RMLD

READING MUNICIPAL LIGHT DEPARTMENT

BOARD OF COMMISSIONERS & CITIZENS' ADVISORY BOARD JOINT SESSION MEETING

WEDNESDAY OCTOBER 25, 2023

Town of Reading
Meeting Posting with Agenda

Board - Committee - Commission - Council:

RMLD Board of Commissioners

Date: 2023-10-25 Time: 6:00 PM

Building: North Reading Town Hall Location: Room 14

Address: 235 ST, North Reading MA Agenda: Revised

Purpose: General Business

Meeting Called By: Philip B. Pacino, 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, REMOTELY, AND STREAMED LIVE ON RCTV AND YOUTUBE: https://www.youtube.com/c/RCTVStudios/videos?view=57.

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.

JOINT MEETING OF THE RMLD BOARD OF COMMISSIONERS AND CITIZENS' ADVISORY BOARD.

1. Call Meeting to Order – P. Pacino, Chair (Board of Commissioners) and V. Soni, Chair (Citizens' Advisory Board).

   Code of Conduct: The RMLD Board of Commissioners recognizes the importance of hearing public comment, at the discretion of the Chair, on items on the official agenda. Once recognized by the Chair, all persons addressing the Board shall state their name and address prior to speaking. It the role of the Chair to maintain order in all public comment or ensuing discussion.

2. Public Comment - P. Pacino, Chair

3. Report on the Citizens' Advisory Board meeting – M. Bita, Commissioner

4. Approval of Board of Commissioners Meeting Minutes (*attachment 1)* – P. Pacino, Chair
   Suggested Motion: Move that the RMLD Board of Commissioners approve the open session minutes of the June 15, 2023, and July 18, 2023, meetings on the recommendation of the General Manager and the Board Secretary.

5. Approval of Citizens' Advisory Board Minutes *(attachment 2)*- V. Soni, Chair
   Suggested Motion: Move that the RMLD Citizens' Advisory Board approve the open session meeting minutes of the February 23, 2023, meeting on the recommendation of the General Manager and the Citizens' Advisory Board Secretary.

6. Carbon Captured Fuel Cell *(attachment 3)*– G. Phipps, General Manager & M. McNeley, Bloom Energy & J. Garfinkle

7. Rates Presentation *(attachment 4)* – B. Bullock, Director of Integrated Resources

   CAB Suggested Motion: Move that the Citizens' Advisory Board recommend that the Board of Commissioners vote to accept the General Manager's recommendation to replace the following MDPU rates effective for billings on or after March 1, 2024:

   - Replace 301 Residential Schedule A with 309
   - Replace 302 Residential Time of Use Schedule A2 with 310
   - Replace 303 Commercial Schedule C with 311
   - Replace 304 Industrial Time of Use Schedule I with 312
   - Replace 305 School Schedule SCH with 313

   BoC Suggested Motion: Move that the Board of Commissioners, on the recommendation of the Citizens' Advisory Board, vote to accept the General Manager's recommendation to replace the following MDPU rates effective for billings on or after March 1, 2024:

   - Replace 301 Residential Schedule A with 309
   - Replace 302 Residential Time of Use Schedule A2 with 310
   - Replace 303 Commercial Schedule C with 311
   - Replace 304 Industrial Time of Use Schedule I with 312
   - Replace 305 School Schedule SCH with 313

8. 2024 Budget Presentation *(attachment 5)* – B. Bloomenthal, Director of Finance & Accounting

   Capital Budget:

   CAB Suggested Motion: Move that the Citizens' Advisory Board recommend to the RMLD Board of Commissioners the Calendar Year 2024 Capital Budget as presented.

   BoC Suggested Motion: Move that the Board of Commissioners, on the recommendation of the Citizens' Advisory Board, approve the Calendar Year 2024 Capital Budget as presented.

Operating Budget:

CAB Suggested Motion: Move that the Citizens' Advisory Board recommend to the RMLD Board of Commissioners the Calendar Year 2024 Operating Budget as presented.

BoC Suggested Motion: Move that the Board of Commissioners, on the recommendation of the Citizens' Advisory Board, approve the Calendar Year 2024 Operating Budget as presented.

9. Scheduling

Subsequent CAB Meetings

Date	Time	Location	BoC Coverage
Wednesday, November 15, 2023	5:30 PM	RMLD AV Room	Talbot
Wednesday, December 13, 2023	5:30 PM	RMLD AV Room	Daskalakis

Subsequent BoC Meetings

Date	Time	Location	CAB Coverage
Wednesday, November 15, 2023	7:00 PM	RMLD AV Room	Small
Wednesday, December 13, 2023	7:00 PM	RMLD AV Room	Kelley

BoC Warrant Schedule

	AP	PAYROLL	Board Member Covering CAB
October	Daskalakis	Talbot	Pacino
November	Coulter	Daskalakis	Talbot
December	Talbot	Bita	Daskalakis

Future MEAM meetings
Wednesday November 15, 2023 (Open)

10. Adjournment – Citizens' Advisory Board – V. Soni, Chair
Suggested Motion: Move that the RMLD Citizens' Advisory Board adjourn regular session. Note: Roll call vote required.

11. Policy Review *(attachment 6)* - G. Phipps, General Manager

Policy 25: Anonymous Communications
Suggested Motion: Move that the RMLD Board of Commissioners dissolve Policy 25: Anonymous Communications, on the recommendation of the General Manager.

