RMLD

READING MUNICIPAL

LIGHT DEPARTMENT

CITIZENS' ADVISORY BOARD

REGULAR SESSION MEETING

THURSDAY FEBRAURY 1, 2024

Town of Reading
Meeting Posting with Agenda

2018-07-16 LAG

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2024-02-01 Time: 6:30 PM

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

Address: 230 Ash Street Agenda:

Purpose: General Business

Meeting Called By: Vivek Soni, Chair

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

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

Topics of Discussion:

ON MARCH 29, 2023, GOVERNOR HEALEY SIGNED INTO LAW A SUPPLEMENTAL BUDGET BILL WHICH, AMONG OTHER THINGS, EXTENDS THE TEMPORARY PROVISIONS PERTAINING TO THE OPEN MEETING LAW TO MARCH 31, 2025.

THIS MEETING WILL HELD IN PERSON AND REMOTELY ON ZOOM.

FOR REMOTE AND/OR PUBLIC PARTICIPATION: Please email rmldevents@RMLD.com. Please include your full name, address, and phone number. Comments and questions will be monitored during the meeting.

Join Zoom Meeting
https://rmld.zoom.us/j/89954979925?from=addon

Meeting ID: 899 5497 9925

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Town of Reading
Meeting Posting with Agenda

1. Call Meeting to Order – V. Soni, Chair

2. Report on the Board of Commissioners Meeting – K. Welter

3. Approval of Citizens' Advisory Board Meeting Minutes (attachment 1) – V. Soni, Chair

   Suggested Motion: Move that the RMLD Citizens' Advisory Board approve the October 5, 2023, open session meeting minutes, as presented, on the recommendation of the General Manager and the Board Secretary.

4. Policy Review (attachment 2) – G. Phipps, General Manager

   Policy 30: Renewable And Greenhouse Gas (GHG) Reduction Regarding Power Supply Procurement

5. RMLD Rates Update (attachment 3) – B. Bullock, Director of Integrated Resources

6. Certificate Management (attachment 4) – B. Bullock, Director of Integrated Resources

   Suggested Motion: Move that the Citizens' Advisory Board recommend to the RMLD Board of Commissioners to approve the 2024 annual certificate retirement rate, as presented, on the recommendation of the General Manager.

7. In Territory Generation Road Map (attachment 5) - G. Phipps, General Manager

8. General Manager's Report (attachment 6) – G. Phipps, General Manager

9. Scheduling – V. Soni, Chair

CITIZENS' ADVISORY BOARD MEETING SCHEDULE

Date	Time	Location	BoC Coverage
Thursday February 1, 2024	6:30 PM	RMLD AV Room	Daskalakis
Thursday February 22, 2024	6:30 PM	RMLD AV Room	Pacino
Thursday March 21, 2024	6:30 PM	RMLD AV Room	Bita

BOARD OF COMMISSIONERS MEETING SCHEDULE

Date	Time	Location	CAB Coverage
Wednesday January 31, 2024	6:30 PM	RMLD AV Room	Welter
Wednesday February 28, 2024	6:30 PM	RMLD AV Room	Small
Wednesday March 27, 2024	6:30 PM	RMLD AV Room	Kelley

10. Adjournment **ACTION ITEM**
    Suggested Motion: Move that the RMLD Citizens' Advisory Board adjourn regular session. Note: Roll call vote required.

MATERIALS AVAILABLE BUT NOT DISCUSSED

October 2023 Financials

ATTACHMENT 1
APPROVAL OF MEETING MINUTES

Town of Reading
Meeting Minutes

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2023-10-05 Time: 5:30 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:**

Vivek Soni, Chair (Reading); Ken Welter, Vice Chair (Lynnfield); Jason Small, Secretary (North Reading); Dennis Kelley (Wilmington).

Members - Not Present:

George Hooper, (Wilmington)

Others Present:

RMLD Staff: Gregory Phipps, General Manager; Erica Morse, Executive Assistant, Bill Bullock, Director of Integraded Resources; Erin MacDonough, Operational Assistant.

Board of Commissioners Rep: Commissioner Bita

Minutes Respectfully Submitted By: Vivek Soni, Chair

Topics of Discussion:

Documents and exhibits used at this meeting can be found on the RMLD website in the CAB meeting packet and linked here: Citizens' Advisory Board Meeting Agenda & Packet | Reading Municipal Light Dept (rmld.com)

Call Meeting to Order

Chair Soni called the RMLD Citizens' Advisory Board (CAB) meeting to order at 5:30 PM and announced that the meeting would be held in person, remotely on Zoom, and recorded.

Opening Remarks

Chair Soni stated that George Hooper, Town of Wilmington CAB representative, is retiring from the CAB and his role within the Town of Wilmington. Mr. Hooper will be recognized at a future CAB meeting.

CAB Secretary Appointment

Mr. Small was appointed the Secretary of the CAB.

Chair Soni nominated Jason Small for Secretary of the CAB. Mr. Kelley seconded the nomination.

Chair Soni made a **motion**, seconded by Mr. Kelley, that the RMLD Citizens' Advisory Board appoint Jason Small as Secretary to the RMLD Citizens' Advisory Board to be effective immediately after the vote. **Motion Carried: 3:1:1** (3 in favor; 1 abstained; 1 absent). *Roll Call: Chair Soni, Aye; Vice Chair Welter, Aye; Mr. Kelley, Aye; Mr. Small, Abstained. Mr. Hooper was absent from the meeting.*

Approval of Citizens' Advisory Board Meeting Minutes
Materials: Draft Meeting Minutes (CAB Packet, attachment 1)

The minutes were approved as presented.

Chair Soni made a comparison of the Maple Meadows project's progress from past meeting minutes to now.

Mr. Welter made a **motion**, seconded by Chair Soni, that the RMLD Citizens' Advisory Board approve the October 27, 2022, December 8, 2022, and January 18, 2023, open session meeting minutes, as presented, on the recommendation of the General Manager and the Board Secretary. **Motion Carried: 4:0:1** (4 in favor; 0 abstained; 1 absent). *Roll Call: Chair Soni, Aye; Vice Chair Welter, Aye; Mr. Kelley, Aye; Mr. Small, Aye. Mr. Hooper was absent from the meeting.*

2022 Annual Report Confirmation
Materials: Draft CY2022 Annual Report (CAB packet, attachment 2)

Mr. Phipps presented the CY2022 Annual Report to the CAB.

Annual report format
Mr. Phipps noted that the format of the annual report changed slightly in recent years. The introductory portions include a summary section with key statistics and highlights.

Mr. Phipps mentioned the report's emphasis on power supply, RMLD's art contest, and certificate handling.

BoC feedback
Mr. Phipps highlighted the Board of Commissioner's (BoC) feedback on the characterization of RMLD's non-carbon and carbon energy portfolio, discussed at the recent BoC meeting.

Information on the characterization of RMLD's non-carbon and carbon energy portfolio and certificate handling is outlined on pages 18-19.

Carbon metrics
Chair Soni suggested adding a carbon metric to page 3 of the annual report starting next year. Chair Soni gave an example of something that demonstrates RMLD' status in relation to state compliance.

Mr. Phipps agreed with this recommendation and committed to adding the carbon metric to the 2024 annual report and RMLD's website.

RMLD Strategic Plan
Materials: RMLD Strategy Overview (CAB packet, attachment 3)

RMLD Mission and Vision – Updated (slide 3)
Mr. Phipps introduced the updated mission and vision statements for RMLD, emphasizing simplicity and clarity.

Mission statement
Mr. Phipps emphasized the incorporation of RMLD "Team" and the focus on serving customers with reliable, low-cost, and increasingly non-carbon energy. Increasingly was added to the mission because RMLD's portfolio is not 100% non-carbon.

Vision statement
Mr. Phipps highlighted RMLD's support for electrification and the transition to non-carbon energy with customer engagement. At the suggestion of the BoC, "sensibly facilitate" was added to emphasize the importance of a careful transition to non-carbon energy.

Chair Soni asked when the mission and vision statement were last updated. Mr. Phipps responded that they were recently modified with input from the BoC at the last meeting.

Executive Summary (slide 4)
Mr. Phipps noted that slide 4 is meant to be a quick summary of the highlights.

Context – External to RMLD (slide 5)
Mr. Phipps discussed the external factors influencing RMLD's strategic planning, as outlined on slide 5.

Legislative compliance
Mr. Phipps noted that the transition to electrification and decarbonization is driven by legislation and is a key factor in RMLD's strategy. The transition involves increasing electric vehicle adoption and electrification of building heating and cooling.

The 2021 Climate Bill (now Law) mandates increased use of non-carbon energy sources, particularly in transportation (e.g., Electric Vehicles) and aims to phase out light-duty vehicles with internal combustion engines by 2035.

Mr. Phipps emphasized RMLD's focus on complying with current legislation. The organization operates under the assumption that current laws will remain in place and may become stricter.

Chair Soni made a comment on Mr. Phipps' point about electrification moving fast, adding that other industries will need to have green power coming in as well.

Energy generation and network stability
Mr. Phipps discussed energy generation and network stability, emphasizing the fragility inherent in the transition to non-carbon sources. Mr. Phipps clarified that ISO New England maintains the reliability of the network.

Mr. Phipps highlighted the potential impacts on the natural gas network due to the closure of large generation plants like the Mystic Generation Plant.

Mr. Phipps discussed the challenges with Offshore Wind Projects. significant external challenges include delays and cost increases in offshore wind projects, as well as the need for new transmission systems to handle increased capacity beyond 6,000 MWs.

Context –Internal to RMLD (slide 6)
Mr. Phipps discussed the internal context, highlighting RMLD's power supply portfolio and infrastructure.

Portfolio management & hedging
Mr. Phipps emphasized that the current power supply portfolio is in good condition but requires ongoing management due to the shift towards more intermittent resources. Currently, RMLD's hedging is nearly 95%, influenced by a milder year and lower than anticipated kilowatt-hour sales.

Transmission system – reliability
Mr. Phipps explained that RMLD uniquely ties to both Eversource and National Grid transmission systems, which is important from a reliability perspective. Substation 6 will create a third tie point (with National Grid), and the Maple Meadows site will establish a fourth tie point (with Eversource).

Battery storage
RMLD currently has a 5 MW 2-hour battery system and plans to expand this to 30 megawatts of nearly 3-hour capacity by 2025. This expansion aims to enhance both reliability and peak management.

Annual Load (MWHs) nearly doubles by 2050 (slide 7)
Mr. Phipps presented RMLD's annual load forecast from 2023 to 2050, projecting nearly a doubling of load.

projected growth
MWh sales are expected to increase from ~ $700K to ~1.3m by 2050.

Key drivers of load increase
Electric Vehicles (EVs) are a major contributor to load growth. Residential EV adoption is distinguished from fleet vehicles (industrial and commercial).
Air Source Heat Pumps (ASHPs) also contribute to the increase, though to a lesser extent than EVs and the net increase is only during winter months.

Adoption rates
The forecast assumes a slightly less than 100% adoption rate of EVs by 2050, with current EVs in the service territory around 1,000 vehicles out of 55K total vehicles.

Notable growth years
Significant increases in EV-related load are anticipated starting in 2026, becoming more substantial by 2038 -2050.

Legislation impacts
The forecast is designed around current legislation, with acknowledgment that adoption rates could vary based on potential legislative changes.

Monthly Load Shape Changes by 2050 (slide 8)
Mr. Phipps discussed the monthly load shape for the years 2023, 2038, and 2050, emphasizing the impact of increased electrification.

