



## Town of Reading Meeting Minutes

2018-09-22 LAG

### Board - Committee - Commission - Council:

RMLD Board of Commissioners

Date: 2022-09-15

Time: 7:30 PM

Building: Reading Municipal Light Building

Location: Winfred Spurr Audio Visual Room

Address: 230 Ash Street

Session: Open Session

Purpose: General Business

Version: Draft

#### Attendees: **Members - Present:**

Marlena Bitá, Chair; Philip Pacino, Vice Chair; David Talbot, Commissioner; Robert Coulter, Commissioner.

#### **Members - Not Present:**

John Stempeck, Commissioner.

#### **Others Present:**

RMLD Staff: Gregory Phipps, Interim General Manager and Director of IRD; Erica Morse, Executive Assistant; Hamid Jaffari, Director of E&O.

RMLD Liasons: Karen Herrick, Reading Select Board

Public: Philip B. Pacino, 5 Washington Street, Reading, MA.

**Minutes Respectfully Submitted By:** Philip B. Pacino, Secretary Pro Tem

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### Topics of Discussion:

Definitions for acronyms used in these minutes:

- BoC: Board of Commissioner
- CAB: Citizens' Advisory Board
- IGM: Interim General Manager
- GM: General Manager
- MEAM: Municipal Electric Association of Massachusetts
- APPA: American Public Power Association
- IOU: Investor owned utility
- NEPPA: Northeast Public Power Association
- ENE: Energy New England
- IRD: Integrated Resources Department
- E&O: Engineering and Operations
- SAIDI: System Average Interruption Duration Index
- SAIFI: System Average Interruption Frequency Index
- CAIDI: Customer Average Interruption Duration Index

All materials presented can be found on the RMLD website in the BoC packet.

<https://www.rml.com/board-commissioners>

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### **Call Meeting to Order**

Chair Bitá called the meeting to order at 7:30 PM and announced that the meeting would be held in person, remotely on Zoom, and will be streamed live on RCTV and YouTube.

### **Opening Remarks and Introductions**

Chair Bitar read the RMLD BoC Code of Conduct and asked all remote attendees to identify themselves.

The recording of this meeting can be viewed here:

<https://www.youtube.com/watch?v=hA1UqYVEcNw>

Vice Chair Pacino served as Secretary at the meeting.

### **Public Comment**

There were no comments from the CAB or RMLD Liaisons.

Philip B. Pacino made a public comment as a Reading resident and ratepayer. Mr. Pacino disagrees with the IGM decision to remove the Director of Business and Finance. It is not a decision he feels the IGM should have made at this point.

### **Report on the CAB Meeting**

There was no report on the CAB meeting.

### **Approval of Meeting Minutes**

Click [here](#) to view the approved meeting minutes on the RMLD website.

Vice Chair Pacino made a **motion**, seconded by Commissioner Coulter, that the RMLD Board of Commissioners approve the minutes of the February 16, 2022, and April 8, 2022 meetings on the recommendation of the Interim General Manager.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

### **IGM Report**

Gregory Phipps provided an IGM update.

Click [here](#) to view to the IGM presentation.

Click [here](#) to view the Business Newsweek article on energy bills.

*IGM said the following:*

RMLD's 13 new hires bring energy, new skills, and new perspectives. Promotions and moves within the organization have allowed individuals to feel that there is a career path for them where they can thrive.

The salary survey is expected to include RMLD roles except for line worker positions. The line worker positions align with the MEAM and APPA surveys, which are regionally relevant and more specific.

*Question:* Chair Bitar asked a question relative to the salary survey.

*IGM Response:* The survey is regional (Greater Boston) with a focus on the North Shore. The company conducting the survey is nationally based and experienced.

The internal organization is excited with positive feedback and energy. Small changes are being implemented that contribute to this. The IGM cited the example of waiving doctors note requirement for the use of stand-up desks.

The flex time program functions through coordination with the supervisor, manager, or director of each group. Individuals can choose to work five eight-hour days; four ten-hour days; or four nine-hour days and one-half day on Friday. This is another contribution toward more positive moral.

*Question:* Commissioner Coulter asked a question relative to flex time and negotiations.

*IGM Response:* The program is a pilot, which gives RMLD flexibility in terms of putting the program into the union agreements.

*Question:* Chair Bitá asked a question relative to the hours employees are choosing to work.

*IGM response:* Some individuals started out with four ten-hour days and later adjusted to five eight hour days.

RMLD is an in-person organization where interactions between and across departments are crucial. The flex-time pilot has been successful by providing individuals with flexibility while remaining engaged and productive. Coordination with management is necessary for the flex time pilot to continue to be successful.

*Question:* Commissioner Coulter and Commissioner Pacino asked questions relative to individuals coming to the customer service window.

*IGM response:* Many customers come to pay their bills in person; hence there is the added benefit of allowing for the personal connection between staff and their customers.

*Question:* Chair Bitá asked if the individuals who work the customer service window ever cross-sell time of use?

*IGM response:* No, but it is an idea worth investigating.

RMLD had three summer interns; an electrical engineering student from Merrimack College; a data analytics student from Endicott College, and an environmental sciences student from Colby College. Each student had different roles and projects.

The goals of the summer internship program are to help create a positive reputation of RMLD within the host schools, the interns learn and provide tangible value to the RMLD. The program promoted learning on both sides and was a great help to the RMLD.

On a more general note, there is a broader set of people and experience coming to the RMLD team; diversity of career experience is valuable to RMLD.

The Business Week article brought forward by Chair Bitá discusses what is currently going on in Europe. The war in Ukraine has cost of energy implications in the Northeast. The way the RMLD's contracts are structured reduces the impact of these implications, unlike IOUs.

RMLD has not received a lot of customer feedback relative to being able to pay their bills. RMLD bills are not significantly high, and paying bills is not a problem for customers currently. However, the Department will keep an eye on this issue.

*Comment:* Commissioner Coulter made a comment relative to high energy bills in Europe causing customer revolts. This is an implication of increased energy costs and the decision to go green suddenly.

*Follow Up Question:* Commissioner Coulter asked if the intention is to pull back, so this does not happen at RMLD. It may be necessary to wait and see how the market plays out.

*Comment:* Vice Chair Pacino noted that in England there is a movement by customers to stop paying their bills.

*IGM Response:* RMLD remains sensitive to the situation. Being an MLP allows the Department to enter into longer term contracts, and the portfolio continues to be modified, adapting to market change.

From a regulatory perspective, IOUs are limited to six month rolling contracts, which are subject to market prices and the current forward price curve. This is why IOU customers in

New England are facing significant bill increases. Market price this time of year is usually \$30-\$40 per MWh; current costs are over \$100 per MWh.

Unlike coal, natural gas, and oil; electricity does not travel long distances. This is putting significant pressure on New England. RMLD is working as a consortium between MMWEC and ENE to encourage ISO NE and governors to allow some stockpiling of oil fuel. This is because there will be less natural gas coming into New England due to higher prices in Europe.

This is a very complicated piece and has implications on resiliency, reliability, and cost. Things the RMLD is moving toward, such as within territory generation is in anticipation of the regional networking being less reliable and more expensive over time.

*Comment:* Commissioner Talbot said that the escalating costs have to do with the cost of natural gas, which is driving the rate shock in Europe.

RMLD is supporting the Town of Reading in the economic development of Ash Street. The implication of a different development is the consideration of where the RMLD would go. There is a benefit to the community and to the RMLD to layout and execute a plan over the next five years where the Department is integrated into one building.

*Comment:* Vice Chair Pacino said that there are three outside towns in this district and RMLD is owned by the rate payers.

*IGM response:* There is a Super Regional MLP strategy which would allow contiguous MLPs to work together to be more reliable, resilient, and lower cost.

## **2022 NEPPA Conference Report**

The IGM reported on the 2022 NEPPA conference.

Click [here](#) to view to the 2022 NEPPA conference presentation.

*IGM said the following:*

The IGM, Chair Bitz, Vice Chair Pacino, Commissioner Talbot, and Commissioner Coulter attended the conference.

RMLD's vision and direction is consistent with many of the presentations.

Digitization is a key piece that the RMLD is already working on. Data is becoming critical to how the RMLD is managed and operated, as well as, how it serves customers.

The conference theme of decentralized generation aligns with RMLD's initiative to implement more within territory generation.

Another conference theme was customer communication across all NEPPA presentations. This ties into the RMLD's aggressive external communications plan.

Commercial fusion energy is 10-15 years down the road. Commonwealth Fusion is planning on 75 MWh systems. They could fit in with RMLD's goal of within territory generation.

The industry agrees that storage is a critical piece of the solution to support the intermittent nature of renewables. The RMLD is continuing to pursue storage, such as the battery at Fordham Road. The challenge with lithium ion is that it is geared towards peak shaving verses time shifting.

The Form Energy battery emphasizes time shift storage, where you can generate in the afternoon and discharge in the evening or next week. This technology is very compatible with intermediate renewable resources such as solar, and a 10% premium on RMLD's

existing energy costs is doable. The IGM is looking into participating in a pilot program with Form.

The extension of the investment tax credit allows MLPs to participate in investment tax credits as direct cash grants. MLPs have access to millions of dollars that were previously unavailable. This is part of the reason the RMLD finance team was restructured to include individuals with finance and grant experience, in addition to accounting experience. These legislative updates are extremely significant.

Even though most EV charging occurs at home, there is a role for public charging within RMLD's territory.

There are consistent themes of storage, taking action, customer coordination, decarbonization, digitization, and decentralization. Each of these themes reflect what the RMLD is pushing on.

*Question:* Karen Herrick, Reading Select Board, asked if the RMLD needs assistance from the rate payer communities relative to legislative updates and proactive/active advocacy.

*IGM Response:* Yes, particularly in relation to some of the things the RMLD is about to do with within territory generation. The IGM cited the example of a 79-acre landfill in Wilmington that's linked to a superfund site just starting remediation. There is a lot of history associated with the landfill; various individuals have tried to utilize the land.

RMLD is uniquely positioned to turn the landfill into something of value and positive for the community by putting in a solar array, and possibly storage. The Department is working on this at the encouragement of the Wilmington Town Manager and Wilmington CAB representative. RMLD has already held several meetings including some with the local environmental groups.

In addition, the Department is trying to fit the project in the Investment Inflation Reduction Act. The project is estimated to cost \$20 million and is worth doing from a rate payer perspective because the net net (solar and within-territory generation) is in the range of less than \$20 per MWh.

RMLD has been pushing air source heat pumps as a part of electrification, in support of the Massachusetts decarbonization goal. The messaging is going to be modified to reflect that air source heat pumps are an energy efficiency play. The best thing individuals can do is use less energy to begin with.

There is a regulatory compliance piece as well as an efficiency piece. Frequent communications and joint projects on municipal buildings with each community will be extremely important moving forward. The massive Inflation Reduction Act is an accelerant to do more within territory assets on municipal buildings. Bringing different types of people into the RMLD organization will allow RMLD to pursue this strategy.

*Comment:* Herrick said that Reading is in close contact on energy initiatives with their delegates.

*Comment:* Vice Chair Pacino made a comment relative to a company in Watertown trying to create wireless EV charging.

*IGM response:* This vehicle to grid technology exists, the question at hand is the viability of commercialization. RMLD is talking with Spark Charge, who made an announcement today relative to mobile battery chargers.

The Northfield hydro facility installed bi-directional EV chargers, (wired vehicle to grid) which the RMLD will further explore. The Department is thinking differently around how to use storage assets that both RMLD and customers are investing in.

*Question:* Vice Chair Pacino asked a question regarding the IGM's EV.

*IGM Response:* The car has 36,000 miles. The wipers and cabin air filter were replaced once. The gas bill is 20% of what it was with his gas vehicle when gas was ~ \$3.50 a gallon. Part of the motivation to switch to an EV was economic and the other part was to learn. The goal is to understand how to make it easier for customers who adopt EVs.

*Question:* Vice Chair Pacino asked a question relative to NEPPA's President Hyland's personal experience with EVs.

*IGM Response:* Hyland's experience is primarily with EV charging. RMLD is currently adopting a charging network and will pull on the lessons and experiences presented. Customers are going to decide in terms of how fast they're going to move to EVs. Selling an internal combustion light duty vehicle in Massachusetts will be prohibited by 2035.

### **Policy Review**

The IGM presented the policy review.

Click [here](#) to view Policy 15: Sexual Harassment review memo.

Click [here](#) to view Policy 16: Violence in the Workplace review memo.

Click [here](#) to view the finalized RMLD policies.