12. RMLD Procurement Requests for Board Approval *(attachment 7)* - G. Phipps, General Manager

IFP 2023-01 MDMS and Customer Portal IFP
Suggested Motion: Move that IFP 2023-01 for a Meter Data Management System

(MDMS) and Customer Portal be awarded to: Professional Computer Systems, LLC (PCS) for an amount not to exceed $500,000, pursuant to M.G.L. c. 164 § 56D, on the recommendation of the General Manager.

13. Adjournment – Board of Commissioners – P. Pacino, Chair
    Suggested Motion: Move that the Board of Commissioners adjourn regular session.
    Note: Roll call vote required.

BOARD MATERIALS AVAILABLE BUT NOT DISCUSSED
Accounts Payable / Payroll Questions through October 16, 2023
Surplus and Scrap Material Report September 2023
Financials: Preliminary July 2023/August 2023

ATTACHMENT 1

BOARD OF COMMISSIONERS APPROVAL OF MEETING MINUTES

ATTACHMENT 2

CITIZENS' ADVISORY BOARD

APPROVAL OF MEETING MINUTES

ATTACHMENT 3

CARBON CAPTURE FUEL CELL

In Territory Generation Carbon Captured Fuel Cell

25 October 2023 update

RMLD Reading Municipal Light Department
RELIABLE POWER

1

Outline

Context

In Territory Generation

Carbon Captured Fuel Cell

High Level Economics

RMLD Reading Municipal Light Department RELIABLE POWER

2

Context – RMLD in territory generation

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

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

Compliant (2021 Climate Bill → non-carbon electricity sales 50% by 2030, 75% by 2040, and net zero by 2050)
- 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 **winter 2025/2026**
- First 3 MWs of RMLD owned rooftop solar PV commissioned in 2026, then Maple Meadows solar PV (8 MW) in 2027
- Additional 20 MW base load gen commissioned in 2029, followed by two additional units in 2030's

Source(s): prior RMLD presentations and internal analysis

RMLD Reading Municipal Light Department RELIABLE POWER

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In territory generation options for RMLD

Hydrogen for electricity generation

- Early years of development
- Generation / distribution challenged
- Working to create pilot at Station 3

Carbon captured fuel cells

- Fuel cell technology well established
- Compliant – CES (emissions-based program)

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

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)

RMLD Reading Municipal Light Department RELIABLE POWER

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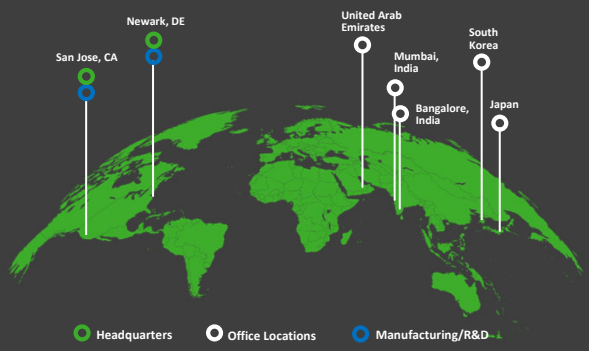
Bloom Energy at a glance

BE
LISTED
NYSE



MISSION
To make clean, reliable energy affordable for everyone in the world.

NASA Roots

Bloom Energy was founded in 2001 utilizing NASA solid-oxide technology. Today we have deployed over 1 GW of our solid-oxide fuel cells with a mission to make clean, reliable energy affordable for everyone in the world.

$1.2B 2022 Revenue	**30% CAGR** Over last decade	**$10B** Backlog
1 GW Deployed	**~1,000 Sites** ~150 Microgrids	**~20B kWh** Without Combustion