Monthly load shape changes
Mr. Phipps explained that the charts show the addition of load, primarily due to ASHPs and EVs.

Summer load increase
Between 2023 and 2050, the summer load is projected to be about 60% higher.

Winter load doubling
The winter load in January 2050 is nearly twice that of January 2023, attributed mainly to ASHPs and EV charging.

EV charging efficiency
RMLD assumes that EVs are about 15% less efficient in winter, requiring additional power supply.

Chair Soni commented that relative to generation in 2024, Mystic closing will be a big risk to the ISO system. Mr. Phipps agreed that the closing within itself is a challenge, but temperature is the key driver of load in the region.

Dramatic daily load shape change possible (slide 9)
Mr. Phipps discussed the average daily load curves for RMLD, illustrating energy consumption patterns from midnight to midnight.

Load curve characteristics
Mr. Phipps explained that the curve appears flat, but this is due to the factor of 2x from the bottom to the top.

EV charging impact
Mr. Phipps noted that the model for 2043 assumes 80% EV adoption in the territory. The orange line on the chart represents the load with EV charging primarily overnight.

rate structure design
Mr. Phipps explained that a rate structure focused on overnight charging works near-term but is not viable long-term dur to overnight being triple day time load.. The bottom left-hand chart shows a scenario that aims for a flatter load curve through different rate blocks (overnight, morning, peak afternoon).

EV rate structure
Mr. Phipps noted that RMLD is working on introducing a dedicated EV rate. The assumption is that residential customer habits won't change significantly. The only difference will be EV charging, which is a new and learnable behavior.

Rate design flexibility
Mr. Phipps explained that recent analysis is leading RMLD to rethink rate design, especially for EVs, to encourage desired charging behaviors and maintain grid stability.
In response to Vice Chair Welter's inquiry, Mr. Phipps confirmed that V2G stands for Vehicle to Grid.

Demand (MWs) 75% higher by 2050 (slide 10)
Mr. Phipps differentiated between load (MWh sold) and demand (network peak), clarifying that slide 10 references demand.

Current network peak
Mr. Phipps stated that RMLD's network peak typically occurs in July (around 170 MWs) with a network capacity designed for 220 MWs.

2050 Forecast
Mr. Phipps mentioned that by 2050, demand is expected to approach 300 MWs, exceeding current network capacity.

Substation impact
Mr. Phipps noted that the addition of the new substation will raise capacity to ~ 270 MWs, but further enhancements will be necessary to meet future demands.

Network stress forecast
Mr. Phipps emphasized that anticipated EV adoption will significantly increase network stress by the early to mid-2030s.

Infrastructure planning
RMLD is analyzing future load to plan network upgrades, with consideration of the lifespan of transformers, substations, and wiring.

Safety buffer and charging patterns
Mr. Phipps highlighted the need for a safety buffer above 300 MWs.

Mr. Phipps discussed assumptions around simultaneous EV charging, which significantly influences demand projections.

In response to an inquiry regarding commercial demand, Mr. Phipps confirmed that commercial is primarily composed of offices and commercial stores.

Chair Soni commented that commercial is risky and in big cities people are beginning to rethink energy use. Mr. Phipps agreed, and noted this is happening in Boston.

Investment Timing – Key Initiatives (slide 12)
Mr. Phipps outlined RMLD's investment timeline and key initiatives, which will be detailed in the upcoming budget review in October and November.

Mr. Phipps highlighted RMLD's responsible and balanced approach to investments, incorporating grants and Investment Tax Credits to ease the financial burden on ratepayers.

Acquiring land
Mr. Phipps emphasized the importance of acquiring land immediately for future projects.

Energy storage expansion
RMLD plans to implement 30 MWs of short-term battery storage and continue exploring long-term storage solutions.

In territory generation
Mr. Phipps highlighted RMLD's focus on building generation within its territory to mitigate capacity and transmission costs, which form a significant part of the cost structure.

Metering project
RMLD plans to enhance monitoring capabilities through updated metering systems.

Software and security updates
Mr. Phipps emphasized RMLD's priority of keeping internal platforms up-to-date and ensuring robust security.

Transforming ash street campus
RMLD is considering options for the Operations building and overall site, with potential actions planned for 2025-2027.

Finance & Accounting Update
Materials: Financial Update (CAB packet, attachment 4)

Mr. Phipps presented a financial update to the BoC, on behalf of Mr. Bloomenthal.

Finance and Accounting Milestones (slide 1)
Mr. Phipps provided an overview of the RMLD financial status and milestones.

CY2024 budget
The CY2024 budget is in the final stages of preparation, and the RMLD staff is collaborating to finalize details. A formalized CY2024 budget presentation and related discussion is scheduled for the October BoC and CAB meetings.

Staffing updates
Mr. Phipps provided a staffing update, highlighting the recent promotions detailed on slide 1.

Mr. Phipps noted that RMLD has increased both hires and training.

Mr. Kelley inquired about the Director of Engineering and Operations position. Mr. Phipps responded that the position is being split into two roles: Director of Operations and Director of Engineering.

Above the line payment
Mr. Phipps reported on the above the line payments to the four service towns, detailed on slide 1.

Below the line payment
Mr. Phipps reported on the payment schedule and amount for the below the line payment to the Town of Reading, detailed on slide 1.

Preliminary Cash Balances – As of 6/30/2023 (slide 2)
Mr. Phipps reported on RMLD's preliminary cash balances.

Mr. Phipps highlighted RMLD's strong financial position, with ~$55m in cash as of June 30, 2023. This includes restricted cash, restricted investments, and unrestricted cash.

Mr. Phipps emphasized RMLD's fiscal consciousness and awareness of industry changes. Strong cash reserves, both restricted and unrestricted, are crucial for upcoming capital projects.

Preliminary Operating Budget vs. Actuals through 6/30/2023 (slide 3)
Mr. Phipps reported on RMLD's preliminary operating budget vs. actual spending. RMLD's actual spending is currently below budgeted numbers. The June financials were finalized with ~$10m in operating costs.

The organization managed employee head count, which allows RMLD to ensure these expenses remain under budget. Expense management continues to be effective, with forecasted expenses expected to be below budget for the year.

Cash Expenditures through 7/31/2023 (slide 4)
Mr. Phipps reported on capital expenditures, highlighting that transformers are a critical component. Transformers represent ~ $7 million of the 2023 capital budget.

Mr. Phipps noted that as of July 21, 2023, RMLD has spent $5.1m out of the $22.85m total capital budget for 2023. Capital spending is increasing but projected to be around $12m by the fiscal year-end, due to delays in transformer delivery.

DOE Awards as of 9/1 (slide 5)
Mr. Phipps reported on the DOE awards as of September 1, 2023.

RMLD is actively pursuing federal funding in various forms: grants, IRA tax credits, and rebates. These funding sources are crucial for advancing RMLD's upcoming capital program.

Rebates
RMLD was authorized to receive up to $25K in rebates for transformers as of September 1.

Grants
RMLD is collaborating with the Congressional delegation for grant application follow-ups, ensuring RMLD's prominence in fund allocation.

IRA tax credits
RMLD is exploring direct IRS payment tax credits, akin to rebates but under a different program.

NEPPA 2023 Annual Conference Report
Materials: Summary Notes: NEPPA 2023 Annual Conference (CAB Packet, attachment 5)
Materials: 2023 NEPPA Conference Presentations (referenced not presented)

Mr. Phipps provided a summary of the 2023 NEPPA Annual Conference presentations to the CAB.

Gordon van Welie – Keynote (slide 3)
Mr. Phipps summarized the highlights of keynote speaker Gordon van Welie's presentation.

legislative impact & increase in non-carbon energy sources
Mr. van Welie's presentation stated that legislation is driving changes in the energy world, leading to a shift in the energy mix from primarily natural gas. It was emphasized that non-carbon energy sources are growing in the energy mix.

Solar PV funding and challenges
Mr. van Welie's presentation discussed Solar PV, which is well-funded, but facing cancellations, price increases, and delays.

Offshore wind project issues
Mr. van Welie's presentation highlighted offshore wind projects, which are facing transmission challenges and higher costs than initially planned.

Transmission system needs
Mr. Phipps explained that as the energy mix becomes more non-carbon and distributed, more transmission is needed to get energy to the load centers. Mr. van Welie's presentation emphasized the significant requirement for additional transmission systems to distribute non-carbon energy.

Natural gas as a critical resource
Mr. van Welie's presentation emphasized that despite a phase-out, natural gas will remain important for periods of low renewable energy generation, such as during cold periods with no wind.

Energy adequacy and reliability
Mr. van Welie's presentation highlighted that reliability is a critical issue, significantly for the period between 2027 and 2032. Mr. Phipps emphasized that RMLD's response to this issue is focusing on energy storage and within-territory generation.

Distribution network and winter peaking
Mr. Phipps reported that Mr. van Welie's presentation was consistent with RMLD data on winter peaking and load changes.

EVs and ASHPs as key load drivers
Mr. van Welie's presentation discussed the dynamic nature of land, reinforcing RMLD's focus on EVs and ASHPs, particularly in relation to EV charging.

Key implications for RMLD
Mr. Phipps highlighted the need to adapt to the changing energy landscape driven by legislation and market trends as well as the importance of storage, generation, and network adaptation in response to these changes.

Mr. Phipps emphasized the consistency between RMLD's strategy, and the trends outlined in Mr. Van Welie's presentation.

Mike Zenker – NE Regional Energy Outlook (slide 4)
Mr. Phipps summarized the highlights of speaker Mike Zenker's presentation.

natural gas market and LNG (liquefied natural gas)
Mr. Zenker's presentation emphasized the recent developments in the natural gas market, particularly the impact of LNG exports and the influence of the European market.

Impact of war and pipeline issues
Mr. Zenker noted that the redirection of LNG tankers to Europe due to higher prices and geopolitical factors has influenced energy prices.

winter weather impact
Mr. Zenker's presentation explained that mild winters in both Europe and the US have eased energy demands, contributing to lower energy prices.

Volatility of energy pricing
Mr. Zenker's presentation highlighted the increase in volatility in energy pricing since 2010, driven by exports of natural gas.

Future of natural gas demand
Mr. Zenker's presentation predicts an increase in natural gas demand in New England until 2032, followed by a decline, leading to potential excess and reduced prices in the mid-

2030s.

Legislative influence
Mr. Zenker's presentation noted that the legislative agenda is driving the shift towards non-carbon, renewable sources.

Key implications for RMLD
Mr. Phipps confirmed that RMLD has transitioned to higher hedging strategies (up to 95%) in response to market volatility and reduced volume requirements due to milder winters.

Mr. Phipps emphasized RMLD's focus on long-term contracts for stability amidst market fluctuations.

Mr. Phipps reiterated the legislative agenda's impact on RMLD's strategic planning and operations.

Mike O'Connor – Millstone Nuclear (slide 5)
Mr. Phipps discussed speaker Mike O'Connor's presentation in relation to RMLD's power supply strategy and portfolio.

Mr. O'Connor's presentation discussed Millstone Power Station; a nuclear power facility operated by Dominion Energy.

RMLD's nuclear portfolio
Mr. Phipps emphasized that RMLD's nuclear portfolio is approximately a third of the total portfolio, with potential to go up to 40%.

Mr. Phipps explained that RMLD has contracts with two nuclear facilities in New England: Millstone, in Connecticut, and Seabrook, in New Hampshire.

RMLD's Contracts with Millstone and Seabrook were established in the 1980s and are perpetual until the end of the facilities' life.

