgear #2 that feeds 46 and 65 Jonspin Road, Wilmington. On May 11th crews replaced pad-mounted switchgear #3 that feeds 72 Jonspin Road, the Ashwood Avenue underground subdivision and the future feed to the new building at 58 Jonspin Road. In total, we have replaced three out of the six pad-mounted switchgears on Jonspin Road. **Status: Complete**



Major Construction Projects

Currently Underway

> Station 4 – 4W6 and 4W16 Getaway Replacement Projects (Capital Projects)

Work on these two projects has begun simultaneously. Crews are currently focused on replacing the underground cables for the 4W6 getaway. **Status:** *In-progress*

Grid Modernization – Scada-Mate Switches (Capital Project) Six new Scada-Mate switches have been received and installation will be scheduled over the coming months. Status: In-progress

- (1) Butters Row, Wilmington installed; pending radio installation to bring on-line
- (2) Pole 150, Main Street, Wilmington installed to replace damaged switch
- (3) Chestnut Street in Wilmington work is currently underway to set pole and install switch
- (4) Ash Street, Reading pending Verizon pole set
- (5) Minot Street, Reading pending Verizon pole set
- (6) Spare to be used in the event of a failure

Area Upgrade Projects

Essex Street Stepdown Conversion, Lynnfield – RMLD converted the distribution voltage from the stepdown transformer on pole 58 on Essex Street from 2,400 volts to 7,970 volts. This provided service to one pole-mount transformer on Essex Street, and four pad-mount transformers in the Woodwinds Estate (Jordan Road, Currie Circle and Evans Road). Prior to converting the distribution voltage, RMLD upgraded three of four transformers in Woodwind Estate and during the conversion upgraded the pole-mount transformer on Essex Street. The conversion was completed by de-energize the area, changing the ratio switches on each transformer from 2,400 to 7,970, changing all the fuses, disconnecting and removing the stepdown transformer and re-energizing at 7,970 volts directly from circuit 3W8 on Essex Street. Status: Complete

- Underground Upgrade: Gloria Lane, North Reading one pad-mount transformer as well as the riser pole and all of the underground cable was replaced. Status: Complete
- Transformer Replacement one transformer was replaced in each of the following location
 Back Bay Court, Reading (pad-mount) Status: Complete
 - Great Neck Drive, Wilmington (pad-mount) Status: Complete
 - Lafayette Road, Reading (pad-mount) Status: Complete
 - Scotland Road, Reading (overhead) Status: Complete
 - Earles Row, Wilmington (pad-mount) one transformer has been replaced, one transformer remains to be replaced. *Status: In-progress*

Maintenance Programs

Aged Transformer Replacement (thru April) – Pad-mount: 39.38% replaced Overhead: 24.93% replaced

- Pole Inspection/Replacement Program 260 poles set 232 transfers completed
- Tree Trimming 134 spans in April 644 spans YTD through April

2019 Inspection of Feeders –

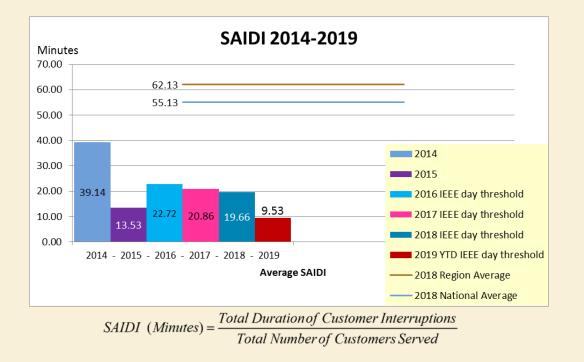
- 3W5, 3W6, 3W7, 3W8, 3W13, 3W14, 3W15 and 3W18
- 4W4, 4W5, 4W6, 4W7, 4W9, 4W10, 4W12, 4W13, 4W16, 4W17, 4W18, 4W19, 4W23, 4W24, 4W28, 4W30
- 5W4, 5W6 (Transfer)

Infrared Scans – Completed through April - No Hot Spots Found

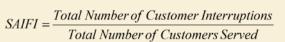
- Manhole Inspection on-going
- Porcelain Cutout Replacement on-going