Bloomenergy

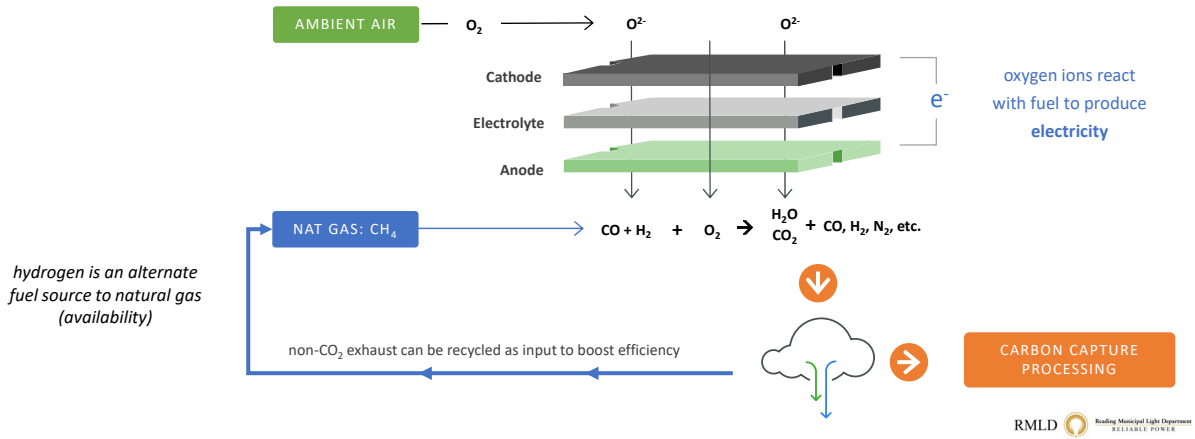
5

5

Bloom fuel cell overview – how it works

*Solid-oxide fuel cells convert fuel into electricity **without** combustion*

inputs → processing → outputs



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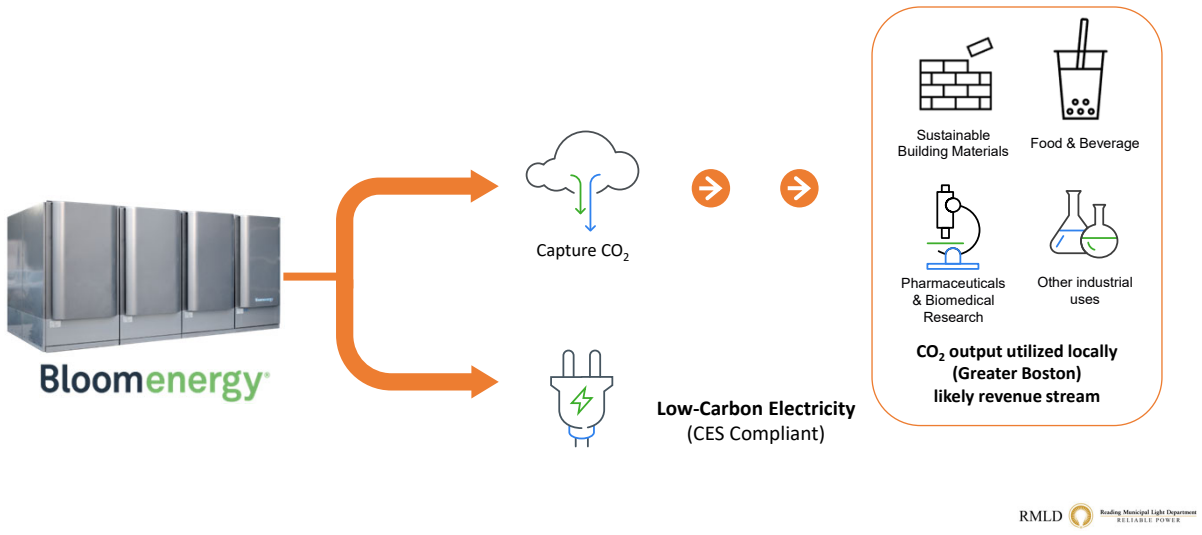
Carbon capture overview



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Real-World Benefits

CO_2e Reductions

62,753 Mt/year

92.8+%

Reduction[1]

Saves the equivalent CO_2 emissions from:

7,074,794

gallons of gasoline consumed

NOx Reductions

30.6 Mt/year

SO_2 Reductions

9.7 Mt/year

99+%

Reduction[2]

Saves the equivalent of:

$592,050 - $1,336,256

in avoided healthcare costs

Water Withdrawal

848 million gal/year

99+%

Reduction[3]

Savings equivalent to:

1,284

Olympic-sized swimming pools of water annually

160,000 MWh
Firm Baseload Power (95% Capacity Factor)

99+%
Availability with Modular Design

24/7/365 Remote Monitoring + Predictive Maintenance

1. Bloom's emissions rate is compared to 2021 eGRID non-baseload emission rates for NPCC New England. 92% carbon capture is assumed.
2. EPA COBRA Tool (https://cobra.epa.gov/)
3. Bloom's water use of 1.01 gal/MWh is compared to the USGS United States average water withdrawal for thermoelectric power (https://www.eia.gov/todayinenergy/detail.php?id=37453)

RMLD Reading Municipal Light Department RELIABLE POWER

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Preliminary high-level economics

20 MW carbon capture fuel cell system (preliminary estimates)

key prerequisite components

$120 million across participants
4 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

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

RMLD Reading Municipal Light Department RELIABLE POWER

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Thank You
from the RMLD Team

RMLD

Reading Municipal Light Department
RELIABLE POWER

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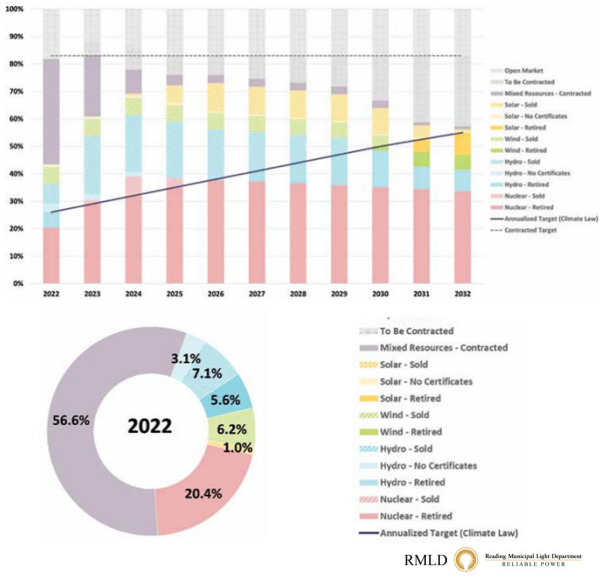
Compliance with MLP GGES

RMLD POLICY 30

ATTACHMENT 1 – Update 1

ROADMAP to Net-Zero Carbon by 2050
(a.k.a., S.9 or MLP GGES Legislation, amending chapter 25A)
Legislation effective (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
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 renewable or greenhouse gas reduction resource of generation under this Policy); and (11) any other generation qualifying as special cases per this Legislation.
Make / Buy	MLPs may either purchase or generate non-carbon emitting energy. Existing energy supply contracts that meet Legislation requirements count as compliance.