Mr. Phipps noted that Millstone is considered reliable and important for base load energy but is not highly responsive to customers.

RMLD is engaging in ongoing efforts to secure additional purchases from Millstone to balance risk.

Key implications for RMLD
Mr. Phipps stated that RMLD continues to rely on nuclear power as a key part of its energy portfolio, and the ongoing strategy to balance the portfolio.

John Parsons – MIT Pathways to Non-Carbon (slide 6)
Mr. Phipps discussed highlights from speaker John Parson's presentation.

Increased economic volatility
Mr. Parsons's presentation discussed the economic volatility for natural gas generators, and the future value of natural gas generators for back up capacity.

Chair Soni mentioned Bloom Energy Solutions' carbon capture fuel cell technology.

Key implications for RMLD
Mr. Phipps stated that RMLD is exploring Hydro Qubec as a storage/balancing resource through leveraging ownership rights.

Mr. Phipps noted that RMLD will continue to investigate out-of-the-box solutions to ensure network reliability.

General Managers Report
Mr. Phipps provided a General Manger's Report to the BoC.

Station 6 development
Mr. Phipps reported that ISO New England completed the system impact study for Station 6, indicating no adverse impact on the transmission system. Final approval is expected by the end of November.

flexible work schedules
Mr. Phipps noted that RMLD is implementing flexible 4-day, 10-hour work schedules for line crews from mid-October through Christmas. Overtime will be offered on Fridays, aligning with subcontractor obligations.

In response to Mr. Kelley's inquiry about overtime, Mr. Phipps noted that due to the nature of the contracts, there will always be overtime.

Mr. Small commented that some jobs require a decent amount of line crews.

Storm preparedness
Mr. Phipps emphasized RMLD's priority of ensuring storm preparedness.

Employee survey
Mr. Phipps stated that RMLD is planning another employee survey in November.

Communication enhancements
Mr. Phipps mentioned increased engagement in quarterly webinars and newsletters.

Mr. Phipps introduced RMLD's new podcast, with two sessions already recorded and live. The podcast is available on YouTube and linked in the latest RMLD newsletter.

Mr. Phipps emphasized that RMLD will continue the promotion and recording of the podcast series as a new communication channel for better customer engagement.

Scheduling
The next CAB meeting will be a joint meeting with the BoC on October 25, 2023.

Executive Session
Chair Soni made a motion, seconded by Vice Chair Welter, that the RMLD Citizens' Advisory Board go into Executive Session pursuant to Massachusetts G.L. c.164 section 47D, exemption from public records and open meeting requirements in certain instances, to consider the purchase, exchange, lease or value of real property relative to Maple Meadow and Route 125 in Wilmington, if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body, and return to regular session, for the sole purpose of adjournment. Note: Roll call vote required. **Motion Carried: 4:0:1** (4 in favor; 0 abstained; 1 absent). *Roll Call: Chair Soni, Aye; Vice Chair Welter, Aye; Mr. Kelley, Aye; Mr. Small, Aye. Mr. Hooper was absent from the meeting.*

Adjournment
The CAB meeting was adjourned at 7:31 PM.

Chair Soni made a **motion**, seconded by Mr. Small, that the RMLD Citizens' Advisory Board adjourn regular session. **Motion Carried: 4:0:1** (4 in favor; 0 abstained; 1 absent). *Roll Call: Chair Soni, Aye; Vice Chair Welter, Aye; Mr. Kelley, Aye; Mr. Small, Aye. Mr. Hooper was absent from the meeting.*

ATTACHMENT 2

POLICY REVIEW

Policy 30 Revision 2

Renewable and Greenhouse Gas (GHG) Reduction Regarding Power Supply Procurement

RMLD Board of Commissioners Meeting
January 31, 2024
Policy 30: Non-Carbon Power Portfolio Mix

In accordance with the Board's periodic policy review, attached is the review package for Policy 30: Non-Carbon Power Portfolio Mix (Revision 2).

Included are the following four components for Policy 30: Non-Carbon Power Portfolio Mix R2:

1) Summary & highlights (this page)
2) Final clean copy with all changes accepted.
3) Redlined copy, showing edits from the December 13, 2023, meeting.
4) Redlined copy, showing all edits from 2021 (R1).

Based on two years of experience with the 2021 Climate Bill, proposed Revision 2 is a streamlined draft that provides more clarity and simplicity. Note that the 2021 Climate Bill was passed the month after (March 2021) BoC approval of Revision 0 and Revision 1 (Feb 2021). Key changes for Revision 2 include:

a) Title changed to reflect the non-carbon metric from the actual text of the 2021 Climate Bill.

b) Background and redundant verbiage deleted to simplify this policy and also avoid potential conflicts with other RMLD policies.

c) Responsibilities for Boc, CAB and GM refined and moved to Policy 19. Added that annual certificate retirement targets are to be proposed by the GM, for decision making input by the BAC, and approval by the BoC.

d) 2021 Climate Bill replaces Roadmap 2050 in earlier Revisions.

e) Non-Carbon is the metric replaces renewable or greenhouse gas (GHG), per the 2021 Climate Bill.

Additional policy modifications are outlined below.

Section I: Preamble	• Deleted; redundant to numerous other RMLD documents, including other policies. • Some elements, such as the reminder that RMLD has franchise obligations via M.G.L. 164 are already included in Policy Elements.
Section 2: Purpose	• Non-carbon replaces renewable as the metric per the 2021 Climate Bill. • Majority of remaining text remains, capturing some of the key verbiage from the deleted Preamble.
Section 3: Responsibilities	• Review every three years or earlier moved to Policy 19. • The remaining text, much of which being covered in the 20 Year Agreement, moved to Policy 19.
Section 4: Policy Elements	• Added compliance to Policy 19 at end of paragraph E (BoC to approve). • Additional word replacements as noted above. • BoC may vote on policy changes moved to Policy 19.
Attachment 1: Update 2	• Added note that RMLD will explore other generation technologies, specific examples noted.

RMLD Policy No. 30
NON-CARBON AND GREENHOUSE GAS (GHG) REDUCTION
REGARDING POWER SUPPLY PROCUREMENT

Revision No. 2

Commission Vote Date

General Manager/Date

Next Review Date

I. **PURPOSE**

A. To establish general policy guidelines to aggressively pursue practical and cost-effective non-carbon and GHG reduced power supply opportunities that balance RMLD's customers' priorities, its franchise obligations, reliability, power supply risk mitigation, and financial risk mitigation, while complying with applicable laws and regulations

B. To provide an opportunity for customers who wish to go above and beyond RMLD's non-carbon energy goals and requirements.

II. **POLICY ELEMENTS**

A. RMLD shall comply with all laws applicable to Municipal Light Plants, pertaining to renewable, non-carbon, and GHG reduction power procurement requirements, including 2021 Climate Bill requirements, while balancing its customer priorities and franchise obligations. RMLD shall strive to make incremental changes on an annual basis, especially certificate retirement targets, where possible, to mitigate potential rate shocks. 2021 Climate Bill requirements that are applicable as of the date of this Policy are attached hereto as Attachment 1.

B. RMLD remains committed to supporting the Commonwealth's goals for Green House Gas (GHG) reduction and electrification, in the context of RMLD's customer obligations and RMLD's Mission.

C. RMLD will continue to improve its utility operations, including power supply, to support the Commonwealth's goals of reducing GHG emissions. RMLD has a unique mix of location, geography, and demographics. Given this context, RMLD will apply its unique capabilities to proactively explore and implement new programs, business models, and technologies to contribute to the reduction of GHG in its operation as an electric utility.

D. The RMLD shall develop the Renewable Choice Program, as an option available to all ratepayers. The Renewable Choice Program will allow RMLD customers to purchase "blocks" of Class 1 energy certificates ("RECs") for an additional monthly fee. Customer REC purchases (for subsequent retirement) through the Renewable Choice Program are above and beyond RMLD's other GHG reduction power procurement goals and requirements and are intended to help customers who have stated that they would be willing to pay more.

E. In order to balance RMLD's customer priorities and franchise obligations with compliance with all applicable laws pertaining to non-carbon and GHG reduction power procurement requirements, the General Manager may retain or may market RECs as she/he deems to be in the best interest of the RMLD and in compliance with all applicable law and Policy 19.

F. If applicable laws pertaining to non-carbon and GHG reduction power procurement change after the effective date of this Policy, the General Manager will review such changes and report to the RMLD Board on such changes and shall present for review and comment by the Board a plan for compliance with such changes that is consistent with RMLD's customer priorities and franchise obligations.

RMLD POLICY 30

ATTACHMENT 1 – Update 2

ROADMAP to Net-Zero Carbon by 2050
(a.k.a., S.9 or MLP GGES Legislation, amending chapter 25A)
Legislation effective (March 2021)

Provision	***Key Elements***
Goals	This Legislation sets a minimum percentage of non-carbon emitting energy sold by MLPs (retail sales): 2030 - 50% non-carbon emitting energy sales 2040 - 75% non-carbon emitting energy sales 2050 - net-zero greenhouse gas emissions energy sales
Sources	In this Legislation, "non-carbon emitting" is defined as energy generated from: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric, including imports (4) nuclear; (5) marine or hydrokinetic energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) wind energy; (10) biomass (The RMLD Board of Commissioners approves the exclusion of future wood burning biomass as an acceptable non-carbon or greenhouse gas reduction resource of generation under this Policy); and (11) any other generation qualifying as special cases per this Legislation. Note that RMLD will explore other generation technologies that are compliant with MGL CH 25A, Section 11f3/4, including carbon capture fuel cells, hydrogen system, and low-temperature geothermal general systems.
Make / Buy	MLPs may either purchase or generate non-carbon emitting energy. Existing energy supply contracts that meet Legislation requirements count as compliance.
Certificates	Qualification requires the MLP retirement of certificates for these energy retail sales. These certificates consist of non-carbon energy credits, emission-free energy certificates, or other evidentiary non-carbon emitting documentation.
Reporting / Alternative Compliance Payment	MLPs shall file an annual report demonstrating compliance. If an MLP fails compliance, it shall make an alternative compliance payment (ACP). This ACP shall not exceed $0.010 / kWh. This ACP shall be deposited into an MLP maintained and administered fund and shall be used by the MLP to fund greenhouse gas emissions reduction and related programs in its service territory. RMLD shall establish this fund effective the date of the Legislation.

RMLD POLICY 30

ATTACHMENT 2 – Update History of Attachment 1

Update	***Effective Date***	***Exclusion/ Change***	***Description***	***Recommended by General Manager and approved by BOC and CAB*** *(vote and date)*
0	02/24/2021	New	Attachment 1 created to reflect MLP GGES pending Legislation that will apply to MLPs.	02/24/2021
1	02/24/2021	Exclusion	Insert under Sources Provision, Item 10, next to the word biomass (The RMLD Board of Commissioners approves the exclusion of future wood burning biomass as an acceptable non-carbon or greenhouse gas reduction resource of generation under this Policy)	02/24/2021

RMLD Policy No. 30
NON-CARBON AND GREENHOUSE GAS (GHG) REDUCTION
REGARDING POWER SUPPLY PROCUREMENT

Revision No. 2

Commission Vote Date

General Manager/Date

Next Review Date

I. **PURPOSE**

A. To establish general policy guidelines to aggressively pursue practical and cost-effective non-carbon and GHG reduced power supply opportunities that balance RMLD's customers' priorities, its franchise obligations, reliability, power supply risk mitigation, and financial risk mitigation, while complying with applicable laws and regulations

B. To provide an opportunity for customers who wish to go above and beyond RMLD's non-carbon energy goals and requirements.