*Question:* Vice Chair Pacino asked a question relative to Section IV: C: Board of Commissioners.

*IGM response:* The section states if there are allegations of sexual harassment involving the GM then the BoC Chair must be notified, as the GM reports to the Chair.

*Modification:* Vice Chair Pacino suggested the following modification: "Any investigation will be conducted in accordance with Section V.C. *in this policy*." The modification was accepted as part of the main motion.

*Comment:* Vice Chair Pacino noted that in RMLD's history Section IV: C has come into play once.

Vice Chair Pacino made a **motion**, seconded by Commissioner Coulter, that the RMLD Board of Commissioners approve Policy 15: Sexual Harassment (Revision 4), as presented, on the recommendation of the Interim General Manager.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

*Question:* Commissioner Coulter asked a question clarifying pre-employment

*IGM response:* RMLD performs a background check and criminal history check. From a legal perspective there are things that can and cannot be asked during an interview.

Vice Chair Pacino made a **motion**, seconded by Commissioner Talbot, that the RMLD Board of Commissioners approve Policy 16: Violence in the Workplace (Revision 3) as presented, on the recommendation of the Interim General Manager.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

### **IRD Report**

Gregory Phipps presented the IRD report.

Click [here](#) to view to the IRD presentation.

*The IGM said the following:*

In reference to the chart on page 78; dollars per MWh represent energy only. Certificate retirement, transmission, and capacity are the other costs that comprise power supply.

Additional wind projects will be part of RMLD's portfolio. Timing depends on how fast offshore wind is built. The IGM cited the example of the Vineyard Wind Project.

RMLD pursued nuclear in December 2022. The nuclear portion of the portfolio is transitioning from 15% to ~ 30%. There are three nuclear reactors in New England; Seabrook is two-thirds of the portfolio and Millstone is one-third. RMLD aims to keep the portfolio balanced in terms of geography and physical separation.

The State of Connecticut keeps all Millstone certificates until 2029.

The TFA model assumptions are ideal in a stable market not a volatile one. The RMLD will continue to monitor the model assumptions, but it is not economically beneficial to enter high priced hedging contracts at this time.

RMLD did a load following program with NextEra in 2018 and the net results were marginal. A new load following program would allow for RMLD to be 100% hedged with NextEra but at a significant premium, hence, we will reevaluate again as market conditions merit.

The IGM presented a new PPA for a hydro facility called First Light Falls Village. RMLD is trying to mitigate risk by geographically spreading out hydro facilities. The portfolio includes some plants on the Housatonic and some on the Connecticut River (different watersheds). The financial owners of First light are Canadian pensions funds.

*Question:* Commissioner Talbot asked a question on terminology.

*IGM clarification:* The term is environmental due diligence.

The word "justice" was removed and accepted as part of the main motion.

Vice Chair Pacino made a **motion**, seconded by Chair Bitá, move that the RMLD Board of Commissioners, on the recommendation of the Citizens' Advisory Board, vote to accept the Interim General Manager's recommendation to execute a contract with First Light Power for energy, including associated certificates, from an existing hydro facility in Connecticut, contingent on appropriate environmental due diligence.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

There is upward pressure on the budget due to the nature of the power supply portfolio and transition to non-carbon.

The annual budgeted power supply was anticipated to be ~ \$64M-\$65M in 2022; actual costs will be higher. Fifteen percent of the portfolio (in kwk) is open market.

The costs that are increasing are pass through costs to the customer with no markup. Since January the RMLD has been communicating that costs are anticipated to increase by 12% from 2021 -2022. It was noted that August is

typically the highest bill month due to usage etc.

### **E&O Report**

Hamid Jaffari presented the E&O report.

Click [here](#) to view to the E&O presentation.

*Jaffari said the following:*

The outage management system allows the Department to locate, manage, and restore outages quickly.

RMLD completed a system planning study and technology roadmap in 2015. These tools map out a system automation plan for the next twenty years.

Each reliability maintenance program is reviewed annually to identify successes and areas of improvement.

Reliability indices indicate the health status of the system. RMLD's SAIDI and SAIFI are below the national and regional average (based on 2021 numbers).

Jaffari expects that 2023 numbers will rise, and the curve will increase slightly due to increased tree falls. However, RMLD's numbers will likely remain relatively low.

The system indices relate to global issues such as a substation or feeder out. CAIDI relates to all customers within the system, such as animal contact causing a transformer to blow.

Although the outage statistics (local outages) seem high, the RMLD is doing well overall.

The data shows that trees are the common denominator of outage causes and cited the example of branches creating a path for animals to get to the energized part of the system.

The increase in outages caused by equipment was due to the slowdown of the aged transformer replacement program.

*Clarification:* "as of January 2022" should read "January 2020" on the slide titled *RMLD Strategy Moving Forward*.

*Question:* Chair Bitá asked a question relative to tree trimming and personal property.

*Jaffari response:* if a tree on private property is growing into energized equipment, then RMLD will prune the tree growth back. Trees on the sidewalks are considered Town trees.

*Question:* Commissioner Coulter asked a question relative to RMLD's Maintenance schedule.

*IGM response:* An increase in the tree maintenance cycle is included in the 2023 budget.

Tree trimming is currently on a three-year cycle. Ensuring the main lines are clear is priority.

### **RMLD Procurement Requests for Board Approval**

Hamid Jaffari presented the procurement requests for approval.

Click [here](#) to view to the RFQ 2022-33 Eight (8) Electric Vehicle Charging Stations materials.

Click [here](#) to view to the IFB 2022-39 Substation Transformer Testing and Repairs.

*Jaffari said the following:*

RMLD is purchasing eight electric vehicle charging stations with the intention of putting two EV charging stations in each service town.



*Question:* Commissioner Talbot asked a question relative to the second bid response.

*Jaffari response:* VERDEK, LLC's bid was thrown out because they took exceptions, offered an alternative brand/model, and did not sign the quote form.

*Comment:* Vice Chair Pacino said the bid analysis is usually included in the packet.

*Comments:* Commissioner Talbot said that the budgeted amount was \$50K and asked if RMLD could go back out to get more bids. Commissioner Coulter noted that he feels this would be a waste of time.

The IGM noted there is no over budget issue; RMLD has a total of \$700K in the budget for level 2 chargers.

RMLD has 40 ChargePoint level 2 chargers and from a maintenance perspective, the Department needs to remain consistent. The Department is focusing on this equipment as well as the chargers located at in Wilmington (EVSE pole mount).

*Clarification:* Commissioner Talbot confirmed that the ChargePoint Level 2 chargers are the ones at the Reading Library.

*Question:* Chair Bitá asked a question about site location.

*IGM response:* Three are going to Lynnfield and five are going to North Reading. Interest in EV Chargers has increased from previous years.

*Question:* Chair Bitá asked if people are anxious to get them because it drives business.

*IGM response:* All locations are town owned; four are school related and two are Town hall.

*Question:* Vice Chair Pacino asked if RMLD is working with Peabody on the Lynnfield locations.

*IGM response:* The sites are within RMLD territory, there is no coordination with the two RMLD EV projects.

*Question:* Herrick asked a question relative to DC fast chargers.

*IGM response:* The delay is due to changes in the grant requirements, supply chain issues, and the state procurement process. The installation is expected to be completed Q1 2023.

The IGM said the Department is working on designing the network to accommodate DC Chargers, and this ties in to the super regional MLP concept.

Vice Chair Pacino made a **motion**, seconded by Chair Bitá, that RFQ 2022-33 for eight (8) Level 2 Electric Vehicle Supply Equipment (EVSE) be awarded to: Voltrek, LLC, in the amount of \$74,460.00, pursuant to M.G.L. c. 30B, § 22 as the lowest responsible vendor, on the recommendation of the Interim General Manager.

**Motion Carried: 3:1:1** (3 in favor; 1 absent; 1 abstained) Vice Chair Pacino abstained from the vote due to ownership of ChargePoint publicly traded stock. Commissioner Stempeck was absent from the meeting.

*Jaffari said the following:*

The Department went out to bid previously and intended to award the bid to Waukesha. During the contracting process minor exceptions became major. As a result, RMLD rejected all bids and went out to bid again.

Since the previous bid, one of Station Five's transformers began to demonstrate problems. Investigating and fixing the issue will require additional cost in terms of time and material. If repairs are required, funds will be needed to ensure the transformer remains functional for another three to four years.

In addition to any repairs needed, the company will filter and take moisture out of the oil.

The current bid reflects a lump sum of six transformers.

Vice Chair Pacino made a **motion**, seconded by Chair Bitá, to authorize the Interim General Manager to award the contract for IFB 2022-39, Substation Transformer Testing and Repairs, to the lowest responsible and eligible bidder pursuant to M.G.L. c. 30, § 39M, provided that the total price does not exceed \$610,000.

**Motion Carried: 4:1** (3 in favor; 1 absent). Commissioner Stempeck was absent from the meeting.

### **Report of the GM Search Committee**

Commissioner Talbot and Commissioner Coulter provided a General Manager Search Committee update.

The General Manager Search Committee consist of two BoC members and one CAB member.

Commissioner Coulter noted that GM Search Committee vetting process began with 50 applications. The pool was cut down to 15 applicants. Of those 15, five were chosen for the interview process. The interviews are in process and scheduled to end next week.

Following the interviews, the GM Search Committee will provide a recommendation to the BoC to continue looking at applicants or to move forward with finalists.

*Question:* Chair Bitá asked a question relative to an end date.

*Commissioner Talbot response:* It depends on the outcomes of the interviews already scheduled.

Commissioner Talbot noted that the approved GM Search Committee minutes are available on the RMLD website. The committee does not feel there is a lack of awareness of the opening, which was advertised on APPA, NEPPA, and other platforms. The open position is being widely discussed in the industry.

Commissioner Talbot said that the Committee interviewed three recruiting consultants. Two operate on a model where they would take a third of the GM salary and the third would cost \$15K. The Committee voted that, if need be, they will recommend Bernie Lynch as a recruiting consultant. However, the Committee feels there is no current need to bring in a consultant.

### **IGM Training and Travel**

Chair Bitá noted that there is an employee education budget in place that far exceeds the stipend amount.

The motion was made and voted prior to a discussion being held. Commissioner Talbot moved to reconsider the motion for discussion.

Vice Chair Pacino noted that the proposed stipend is open ended and has never been done before. This is something that is okay during a storm. In the past this has been part of a contract.

Chair Bita said that this is an unusual circumstance, because the IGM is performing two jobs. The intention of the stipend is to alleviate some time required by those roles.

Chair Bita noted that the IGM has not requested anything and is working long hours. This would be an act of good faith.

Commissioner Talbot said that the stipend was proposed by Commissioner Stempeck.

Vice Chair Pacino said that he has no problem if some restrictions are implemented.

Discussion ensued on potential restrictions on the motion.

Commissioner Talbot and Commissioner Coulter expressed support for the original motion.

The BoC agreed to move forward with the original motion vote.

Vice Chair Pacino, made a **motion**, seconded by Commissioner Talbot, move that the Board of Commissioners approve travel related expenses not to exceed \$600 a week and to be allocated from the existing budget, for Gregory Phipps as Interim General Manager and Director of Integrated Resources to cover a local hotel if he determines it is necessary to stay local for business purposes.

**Motion Carried: 3:1:1** (3 in favor; 1 abstained; 1 absent) Commissioner Stempeck was absent from the meeting. Vice Chair Pacino voted to abstain.

### **ENE Strategic Meeting**

The IGM stated that the October meeting will include RMLD's suggestions of strategic initiatives for RMLD BoC input.

Vice Chair Pacino, made a **motion**, seconded by Commissioner Talbot, that the Board approve Greg Phipps's travel to, and attendance at, the ENE Strategic Retreat to take place in Waterbury, Vermont on October 24<sup>th</sup>- 25<sup>th</sup>, 2022.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

### **Scheduling**

Future BoC meeting dates are as follows:

- October 13, 2022, 6:00 PM
- October 20<sup>th</sup> 2022 6:00 PM
- November 16, 2022, 7:30 PM
- December 14, 2022, 7:30 PM
- January 19, 2023, 7:30 PM
- February 15, 2023, 7:30 PM
- March 16, 2023, 7:30 PM

The next Joint Economic Development Meeting is tentatively scheduled for November. The IGM said that all parties want to keep moving the ball forward. The meeting was collectively pushed out by the Town and RMLD to secure additional information and provide a more valuable update.