To Be Contracted
Mixed Resources - Contracted
Solar - Sold
Solar - No Certificates
Solar - Retired
Wind - Sold
Wind - Retired
Hydro - Sold
Hydro - No Certificates
Hydro - Retired
Nuclear - Sold
Nuclear - Retired
Annualized Target (Climate Law)

RMLD Reading Municipal Light Department RELIABLE POWER

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From *MGL Ch. 25A, Section 11F3/4*

(i) energy from facilities using the following generation technologies, but only to the extent that any renewable energy credits, emission free energy certificates or other evidentiary non-carbon emitting documentation associated therewith have not been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales or used to satisfy obligations in jurisdictions other than the commonwealth: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric, including imports into the New England wholesale electric market as administered by ISO New England Inc.; (4) nuclear; (5) marine or hydrokinetic energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) wind energy; and (10) any other generation qualifying for renewable portfolio standards pursuant to section 11F or the department of environmental protection's clean energy standard regulation pursuant to 310 C.M.R. 7.75;

(ii) generation that has net lifecycle greenhouse gas emissions, over a 20-year life cycle, that yield at least a 50 per cent reduction of greenhouse gas emissions per unit of useful energy relative to the lifecycle greenhouse gas emissions from the aggregate use of the operation of a new combined cycle natural gas electric generating facility using the most efficient commercially-available technology as of the date of the statement of qualification application to the department of environmental protection for the portion of electricity delivered by the generation unit;

RMLD Reading Municipal Light Department RELIABLE POWER

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RMLD Mission and Vision - Updated

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.

The following strategy overviews how the RMLD team will fulfill its Mission and Vision

RMLD Reading Municipal Light Department RELIABLE POWER

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ATTACHMENT 4

RATES PRESENTATION

Proposed Rates
Effective March 2024

Presented to the
Board of Commissioners and
Citizens' Advisory Board

25 October 2023

1

Outline

Goals and Objectives (desired outcomes)

Context – volatile wholesale and load increase

Summary of proposed changed effective March 2024

Recommendation Summary

2024 Rate Examples

2

Rates – goals and objectives

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**

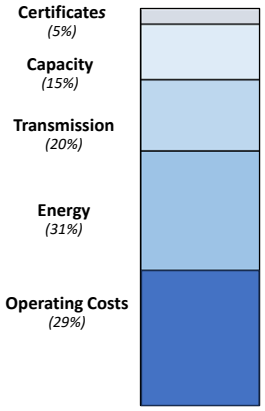
Comply with DPU, statutory, and RMLD policies

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 expenses

illustration



Wholesale energy and electrification (compliance) are primary driver of upward costs

3 *source: RMLD analysis and forecasts*

3

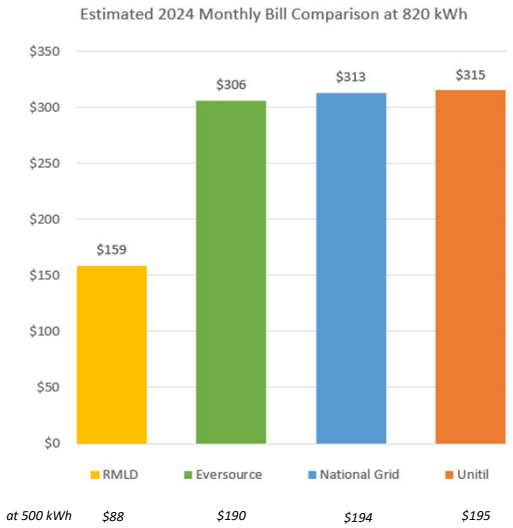
2024 RMLD monthly bills – 8.4% proposed increase

RMLD proposed 2024 increase is 8.4% higher than actual 2023 monthly bills

Two key variables

1) Monthly usage (kWhs)
2) Power supply costs:
   a) Energy (fuel) forecasted 5.2% higher
   b) Transmission costs forecasted 14.3% higher

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



4 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

4

Summary of monthly bill changes – March 2024

total average monthly bill – proposed effective March 2024

	2023 current	*March 2024 estimated*	$ change	% change	current 2023 net $/kwh	estimated March 2024 net $/kwh
Residential A	$ 148	$ 159	$ 11	7.6%	$ 0.1819	$ 0.1958
Residential TOU A2	$ 125	$ 138	$ 12	9.9%	$ 0.1545	$ 0.1697
Commercial C	$ 1,096	$ 1,201	$ 105	9.6%	$ 0.1600	$ 0.1754
Industrial TOU	$ 24,478	$ 26,844	$ 2,366	9.7%	$ 0.1219	$ 0.1337
Municipal C	$ 603	$ 662	$ 60	9.9%	$ 0.1540	$ 0.1693
School	$ 4,603	$ 5,003	$ 401	8.7%	$ 0.1431	$ 0.1555