II. **POLICY ELEMENTS**

A. RMLD shall comply with all laws applicable ~~laws~~ to Municipal Light Plants, pertaining to renewable, non-carbon, and GHG reduction power procurement requirements, including 2021 Climate Bill requirements, while balancing its customer priorities and franchise obligations. RMLD shall strive to make incremental changes on an annual basis, especially certificate retirement targets, where possible, to mitigate potential rate shocks. 2021 Climate Bill requirements that are applicable as of the date of this Policy are attached hereto as Attachment 1.

B. RMLD remains ~~is~~ committed to supporting the Commonwealth's goals for Green House Gas (GHG) reduction and electrification, ~~and will continue to implement changes in support of those goals~~ in the context of RMLD's customer obligations and RMLD's Mission. ~~RMLD will stay informed of legislative and regulatory changes specific to GHG emissions.~~

C. RMLD will continue to improve its utility operations, including power supply, to support the Commonwealth's goals of reducing GHG emissions. RMLD has a unique mix of location, geography, and demographics. Given this context, RMLD will apply its unique capabilities to proactively explore and implement new programs, business models, and technologies to contribute to the reduction of GHG in its operation as an electric utility.

~~B.~~D. The RMLD shall develop the Renewable Choice Program, as an option available to all ratepayers. The Renewable Choice Program will allow RMLD customers to purchase "blocks" of Class 1 energy certificates ("RECs") for an additional monthly fee. Customer REC purchases (for subsequent retirement) through the Renewable Choice Program are

above and beyond RMLD's other GHG reduction power procurement goals and requirements and are intended to help customers who have stated that they would be willing to pay more.

~~C.~~E. In order to balance RMLD's customer priorities and franchise obligations with compliance with all applicable laws pertaining to non-carbon and GHG reduction power procurement requirements, the General Manager may retain or may market RECs as she/he deems to be in the best interest of the RMLD and in compliance with all applicable law and Policy 19.

~~D.~~F. If applicable laws pertaining to non-carbon and GHG reduction power procurement change after the effective date of this Policy, the General Manager will review such changes and report to the RMLD Board on such changes and shall present for review and comment by the Board a plan for compliance with such changes that is consistent with RMLD's customer priorities and franchise obligations.

~~E. The RMLD Board may vote on changes to this Policy from time to time and at a frequency note to exceed three years, and any changes to Attachment 1 shall be set forth below as shown and updated on Attachment 2.~~

RMLD POLICY 30

ATTACHMENT 1 – Update 2

ROADMAP to Net-Zero Carbon by 2050
(a.k.a., S.9 or MLP GGES Legislation, amending chapter 25A)
Legislation effective (March 2021)

Provision	***Key Elements***
Goals	This Legislation sets a minimum percentage of non-carbon emitting energy sold by MLPs (retail sales): 2030 - 50% non-carbon emitting energy sales 2040 - 75% non-carbon emitting energy sales 2050 - net-zero greenhouse gas emissions energy sales
Sources	In this Legislation, "non-carbon emitting" is defined as energy generated from: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric, including imports (4) nuclear; (5) marine or hydrokinetic energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) wind energy; (10) biomass (The RMLD Board of Commissioners approves the exclusion of future wood burning biomass as an acceptable non-carbon or greenhouse gas reduction resource of generation under this Policy); and (11) any other generation qualifying as special cases per this Legislation. Note that RMLD will explore other generation technologies that are compliant with MGL CH 25A, Section 11f3/4, including carbon capture fuel cells, hydrogen system, and low-temperature geothermal general systems.
Make / Buy	MLPs may either purchase or generate non-carbon emitting energy. Existing energy supply contracts that meet Legislation requirements count as compliance.
Certificates	Qualification requires the MLP retirement of certificates for these energy retail sales. These certificates consist of non-carbon energy credits, emission-free energy certificates, or other evidentiary non-carbon emitting documentation.
Reporting / Alternative Compliance Payment	MLPs shall file an annual report demonstrating compliance. If an MLP fails compliance, it shall make an alternative compliance payment (ACP). This ACP shall not exceed $0.010 / kWh. This ACP shall be deposited into an MLP maintained and administered fund and shall be used by the MLP to fund greenhouse gas emissions reduction and related programs in its service territory. RMLD shall establish this fund effective the date of the Legislation.

RMLD POLICY 30

ATTACHMENT 2 – Update History of Attachment 1

Update	***Effective Date***	***Exclusion/ Change***	***Description***	***Recommended by General Manager and approved by BOC and CAB*** *(vote and date)*
0	02/24/2021	New	Attachment 1 created to reflect MLP GGES pending Legislation that will apply to MLPs.	02/24/2021
1	02/24/2021	Exclusion	Insert under Sources Provision, Item 10, next to the word biomass (The RMLD Board of Commissioners approves the exclusion of future wood burning biomass as an acceptable non-carbon or greenhouse gas reduction resource of generation under this Policy)	02/24/2021

RMLD Policy No. 30
~~RENEWABLE~~NON-CARBON AND GREENHOUSE GAS (GHG)
REDUCTION REGARDING POWER SUPPLY PROCUREMENT

Revision No. 2~~1~~

_____
Commission Vote Date

~~I.~~ **General Manager/Date** **Next Review Date**

~~II. PREAMBLE~~

~~A. Established in 1894, Reading Municipal Light Department is a public power, not-for-profit electric utility that serves its four communities.~~
~~B. Public power means local control and local decision-making. Our customers help determine our electric rates and the policies and programs that meet local needs.~~
~~C. RMLD's electric rates reflect our customers' priorities as expressed in RMLD's Customer Satisfaction Surveys and adopted Mission and Vision statements:~~
~~a. Reliability — Customers expect and value excellent electric reliability.~~
~~b. Low Cost of Electricity — Customers value low-cost electricity.~~
~~c. Greenhouse Gas Reduction Goals — Our environmentally-conscious community wants RMLD to set greenhouse gas reduction goals while having little to no impact on rates.~~
~~d. RMLD's electric rates also reflect RMLD's franchise obligations. As a municipal light plant, RMLD is a public service corporation, having a legal franchise obligation to provide low-cost, reliable electric service to its ratepayers.~~
~~D. Consistent with RMLD's customers' priorities and its franchise obligations, the RMLD adopts the following Policy addressing renewable and sustainable energy:~~

~~III.~~I. **PURPOSE**

A. To establish general policy guidelines to aggressively pursue practical and cost-effective ~~renewable~~non-carbon and GHG reduced~~tion~~ power supply opportunities that balance RMLD's customers' priorities, its franchise obligations, reliability, power supply risk mitigation, and financial risk mitigation, while complying with applicable laws and regulations ~~pertaining to GHG power procurement requirements~~
B. To provide an opportunity for customers who wish to go above and beyond RMLD's ~~other greenhouse gas reduction~~non-carbon energy goals and requirements.

~~IV. **RESPONSIBILITIES**~~

~~A. RMLD Citizens' Advisory Board~~

~~1. Review and comment expeditiously on power purchase contracts recommended by the General Manager under this Policy.~~

~~B. RMLD Board of Commissioners~~

~~1. Responsible for approving this Policy every three years by December 31 of the third year.~~

~~2. Review and comment expeditiously on power purchase contracts recommended by the General Manager under this Policy.~~

~~3. Review, deliberate and vote on deviations and changes to this Policy.~~

~~C. General Manager~~

~~1. Responsible for implementing this Policy.~~

~~2. Present power purchase contracts covered by this Policy to the RMLD Citizens' Advisory Board and the RMLD Board of Commissioners for review and comment.~~

~~3. Present monthly updates to the RMLD Board concerning the RMLD's compliance and ability to comply with this Policy and any deviations or changes established by the RMLD Board, which will include impacts on cost and reliability.~~

~~V.~~II. POLICY ELEMENTS

A. The RMLD shall comply with all laws applicable ~~law~~ to Municipal Light Plants, pertaining to renewable, non-carbon, and GHG reduction power procurement requirements, including ~~, but not limited to, so-called Roadmap 2050~~2021 Climate Bill requirements, while balancing its customer priorities and franchise obligations. ~~The~~ RMLD shall strive to make incremental changes on an annual basis, especially certificate retirement targets, where possible, to mitigate potential rate shocks. ~~Roadmap 2050~~2021 Climate Bill requirements that are applicable as of the date of this Policy are attached hereto as Attachment 1.

B. RMLD remains committed to supporting the Commonwealth's goals for Green House Gas (GHG) reduction and electrification, in the context of RMLD's customer obligations and RMLD's Mission.

C. RMLD will continue to improve its utility operations, including power supply, to support the Commonwealth's goals of reducing GHG emissions. RMLD has a unique mix of location, geography and demographics. Given this context, RMLD will apply its unique capabilities to proactively explore and implement new programs, business models, and technologies to contribute to the reduction of GHG in its operation as an electric utility.

~~C.~~D. The RMLD shall develop the Renewable Choice Program, as an option available to all ratepayers. The Renewable Choice Program will allow RMLD customers to purchase "blocks" of Class 1 ~~renewable~~ energy certificates ("RECs") for an additional monthly fee. Customer REC purchases (for subsequent retirement) through the Renewable Choice Program are above and beyond RMLD's other GHG reduction power procurement goals and requirements and are intended to help customers who have stated that they would be willing to pay more. ~~to reduce greenhouse gas emissions. The program will be developed as a tariffed rate.~~

~~D.~~E. In order to balance RMLD's customer priorities and franchise obligations with compliance with all applicable laws pertaining to ~~renewable~~non-carbon and GHG reduction power procurement requirements, the General Manager may retain or may market RECs as she/he deems to be in the best interest of the RMLD and in compliance with all applicable law and policy 19~~.~~

~~E.~~F. If applicable laws pertaining to ~~renewable~~non-carbon and GHG reduction power procurement change after the effective date of this Policy, the General Manager will review such changes and report to the RMLD Board on such changes and shall present for review and comment by the Board a plan for compliance with such changes that is consistent with RMLD's customer priorities and franchise obligations.

~~F. The RMLD Board may vote on changes to this Policy from time to time and at a frequency of no more than every three years, and any changes to Attachment 1 shall be set forth below as shown and updated on Attachment 2.~~

RMLD POLICY 30

ATTACHMENT 1 – Update
2~~1~~

ROADMAP to Net-Zero Carbon by 2050
(a.k.a., S.9 or MLP GGES Legislation, amending chapter 25A)
Legislation effective (March 2021~~XX/XX/XXXX~~)

Provision	***Key Elements***
Goals	This Legislation sets a minimum percentage of non-carbon emitting energy sold by MLPs (retail sales): 2030 - 50% non-carbon emitting energy sales 2040 - 75% non-carbon emitting energy sales 2050 - net-zero greenhouse gas emissions energy sales
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Make / Buy	MLPs may either purchase or generate non-carbon emitting energy. Existing energy supply contracts that meet Legislation requirements count as compliance.
Certificates	Qualification requires the MLP retirement of certificates for these energy retail sales. These certificates consist of ~~renewable~~non-carbon energy credits, emission-free energy certificates, or other evidentiary non-carbon emitting documentation.
Reporting / Alternative Compliance Payment	MLPs shall file an annual report demonstrating compliance. If an MLP fails compliance, it shall make an alternative compliance payment (ACP). This ACP shall not exceed $0.010 / kWh. This ACP shall be deposited into an MLP maintained and administered fund and shall be used by the MLP to fund greenhouse gas emissions reduction and related programs in its service territory. RMLD shall establish this fund effective the date of the Legislation.