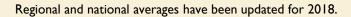
		Po		IC		WILMINGTON	
	Per NJUNS (as of 6/13/19)					"Next to Go"	# of Ticket
						VZNEDR – Verizon	:
	READING					Transfer 6	
		"Next to Go"	# of			Pull Pole 4	
		Next to Go	Tickets	NORTH READIN	IG	RMLD	
LYNNFIELD		VZNESA – Verizon	2		# of	Transfer 30	
	# of	Transfer	2	"Next to Go"	Tickets	Pull Pole 1	
"Next to Go"	Tickets			VZNEDR – Verizon	1		
21412		RMLD	35	Transfer	1	CMCTNR - Comcast	
RMLD	34	Transfer 30	D			Transfer 7	
	34	Pull Pole	5	RMLD	22		
Pull Pole				Transfer	3	WMGNFD - Wilmington Fire Dept.	
		CMCTNR - Comcast	11	Pull Pole	19	Transfer 31	
CMCTNR - Comcast	9	Transfer 12	1			WLMFIG - Wilmington Fiber	
Transfer	9			CMCTNR - Comcast	1	Transfer 1	
		RDNGFD - Reading Fire Dept.	9	Transfer	1		
LFLDFD - Lynnfield Fire Dep	t. 3	Transfer 9	9			NP3PMA - Non-Participating 3rd	
Transfer	3			NRDGFD - North		Party Attachee	
		LTFMA - Lightower Fiber	0	Reading Fire Dept.	1	Transfer 5	
GRAND TOTAL	46	Transfer		Transfer	1		
						LTFMA - Lightower Fiber	
		NP3PMA - Non-Participating 3rd		LTFMA - Lightower Fiber	0	Transfer 0	
		Party Attachee	3	Transfer			
		Transfer	3			VZBMA - Verizon Business	
				GRAND TOTAL	25	Transfer 1	
		GRAND TOTAL	60			GRAND TOTAL	5

RMLD Reliability Indices

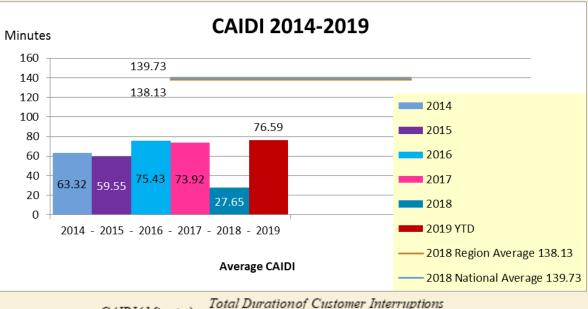


Note: The major event (ME) threshold allows a utility to remove outages that exceed the IEEE 2.5 beta threshold for events. These events could be severe weather, which can lead to unusually long outages in comparison to your distribution system's typical outage.

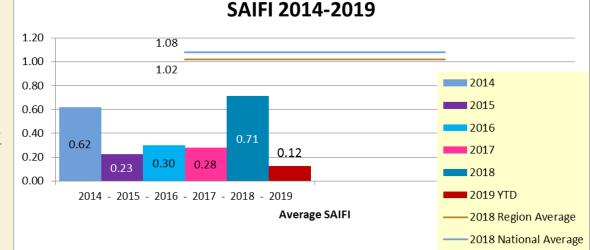




2019 data from January through May

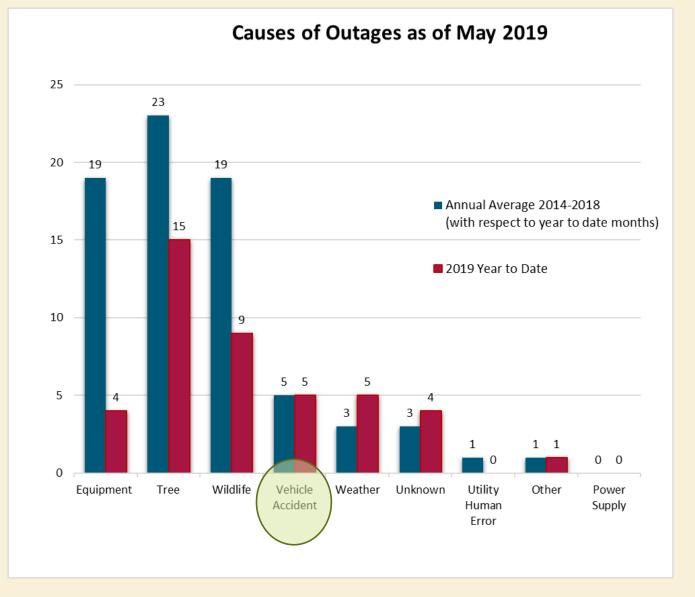


CAIDI (Minutes) = $\frac{Iotal Duration of Customer Interruptions}{Total Number of Customers Interruptions}$