*Effective March 2024 - **AFTER** higher winter usage months (avoid customer jolt)*

5 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

5

Effective March 2024 bill - recommendations

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: SC1 $8.00, SC2 $5.00, SolarChoice B2 $25
301	309	**Residential Schedule A Rate**	7.6%	distribution, EEC
302	310	Residential Time of Use Schedule A2 Rate	9.9%	distribution, EEC
303	311	**Commercial Scheduled C Rate**	9.6%	distribution, EEC
304	312	**Industrial Time of Use Schedule I Rate**	9.7%	demand, EEC
305	313	School Schedule SCH Rate	8.7%	distribution, EEC
306		Electric Vehicle Supply Equipment Schedule EVSE Rate	0%	distribution
292		Efficiency Electrification Charge	25%	increase $0.004 / kWh to $0.005 / kwh
		A3 residential TOU (EV focused)	future	update, approve, and release
		Coincident Peak - Large Industrials		create, approve, and release

Capacity & transmission and distribution costs are key 2024 drivers

6 *source: Rate and Analysis by Cost Stream v33 2023-10-19* *rates motion*

6

Thank You

7

Residential A – March 2024 – MDPU 309

updated

proposed effective March 2024

average monthly bill

Residential A	*current*	*proposed*	$ change	% change	MDPU 301		MDPU 309	
*Customer Charge	$ 6.24	$ 7.70	$ 1.46	23.5%	$6.24	/ mo	$7.70	/ mo
*Distribution Energy	$ 73.23	$ 74.03	$ 0.81	1.1%	$0.09018	/ kWh	$0.09117	/ kWh
*Distribution Demand	$ -	$ -	$ -	0.0%				
EEC	$ 3.25	$ 4.06	$ 0.81	25.0%	$0.0040	/ kWh	$0.0050	/ kWh
Fuel Adjustment	$ 40.13	$ 41.43	$ 1.30	3.3%				
NYPA Credit Rate	$ (4.58)	$ (3.57)	$ 1.01	-22.0%				
Cap & Trans (PPCT)	$ 41.36	$ 47.56	$ 6.20	15.0%				
other	$ -	$ -	$ -	0.0%				
other	$ -	$ -	$ -	0.0%				
Prompt Payment	$ (11.92)	$ (12.26)	$ (0.34)	2.9%	net $ / kWh		net $ / kWh	
Total Monthly Bill	**$ 147.70**	**$ 158.95**	**$ 11.26**	**7.6%**	$ 0.1819		$ 0.1958	
Average Monthly kWh	812	812						
Average kW	NA	NA						

- Capacity and transmission costs represent majority of increase

With proposed rates, total average monthly bill up $11.26 (7.6%)

8 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

8

Residential A2 (resi time of use) – March 2024 - 310

updated

proposed effective March 2024

Residential TOU A2	average monthly bill *current*	*proposed*	$ change	% change	MDPU 302		MDPU 310	
*Customer Charge	$ 9.75	$ 12.04	$ 2.29	23.5%	$9.75	/ mo	$12.04	/ mo
*Distribution Energy	$ 43.89	$ 45.20	$ 1.32	3.0%	$0.05405	/ kWh	$0.05567	/ kWh
*Distribution Demand	$ -	$ -	$ -	0.0%				
EEC	$ 3.25	$ 4.06	$ 0.81	25.0%	$0.0040	/ kWh	$0.0050	/ kWh
Fuel Adjustment	$ 39.83	$ 41.12	$ 1.29	3.3%				
NYPA Credit Rate	$ (4.58)	$ (3.57)	$ 1.01	-22.0%				
Cap & Trans (PPCT)	$ 41.36	$ 47.56	$ 6.20	15.0%				
other	$ -	$ -	$ -	0.0%				
other	$ -	$ -	$ -	0.0%				
Prompt Payment	$ (8.05)	$ (8.59)	$ (0.54)	6.7%	net $ / kWh		net $ / kWh	
Total Monthly Bill	**$ 125.44**	**$ 137.82**	**$ 12.38**	**9.9%**	$ 0.1545		$ 0.1697	
Average Monthly kWh	812	812						
Average kW	NA	NA						

- Capacity and transmission costs represent majority of increase

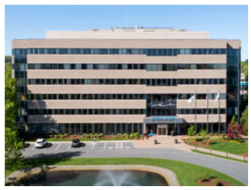
With proposed rates, total average monthly bill up $12.38 (9.9%)

9 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

9

Commercial C – MDPU 311

updated



- Capacity and transmission plus distribution demand represent majority of increase
- Demand and EEC to cover Climate Bill electrification

proposed effective March 2024

	average monthly bill				MDPU 303		MDPU 311	
Commercial C	***current***	***proposed***	**$ change**	**% change**				
*Customer Charge	$ 10.30	$ 13.38	$ 3	30.0%	$10.30	/ mo	$13.38	/ mo
*Distribution Energy	$ 159	$ 175	$ 16	10.0%	$0.02322	/ kWh	$0.02554	/ kWh
*Distribution Demand	$ 279	$ 302	$ 22	8.0%	$12.14053	/ kW	$13.11177	/ kW
EEC	$ 27	$ 34	$ 7	25.0%	$0.0040	/ kWh	$0.0050	/ kWh
Fuel Adjustment	$ 338	$ 349	$ 11	3.3%				
NYPA Credit Rate	$ -	$ -	$ -	0.0%				
Cap & Trans (PPCT)	$ 349	$ 401	$ 52	15.0%				
other	$ -	$ -	$ -	0.0%				
other	$ -	$ -	$ -	0.0%				
Prompt Payment	$ (67)	$ (73)	$ (6)	9.2%	net $ / kWh		net $ / kWh	
Total Monthly Bill	**$ 1,096**	**$ 1,201**	**$ 105**	**9.6%**	$ 0.1600		$ 0.1754	
Average Monthly kWh	6,848	6,848						
Average kW	23	23						