RMLD POLICY 30

ATTACHMENT 2 – Update History of Attachment 1

Update	***Effective Date***	***Exclusion/ Change***	***Description***	***Recommended by General Manager and approved by BOC and CAB*** *(vote and date)*
0	02/24/2021	New	Attachment 1 created to reflect MLP GGES pending Legislation that will apply to MLPs.	02/24/2021
1	02/24/2021	Exclusion	Insert under Sources Provision, Item 10, next to the word biomass (The RMLD Board of Commissioners approves the exclusion of future wood burning biomass as an acceptable ~~renewable~~non-carbon or greenhouse gas reduction resource of generation under this Policy)	02/24/2021

POLICY 19 REVISION MEMO

RMLD Board of Commissioners Meeting
January 31, 2024
Policy 19 Board of Commissioners
Proposed revisions relative to Policy 30 removals

Please find below proposed verbiage to be incorporated into Policy 19 Board of Commissioners so as capture verbiage removed from Policy 30 Non-Carbon Power Portfolio Mix (Revision 2). The intent is to capture the Responsibilities of the Board of Commissioners in one location to minimize conflicting text.

Policy Review

- Board of Commissioners:
  Responsible for reviewing all policies under a 3-year review cycle. Policies may be reviewed at any time at the Board of Commissioners request, at the recommendation of the General Manager, and in response to internal procedure or federal/state legislation changes.

- General Manager
  Responsible for periodically reviewing all policies and applicable laws/regulations and making recommendations to the Board of Commissioners for changes to the policies.

- Citizens' Advisory Board (CAB)
  Has the right to make recommendations on Board of Commissioner policies relative to its responsibilities as specified in Paragraph 9 and Attachment 4 of the "20 Year" Agreement. CAB Policy 1 outlines the responsibilities of the Citizens' Advisory Board relative to CAB policy review.

Policy Approval/ Implementation

- Board of Commissioners
  Approves policies governing RMLD to be implemented and discharged by the General Manager within the constraints of M.G.L. c. 164 and other applicable statutes and regulations.

- General Manager
  Responsible for the implementation, oversight, and enforcement of all RMLD policies.

- Citizens' Advisory Board
  Has no authority to approve or implement Board of Commissioner/RMLD policies. CAB Policy 1 outlines the responsibilities of the Citizens' Advisory Board relative to CAB policy approval.

Power Supply

- Board of Commissioners
  Approves long-term power supply contracts and agreements, unless otherwise voted through a strategic risk mitigation plan, i.e., ("TFA") and approves annual certificate retirement targets.

- Citizens' Advisory Board
  Provides decision-making input to the Board of Commissioners on issues concerning long term power supply contracts and agreements and annual certificate resource mix targets

Reporting

- General Manger will present quarterly updates to the Board of Commissioners and Citizens' Advisory Board concerning the RMLD's legal and regulatory compliance regarding power supply portfolio, including certificate management and impact of new or changed legislation.

ATTACHMENT 3

RMLD RATES UPDATE

Monthly Bills and Rates Effective March 2024

Presented to the
Board of Commissioners and
Citizens' Advisory Board

31 January 2024

1

Rates – goals and objectives

updated

goals

Design rates to **cover cost** of providing service

Allocate costs fairly, based on rate class characteristics

Provide funds for **efficiency and electrification incentives**

Offer customers better understanding and **control of energy use**

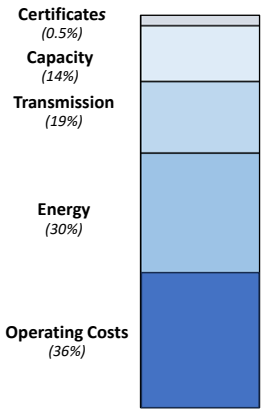
Comply with DPU, statutory, and RMLD policies

process *(annual analysis in current volatile market)*

1) Clarify outcomes, behaviors
2) Forecast loads, retail sales by class
3) Forecast base costs and power supply pass through costs
4) Review cost drivers by rate classes
5) Allocate costs across rates classes
6) Refine allocations
7) Update rates

2024 cost structure

illustration



3 *source: RMLD analysis and forecasts; 2024 budget;*

2

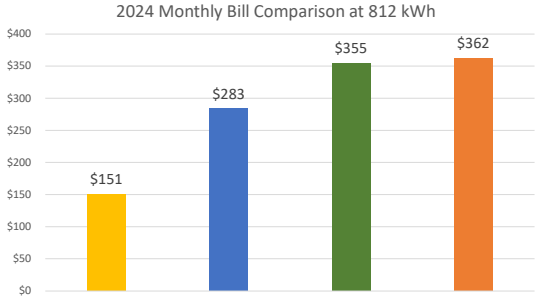
2024 RMLD monthly bills – 3.2% average increase updated

RMLD forecasts 2024 monthly bills to increase an average 3.2%

Two key variables drive monthly bills

1) Customer monthly electric usage (kWhs)
2) Rate elements (power supply costs, …)

Actual 2024 monthly bills will reflect actual monthly usage and pass through power supply costs



2024 residential rates based on average customer usage of 812 kWh per month.

3 *source: Rate and Analysis by Cost Stream v33 2024-10-19, 2024 Competitor Electric Rates Comparison IOUs*

Summary of monthly bill changes – March 2024

updated

total average monthly bill – effective March 2024

	2023 current	*March 2024 estimated*	$ change	% change	current 2023 net $/kwh	estimated March 2024 net $/kwh
Residential A	$ 148	$ 151	$ 2.96	2.0%	$ 0.1819	$ 0.1855
Residential TOU A2	$ 125	$ 130	$ 4.11	3.3%	$ 0.1545	$ 0.1595
Commercial C	$ 1,096	$ 1,131	$ 35.36	3.2%	$ 0.1600	$ 0.1652
Industrial TOU	$ 30,241	$ 31,698	$ 1,456.77	4.8%	$ 0.1506	$ 0.1578
Municipal C	$ 603	$ 623	$ 19.95	3.3%	$ 0.1540	$ 0.1591
School	$ 4,603	$ 4,675	$ 72.15	1.6%	$ 0.1431	$ 0.1453
				3.2%	revenue weighted average	

Effective March 2024 – ***overall average 3.2% higher compared to 2023***

5 *source: Rate and Analysis by Cost Stream v35 2024-01-19*

4

Effective March 2024 bills

updated

current MDPU	new MDPU	description	total monthly change	notes and key drivers
247		Municipal Street Lighting Schedule F Formula Rate	no change	
275		Backup and Standby Rate	no change	
285		Cooperative Resale Schedule G Rate	no change	
286		Residential Customer Owned Generation Under 20kW	no change	evaluating facilities charge and higher credit for exported kWh
287		Commercial/Industrial Customer-Owned Generation	no change	
288		Purchase Power Capacity and Transmission Charge	market	pass through cost
289		Private Street Lighting Rate Schedule D	no change	
290		Municipal LED Street Lighting Rate	no change	
291		Standard Fuel Charge Clause	market	pass through cost
294		Renewable Choice	no change	
295		Solar Choice Rider	adjusted semi-annually	monthly credits
306		Electric Vehicle Supply Equipment Schedule EVSE Rate	0%	
307		Economic Development	no change	
308		Coincident Peak - Large Industrials	no change	
301	309	**Residential Schedule A Rate**	2.0%	base rate, EEC
302	310	Residential Time of Use Schedule A2 Rate	3.3%	base rate, EEC
303	311	**Commercial Scheduled C Rate**	3.2%	base rate, EEC
304	312	**Industrial Time of Use Schedule I Rate**	4.8%	base rate, EEC
305	313	School Schedule SCH Rate	1.6%	base rate, EEC
292		Efficiency Electrification Charge	25%	increase $0.004 / kWh to $0.005 / kwh
		A3 residential TOU (EV focused)	future	update, approve, and release

Total monthly bill increase estimated at 3.2%

6 *source: Rate and Analysis by Cost Stream v35 2024-01-09*

5

2024 Rates – Residential A at 32% retire example

updated

Customer Charge
Cost of customer account administration.

Distribution Energy Charge
Cost of the distribution network system (wires, poles, transformers) including operations and maintenance for reliability.

Efficiency Electrification Charge
Cost of energy efficiency, electrification, rebate and incentive programs.

Fuel Charge
Wholesale cost of power supply (energy) including certificates.

Purchased Power Capacity & Transmission Charge (PPCT)
Wholesale cost for generation assets and transmission in ISO-NE. Cost based on RMLD peaks and regional pricing.

NYPA Credit
Credit from NY Power Authority related to hydropower. Legislation determined that the credit only applies to residential accounts.

32% Retirement

Residential A	*current*	*proposed*	$ change
*Customer Charge	$6.24	$7.70	$1.46
*Distribution Energy	$73.23	$74.03	$0.81
Efficiency Electrification	$3.25	$4.06	$0.81
Fuel	$40.13	$38.72	$(1.40)
Capacity & Trans (PPCT)	$41.36	$41.98	$0.62
NYPA Credit	$(4.58)	$(3.57)	$1.01
Prompt Payment	$(11.92)	$(12.26)	$(0.34)
Total Monthly Bill	**$147.70**	**$150.66**	**$2.96**
Average Monthly kWh	812	812	

Tariff Rate
$3.08
2%
rates set yearly

Power Supply Pass Thru
$0.23
0.16%
adjusted monthly based on actuals

Fuel, Capacity and Transmission prices have been trending downward Since budget estimates last year, resulting in a much lower rate impact.

Fixed tariff (rate sheet) is $3.08 (2%) of total estimated increase.
Variable power supply pass through is estimated $0.23 (0.16%) of total.

Source: Rate and Analysis by Cost Stream v35 2024-1-09

6

2024 Rates – Residential A at 55% retire example

updated

Customer Charge
Cost of customer account administration.

Distribution Energy Charge
Cost of the distribution network system (wires, poles, transformers) including operations and maintenance for reliability.

Efficiency Electrification Charge
Cost of energy efficiency, electrification, rebate and incentive programs.

Fuel Charge
Wholesale cost of power supply (energy) including certificates.

Purchased Power Capacity & Transmission Charge (PPCT)
Wholesale cost for generation assets and transmission in ISO-NE. Cost based on RMLD peaks and regional pricing.

NYPA Credit
Credit from NY Power Authority related to hydropower. Legislation determined that the credit only applies to residential accounts.

55% Retirement

Residential A	*current*	*proposed*	$ change
*Customer Charge	$6.24	$7.70	$1.46
*Distribution Energy	$73.23	$74.03	$0.81
Efficiency Electrification	$3.25	$4.06	$0.81
Fuel	$40.13	$39.41	$(0.72)
Capacity & Trans (PPCT)	$41.36	$41.98	$0.62
NYPA Credit	$(4.58)	$(3.57)	$1.01
Prompt Payment	$(11.92)	$(12.26)	$(0.34)
Total Monthly Bill	**$147.70**	**$151.35**	**$2.96**
Average Monthly kWh	812	812	

Tariff Rate
$3.08
2%
rates set yearly

Power Supply Pass Thru
$0.91
0.6%
adjusted monthly based on actuals

Fuel, Capacity and Transmission prices have been trending downward Since budget estimates last year, resulting in a much lower rate impact.

Fixed tariff (rate sheet) is $3.08 (2%) of total estimated increase.
Variable power supply pass through is estimated $0.91 (0.6%) of total.