Outages

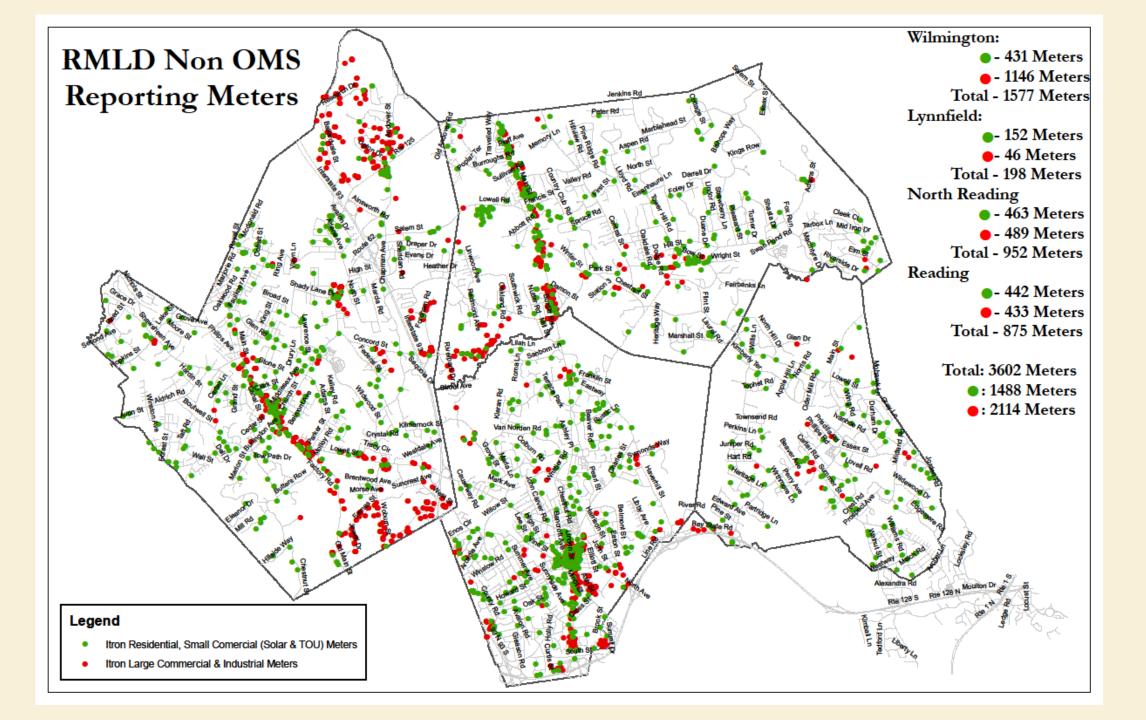


Recent Significant Outage Events: Nothing significant to report.

CAPITAL SPENDING YTD (All Divisions) January through April 2019

	ACTUAL YTD	BUDGET	REMAINING BALANCE
Engineering and Operations	\$1,484,336	\$6,211,197	4,726,861
Facilities	\$14,680	\$1,030,282	\$1,015,602
Integrated Resources Division	\$23,371	\$80,000	\$56,629
Information Technology	\$9,459	\$483,000	\$473,54I
TOTAL:	\$1,531,846	\$7,804,479	\$6,272,632





NON-OMS REPORTING METERS - REPLACEMENT COST ANALYSIS

	Unit	Material Cost	Labor Cost	Total Cost
Eaton Mesh Expansion	258	\$93,185	\$360,000	\$453,185
Meters Not Communicating With OMS	3602	\$1,411,800	\$274,275	\$1,686,075
TOTAL	3860	\$1,504,985	\$634,275	\$2,139,260

Eaton Mesh Expansion						
	Cost per Unit		Number of Units	Material Cost	Labor	Total Cost
Relays	\$260		250	\$65,025	\$80,000	\$145,025
Gateways	\$2,040		4	\$8,160	\$40,000	\$48,160
Fiber Encloser Equipment	\$5,000		4	\$20,000	\$240,000	\$260,000
TOTAL \$93,185 \$360,000					\$453,185	

3reakdown of Itro	eakdown of Itron Meters Not Capable of Communicating With OMS							
Meter Class	Unit	Rate Classification	Meter Cost	Material Cost	Labor Cost	Total Cost		
2S	1550	Res TOU, Solar, Small Com	\$113	\$175,150	\$120,000	\$295,150		
2S (320 Amp)	50	Res TOU, Solar, Small Com	\$150	\$7,500	\$3,750	\$11,250		
3S	6	Municipal, Commercial	\$500	\$3,000	\$450	\$3,450		
4S	15	Res TOU, Solar, Small Com	\$650	\$9,750	\$1,125	\$10,875		
5S	45	Com, School, Muni, Ind TOU	\$600	\$27,000	\$3,375	\$30,375		
6S	465	Com, School, Muni, Ind TOU	\$650	\$302,250	\$35,250	\$337,500		
8S	4	Com, School, Muni, Ind TOU	\$650	\$2,600	\$300	\$2,900		
9S	15	Com, School, Muni, Ind TOU	\$650	\$9,750	\$1,125	\$10,875		
12S	280	Small Com, Ind TOU	\$600	\$168,000	\$21,000	\$189,000		
16S	1100	Small Com, Ind TOU	\$600	\$660,000	\$82,500	\$742,500		
16S(320 Amp)	60	Small Com, Ind TOU	\$650	\$39,000	\$4,500	\$43,500		
17S	12	Com, School, Muni, Ind TOU	\$650	\$7,800	\$900	\$8,700		
TOTAL	3602			\$1,411,800	\$274,275	\$1,686,075		

Attachment 5 - Agenda Item 5: Power Supply Report

Citizen's Advisory Board Meeting June 19, 2019

Charles Underhill, Director of Integrated Resources Reporting for April 2019.