### **Executive Session**

Vice Chair Pacino made a **motion**, seconded by Commissioner Talbot, that the Board of Commissioners go into Executive Session pursuant to Massachusetts G.L. c.164 section 47D, to conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel and to discuss trade secrets or confidential, competitively-sensitive or other proprietary information

provided: in the course of activities conducted by a governmental body as an energy supplier under a license granted by the department of public utilities pursuant to MA G.L.c. 164, § 1F and return to regular session, for the sole purpose of adjournment. Note: Roll call vote required.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting.

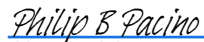
### **Adjournment**

Vice Chair Pacino made a motion, seconded by Chair Bitá, move that the RMLD Board of Commissioners adjourn Regular Session.

**Motion Carried: 4:0:1** (4 in favor; 1 absent) Commissioner Stempeck was absent from the meeting. Roll Call: Chair Bitá, Aye; Vice Chair Pacino, Aye; Commissioner Talbot, Aye; Commissioner Coulter, Aye.

Regular Session adjourned at 10:24 PM.

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

  
Philip B Pacino (Feb 21, 2023 16:50 EST)

Feb 21, 2023

Philip B. Pacino, Secretary Pro Tem  
RMLD Board of Commissioners



# Interim General Manager Update

*Presented to the  
Board of Commissioners and  
Citizens' Advisory Board*

15 September 2022

# Outline



Talent Acquisition and Talent Management  
Salary Survey  
Flex Time Pilot  
Summer Intern Outcomes  
RMLD Customer Payment History  
Joint Economic Development

## Talent Acquisition and Development

### *6 moves/promotions, 13 new hires (1 July and 30 Sep 2022)*

July (4 promotions, 2 hires)

- Promotions – Asst General Foreman, 3 X Leader Lineman
- Hires – Facilities Maintenance Worker, Technology Support & Systems Analyst

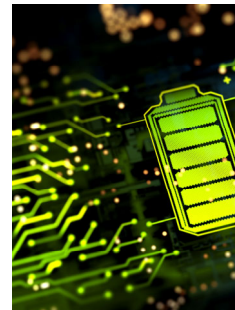
August (1 move, 5 hires)

- Move – Customer Billing Specialist
- Hires – 2 X Substation Technicians, 3 X Apprentice Lineman

September (1 move, 6 hires)

- Move – GIS Specialist (new position)
- Hires – 2 X Apprentice Lineman, Facilities Manager, Director of IT, Director of Finance & Accounting, Assistant Director of IRD

10 openings in process of being filled



*Promotions/moves and new hires **energizing** entire team, enabling more accomplishments, adding new skills and perspective*

## Team Management / Leadership

### External salary survey

- Kickoff with NFP project manager on 1 Sep 2022; complete by year-end
- Salary benchmarks for non-line operations positions (1H23 forecast)
- MEAM survey for line operations positions

### Employee survey

- Nameless, simple, soon
- Free platforms could be adapted, but survey Qualtrics is best option
- Carefully refine questions (allow for comments)
- Conduct in November

### Flex time program

- Very positive employee feedback of summer pilot
- Extended through Dec 2022
- Customer front window open 4 days (7:30 to 5:30, Monday – Thursday)
- Adding Flextime for line ops, grid asset, engineering teams





## Summer Intern Program – Great Success

### Summer program purpose

- Introduce RMLD and industry to potential future employees
- Create positive reputation at host schools
- Complete internal projects

### Summer 2022 project highlights

- ASHP load impact
- EV load impact
- Hydrogen as alternate generation
- Solar PV site research
- Mobile app benchmarking
- PCE vs CPI indexing analysis
- ...

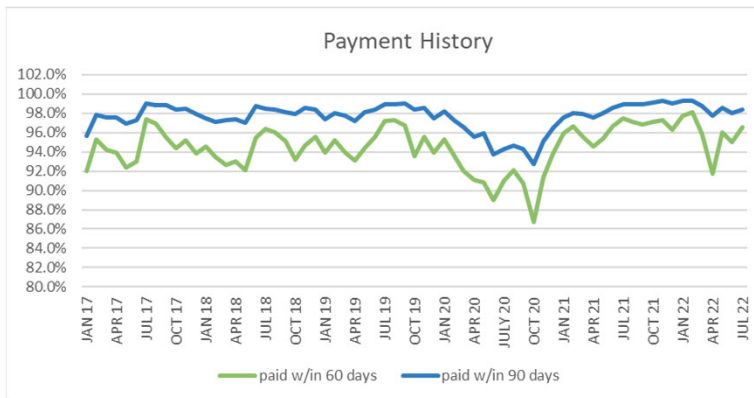


3 summer interns and RMLD analyst at Cabot Turner Falls hydro

*Great success for Summer Interns and RMLD (learning, value add, recruiting)*

# RMLD Payment Aging

Aug 2022 snapshot



RMLD offers 15% prompt payment discount (excludes purchase power which is a pass through)

RMLD offer LIHEAP to ~200 customers (financial bill pay assistance)

98.5% w/in 90 days  
Jan 2021 – Jul 2022

96.2% w/in 60 days  
Jan 2021 – Jul 2022

LIHEAP, Good Neighbor Energy Fund, local church and charity services



**Businessweek**

**+ Equality**

# A 'Tsunami of Shutoffs': 20 Million US Homes Are Behind on Energy Bills

Surging electricity prices spur worst-ever crisis in late utility payments.



About 1 in 6 American households are behind on their utility bills, the highest number on record, according to the National Energy Assistance Directors Association. *Photographer: Michael Nagle/Bloomberg*

By Will Wade and Mark Chediak

August 23, 2022 at 6:30 PM EDT *Updated on August 23, 2022 at 8:05 PM EDT*

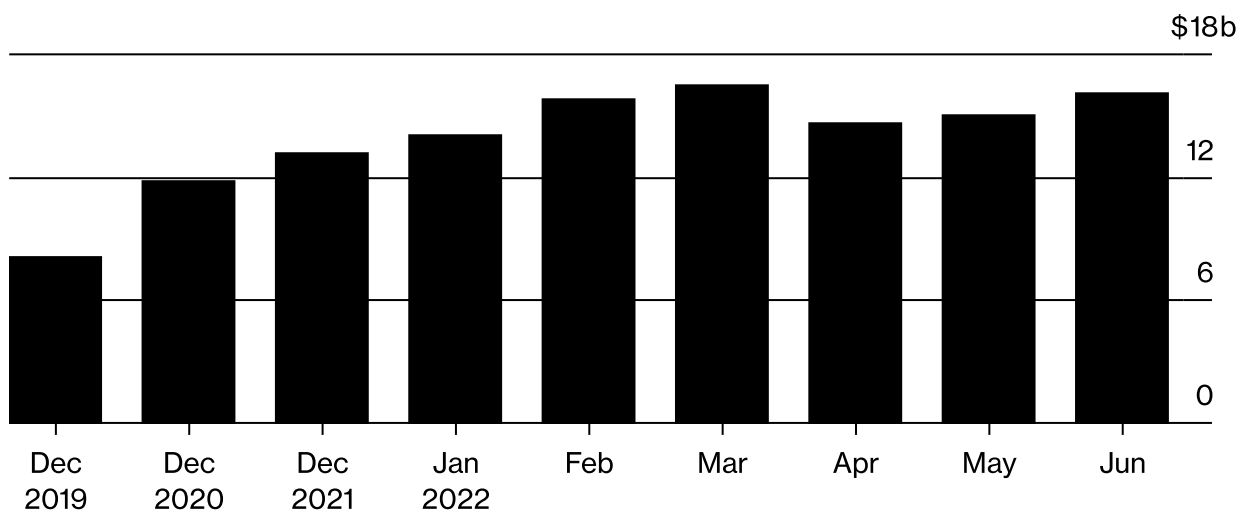
Adrienne Nice woke up early on the morning of July 25 to news she'd been dreading. The power company, Xcel Energy Inc., had shut off the electricity to the small Minneapolis apartment she shares

with her teenage son, just as a heat wave was bearing down on the city.

Nice had been struggling financially ever since the pandemic hit, racking up more than \$3,000 in past-due utility bills. The warnings she'd gotten on her monthly statement—"FINAL NOTICE" scrawled in big, bold letters—had prepared her to some degree, but it was still jarring to find the fridge dark and the air conditioner silent. With temperatures set to reach 95F (35C) in the coming days, she needed the power back on, and fast.

The Nice household is one of some 20 million across the country—about 1 in 6 American homes—that have fallen behind on their utility bills. It is, according to the National Energy Assistance Directors Association (Neada), the worst crisis the group has ever documented. Underpinning those numbers is a blistering surge in electricity prices, propelled by the soaring cost of natural gas.

## Total US Overdue Utility Balance



Source: National Energy Assistance Directors Association

The power bill crisis is even more acute in Europe, where the spike in natural gas prices has been far greater in the wake of Russia's invasion of Ukraine. Policymakers there have sprung into action, throwing billions of euros in aid at struggling families to help them pay bills. There's been no meaningful talk of doing anything on a similar scale in the US, where the hand-wringing has been dedicated, as always, to the gyrations of gasoline prices at the pump.

Utility shutoffs can have deadly consequences, though, a risk that's becoming more palpable as summer heat shatters records. Already gut-punched by soaring prices for just about everything, more and more people are facing a choice among food, housing, and keeping the power on. "I expect a tsunami of shutoffs," says Jean Su, a senior attorney at the Center for Biological Diversity, which tracks utility disconnections across the US.





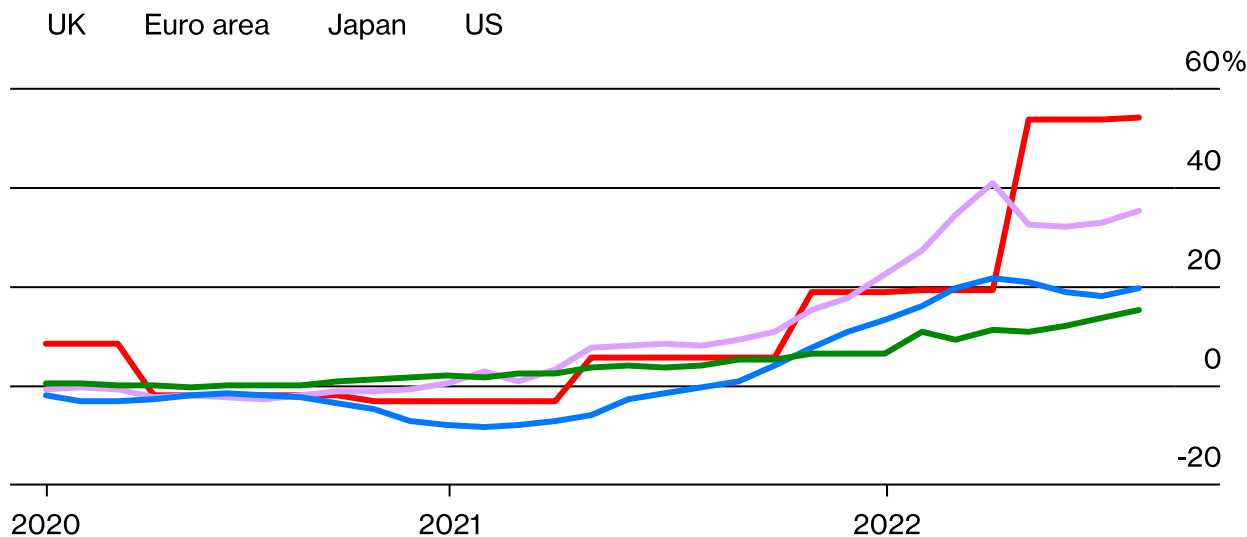
Germany put a levy of \$296 on households to pay for natural gas and asked citizens, municipalities, and industrial consumers to save energy. *Photographer: Krisztian Bocsi/Bloomberg*

Nice, 45, is a housecleaner. Her work dried up almost overnight when Covid-19 swept through Minnesota in early 2020. Things are picking up again, but inflation is eating into the money she makes. Just filling up her old Saturn sedan to drive from house to house now costs about \$50 a week.

She found it impossible to set aside enough money for utilities, especially as her power bill effectively doubled over the past year. A friend who used to live in the apartment along with her two kids moved out in mid-2021. But though Nice's household is using less electricity, she's still getting charged about the same amount per month—\$244, on average. "I just don't understand how electricity can be so high," she says.

## Household Electricity Prices

Year-over-year change



Source: Consumer price index data compiled by official statistics agencies

California's PG&E Corp. has seen a more than 40% jump since February 2020 in the number of residential customers behind on payments. For New Jersey's Public Service Enterprise Group, the total is up more than 30% for customers at least 90 days late—and that's just since March.