Source: Rate and Analysis by Cost Stream v35 2024-1-09

Thank You

8

ATTACHMENT 4

CERTIFICATE MANAGEMENT

Certificate Management

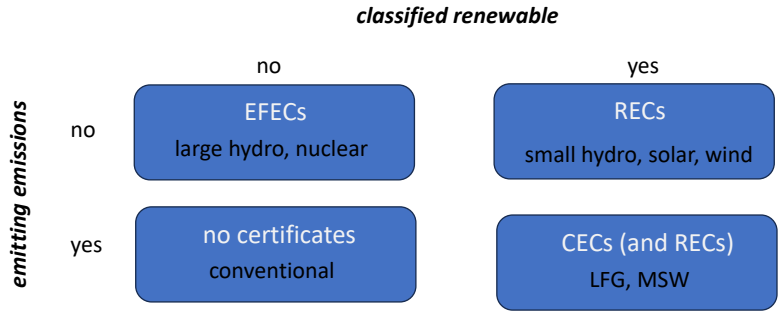
31 January 2023 BoC / CAB update

RMLD Reading Municipal Light Department
RELIABLE POWER

1

Many Types of Certificates

from 13 Dec 2023 BoC CAB presentation



numerous certificates types created to drive generation emphasis

RMLD Reading Municipal Light Department RELIABLE POWER

Certificate Purpose and Market Prices

updated

MA RPS Class I
Stimulate New Renewable Development
→ $36

MA RPS Class II
Support continued operation of existing renewables
→ $24

ME RPS Class II
Support continued operation of existing renewables
→ $10

The generation and delivery of each MWh of electricity from a renewable energy source to the grid creates a REC. Nuclear and Large Hydro units create EFECs. RECs vary greatly in value depending on where the source is registered. EFECs are generally less valuable than RECs.

The value difference drives current strategy to retire lower value certificates and sell higher value certificates.

$8 ← **Clean Energy Standard (CES-E) Certificates**
Support assets that meet the CES

$2 ← **Emission-Free Energy Certificates (EFEC)**
Support non-emitting nuclear, large hydro

3 *Source(s): prior RMLD presentations, internal analysis, Spectra Market Reports*

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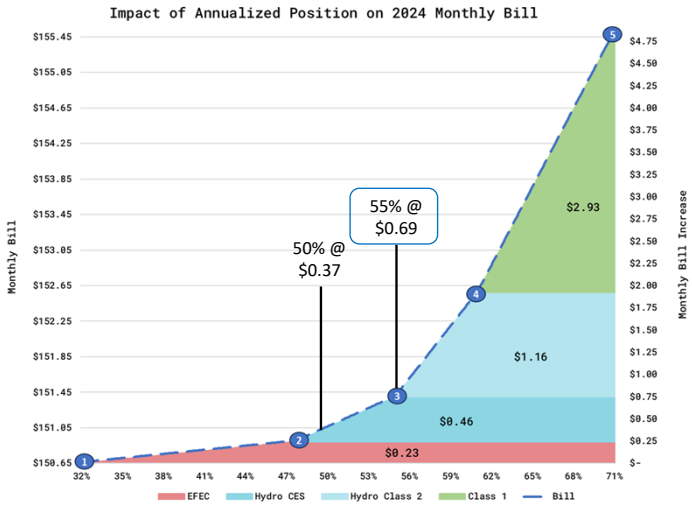
3

Accelerating Certificate Retirements to 55% in 2024



Source: 2024-2029 Resi Certificates 2024-01-25 JP.xls

RMLD made noteworthy power supply changes over past few years (more non-carbon)

RMLD acquires certificates with power purchases (associated certificates)

New Hydro Quebec contract provides additional low cost certificates, adding to EFECs from power supply changes

Current certificate retirement rate increases 3% annually to avoid customer rate shock while achieving 50% retirements by 2030

Accelerated retirement of EFECs and Hydro CES-E certificates would allow for 55% retirements

$0.69 increase in average monthly residential bill

certificate motion

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Thank You
from the RMLD Team

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5

ATTACHMENT 5

IN TERRITORY GENERATION

ROAD MAP

In Territory Roadmap
Energy Storage and Generation

31 January 2024

RMLD Reading Municipal Light Department
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1

Outline

Executive summary

Mission and vision

Electrification doubling load

In territory options

a) energy storage
b) low temperature geothermal
c) solar
d) carbon capture fuel cell

Milestones

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2

Executive summary – in territory generation

RMLD serves Lynnfield Center, North Reading, Reading, and Wilmington with *reliable*, *low-cost*, and *non-carbon* electricity
- Reliability is a combination of proactively minimizing outages and quickly restoring when they occur

Near-term, regional wholesale network supply reliability is increasingly fragile
- Timing of traditional generation decommission (before commissioning of non-carbon replacement generation)
- New transmission required to support replacement generation with is more distributed than traditional generation

Wholesale energy and transmission costs are increasing, and energy pricing is increasingly volatile
- As a result, RMLD costs will increase to support electrification load growth and associated buildout
- In territory generation is now viable (lower cost than wholesale forecasts)

2021 Climate Law accelerates electrification as part of decarbonization; no softening of legislative targets is expected
- Hence, RMLD load will double, and demand will increase 60% by 2050

Hence, RMLD needs significant investment (in territory generation / storage, data analytics, distribution, metering, IT, …)
- In-territory generation and energy storage require support RMLD's decarbonization strategy
- RMLD has new access to tax credits and numerous grants (new funding sources)
- RMLD is large enough to have resources while small enough to be nimble
- RMLD is a representative microcosm of region → lessons, experiences, and solutions can be scaled and are transferable
- RMLD is partnering with solution providers and the Commonwealth

 Source: RMLD 2022 statistics and analysis

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RMLD mission and vision

mission *(what we do)* → ***vision*** *(where we are going)* → ***strategy*** *(how we get there)* → ***goals*** *(milestones)*

Mission

RMLD's team mission is to serve our customers with **reliable**, **low cost**, and increasingly **non-carbon** energy.

Vision

RMLD's team vision is to innovatively support electrification and sensibly facilitate the required non-carbon transition, with customer involvement.

Context – in territory storage and generation

Reliability enhanced via in territory energy storage and generation assets
- Regional wholesale more fragile
- More direct control (and responsibility)
- In territory generation targeted to support ~40% of load by 2040

Favorable economics for in territory generation
- Wholesale costs increasing (energy, transmission, capacity, certificates)
- New funding sources (state / fed grants, tax credits, vendor contributions)
- RMLD has scale to implement

Compliant (2021 Climate Bill → non-carbon electricity sales 50% by 2030, 75% by 2040, and net zero by 2050)
- Actual lower CO2 emissions, well ahead of compliance targets
- Clean energy certificates produced by a fuel cell with >90% carbon capture provides compliance pathway in the near term
- Carbon captured fuel cells compliant for life of assets (>20 years)

Generation asset timing
- First 20 MW base load gen commissioned 2026
- Additional 3 MWs of RMLD owned rooftop solar PV commissioned in 2026, then Maple Meadows solar PV (7 MW) in 2027
- Additional 20 MW base load gen commissioned in 2032, followed by two additional units in mid 2030's

5 *Source(s): RMLD presentations and internal analysis*

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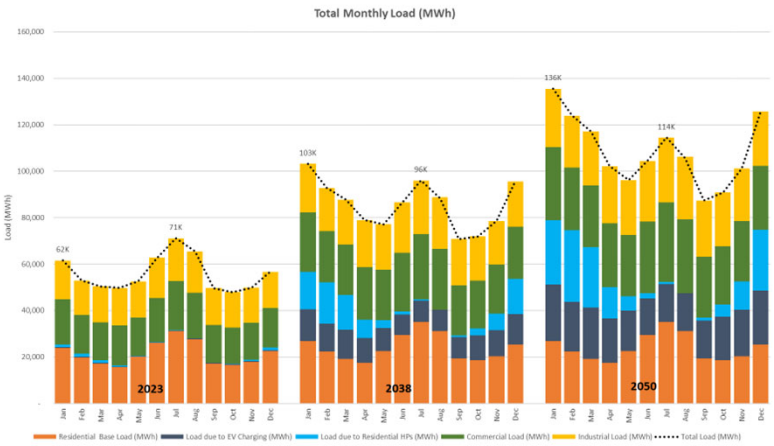
RMLD load doubles by 2050 – 2.5% cagr



Winter (January) highest load beginning in 2030's primarily due to ASHP and EV load additions; doubling winter load by 2050

Summer load 60% higher by 2050

- Industrial 1.5% cagr
- Commercial 1.8% cagr
- ASHP Residential 12% cagr (75% conversion by 2050)
- EV Residential 17% cagr (95% adoption by 2050)
- Base Residential 0.5% cagr

RMLD forecast consistent with ISO NE 2050 Transmission Study and ISO NE 2023 CELT forecast

6

Source: long-term-forecast 2023-10-02; 2023 CELT; RMLD analysis; actual RMLD 2022 is base year; 2023 CELT shows 2.3% cagr 2023 - 2032

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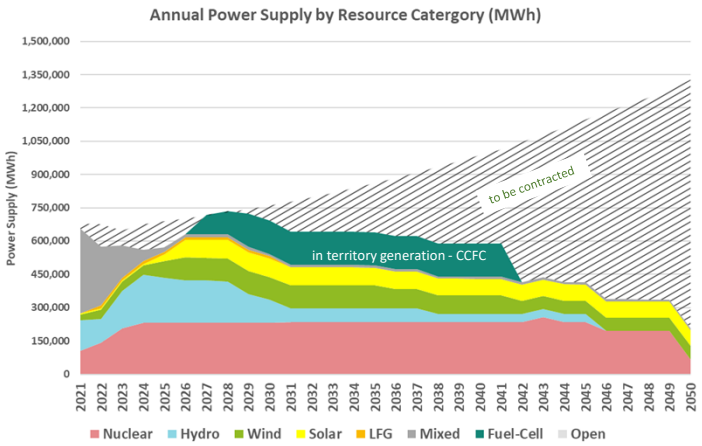
RMLD power supply to meet load - reliability

Power supply portfolio adjusted regularly to meet RMLD mission

"to be contracted" can be filled with:

a) real-time open market purchases
b) day ahead open market purchases
c) new contracts
d) in territory generation

Favorable economics and non-carbon goals prompts new **in territory** energy storage and generation



7 *source: Energy Position MASTER 2X with dashboards 2023-09-25*

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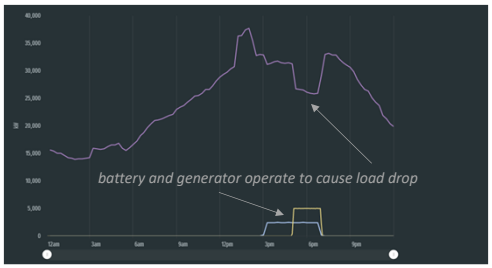
Energy storage – key puzzle piece

Storage systems ***time shift*** energy (ex. afternoon solar to evening use)

Time shifting enables benefits:

a) **Economic** (coincident ISO NE / RMLD peak management)
b) **Reliability** (network hot spots)
c) **Resiliency** (limited backup)

Storage systems are not generators



RMLD adding ~30 MW (2-3 hour) of battery storage

- Existing 5 MW at Station 3 - 2019
- New mobile 500 kw at Station 2 - 2024
- New 10 MW on Fordham Road - 2024
- New 10 MW at Station 3 - 2025
- Planning 10 MW at Station 6 – 2026
- Exploring 2.5 MW (10 hour) - grant submitted
- Exploring 10 MW (100 hour) - analysis in process