With proposed rates, total average monthly bill up $105 (9.6%)

10 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

10

Industrial I (all time of use) – MDPU 312

proposed effective March 2024

- Capacity and transmission costs represent majority of increase
- Highest near-term load growth
- Demand and EEC to cover Climate Bill electrification

	average monthly bill						
Industrial TOU	***current***	***proposed***	**$ change**	**% change**	**MDPU 304**		**MDPU 312**	
*Customer Charge	$ 51	$ 71	$ 20	40.0%	$50.67	/ mo	$70.93	/ mo
*Distribution Energy	$ -	$ -	$ -	0.0%				
*Distribution Demand	$ 4,910	$ 5,646	$ 736	15.0%	$15.48778	/ kW	$17.81095	/ kW
EEC	$ 803	$ 1,004	$ 201	25.0%	$0.0040	/ kWh	$0.0050	/ kWh
Fuel Adjustment	$ 9,851	$ 10,171	$ 320	3.2%				
NYPA Credit Rate	$ -	$ -	$ -	0.0%				
Cap & Trans (PPCT)	$ 9,607	$ 10,809	$ 1,202	12.5%				
other	$ -	$ -	$ -	0.0%				
other	$ -	$ -	$ -	0.0%				
Prompt Payment	$ (744)	$ (858)	$ (114)	15.3%	net $ / kWh		net $ / kWh	
Total Monthly Bill	**$ 24,478**	**$ 26,844**	**$ 2,366**	**9.7%**	$ 0.1219		$ 0.1337	
Average Monthly kWh	200,823	200,823			very competitive rates			
Average kW	317	317						

With proposed rates, total average monthly bill up $2.36k (9.7%)

11 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

11

School – MDPU 313

proposed effective March 2024

School	average monthly bill current	proposed	$ change	% change	MDPU 305		MDPU 313	
*Customer Charge	$ 9	$ 13	$ 4	40.0%	$9.35	/ mo	$13.09	/ mo
*Distribution Energy	$ 517	$ 568	$ 52	10.0%	$0.01606	/ kWh	$0.01767	/ kWh
*Distribution Demand	$ 939	$ 967	$ 28	3.0%	$8.69400	/ kW	$8.95482	/ kW
EEC	$ 129	$ 161	$ 32	25.0%	$0.0040	/ kWh	$0.0050	/ kWh
Fuel Adjustment	$ 1,590	$ 1,642	$ 52	3.2%				
NYPA Credit Rate	$ -	$ -	$ -	0.0%				
Cap & Trans (PPCT)	$ 1,639	$ 1,884	$ 246	15.0%				
other	$ -	$ -	$ -	0.0%				
other	$ -	$ -	$ -	0.0%				
Prompt Payment	$ (220)	$ (232)	$ (13)	5.7%	net $ / kWh		net $ / kWh	
Total Monthly Bill	**$ 4,603**	**$ 5,003**	**$ 401**	**8.7%**	$ 0.1431		$ 0.1555	
Average Monthly kWh	32,175	32,175						
Average kW	108	108						

- Capacity and transmission costs represent majority of increase
- Demand and EEC to cover Climate Bill electrification

With proposed rates, total average monthly bill up $401 (8.7%)

12 *source: Rate and Analysis by Cost Stream v33 2023-10-19*

12

thank you - again

13

13

Rate Stabilization Fund

Target level established at $6.5 m (± $0.5 m)
by BoC based on CAB recommendation (2003)

Primary purpose to reduce rate shock under extraodinary events

Replenishment is interest earned and specific transfers ***(no regular transfers)***

Hence, whatever funds are removed, are replaced with specific transfers

Current balance is $7.1 m

Residential Schedule A Rate

Designation:
Residential A Rate

Available in:
Reading, Lynnfield Center, North Reading, and Wilmington

Applicable to:
Individual residential customers for all domestic uses where service is taken through one meter. Incidental commercial use, not exceeding 20% of the total energy used on the same premises is permitted.

Character of service:
A.C. 60 cycles: single phase.

Customer Charge:
$7.70 per month

Distribution Energy Charge:
$.09117 per Kilowatt-hour for all Kilowatt-hours usage

Budget Billing:
The customers under this rate will have available to them a budget billing program under which the customer is required to pay a levelized amount to the Department each billing period during the calendar year. The specifics of this program are outlined in the Department's General Terms and Conditions.

Low Income Discount
The Customer Charge under this rate will be waived upon verification of a low-income customer's receipt of any means-tested public benefit, or verification of eligibility for the low-income home energy assistance program, or its successor program, for which eligibility does not exceed 200 percent of the federal poverty level based on a household's gross income. In a program year in which maximum eligibility for LIHEAP exceeds 200 percent of the federal poverty level, a household that is income eligible under LIHEAP shall be eligible for the low-income electric discount. It is the responsibility of the customer to annually certify, by forms provided by the utility, the continued compliance with the foregoing qualifications.