The average price consumers pay for electricity surged 15% in July from a year earlier, the biggest 12-month increase since 2006. Regulation of electricity rates makes it hard for providers to immediately pass on higher fuel costs, so the recent hikes may be just the start.

The US is waking up to a problem that's plagued other parts of the world since last year. In Germany, the government slapped a levy of \$296 on households to pay for natural gas as Russia squeezes energy flows to Europe after the invasion of Ukraine. In the UK, government support for energy bills doubled, to \$482 for every household starting in October, but prices are rising so fast that the support might not be enough. More than 100,000 people have signed a pledge from campaign group Don't Pay UK to cancel their direct-debit energy payments beginning in October.



Demonstrators gathered outside the Glasgow headquarters of ScottishPower in August to protest the rise in energy prices and the cost of living. *Photographer: Jeremy Sutton-Hibbert/Alamy*

In Japan and Thailand, electricity bills are surging as the countries grapple with expensive fuel costs that have been made worse by their slumping currencies. Pakistan and Bangladesh, falling short in the global competition for costly fuel, have suffered from rolling blackouts and increasing power bills.

In the earlier days of the pandemic, some states and utilities halted power disconnections, shielding customers like Nice who'd fallen on hard times. But those measures wound down just as inflation gathered steam. US households owe about \$16 billion in late energy bills, double the pre-pandemic total, according to Neada. The average balance owed has climbed 97% since 2019, to \$792. "The bills just aren't affordable," says Mark Wolfe, Neada's executive director. "People on the bottom, they can't pay this."

For investor-owned US utilities, the financial repercussions of accumulating debt from unpaid customer bills are typically limited. That's because state regulators often allow utilities to recover their losses by adding a charge for customers who are paying their bills, or taxpayers help pick up the tab.



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In Nice's case, her power was out for only three days; the nonprofit Citizens Utility Board of Minnesota helped her negotiate a payment plan with Xcel. Her experience is common: Utilities shut off customers only as a last resort, according to Xcel. About 80% of US utility customers who experience a shutoff will have service restored in a few days, Wolfe says. The remaining 20%, though, may be close to eviction or on the verge of homelessness.



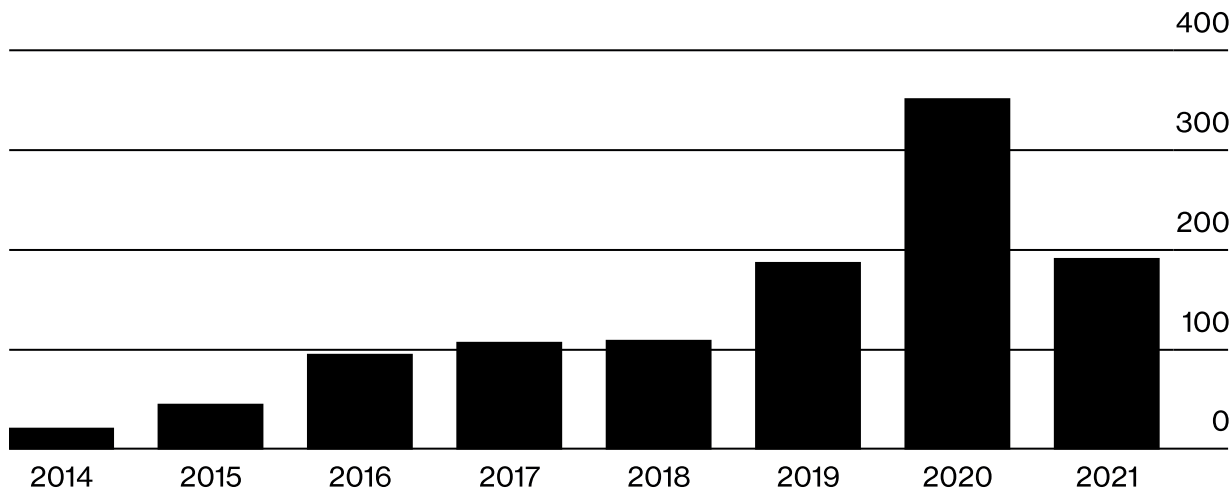
A nonprofit helped Adrienne Nice negotiate a payment plan with Xcel Energy, so her power was shut off for only three days. *Photographer: Ken Wolter/Alamy*

While the US government’s Low Income Home Energy Assistance Program, or Liheap, helps low-income households pay energy bills, it doesn’t come close to the scale of subsidies offered by some countries in Europe and Asia.

Calls for states and the federal government to offer more assistance are starting to grow. A bipartisan group of almost 60 US representatives and senators asked in early August for additional emergency funding beyond the \$4 billion set aside for Liheap for fiscal year 2023. California just passed a budget that will offer \$1.4 billion to help residents pay past-due utility bills.

[Entergy Corp.](#) agreed in July to a moratorium on shutoffs in New Orleans through October, after the City Council asked the company to voluntarily halt disconnections during the summer heat. But moratoriums are just a stopgap measure, says Wolfe, who anticipates a surge in disconnections across the US. “Inflation is hitting people pretty hard,” he says. “Utilities are not set up to deal with the number of people who can’t pay their bills.”

## US Heat-Related Fatalities



Source: Centers for Disease Control and Prevention

Hotter summers are heightening the risk that, for some people, losing power will prove fatal. According to Indiana University’s Energy Justice Lab, 41 states have some sort of protection against utility shutoffs during the winter, whereas only 19 have laws or regulations preventing disconnections in sweltering weather. On average there were 188 heat-related deaths a year in the US from 2017 through 2021, up from an average of 81 in the five years before that.

Historically, states and regulators have focused on protecting customers during the cold winter months, but that will need to be reexamined with climate change expected to create longer and more persistent heat waves, says David Konisky, co-director of the Energy Justice Lab. Rising temperatures are already boosting demand for electricity and raising utility bills.


Shutoffs after people fall behind on bills “will likely become worse in the coming years and decades,” he says. “It’s higher prices. It’s heat waves and increasing needs for energy.” –*With Ben Holland, Shoko Oda, Stephen Stapczynski, and Rachel Morison*

*Read next: [Wall Street Says a Recession Is Coming. Consumers Say It's Already Here](#)*

*(Adds context for electricity-price data in ninth paragraph)*

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Summary Notes

# NEPPA 2022 Annual Conference

*Presented to the  
Board of Commissioners and  
Citizens' Advisory Board*

15 September 2022

# Outline

Kelly-Detwiler - Keynote

Joe Cutatone – Clean Energy Goes Mainstream

Benjamin Byboth – Commercial Fusion

Ted Wiley – Form Energy Storage

Elizabeth Whitney – Legislative

Barry Rush - Regional Energy Challenges

Mike Hyland – EV Chargers

# Peter Kelly-Detwiler Keynote

## Key Points

Key Themes – **decarbonization, digitization, decentralization**

New England States mandating decarbonization (use and source)

**Use** – heating and transportation will dramatically increase electric load

**Source** – renewables are intermittent and distributed

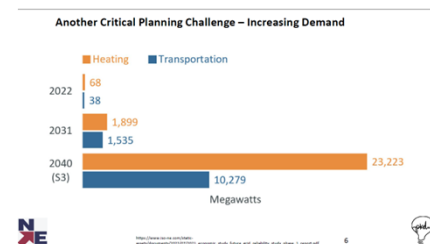
Intermittent renewables causing supply volatility and price volatility

Storage dampens intermittency and will take many forms (ex home/EV)

Data increasingly critical to manage, predict, enable distributed control

## Implications for RMLD

- Model load increase and update distribution network to support bi-directional and variable load
- Define and build digitization program (MDM/AMI, mobile app, Dir Enterprise Data are just a start)
- Build within territory generation and storage (landfill PV, accelerate solar, continue storage)
- Build new rate programs to enable customers to change energy use profiles; add customer control w/ AI



3 Source: NEPPA 2022 Annual Conference; Keynote-The-Evolving-Northeastern-Electricity-Landscape-Peter-Kelly-Detwiler-8.15.22

# Joe Cutatone - Clean Energy Goes Mainstream

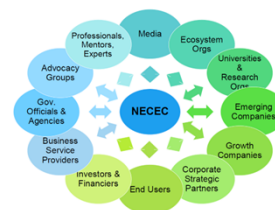
NEPPA 2022

## Key Points

- Rapid transition to clean energy happening now
- New competencies are required (storage, grid management, ...)
- Prioritize resiliency (aka reliability in this presentation)
- Work regionally
- Make sure your customers know what you are doing
- Connect on values (climate, affordability, reliability)



NECEC's Community



## Implications for RMLD

- a) Take action now (generation, storage, ...)
- b) Learn new expertise (train team, recruit new hires with up-to-date expertise and inquisitiveness)
- c) Explore super-regional MLP consortium
- d) Accelerate external communications

4 Source: NEPPA 2022 Annual Conference; The Future is Now Clean Energy Goes Mainstream Joe Cutatone

# Ben Byboth – Commercial Fusion Energy

## Key Points

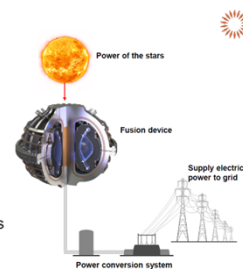
Solar, wind not price competitive above 50% mix  
More than renewables required to achieve Net Zero  
Commonwealth Fusion Systems founded 2018, MIT spin-off  
Raised \$2 billion; strong team; diverse investor set  
Building facility in Devens, MA  
HTS magnets are the game changing technology  
Commercialization in early 2030's

## Implications for RMLD

- a) Monitor progress of Fusion Systems
- b) Consider some room for fusion in longer term power supply portfolio

## Why fusion is disruptive

- Zero emissions, power-dense, dispatchable
- Inherently safe – no meltdown, no long-lived nuclear waste, no proliferation
- Economically competitive
- Scalable: build anywhere; inexhaustible fuel supply; leverage existing infrastructure, supply chains



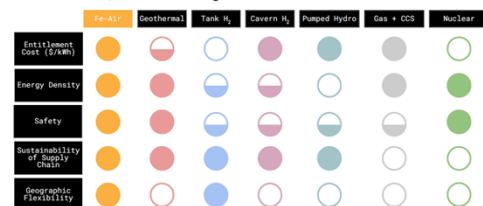


# Ted Wiley- Form Energy Storage

## Key Points

- Storage needed for intermittent generation sources
- Renewable lull periods can last over 24 hours
- Significant investing into storage (\$367M into Form Energy)
- Form targeting 100-hour duration storage system
- Form targeting (\$/kWh) at 10% of lithium ion cost
- Form's reversible rust tech safe, scalable, and reliable
- Pilot projects by 2024; commercial scale by 2026

Form Energy's battery delivers on core competencies as compared to other clean, firm technologies



## Implications for RMLD

- Explore role as local pilot site
- Stay abreast of commercial development
- Include flexibility into near-term storage contracts (energy services agreements)

6 Source: NEPPA 2022 Annual Conference; Ted-Wiley-Emerging-Topics-in-Energy-Storage-NEPPA-Form-Presentation

# Elizabeth Whitney – Legislative Update

## Key Points

Infrastructure Investment and Jobs Act – implementation clarifying

- Reliability hardening, EVs

Inflation Reduction Act significant for MLPs

Extensions of Production Tax Credit and Investment Tax Credit

- Direct pay to MLPs (ed. “this is significant”)

EV tax credits (with new strings)

New grant and loan programs (environmental and climate)

## 2022 LEGISLATIVE UPDATE

- Democrats pass Inflation Reduction Act
- Implementing the Infrastructure Investment and Jobs Act
- FERC Transmission and Markets
- West Virginia v. EPA
- Election preview

## Implications for RMLD

- Immediately pursue grants for w/in territory generation projects (ITC, PTC, environmental, climate, and ...)
- Pursue IIJA cybersecurity grants as submission qualifications clarify
- Incorporate EV tax credits into updated EV incentives
- Explore super-regional MLP transmission plan for resiliency of contiguous MLPs in North Shore

7 Source: NEPPA 2022 Annual Conference; 2022-Legislative-Update.Elizabeth-Whitney

# Barney Rush – Regional Energy Challenges

## **Key Points**

Regional and national threats: threats from climate change, growth authoritarianism (Tocqueville, Russia, China)  
Decarbonization is a massive and global issue, but it remains a regional job (avoid cynicism)  
Decarbonization will take time resolve (be realistic)  
Fossil fuel generation is a component of the transition to intermittent non-carbon generation (ISO-NE four pillars)  
Economic market forces (money) enable the transition (“get prices right”)  
Russia invasion of Ukraine directly affects local energy prices (sword)  
China has long head start in resources for renewable energy (sword)  
Civil, transparent, tolerant, and fact-based discussions are foundation of short-term and long-term solutions