Energy storage – important component of reliability, low-cost, non carbon mission and decarbonization

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In territory generation options for RMLD

2036

Hydrogen for electricity generation

- Early years of development
- Expensive until technology advances
- Generation / distribution challenged
- Exploring pilot at RMLD Station 3

not likely

Small Nuclear Reactor (SMR)

- Better suited for existing / former sites
- Commercialization mid-2030's
- Not likely an in territory option

not likely

Utility scale wind

- Onshore wind requires tall towers
- Majority of RMLD territory populated
- Not likely an in territory option

*Although viable regionally and part of the RMLD's power supply portfolio, nuclear, wind, and hydrogen are not likely for **in territory** generation*

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In territory generation options for RMLD (cont)

2015 - 2027

Solar PV (landfill, industrial rooftops, muni rooftops, some resi)

- Great economics, low operating costs
- Very limited land for solar in RMLD (40 MW in territory maximum)
- 40 MW generates 60,000 MWHs annually (< 10 % of current total)

2026

Carbon captured fuel cells

- Fuel cell technology well established
- Adding carbon capture is new
- Compliant – CES (emissions-based program)
- Viable bridge solution to fully non-carbon

2034

Low temp geothermal for electricity generation

- High temp proven (3,700 MWs operating in US)
- Fundamental process /technology established
- Commercially viable 8-12 years out

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solar at RMLD

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Little room for much additional solar at RMLD

	location	on-line	MW AC	annual output (MWHs)
installed	Burlington Ave	2015	2.0	2,978
	Ballardvale Road	2017	1.0	1,489
	Fordham Road	2017	1.7	2,532
	Residential roof top	2010 - ongoing	2.0	2,978
	Commercial roof top	2011 - ongoing	2.5	3,723
	subtotal		**9.2**	**13,701**
in planning	new Maple Meadows	2026	7.5	11,169
	new Lynnfield Water	2026	2.5	3,723
	new Town buildings	2025	1.5	2,234
	other industrial roof PV	2028	7.5	11,169
	other PV (ground, canopy, ...)	2028	12.0	17,870
	grand total		**40.2**	**59,866**

Solar PV is viable for RMLD (good economics, non-carbon, …)

Solar PV requires horizon area (limited locally)

Local solar PV has very low capacity factor due higher latitude

Bottom-line, RMLD will max out solar, supplying 5-10% of total load

12 *source: in territory assets 2024-01-23*

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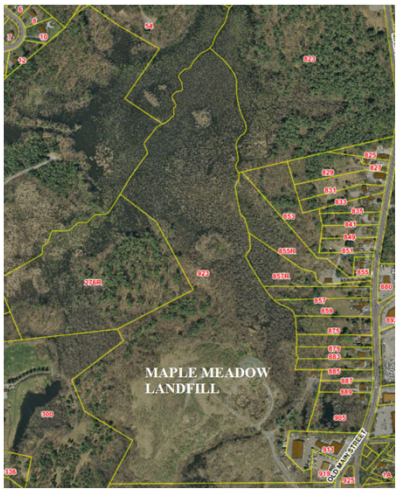
Maple Meadow – RMLD can unlock community value



75 acre site with challenged history (former landfill, in limbo, taxes, …)

But RMLD uniquely positioned to create value for all parties:

- Solar PV
  - ~7 MW solar PV, within territory generation
  - Persuasive economics
  - Many hurdles
- Storage – battery, fly wheel, …
  - 10 MW linked to solar PV (time shifting, peak management, economics)
  - 30 – 60 ME battery storage tied to transmission system (SATOA)
- Fourth transmission tie point (southern substation)
  - Increase resiliency, PTF eligible (reimbursement)
  - Support electrification load growth
- Future non-solar generation site
  - Low-temp geothermal for electricity generation
  - Hydrogen

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carbon capture fuel cell (CCFC)

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CCFC output management

in territory, carbon captured equipped fuel cell system

natural gas

CO_2

92% CO2 captured
Sold locally to pharma, building materials, …
Possible local pipe transport

MWh

Non-carbon compliant electricity
Cost near current RMLD contracted average

H_2O

Water sent to adjacent long-duration battery system

RMLD envisions a local business microcosm that fully utilizes all outputs as bridge solution

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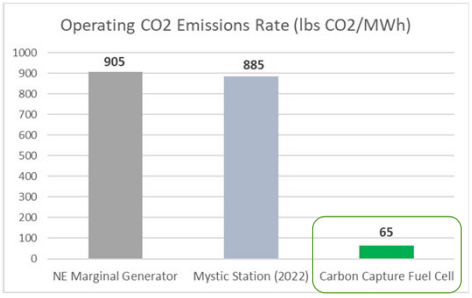
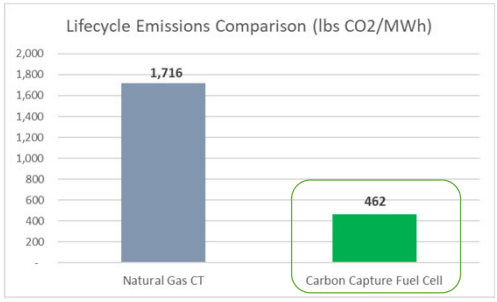
Carbon Capture Fuel Cell – CO_2

Carbon capture equipped fuel cell system emits 7% of CO2 captured to New England marginal generator



Carbon capture equipped fuel cell system 73% below NGCT system in life cycle comparison



Although not zero, carbon capture fuel cell system yields dramatic CO2 reduction when run as base load unit (8,300 annual hours)

73% life cycle savings enable clean energy standard (non-carbon compliant with 2021 Climate Bill)

source(s): 2021 EPA eGRID, EIA 2022 plant emissions, initial Bloom analysis

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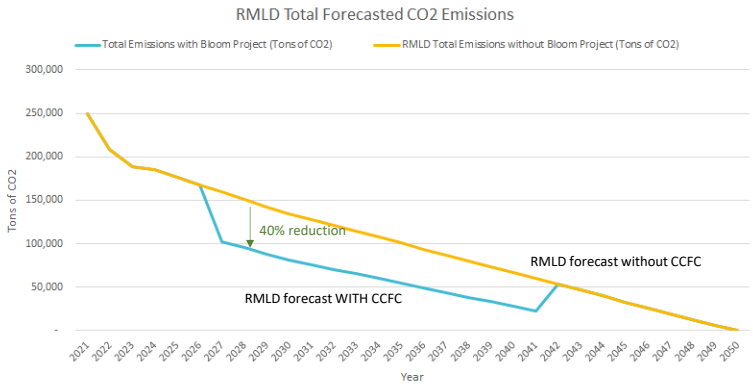
Result – accelerated, viable decarbonization



CCFC drops RMLD total CO2 emissions by 40% annually

CCFC generation positioned as interim step to reduce CO2 emissions; planning 15 year project with option to extend

Low-temperature geothermal and other yet to be commercialized generation technology deployed in mid 2030's

CCFC can be viable bridge technology the lowers total annual CO2

17 *source: Energy Position MASTER 2X with dashboards 2023-09-25*

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CCFC - preliminary high-level economics

20 MW carbon capture fuel cell system

key prerequisite components

$120 million across participants
7 acres of land
reliable fuel supply

financing

investment tax credits
discounts
bonds
grants
cash

net operating costs

$100 / MWH
8,300 annual run hours
lots of variables

More analysis required but initial economics favorable

18 *Source(s): Bloom and RMLD discussions and internal analysis*

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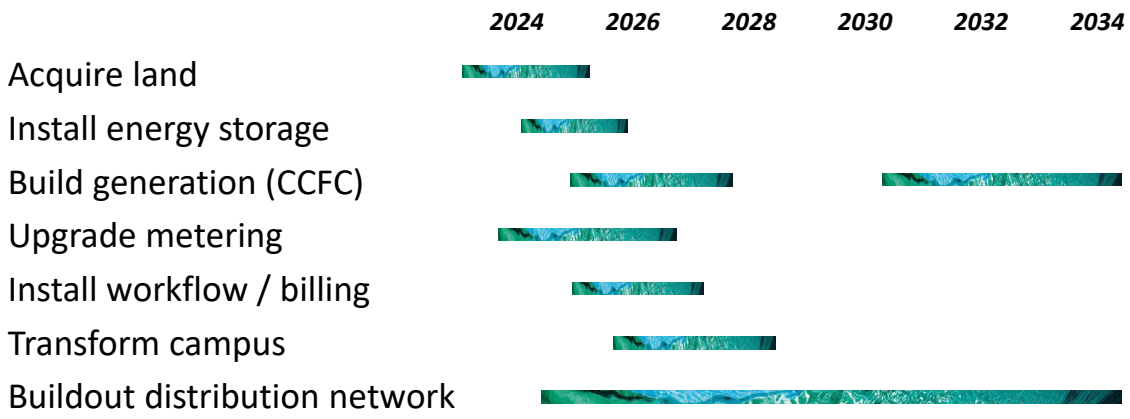
Investment timing – key RMLD initiatives



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Thank You
from the RMLD Team

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ATTACHMENT 6

GENERAL MANAGER'S REPORT

General Manager Update

Presented to the
Board of Commissioners and
Citizens Advisory Board

31 January 2024

1

RMLD Team

New Director of Operations on board and leading

Opened additional billing specialist role (backup, preparation)

Actively recruiting

a) Director of Engineering
b) Director of HR
c) Director of Enterprise Data - mid 2024

Team quickly restored power during extended January storms

Current contracts expired Dec 2024

- start negotiations this summer

Employee survey delayed

Team remains energized

External Communications – More

Public facing outage maps during storms starting June

New Current Insights podcast posts every two week

- Episodes averaging 183 views (highest has 692 views)
- New Zoom capability will broaden guests and audience

Monthly newsletter has 63% open rate (vs 37% national average

- Emailed to 20,000 recipients end of each month

Facebook has 1,096 followers while X has 4,785 followers

- 2-3 posts to each media every week

Quarterly webinars - 150 participants plus 200 subsequent views

Home energy evaluation kits at all four Town libraries (instruments, samples, …)

RMLD increasing outbound communications and exploring new avenues

3

RMLD / MLP and Transmission Buildout

Massive regional transmission buildout over next few decades
- $20 billion on top of $12 billion installed base
- Paid for by all rate payers (ex. transmission element of PPCT on RMLD monthly bills)

Commonwealth and IOU's want public power participation
- MLP's have positive reputation

MLP's teaming up (as ENE-T entity) to uncover MLP opportunities
- Traditionally only transmission operators participated
- MLP's may have opportunity to invest and possibly more
- RMLD one of over a dozen MLPs teaming as ENE-T

Significant economic benefit for participating MLP's
- 11% gross return on investment at 4% cost of capital
- Net 7% return to MLPs

MLP participation puts small downward pressure on total transmission cost

MLP participation promotes more transparency

Project investments will be presented to BoC / CAB as they are developed

Thank You

MATERIALS AVAILABLE
BUT NOT DISCUSSED

Town of Reading, Massachusetts
Municipal Light Department
Statement of Net Assets
10/31/2023