Rate Filed: February 1, 2024
Effective: On Billings on or After March 1, 2024
Filed By: Gregory J Phipps, General Manager

Residential Schedule A Rate (cont'd)

Farm Discount:
Customers who meet the eligibility requirements set forth by the Massachusetts Department of Food and Agriculture for being engaged in the business of agriculture or farming, and upon certification to the RMLD by the Massachusetts Department of Food and Agriculture, will be eligible for an additional 10% discount, prior to the RMLD prompt payment discount, on rates and charges applicable on their monthly billing statement.

Energy Conservation Charge:
The bill for service hereunder may be increased or decreased as provided by the Energy Conservation Charge.

Fuel Adjustment:
The bill for service hereunder may be increased or decreased as provided by the Standard Fuel Adjustment Clause.

Purchase Power Capacity and Transmission Charge:
The bill for service hereunder may be increased or decreased as provided by the Purchase Power Capacity and Transmission Charge.

Meter Reading and Billing:
Bills under this schedule will be rendered monthly. A prompt payment discount of 15% will be allowed on the Customer Charge and Distribution Energy Charge, only if the entire bill is paid-in-full by the discount due date.

General Terms and Conditions:
Service hereunder is subject to the General Terms and Conditions which are incorporated herein and are a part of this rate schedule.

Residential Time-of-Use Schedule A2 Rate

Designation:
Residential Time-of-Use A2 Rate

Available in:
Reading, Lynnfield Center, North Reading, and Wilmington

Applicable to:
Individual residential customers for all domestic uses where service is taken through one On-Peak and Off-Peak meter. Incidental commercial use, not exceeding 20% of the total energy used on the same premises is permitted.

Character of service:
A.C. 60 cycles: single phase.

Customer Charge:
$12.04 per month.

Distribution Energy Charge:
$.05567 per Kilowatt-hour for all Kilowatt-hours usage

Definition of Periods:
The On-Peak period is defined as the hours between 12:00 Noon and 7:00 P.M. Monday through Friday except holidays as listed under the "Granted Holidays" paragraph listed below. The Off-Peak period is defined as the hours between 7:00 P.M. and 12:00 Noon Monday through Friday and all hours Saturday, Sunday and granted holidays as listed below.

Term:
A customer electing to be billed under this rate must remain on this rate for a minimum of one year. At the end of one year on this rate a customer may elect to remain on this rate or be billed under the Residential A Rate.

Residential Time-of-Use Schedule A2 Rate (cont'd)

Budget Billing:
The customers under this rate will have available to them a budget billing program under which the customer is required to pay a levelized amount to the Department each billing period during the calendar year. The specifics of this program are outlined in the Department's General Terms and Conditions.

Low Income Discount
The Customer Charge under this rate will be waived upon verification of a low-income customer's receipt of any means-tested public benefit, or verification of eligibility for the low-income home energy assistance program, or its successor program, for which eligibility does not exceed 200 percent of the federal poverty level based on a household's gross income. In a program year in which maximum eligibility for LIHEAP exceeds 200 percent of the federal poverty level, a household that is income eligible under LIHEAP shall be eligible for the low-income electric discount. It is the responsibility of the customer to annually certify, by forms provided by the utility, the continued compliance with the foregoing qualifications.

Farm Discount:
Customers who meet the eligibility requirements set forth by the Massachusetts Department of Food and Agriculture for being engaged in the business of agriculture or farming, and upon certification to the RMLD by the Massachusetts Department of Food and Agriculture, will be eligible for an additional ten percent discount, prior to the RMLD prompt payment discount, on rates and charges applicable on their monthly billing statement.

Energy Conservation Charge:
The bill for service hereunder may be increased or decreased as provided by the Energy Conservation Charge.

Fuel Adjustment:
The bill for service hereunder may be increased or decreased as provided by the Standard Fuel Adjustment Clause.

Purchase Power Capacity and Transmission Charge:
The bill for service hereunder may be increased or decreased as provided by the Purchase Power Capacity and Transmission Charge.

Meter Reading and Billing:
Bills under this schedule will be rendered monthly. A prompt payment discount of 15% will be allowed on the Customer Charge, Distribution Demand Charge and Distribution Energy Charge, only if the entire bill is paid-in-full by the discount due date.

Residential Time-of-Use Schedule A2 Rate (cont'd)

Granted Holidays
Under the Residential Time-of-Use Schedule A2 Rate the holidays granted for Off-Peak are: New Year's Day, President's Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving Day, Columbus Day, Veteran's Day and Christmas Day.

General Terms and Conditions:
Service hereunder is subject to the General Terms and Conditions which are incorporated herein and are a part of this rate schedule.

Commercial Schedule C Rate

Designation:
Commercial C Rate

Available in:
Reading, Lynnfield Center, North Reading, and Wilmington

Applicable to:
Service under this rate is available to industrial, commercial, or municipal customers who take all their requirements under this rate. All electricity furnished under this rate will be metered through one service unless it is convenient for the Department to do otherwise.

Character of service:
AC 60 cycles: single phase or three phase.

Customer Charge:
$13.38 per month.