## **Implications for RMLD**

- a) Take action, invest now; making decisions in context of reliable, low-cost, non-carbon mission
- b) Be realistic regarding costs and time to transition and time to realize benefits (long-view)
- c) Increase customer engagement and education

8 Source: NEPPA 2022 Annual Conference; Barney-Rush-Reflections-of-an-ISO-Board-Speech-to-NEPPA

# Mike Hyland – Public EV Chargers

## Key Points

- EV early on adoption curve but accelerating
- Majority charging is and will be at home
- Location, location, location (customer value, install costs, ...)
- Think total cost of ownership (ongoing maintenance, cellular, ...)
- Communicate (EV community (social media), cellular carriers, ...)
- Many rate options to consider
- The utility is expected to be the expert – “become the expert”

## SMECO Deployment in Practice



## Implications for RMLD

- Finalize charging solutions for the 3,000 multi-unit dwellings w/in RMLD (apartments, condos)
- Consider rates tailored to use case (EV only, EV w/ home, EV w/ solar/battery, ...)
- Refine A3 / EV 1 rate to accommodate forthcoming “duck curve”
- Brand RMLD owned chargers; be active in EV community (especially social media)
- Train internal team on EV; learn for others; be the expert; EV on RMLD website (w/ links)

9 Source: NEPPA 2022 Annual Conference; An-Energized-Forecast-Charting-your-Utility's-EV-Future-Michael-Hyland

Thank You



**Facing our Region's Challenges:  
Reflections of an ISO - New England Board Member**

**By  
Barney Rush**

**Northeast Public Power Association**

**Stowe VT.**

**August 16, 2022**

## **Introduction**

I am grateful to have the opportunity to speak to you today. I've now served nine years on the board of the ISO-New England, and three as chair of the Markets Committee. Naturally, one accumulates many thoughts over that span of time, and you have offered me a forum where I can share some of them with you. Thank you. Let me also add that my comments today are my own personal thoughts, and I am not speaking as a representative of the ISO, its management or my fellow directors.

First let me honor your profession, of serving in the public power sector. Many of you may be familiar with the multi volume biography of Lyndon Johnson, written (and still being written!) by Robert Caro. In the first volume, Caro uses a chapter to describe what the Texas hill country was like before electricity: the harsh and exhausting rigor of daily life. Men rising at 3 am to milk their cows by hand; women yoking themselves up, to carry heavy pails of water up the hill to the home, then wash the heavy clothes by slapping them with paddles and ironing with hot coals in sheds that became furnaces in the heat. All this at a time, in the 1930's, when urban America had had electricity for over two decades.

President Roosevelt had a vision that all Americans, regardless of income, regardless of how rural their life, deserved the comfort and the freedom from toil that electricity provided. And so, the New Deal created the Rural Electrification Administration, to bring electricity to those who were not being served by utilities. The young congressman, Lyndon Johnson, lobbied hard to bring the funds to his district that allowed the wires to be strung. The lights went on across the Texas hill country in 1938. And that year, so reports Caro, parents across his district named their new-born sons, "Lyndon." Serving the public, with low cost and reliable power: that is the heritage and core values of your profession.

Also, I would like to honor the ISO New England management team, led by Gordon and Vamsi. I acknowledge that my own early background in viewing management was not very elevating: I worked at Lehman Brothers in the 1980's, where if one asked "How many Lehman Brothers partners does it take to screw in a lightbulb?" the right answer was "Nine: One to screw in the lightbulb and eight to push the ladder over." But kidding aside, in my professional life, I have never worked with management as collegial or thoughtful; as determined to find workable solutions to the problems that must be faced; or as respectful and mindful of the views of others. It has been a privilege to work with them, and with my colleagues on the Board.

We as a nation face two existential crises: threats from climate change, and the growth of authoritarianism. Perhaps discussing these two together will surprise you. But New England must grapple with the impacts of both, and I would like to explore these two grave threats, and their intersection, on our power system and our customers.

## **Climate Change:**

The threats posed by climate change are well known to all of us. To note just one increasing risk from within our industry: I recall a NEPOOL sector meeting in 2017, during which I asked the

Transmission sector what keeps them up at night. The answer: increasingly severe storms, and the consequent investment needed to upgrade distribution lines and maintain reliability. Of course, the concerns I heard expressed are only one facet of the overall problem, which includes severe heat, rising sea levels and drastic changes to the survival of plants and animals around the globe.

I've traveled my own journey on the imperative of dealing with climate change: from recognizing it as an issue, to taking it seriously, to regarding it as a matter of urgency.

But urgency must not obscure realism.

First, realism in respect of geography: The only solution is a world-wide solution. I recall listening to a government official of Rhode Island, a few years ago, stating that the people of his state really cared about climate change because of the looming danger of sea level rise in Narragansett Bay. I thought to myself: What possible difference can Rhode Island make – on its own - to the height of water in Narragansett Bay? And that meanwhile, the Indian solar company that I chaired, Azure Power, probably had greater scope for helping, due to its efforts to decarbonize a rapidly growing major country still dependent on large thermal coal plants. Recognizing the need for climate change to be addressed on a global basis can breed cynicism: Why bother about our small piece of the planet, when it amounts to so little of the total that must be transformed?

Yet clearly, decarbonizing New England remains our job. All regions of our country must do their part, not only to clean our national economy, but to demonstrate by example. No one should doubt how difficult it is for large emerging markets to decarbonize; yet we also know that whatever influence we may have on the policies of other nations, that influence is nil without the solid evidence of our own commitment.

Secondly, we must be realistic in terms of time. I have no doubt that all of you know how daunting the challenge is. Most of the New England states have had policies in place for a decade to incent more renewable energy. Yet after this time, only about 10% of the power on our grid, along with roof top solar, comes from these sources. And looking ahead, construction of New England's off-shore wind projects – as major an effort as that is – is only one of many requirements: finding land for on-shore wind and solar, the years ahead to develop technologies, such as modular nuclear reactors and long duration storage, and construction of thousands of miles of additional transmission lines. The Future Grid Reliability Study, just released by the ISO two weeks ago, puts these challenges into stark relief: New England currently has 5.6 Gigawatts of wind, solar and storage capacity. The deep decarbonization scenario will require between 73 and 90 gigawatts of such capacity – 15 times as much as we have today.

To meet the vast increase in the demand for storage, the world must rapidly scale up production of such essential inputs as cobalt and rare earth elements. The recent study on storage from MIT highlights this challenge: production of these elements will have to increase at sustained compounded annual growth rates that are two to four times what has been achieved in single years in the past.



We would all wish to find ways to speed up the transition. But we should also be aware that the faster the transition, the more it must rely on technology that is commercial today, especially wind and solar. It takes time to nurture new technologies, such as small modular reactors which I hope will have great success. There is a limit to compressing the schedule of R & D, certification and testing. Some of my colleagues on the ISO board have stated this point succinctly: “9 women cannot make a baby in a month.”

Such sobering thoughts do not dampen my optimism that we can substantially decarbonize our economy. But by when? By 2030, as some politicians have proclaimed? Clearly impossible. By 2050? That seems plausible and would be a stupendous achievement.

If the timeline I offer seems a low bar to some, let me note the danger of proclaiming targets that are patently unrealistic. For when such targets are not met, public officials lose credibility and hence the confidence of the citizens they lead, when, in fact, it is vital that officials retain the confidence of the public for a transition that is so challenging and costly.

We must also recognize that while pursuing this goal, reliability must be maintained, even as we greatly increase the amount of electricity we generate AND do so with an increasing scale of intermittent resources. I want to be clear about the following: We do not cite the importance of maintaining reliability as a counterweight to the need to decarbonize. To the contrary, maintaining reliability is the handmaiden of decarbonization; for if the public were ever to believe that we must choose between reliable supply of what our lives depend upon, and a further decrement in carbon emissions, the public’s support for the transition will plummet. Further, we will jeopardize the people’s interest in decarbonizing two other sectors – transportation and home heating – that now emit more carbon than the power sector. In sum: a means of securing and ensuring adequate energy reserves, especially for the winter – including the maintenance of and investment in, fossil fuel infrastructure – is important to maintain the public’s support of economy wide decarbonization.

Therefore, let us focus on incenting zero carbon resources and the means to store power from them, and thereby reduce the use of fossil plants; but not criticize the presence and need of these fossil plants themselves. Gordon van Welie’s statement regarding the “four pillars” of a successful transition – growth in zero carbon resources, maintenance of adequate balancing plants, need for energy adequacy and construction of more transmission – is an important addition to this conversation.

## **Markets**

To encourage this transformation, I remain a strong advocate of markets – and hold a healthy regard for market forces. Think of what market forces have already achieved: I remember, when I was a power industry executive in the 1990’s, that we believed that the natural gas prices of \$10 mm btu’s was a given. But then came the massive growth in fracking that led to the price collapse, and this, in turn, propelled the massive switch from coal to gas fired generation around

the country – cutting carbon emissions/kwh in half at every new plant that replaced an old coal station.

We had come to believe that the era of low gas prices would endure, with resulting low marginal prices in our energy market. We have therefore been grappling with the issue of how key regional assets, such as our nuclear power plants, would remain profitable and serve our needs. But suddenly, we now face a dramatic increase in natural gas prices. A war induced blip? I will discuss that further below, but we should recognize that perhaps the low prices we enjoyed were the result of BOTH plentiful supply of fracked gas AND the constraint on exporting LNG, suppressing demand. That demand constraint has now been relaxed, and I expect that sustained world-wide demand for LNG will induce the construction of more export terminals, and hence provide steady uplift to domestic pipeline gas prices.

No doubt this price increase will induce more gas production, but we may still have a new general equilibrium that leaves prices well above the levels of this past decade. And this factor alone will provide a powerful incentive for renewables and other non-fossil sources of power. To put this in perspective, economists have long thought that a reasonable price on carbon, if one were to be established, would be approximately \$40/ton. This would cause power prices to increase approximately 1.5 cents/kWh, if a modern combined cycle plant were setting the marginal price. Yet the increase in natural gas prices over the past 12 months – from \$3 to \$8/mm btu's, raises energy prices by over three cents/kWh – double the impact of the oft cited carbon price figure.

In sum, we may be moving from an era of cheap gas – which incited a wave of investment in gas fired generation that drove national carbon emissions down – to an era of more expensive gas that will incent further investment in zero carbon resources across the country, and thereby propel another steep decline in carbon intensity.

This is not to suggest that subsidies, incentives and market design do not matter: these instruments of policy and tariff matter a great deal. Just that we should remain both humble and nimble in our work and remain aware of the larger forces at play.

Regarding state policies, I respect the efforts by the States to kick start the offshore wind development. I don't believe that there is any other means, within this decade, for the region to make such a material reduction in carbon emissions. And as much as I believe in markets, there are times when the "infant industry" justification for subsidizing a new sector makes sense. Given the risks, it's hard to imagine developers investing the vast sums required to develop offshore wind, without a fair measure of revenue assurance if they generate the power they expect to.

However, the grand goal for using markets is to allow us to retire the use of PPA's that ultimately become an inefficient and costly means to decarbonize the power industry. And we must care about cost. Consumers in New England want three things from their power: They want it reliable, cheap and clean. This is a tall order. And if there is consensus in the region for power that is reliable and clean, the challenge of controlling cost is great.

Why is that so, given the low operating costs of renewable energy, and the opportunity to move away from generation which now requires expensive natural gas? First, New England does not enjoy the natural advantage of the great plains states for onshore wind, or the southwest for solar. These technologies cannot be built to the same scale here or be as productive. Also: the consumer will have to pay for assets that have low-capacity factors and hence high costs per kWh. Utility scale wind and solar plants will require radial transmission lines that will likely have substantial excess capacity due to the intermittency of the supply they carry. Further, as I set out above, a substantial fleet of

conventional generation facilities will still be needed, even if, due to renewable energy and batteries, their hours of operation steadily decline. These units must be well maintained, with stored fuel, and profitable to their owners.

How then do we use markets to achieve the desired transformation which, while not low cost, will at least be at the lowest cost possible? The program set out by the ISO is our effort to address that question. And put simply, these further reforms represent our continued effort to “get prices right.”