	2023	2022
ASSETS		
Current:		
Unrestricted Cash	$ 27,807,291	$ 21,087,277
Restricted Cash	30,586,730	31,784,518
Restricted Investments	1,414,991	1,037,840
Receivables, Net	10,285,565	8,029,964
Prepaid Expenses	1,490,954	1,334,784
Inventory	3,256,815	2,503,337
Total Current Assets	74,842,346	65,777,720
Noncurrent:		
Lease Receivable	1,993,599	-
Investment in Associated Companies	990,826	964,726
Construction in Progress	879,120	385,636
Capital Assets, Net	93,858,128	90,420,159
Total Noncurrent Assets	97,721,672	91,770,521
Deferred Outflows	6,113,387	6,754,497
TOTAL ASSETS	**178,677,406**	**164,302,738**
LIABILITIES		
Current		
Accounts Payable	6,660,804	7,892,826
Accrued Liabilities	487,900	288,703
Customer Deposits	1,771,689	1,674,331
Advances from Associated Companies	200,000	200,000
Contribution in Aid of Construction	3,414,353	2,646,415
Total Current Liabilities	12,534,747	12,702,275
Non-current		
Accrued Employee Compensated Absences	925,017	1,652,518
Net OPEB Obligation	4,269,089	4,158,698
Net Pension Liability	5,358,701	11,954,138
Total Non-current Liabilities	10,552,807	17,765,354
Deferred Inflows	9,802,918	4,327,923
TOTAL LIABILITIES	**32,890,472**	**34,795,553**
NET POSITION		
Invested in Capital Assets, Net of Related Debt	93,858,128	90,420,159
Restricted for Depreciation Fund	11,807,821	7,644,399
Restricted for Pension Trust	7	6,837,197
Unrestricted	40,120,978	24,605,431
TOTAL NET POSITION	**145,786,933**	**129,507,185**
Total Liabilities and Net Assets	**$ 178,677,406**	**$ 164,302,738**

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
10/31/2023

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Operating Revenues					
Base Revenue	$ 2,923,120	$ 2,223,186	$ 30,383,045	$ 25,544,555	18.9%
Fuel Revenue	2,370,674	3,046,303	26,294,923	31,287,354	(16.0%)
Purchased Power Capacity & Transmission	2,462,903	2,356,822	27,563,730	26,455,326	4.2%
Forfeited Discounts	104,366	45,997	766,017	668,840	14.5%
Energy Conservation Revenue	199,229	144,049	2,026,055	1,653,301	22.5%
NYPA Credit	(73,788)	(93,861)	(1,136,694)	(1,028,207)	10.6%
Total Operating Revenues	7,986,504	7,722,497	85,897,076	84,581,169	1.6%
Expenses					
Power Expenes:					
547 Purchased Power Fuel	2,107,419	1,944,238	22,437,186	28,376,797	(20.9%)
555 Purchased Power Capacity	944,398	1,152,778	12,773,916	12,376,664	3.2%
565 Purchased Power Transmission	1,706,126	1,305,749	12,362,984	14,261,674	(13.3%)
Total Purchased Power	4,757,944	4,402,765	47,574,086	55,015,135	(13.5%)
Operations and Maintenance Expenses:					
580 Supervision and Engineering	134,732	80,289	1,178,491	904,911	30.2%
581 Station/Control Room Operators	45,531	41,064	570,420	413,962	37.8%
582 Station Technicians	75,686	46,403	609,684	461,422	32.1%
583 Line General Labor	51,095	77,738	761,683	630,006	20.9%
586 Meter General	16,570	19,424	150,011	176,400	(15.0%)
588 Materials Management	60,332	40,200	444,116	368,195	20.6%
593 Maintenance of Lines - Overhead	31,384	54,863	698,255	338,852	106.1%
593 Maintenance of Lines - Tree Trimming	6,261	9,968	822,787	667,329	23.3%
594 Maintenance of Lines - Underground	6,642	10,614	69,706	193,127	(63.9%)
595 Maintenance of Line - Transformers	10,622	54,434	84,124	182,715	(54.0%)
598 Line General Leave Time Labor	40,171	83,531	466,149	416,548	11.9%
Total Operations and Maintenance Expenses	479,027	518,527	5,855,425	4,753,467	23.2%
General & Administration Expenses:					
903 Customer Collections	140,166	100,739	1,160,810	960,251	20.9%
904 Uncollectible Accounts	3,333	5,000	33,333	50,000	(33.3%)
916 Energy Audit	94,780	48,553	701,397	691,810	1.4%
916 Energy Conservation	144,185	73,526	1,558,282	1,110,401	40.3%
920 Administrative and General Salaries	207,495	133,485	2,010,068	1,687,052	19.1%
921 Office Supplies and Expense	222	1,629	14,566	12,819	13.6%
923 Outside Services - Legal	52,785	80,394	278,028	402,265	(30.9%)
923 Outside Services - Contract	5,625	33,602	313,300	250,292	25.2%
923 Outside Services - Education	25,641	17,651	113,927	52,417	117.3%
924 Property Insurance	27,478	32,768	389,596	348,984	11.6%
925 Injuries and Damages		4,773	77,729	20,877	272.3%
926 Employee Pensions and Benefits	250,273	311,675	3,443,934	3,275,897	5.1%
930 Miscellaneous General Expense	27,300	14,397	335,640	287,752	16.6%
931 Rent Expense	36,503	13,900	188,989	188,426	0.3%
933 Vehicle Expenses	13,170	43,623	263,634	244,183	8.0%
933 Vehicle Expenses - Capital	(39,293)	(29,913)	(347,788)	(332,628)	4.6%
935 Maintenance of General Plant	27,783	29,896	598,967	452,605	32.3%
935 Maintenance of Building & Garage	64,561	69,751	662,950	773,714	(14.3%)
Total General & Administration Expenses	1,082,008	985,449	11,797,361	10,477,117	12.6%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
10/31/2023

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Other Operating Expenses:					
403 Depreciation	435,353	421,450	4,353,534	4,214,501	3.3%
408 Voluntary Payments to Towns	152,217	143,387	1,522,178	1,433,870	6.2%
Total Other Expenses	587,571	564,837	5,875,712	5,648,371	4.0%
Operating Income	1,079,954	1,250,919	14,794,491	8,687,079	70.3%
Non Operating Revenues (Expenses):					
419 Interest Income	70,101	30,461	727,640	180,621	302.9%
419 Other	153,831	147,852	486,324	709,550	(31.5%)
426 Return on Investment to Reading	(211,551)	(210,620)	(2,109,923)	(2,082,734)	1.3%
426 Loss on Disposal					0.0%
431 Interest Expense	(4,098)	(2,016)	(40,907)	(20,136)	103.2%
Total Non Operating Revenues (Expenses)	8,284	(34,323)	(936,866)	(1,212,699)	(22.7%)
Change in Net Assets	1,088,238	1,216,597	13,857,625	7,474,380	85.4%
Net Assets at Beginning of Year	131,929,309	122,032,806	131,929,309	122,032,806	8.1%
Ending Net Assets	$ 133,017,547	$ 123,249,402	$ 145,786,933	$ 129,507,185	12.6%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets Compared to Budget
10/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Operating Revenues				
Base Revenue	$ 30,383,045	$ 26,763,519	$ 3,619,526	13.5%
Fuel Revenue	26,294,923	34,255,027	(7,960,105)	(23.2%)
Purchased Power Capacity & Transmission	27,563,730	28,763,323	(1,199,593)	(4.2%)
Forfeited Discounts	766,017	802,906	(36,889)	(4.6%)
Energy Conservation Revenue	2,026,055	1,667,500	358,555	21.5%
NYPA Credit	(1,136,694)	(968,333)	(168,360)	17.4%
Total Operating Revenues	$ 85,897,076	91,283,942	(5,386,866)	(5.9%)
Expenses				
Power Expenses:				
555 Purchased Power Fuel	22,437,186	33,286,694	(10,849,508)	(32.6%)
555 Purchased Power Capacity	12,773,916	12,891,332	(117,416)	(0.9%)
565 Purchased Power Transmission	12,362,984	16,021,991	(3,659,007)	(22.8%)
Total Purchased Power	47,574,086	62,200,017	(14,625,931)	(23.5%)
Operations and Maintenance Expenses:				
580 Supervision and Engineering	1,178,491	815,366	363,125	44.5%
581 Station/Control Room Operators	570,420	423,413	147,007	34.7%
582 Station Technicians	609,684	1,114,548	(504,864)	(45.3%)
583 Line General Labor	761,683	500,629	261,054	52.1%
586 Meter General	150,011	225,204	(75,193)	(33.4%)
588 Materials Management	444,116	490,491	(46,375)	(9.5%)
593 Maintenance of Lines - Overhead	698,255	473,953	224,303	47.3%
593 Maintenance of Lines - Tree Trimming	822,787	1,324,823	(502,036)	(37.9%)
594 Maintenance of Lines - Underground	69,706	162,478	(92,772)	(57.1%)
595 Maintenance of Line - Transformers	84,124	295,866	(211,742)	(71.6%)
598 Line General Leave Time Labor	466,149	179,969	286,179	159.0%
Total Operations and Maintenance Expenses	5,855,425	6,006,740	(151,314)	(2.5%)
General & Administration Expenses:				
903 Customer Collection	1,160,810	1,083,007	77,803	7.2%
904 Uncollectible Accounts	33,333	62,500	(29,167)	(46.7%)
916 Energy Audit	701,397	892,858	(191,461)	(21.4%)
916 Energy Conservation	1,558,282	2,553,536	(995,254)	(39.0%)
920 Administrative and General Salaries	2,010,068	2,686,777	(676,709)	(25.2%)
921 Office Supplies and Expense	14,566	16,667	(2,101)	(12.6%)
923 Outside Services - Legal	278,028	654,833	(376,805)	(57.5%)
923 Outside Services - Contract	313,300	616,750	(303,450)	(49.2%)
923 Outside Services - Education	113,927	274,292	(160,364)	(58.5%)
924 Property Insurance	389,596	451,292	(61,696)	(13.7%)
925 Injuries and Damages	77,729	21,333	56,395	264.4%
926 Employee Pensions and Benefits	3,443,934	3,807,188	(363,255)	(9.5%)
930 Miscellaneous General Expense	335,640	501,167	(165,526)	(33.0%)
931 Rent Expense	188,989	176,667	12,322	7.0%
933 Vehicle Expense	263,634	324,167	(60,533)	(18.7%)
933 Vehicle Expense - Capital Clearing	(347,788)	(425,223)	77,435	(18.2%)
935 Maintenance of General Plant	598,967	557,306	41,661	7.5%
935 Maintenance of Building & Garage	662,950	826,298	(163,348)	(19.8%)
Total General & Administration Expenses	11,797,361	15,081,413	(3,284,051)	(21.8%)

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets Compared to Budget
10/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Other Operating Expenses:				
403 Depreciation	4,353,534	4,537,500	(183,966)	(4.1%)
408 Voluntary Payments to Towns	1,522,178	1,477,033	45,145	3.1%
Total Other Expenses	5,875,712	6,014,533	(35,447)	(0.6%)
Operating Income	14,794,491	1,981,239	12,709,878	641.5%
Non Operating Revenues (Expenses):				
415 Contribution in Aid of Construction	-	41,667	(41,667)	(100.0%)
419 Interest Income	727,640	250,000	477,640	191.1%
419 Other Income	486,324	591,667	(105,343)	(17.8%)
421 Intergovernmental Grants	-	75,000	(75,000)	(100.0%)
426 Return on Investment to Reading	(2,109,923)	(2,124,143)	14,220	(0.7%)
426 Loss on Disposal	-	(8,333)	8,333	(100.0%)
431 Interest Expense	(40,907)	(8,333)	(32,574)	390.9%
Total Non Operating Revenues (Expenses)	(936,866)	(1,182,477)	245,610	(20.8%)
Net Income	$ 13,857,625	$ 798,762	$ 13,058,862	1634.9%