First: Capacity accreditation. Generation must be paid for the capacity a unit truly provides – not more, not less. The ISO’s determination to assess without favor all forms of generation – fossil and zero carbon alike – is a major project that will no doubt be controversial when accreditation values are recommended. But so be it. We must send the signals to developers to provide the types of generation – and storage – that will truly add to system reliability; and not make capacity payments to units that do not.

Second: Ancillary markets. This project is vital to co-optimize reserves and procure more efficiently the synchronized or fast start capacity that the ISO operators believe is needed the next day. And in its second phase, this project will provide additional incentive for generators to have fuel on hand when the system could be constrained – including constraints caused by lulls in renewable generation.

Third: the Pathways work, which in essence is an effort to find market means to provide an added tilt in favor of zero or low carbon generation. We appear to be moving towards a consensus that the option to be studied further is the “Hybrid:” a moderate price point for Net Carbon Pricing and a Forward Clean Energy Market for new resources. The conversation on these market-oriented policies continues, but let me offer some observations:

- Let’s not think of choosing a pathway – with the prices shown for 2040 – 2050, as an “ultimate” answer - THE policy that will “do the job” of achieving zero carbon over the next 30 years. Instead, let’s focus on the near term: What steps can be taken now or soon, with some initial price point – that promote decarbonization?
- Second, we should take note of a significant finding in the Pathways report: that the payments consumers make through an NCP program flow overwhelmingly to zero carbon resources. Therefore, the incidence of this program is actually quite similar to the FCEM structure or any other program which benefits zero carbon generation.

- Third, Net Carbon Pricing will provide material benefit to the two large nuclear plants that are so essential to meeting both our decarbonization goals and providing reliable base load power. Putting the point just made and this one together has yielded the thought that we might well change the name of Net Carbon Pricing to emphasize these results. I'll offer one: CERI - the Clean Energy Reliability Incentive.
- I want to emphasize a key premise of the Pathways project: that New England will develop its zero-carbon economy more efficiently if choices are made through auctions that are pan-technology and pan-regional, rather than a series of one-off solicitations by a particular state for a particular technology. Let the market participants speak, allowing them the full scope for their ideas, choices and ingenuity.
- Finally – and by no means least - advancing these structures requires extensive discussions with the states, as both the price points for CERI (if you'll allow me to use that term), and the size and scope of a FCEM – can only be determined by the states. And now, with energy market prices as high as they are, there will need to be discussion of the timing of when Pathways policies might be put in place.

### **Market Frictions**

I have set out the broader trends in market prices and discussed the continuing programs that the ISO wishes to pursue to “get prices right” - and incent clean energy and enhance reliability. As hard as will be to launch these programs, my greatest concern is not our ability to do so; but rather, the frictions that may not allow supply to respond to the carefully considered price signals we send.

Let's consider some examples:

- A gas only generator receives the price signal that the unit will be given a low-capacity accreditation value, due to lack of reliable supply of gas in the wintertime. How can the owner respond? Will the community and authorities permit the owner to build a distillate oil tank?
- The great disadvantage of wind and solar is the vast amount of land for utility scale projects: A solar project requires about 6 to 7 acres per MW, with only a 20% capacity factor. The amount of additional solar capacity envisioned in the Future Grid Reliability Study would require over 100,000 acres of land just for solar, between now and 2040. How much local opposition will there be for the land required for sizable arrays?
- Large scale expansion of renewable energy and accessing hydro power from Canada require significant additional transmission lines. Easy to permit and build? Hardly. We need look no further than the successful effort to stop Northern Pass in New Hampshire and the successful effort so far to stop the NECEC project in a remote part of Maine.

Those who oppose such projects are no doubt sincere. Yet clearly, we will not make the progress needed to decarbonize, if significant projects are successfully stopped by local opponents saying, “Yes, I take climate change very seriously, but not this project, not here.” And we will not have the reliability we need if fuel storage projects are successfully stopped by local opponents saying “Yes, I understand we need to keep the grid reliable, but not with any fossil fuel.” Local fervor can become collective hypocrisy: We will proclaim the urgency of decarbonization and the need to maintain reliability, but not construct the infrastructure and plants we need to achieve our goals. This, in my view, is a most urgent public discussion that we must have.

An upcoming focal point of this discussion could well be the Everett LNG terminal. Will New England allow this vital facility to close and leave the entire region dependent solely upon the St. John facility in New Brunswick?

### **Authoritarianism**

Had I given this talk a year ago, I may well have ended it with the points just made. But the world has experienced an upheaval in the past 6 months that compels comment. I therefore would now like to discuss what I believe is another existential crisis – very different from climate change – but just as ominous: The renewed rise of Authoritarianism.

The contest between democracy and autocracy has long been noted. Let me quote from Alexis de Tocqueville, in his magisterial account, “Democracy in America,” written in 1835.

“There are at the present time two great nations in the world. I allude to the Russians and the Americans. Both of them have grown up unnoticed; and while the attention of mankind was directed elsewhere, they have suddenly placed themselves in the front rank of nations, and the world learned their existence and their greatness at almost the same time.

The American struggles against the obstacles that nature opposes to him; the adversaries of the Russian are men. The former combats the wilderness....; the latter, civilization with all its arms. The conquests of the American are therefore gained by the plowshare; those of the Russian by the sword. The American relies upon personal interest to accomplish his ends and gives free scope to the unguided strength and common sense of the people. The Russian centers all the authority of society in a single arm. The principal instrument of the former is freedom, of the latter, servitude. Their starting point is different, and their courses are not the same; yet each of them seems marked out by the will of Heaven to sway the destinies of half the globe.”

I feel chills when I re-read this passage. I first read it in college, in the early 1970’s, at the height of the cold war, and marveled at de Tocqueville’s prescience. I reread them in the 1990’s, when we thought we could feel safe that these words had lost their relevance. But now, I read them again, with horror and foreboding. Who would have believed that today, a major European power would unleash a brutal assault on a peaceful neighboring country?

But also: while we fervently hope that Ukraine will prevail, and many believe that Russia has lost its super-power status, we must also contend with the rise of China – not as a nation joining

the ranks of developed market economies organized by the rule of law, but as a highly centralized autocracy, with state directed enterprises and an omnipresent surveillance of its people that even George Orwell could not have imagined. And finally, we must be aware of a creeping rise of authoritarian instincts even within democratic states – such as Hungary – but also, frighteningly, here in our own nation as well. How does this existential threat affect our world of providing electric power? In three ways, as I discuss below:

The first is the immediate crisis caused by Russia's invasion of Ukraine and Putin's decision to sharply curtail the supply of natural gas to Europe. This of course has led to the steep surge of LNG prices and heightened the risk of New England procuring LNG supplies it may need this coming winter. At times last winter, we faced pipeline gas and LNG prices of over \$20/MMBtu's, resulting in electric prices of over \$150/MWH. Europe is now paying \$60/MMBtus for LNG – in the summertime. Could these be the prices that New England generators will have to pay this coming winter – and perhaps the next, in competition for cargoes that will otherwise go to Rotterdam?

If faced with such prices for natural gas, the ISO markets will react to clear generators with lower cost fuels – primarily oil. This could well require state and local authorities to provide necessary waivers for these plants to produce higher levels of carbon emissions. I expect that as strongly as New England wants to reduce carbon emissions, residents will want officials to mitigate such material price increases in any way possible. And a companion point: it will be vital that every oil and dual fueled unit on our system be well maintained and ready for this winter. Let me add a coda to this: The additional 1,200 MW's of Canadian hydro discussed above would also substantially reduce the region's reliance on LNG – mitigating price spikes and enhancing reliability.

Beyond the impact of the upcoming winter, we can expect that the Ukrainian war will cause a seismic shift in the perspective and policies of western Europe: Russia will not be trusted for a generation or more, and governments will be determined to free themselves from being held hostage to Russian oil and gas. We can therefore expect even greater determination in Europe to advance towards a zero-carbon economy – driven now by a national security imperative, as well as climate change. This, of course, is welcome: As I said above, decarbonization is only successful if undertaken everywhere. But Europe's greater push will also heighten the near and medium term competition for the inputs to a clean economy and hence, at least initially, could affect the pace of transition that we wish to undertake in New England. And for sure, there will be added pressure on all to resolve supply chain bottlenecks.

The second impact of authoritarian government is associated with China. China today manufactures 70% of the world's solar panels and, as importantly, is the leader in solar R & D. China mines 90% of the world output of rare earth elements, so vital to decarbonization technology. With the values and attitudes that the Chinese leadership espouse, with the geo-political threats that are emerging, can we be comfortable pursuing a fast-track commitment to decarbonization, based on such a supply chain? Other nations have already begun taking defensive steps. The Indian solar market is burgeoning with virtually all the panels imported from China. Therefore, the Indian government – starting three years ago – began to impose what

has become a highly dirigiste industrial policy that requires Indian solar developers to purchase from domestic manufacturers.

Such considerations have now come to our shores, as evidenced by the bipartisan “CHIPS” act. And just last week, Congress passed a major climate change bill, in which tax credits for EV’s are tied to batteries with high percentages of content from the US and other countries deemed safe; and tax credits are also offered to spur manufacturing of solar panels in the US. What more should we do? Must we do, to permit unfettered progress towards decarbonization? Substantially reducing reliance on China will be costly and time consuming, and is likely to slow, at least initially, the speed of our transition. But I submit that we cannot allow China to do to us someday, what Russia is doing now to western Europe.

Finally, we must look at our own nation. How do we combat our own authoritarian instincts? How do we abate the anger so many feel towards government? How do we reduce the despair that many feel, at our seeming inability to solve major problems? A full answer would take us far beyond the limits of this speech. But to consider an important part of the answer, let me again quote from de Tocqueville:

“The strength of free nations resides in the township. Town institutions are to freedom what primary schools are to knowledge: they bring it within people’s reach and give [people] the enjoyment and habit of using it for peaceful ends. Without town institutions a nation can establish a free government but has not the spirit of freedom itself.... In America, not only do institutions belong to the community but they are kept alive and supported by a community spirit.”

As the mayor of the Town of Chevy Chase in Maryland, I take these words to heart. But let me enlarge the scope of de Tocqueville’s meaning: How do we behave as individuals, working within the local and regional institutions that we touch every day. Do we strengthen those institutions or weaken them? Do we advance democracy or abet its retreat?

What is required of all of us, is civility, transparency, tolerance and a commitment to deal with facts. We must avoid demonizing ones’ perceived opponent and thereby torquing the anger of the public. Instead, we need to explain the issues – and the complexities of these issues – that we are all working hard to resolve. With understanding, we can find common ground, make necessary compromises, and forge solutions.

To be sure, one of the major reasons it has been such a privilege to serve on the ISO board, has been the opportunities to observe the high level of discourse among the stakeholders of our power system. But passions and, perhaps, Covid induced separation have cracked our comity. Our community can do better. With dialogue and understanding, we will have a far better chance of enhancing confidence in our institutions, strengthening our democracy, and building the broad, deep and enduring support for the policies of decarbonization that our region, our nation, and our planet require.

RMLD BOARD OF COMMISSIONERS MEETING  
SEPTEMBER 15, 2022  
POLICY 15: SEXUAL HARASSMENT

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In accordance with the Board's periodic policy review, please find attached the review package for Policy 15: Sexual Harassment (Revision 4).

Included are the following three components:

- Policy 15: Sexual Harassment (Revision 4) Summary and Highlights (This Page).
- Updated Policy 15: Sexual Harassment (Revision 4).
- Policy 15: Sexual Harassment (Revision 4) with red lines.

### **SUMMARY**

Policy 15: Sexual Harassment (Revision 4) was revised to clarify the process for complaints against the General Manager, as recommended by legal counsel, as well as other procedural aspects. Various sections were refined for further clarity.

### **REVISION HIGHLIGHTS**

- Human Resources Manager was changed to Human Resources Director throughout.
- Chairman was changed to Chair throughout.
- **Section IV: Responsibilities**
  - Subsection IV: C
    - Verbiage was added to clarify the process for complaints against the General Manager.
    - "All investigations will be conducted in accordance with Section V:C"
    - "Complainants and witnesses shall not be entitled to address the Board of Commissioners."
- **Section V1: Outside Assistance**
  - Subsection V1: A
    - Verbiage was added to expand the resources for private counseling to include "equivalent subcontractor, contracted by RMLD"
  - Subsection V1: B
    - Verbiage was added to clarify the process of a state or federal formal complaint, which may occur after filing a complaint with RMLD.



## RMLD BOARD OF COMMISSIONERS MEETING

SEPTEMBER 15, 2022

### POLICY 16: VIOLENCE IN THE WORKPLACE

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In accordance with the Board's periodic policy review, please find attached the review package for Policy 16: Violence Prevention in The Workplace (Revision 3).

Included are the following three components:

- Policy 16: Violence in the Workplace Summary and Highlights (This Page).
- Updated Policy 16: Violence in the Workplace (Revision 3).
- Policy 16: Violence in the Workplace (Revision 3) with red lines.

#### **SUMMARY**

Policy 16: Violence in the Workplace was revised to reflect current laws, guidelines, and best practices. Various sections were refined, and definitions were revised for further clarity.

#### **REVISION HIGHLIGHTS**

- Human Resources Manager was changed to Human Resources Director throughout.
- **Section II: Definitions**
  - Subsection II: A
    - The definition of "Threat" was revised to clarify that RMLD will use objective and subjective standards taking into account all facts and circumstances to determine whether a Threat has occurred.
  - Subsection II: C
    - Verbiage was added to expand the definition of weapon to include "realistic looking" fake firearms.
- **Section IV: Pre-Employment Screening**
  - Subsection IV: A
    - Verbiage was changed from RMLD "should" to RMLD "strives to".
    - Verbiage stating, "a history of frequent job changes" was removed from the list of red flags.
  - Subsection IV: B: 1
    - Verbiage outlining permissible questions relating to criminal history was removed per current law and best practice.



# Integrated Resources Report

Portfolio update  
Hydro PPA  
2023 preliminary power supply

*Presented to the  
Board of Commissioners and  
Citizens' Advisory Board*

15 September 2022

# Outline

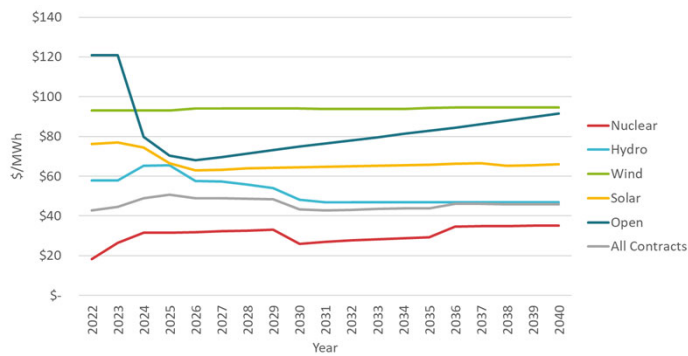
Power Supply Portfolio Update

Power Supply Snapshot

Hydro Addition to Power Supply *(motion)*

2023 Power Supply *(preliminary view)*

## Aggressive pursuit of power supply contracts



### Nuclear

- Dominion response above FPC, no certificates

### TFAs

- Existing TFA contracts continue through 2024
- Model assumptions updated
- Regular model runs not yielding good prices

### Hydro Quebec

- 9.4 MWs of non-carbon starting 2024
- HQ supply next key milestone
- ENE initiating supply discussions

### Load following option with NextEra

- Detailed analysis during past 8 weeks
- High premium to minimize extreme market prices

- Upward market pressure on forward price curve and market remains volatile; high priced winters
- Good position for 2023 and 2024 (85% and 83% hedged, respectively)
- Limited near-term opportunities for low-cost energy (existing assets selling at open market)
- Team diligent and creative at uncovering options

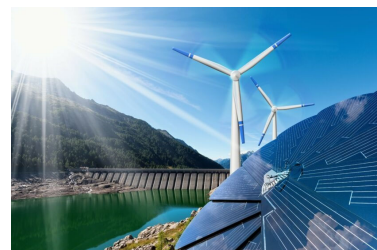
3 Source: Energy Position Graph MASTER 2022-09-09

## Power Supply Snapshot

Contracts approved in 2022: **58,500 MWh per year**

Contracts to be approved: **59,000 MWh per year**

- **non-carbon, long-term, minimize market price volatility**
- forward price curve remains elevated through 2023 & 2024
- 85% hedged in 2023 and 83% hedged in 2024
- persistent pursuit of new non-carbon sources (solar, hydro, nuclear)



<i>Name</i>	<i>Type</i>	<i>MWh/year</i>	<i>Start</i>	<i>End</i>	<i>Notes</i>
Nextera Shape Option	Nuclear	9,500	1-Apr-2022	1 year	PPA executed July 2021 (option executed Mar 2022)
Aspinhook/Wyre Wynd	Hydro	10,000	21-Jun-2022	1 year	PPA executed April 2022
Seabrook Solar	Solar	12,000	30-Jun-2024	30 years	PPA executed May 2022
Shepaug & Stevenson (ext)	Hydro	27,000	1-Jan-2024	7 years	PPA executed June 2022
Vineyard Wind	Wind	21,000	2028	25 years	PPA under negotiation
Falls Village	Hydro	38,000	1-Jan-2025	16 years	PPA under negotiation; final 4Q22

4 Source: 2022 New Power Supply Contracts - 2022-09-07

# Hydro

## First Light Falls Village



New long-term contract for First Light Falls Village hydro, 9 MW in northeastern CT (Housatonic River)

100% of unit output and environmental attributes – minimize admin complexity for both parties

Fixed pricing 2025 through 2030, then indexed through 2040

**Volume** - ~38,000 MWh/yr for RMLD (~5.5% RMLD total annual purchases (2025 reference))

**Term** - 15 years (2025 – 2040)

**Certificates** – CT Class I certificates (renewable and non-carbon)

**Pricing** - 50% higher than RMLD portfolio average; slightly higher than RMLD hydro portfolio

5 Source: Energy Position Graph MASTER 2022-09-09; First Light offer materials 2022-08-26 and 2022-09-09

*hydro motion*

# Power Supply Preliminary Budget

*Continued and diligent management of power supply costs and rates*

	2021 actuals	2022 budget	2022 estimate	2023 budget	2024 budget	2025 budget
Energy*	\$ 27,791,132	\$ 29,478,149	\$ 34,585,168	\$ 36,861,572	\$ 36,695,119	\$ 36,745,747
Capacity	\$ 16,592,028	\$ 16,978,311	\$ 16,152,335	\$ 13,009,089	\$ 13,306,451	\$ 12,788,114
Transmission	\$ 15,688,571	\$ 18,457,184	\$ 16,077,344	\$ 19,043,270	\$ 20,478,358	\$ 21,601,251
<b>Total</b>	<b>\$ 60,071,731</b>	<b>\$ 64,913,645</b>	<b>\$ 66,814,847</b>	<b>\$ 68,913,931</b>	<b>\$ 70,479,928</b>	<b>\$ 71,135,112</b>
*Energy does not include certificate sale revenue (\$1-4 mil/year)				3%	2%	1%

- Overall power supply increase of 3% from 2022 to 2023, 1-2% in 2024 and 2025
- Energy costs significantly higher than budgeted for 2022, with smaller increase in 2023
  - Continued upward pressure on European energy prices, affecting global market
  - 85% hedged position protects against major market volatility
  - Summer 2022 most heavily impacted this year; customer bills should remain stable through Oct-Dec
- Capacity costs trending downward
- Transmission costs increasing; likely accelerating higher to support offshore wind and other renewables

6 Source: 2023 PS Budget for approval\_2022-09-09

Thank You  
from the IRD Team







# **Reliability Report Sept 2022**

**By: H. Jaffari,  
Director of E&O**

# System Reliability

## ➤ System Reliability Depends on Having a Good:

- Maintenance Program
- Outage Management Strategy
- System Planning
- System Automation Plan

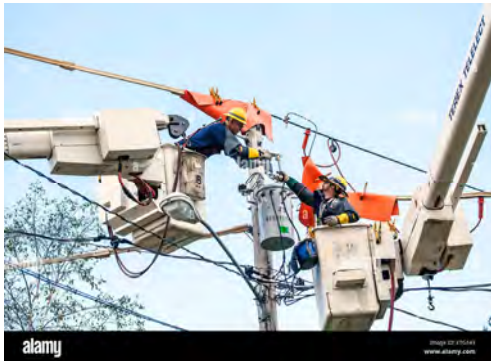


## ➤ RMLD's System Reliability Remains Strong



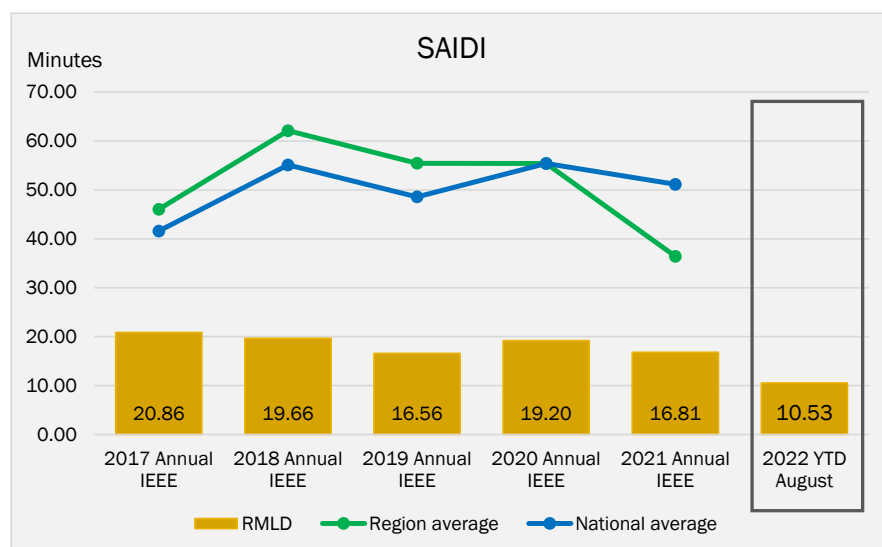


## RMLD's Maintenance Programs

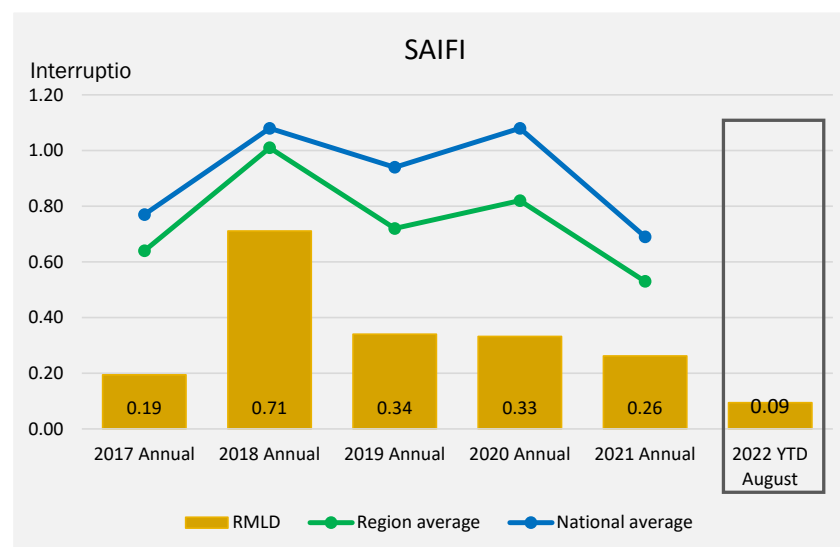


- Tree Trimming – Approximately on Average 2,726 Spans/Year
- Inspection of Feeders (ongoing)
- Pole Inspection/Replacement Program (ongoing)
  - 324 of 541 failed poles have been set since program began
  - 316 transfers have been completed since program began
- Infrared Scans (Monthly)
- Primary Metering Upgrades Systemwide (2020-2023)
- Manhole Inspection (Annually)
- Porcelain Cutout Replacement (ongoing)
- 13.8 kV Conversions (2016-2028)
- Aged Transformer Replacement Program (Annually)
- UG Subdivisions Upgrades Program (2015-2032)

# RMLD Reliability Indices As of August 31, 2022



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

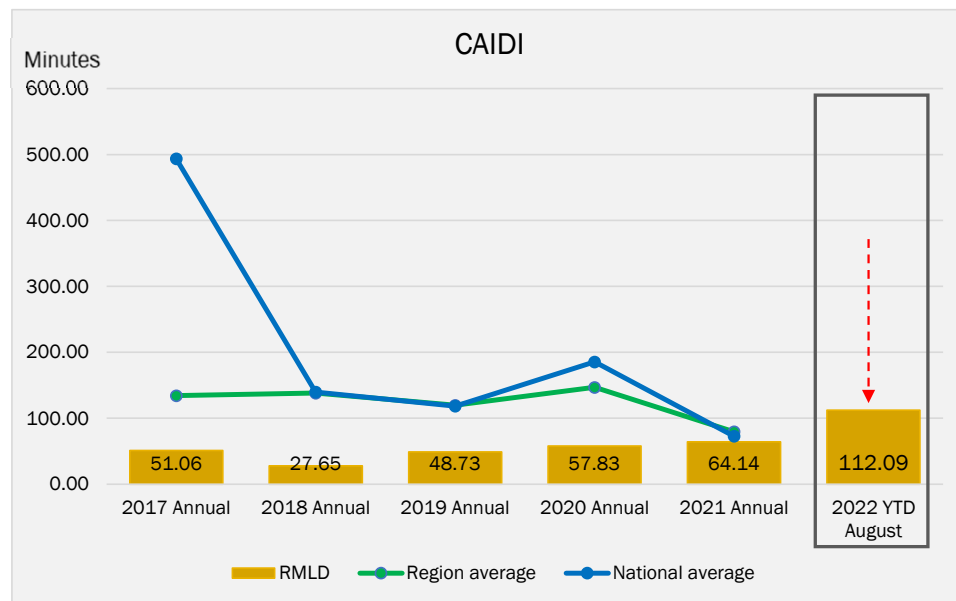


$$SAIFI = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

Source: APPA eReliability Tracker

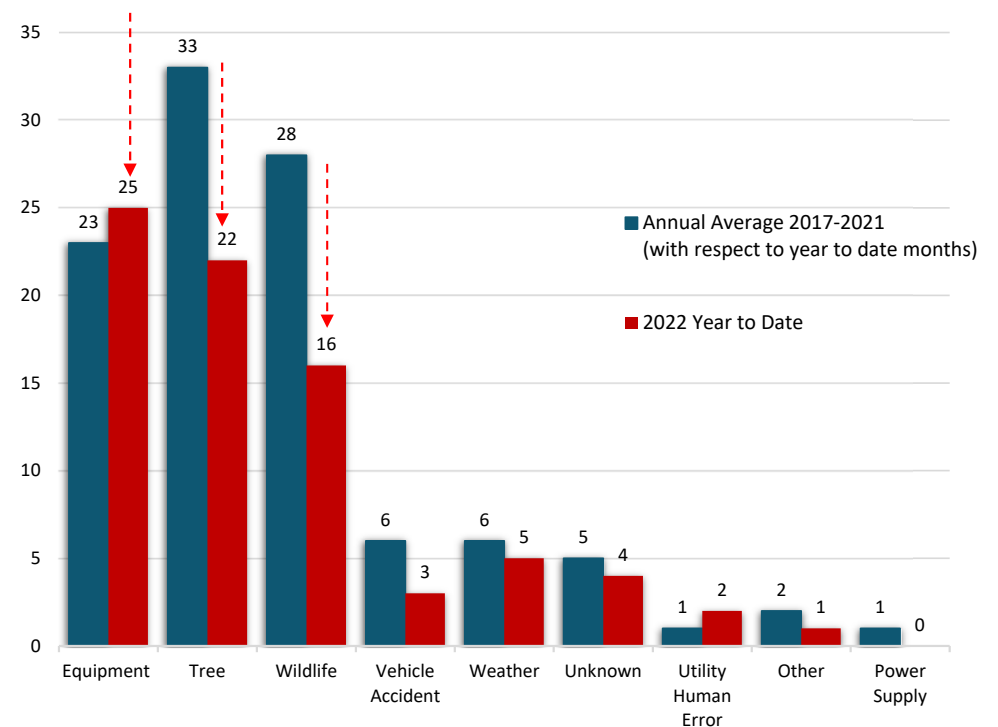
**Note:** APPA eReliability Tracker using IEEE beta threshold method for outages.

# Outage Statistics As of 8/31/2022

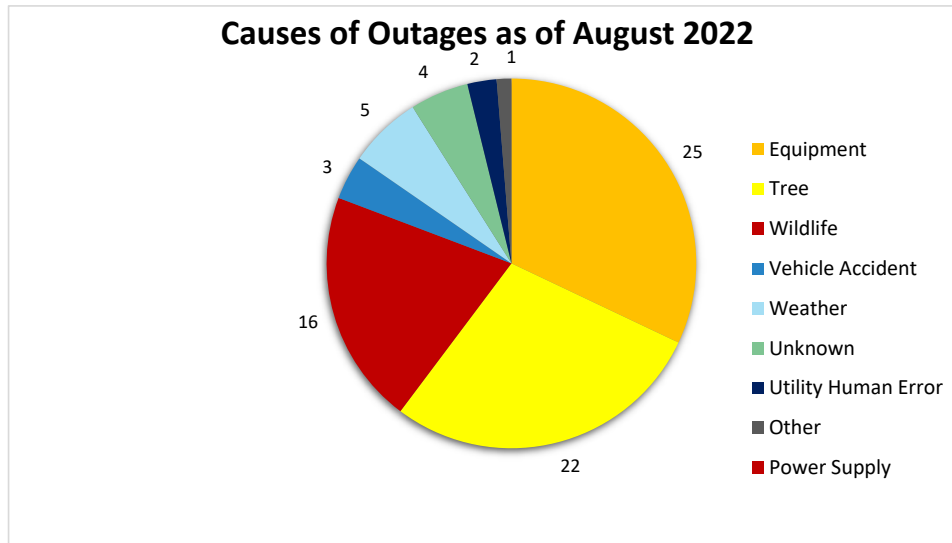


$$CAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customer Interruptions}}$$

## Causes of Outages as of August 2022



# RMLD Outage Causes As of 8/31/2022



- **Equipment Failure (32%): XFMRs, Cables, Wires, Cross Arms, etc.**
  - Supply-chain disruptions forced RMLD to slow down the aged transformer replacement program. Inventory transformers are used for emergencies and potential leakers. [Lead-time for transformers is 52-102 weeks and cable is 25-52 weeks.](#)
- **Tree Problems (28%):**
  - 22 tree-related outages from January-August.
  - Draught and insect infestation has weakened the tree branches causing them to fall on utility lines and bring down poles and wires.
- **Wildlife (21%):**
  - Trees approaching energized zone creating an easy path for animals.
  - Animals find their way under the protective guards making contacts.



# RMLD Strategy Moving Forward

- **Top Three Outage Causes:**

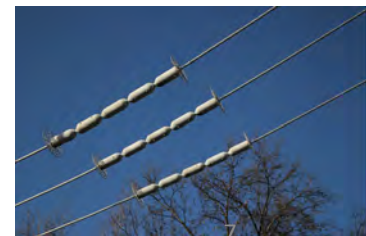
- Equipment Failure/Damages (32%) exceeding 5 years average; Trees (28%); Wildlife (21%)

- **Facts:**

- RMLD has slowed down its [Aged Transformer Replacement Program](#) and [URD upgrades](#) due to [Supply Chain Disruption](#) Issues. Inventory of transformers and wires is reserved for only emergencies, storms and potential leakers.
- Tree trimming is reduced due to changes in laws ([As of January 1, 2020](#)) requiring tree workers be paid prevailing wages, which has impacted budget.
- RMLD is using standard wildlife protectors and animal guards available in the industry and being used by all utilities nationwide to cover energized equipment parts.

- **New Outage Reduction Strategy:**

- Increase the Tree Trimming/Hazardous Tree Removal Operational Budget.
- Increase inventory for both maintenance and capital projects by purchasing transformers and cable/wire more frequently.
- RMLD is searching for extra protective guards like Gritter Guard Line Guards for added protection.
- Purchase fiberglass crossarms rather than wood making it our standard practice.



[Source: CRITTER GUARD LINE GUARD | Animal Traps & Supplies \(animaltrapsandsupplies.com\)](#)



# RMLD Tree Trimming Plan

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- Trees help keep the planet and environment cleaner and safer for all. RMLD treating cuts with respect.
- RMLD's tree trimming priority is trees on main streets (circuits), followed by side streets.
- RMLD conducts annual study to create an Integrated Vegetation Management Plan (IVMP) for all four communities.
- What are the benefits of IVMP?
  - Provides a guideline and plan for tree trimming and minimizes the growth of invasive species to:
    - Keep trees healthy for our environment.
    - Improve reliability and reduce outages as a it "costs American economy \$7-\$10 Billion/Year" (Quote from US EPA).
    - Improve environmental quality and public health.
    - Provide ecological benefits (i.e., control invasive species and create wildlife habitat)
    - Reduce utility customers' costs
- VMP strives for better management of vegetation and environment by balancing cost and reliability.



Reference: <https://www.epa.gov/pesp/benefits-integrated-vegetation-management-ivm-rights-way>



# Tree Damages to RMLD Assets



Edgemere Road, Lynnfield  
on 8/8/2022



Flash Road, North Reading  
on 7/24/2022



Martin Road, Reading  
on 8/19/2022



Chestnut Street, Lynnfield



Ash Street, Reading  
on 8/22/2022



Hillview, North Reading

Thank  
you





September 8, 2022

Town of Reading Municipal Light Board

Subject: RFQ 2022-33

Pursuant to M.G.L. c. 30B, § 22 on July 27, 2022, a Request for Quotes (RFQ) was sent to nine (9) Statewide Contract VEH102 vendors requesting quotes for 'Eight (8) Electric Vehicle Charging Stations'.

The Quotes were submitted via email and opened on August 17, 2022, at 12:00 Noon. Quotes were received from two (2) companies: VERDEK LLC and Voltrek, LLC.

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

Move that RFQ 2022-33 for eight (8) Level 2 Electric Vehicle Supply Equipment (EVSE) be awarded to: **Voltrek, LLC, in the amount of \$74,460.00<sup>1</sup>**, pursuant to M.G.L. c. 30B, § 22 as the lowest responsible vendor, on the recommendation of the Interim General Manager.

<sup>1</sup>See attached spreadsheet for quote detail.

The 2022 Capital Budget amount for this item is \$50,000.

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Sarah Shenstone-Harris

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Gregory J. Phipps



**RFQ 2022-33 EV CHARGING STATIONS QUOTE DETAIL**

		VOLTREK, LLC		
		Quantity	Unit Price	Total Price
1	ChargePoint EVSE, Model CT4021-GW1	6	\$8,392.00	\$50,352.00
	Commercial Cloud Plan/ Software Costs (1 Year)	12	\$345.00	\$0.00
			1st Year free	
	Station Activation/ Set-up	6	\$350.00 Waived	\$0.00
	Shipping	6	\$250.00	\$1,500.00
2	EVSE LLC EVSE, Model 3704	2	\$10,504.00	\$21,008.00
	Commercial Cloud Plan/ Software Costs (1 Year)	4	\$225.00	\$900.00
	Station Activation/ Set-up	2	\$100.00	\$200.00
	Shipping	2	\$250.00	\$500.00
	<b>Total</b>			<b>\$74,460.00</b>

\* VERDEK LLC took an exceptions: Offered an alternate brand/model, which RMLD did not accept. Also, the submitted quote form was not signed, as required.



September 9, 2022

Town of Reading Municipal Light Board

Subject: IFB 2022-39 Substation Transformer Testing and Repairs

Pursuant to M.G.L. c. 30, § 39M, on September 7, 2022, an invitation for bid (IFB) requesting sealed bids for Substation Transformer Testing and Repairs was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle and was posted on the Central Register, COMMBUYS, and the RMLD website.

An invitation for bid was sent to sixteen (16) companies.

Sealed bids are due back on Thursday, September 22, 2022, at 11:00 A.M. and will be publicly opened and read aloud, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

The bids will be reviewed, analyzed, and evaluated by staff and the award of the contract will be recommended to the Interim General Manager based on the statutory standard, which requires RMLD to award the contract to the lowest responsible and eligible bidder. Under this process, RMLD does not have discretion over the contract award. Accordingly, given that timing is critical for this work, the below motion would allow RMLD to move forward with the contract award without the need for additional approvals unless the lowest responsible and eligible bid exceeds \$610,000. RMLD will update the Board on the status of the procurement.

Move to authorize the Interim General Manager to award the contract for IFB 2022-39, Substation Transformer Testing and Repairs, to the lowest responsible and eligible bidder pursuant to M.G.L. c. 30, § 39M, provided that the total price does not exceed \$610,000.

These services will be paid from the Operating Budget.

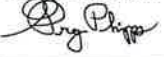
  
Nick D'Alleva (Sep 12, 2022 1:13:14 EDT)

Nick D'Alleva

  
John McDonagh

  
Hamid Jaffari (Sep 12, 2022 14:24 EDT)

Hamid Jaffari

  
Gregory J. Phipps