Distribution Demand Charge:
$13.11 per Kilowatt for all demand usage.

Distribution Energy Charge:
$0.02554 per Kilowatt-hour for all Kilowatt-hours usage.

Budget Billing:
The customers under the C Rate may elect the Budget Billing program under which the customer is required to pay the levelized amount to the Department each billing period during the calendar year. This rate is not available to C Rate Customers electing the Contract Demand Rate, or the Non-Firm Demand Rate. The specifics of this program are outlined in the Department's General Terms and Conditions.

Energy Conservation Charge:
The bill for service hereunder may be increased or decreased as provided by the Energy Conservation Charge.

Fuel Adjustment:
The bill for service hereunder may be increased or decreased as provided by the Standard Fuel Adjustment Clause.

Purchase Power Capacity and Transmission Charge:
The bill for service hereunder may be increased or decreased as provided by the Purchase Power Capacity and Transmission Charge.

Rate Filed: Rate Filed: February 1, 2024
Effective: On Billings on or After March 1, 2024
Filed By: Gregory J. Phipps, General Manager

Commercial Schedule C Rate (cont'd)

Measurement of Billing Demand:
The billing demand shall be the highest of the fifteen minute kilowatt demand established during the billing period, but not less than eighty percent of the maximum demand established during the preceding summer season or sixty percent of the maximum demand established during the winter season.

Definitions of Seasons:
The summer season is defined as the months of June through September and the winter season is defined as the months of October through May.

Farm Discount:
Customers who meet the eligibility requirements set forth by the Massachusetts Department of Food and Agriculture for being engaged in the business of agriculture or farming, and upon certification to the RMLD by the Massachusetts Department of Food and Agriculture, will be eligible for an additional ten percent discount, prior to the RMLD prompt payment discount, on rates and charges applicable on their monthly billing statement.

Customer Transformer Ownership:
A customer requiring a minimal transformer capacity of over 1,500 kVA will be required to furnish its own transforming and protective equipment, including mat, vault, primary and secondary cables, conduits, etc., which must comply with the specifications of the Department. The following discounts apply when the above is complied with:

$.12 per kilowatt of demand when the service is taken at 2,400/4,160 volts.

$.25 per Kilowatt of demand when the service is taken at 13,800 volts.

Primary Metering:
The Department may, at its option, meter at the customer's utilization voltage or on the high side of the transformer through which the service is furnished.

In the latter case, or if the customer's utilization voltage requires no transformation, a discount of 1.8% will be applied to the bill's demand and consumption charges but in no case will such discount be allowed if the metering voltage is less than 2,400 volts.

Commercial Schedule C Rate (cont'd)

Meter Reading and Billing:
Bills under this schedule will be rendered monthly. A prompt payment discount of 15% will be allowed on the Customer Charge, Distribution Demand Charge and Distribution Energy Charge, only if the entire bill is paid-in-full by the discount due date.

General Terms:
Service hereunder is subject to the General Terms and Conditions which are incorporated herein and are a part of this rate schedule.

Industrial Time-of-Use Schedule I Rate

Designation:
Industrial Time-of-Use I Rate

Available in:
Reading, Lynnfield Center, North Reading, and Wilmington

Applicable to:
Service under this rate is available to industrial, commercial, or municipal customers who take all their requirements under this rate. All electricity furnished under this rate will be metered using an electronic meter capable of metering On-Peak and Off-Peak energy as well as kW demand.

Character of service:
A.C. 60 cycles: single phase or three phase.

Customer Charge:
$70.93 per month.

Distribution Demand Charge:
$17.81 per Kilowatt for all demand usage.

Definition of Periods:
The On-Peak period is defined as the hours between 12:00 Noon and 7:00 P.M., Monday through Friday except holidays as listed below. The Off-Peak period is defined as the hours between 7:00 P.M. and 12:00 Noon, Monday through Friday and all hours Saturday, Sunday and granted holidays as listed below.

Term:
A customer electing to be billed under this rate must remain on this rate for a minimum of one year. At the end of one year on this rate a customer may elect to remain on this rate or be billed under the Commercial C Rate.

Energy Conservation Charge:
The bill for service hereunder may be increased or decreased as provided by the Energy Conservation Charge.

Fuel Adjustment:
The bill for service hereunder may be increased or decreased as provided by the Standard Fuel Adjustment Clause.

Purchase Power Capacity and Transmission Charge:
The bill for service hereunder may be increased or decreased as provided by the Purchase Power Capacity and Transmission Charge.

Rate Filed: Rate Filed: February 1, 2024
Effective: On Billings on or After March 1, 2024
Filed By: Gregory J. Phipps, General Manager

Industrial Time-of-Use Schedule I Rate (cont'd)

Measurement of Billing Demand:
The Billing demand shall be the highest of the fifteen minute On Peak kilowatt demand established during the billing period, but not less than eighty percent of the maximum On Peak demand established during the preceding summer season or sixty percent of the maximum On Peak demand established during the winter season.

The summer season is defined as the months of June through September and the winter season is defined as the months of October through May.

Farm Discount:
Customers who meet the eligibility requirements set forth by the Massachusetts Department of Food and Agriculture for being engaged in the business of agriculture or farming, and upon certification to the RMLD by the Massachusetts Department of Food and Agriculture, will be eligible for an additional ten percent discount, prior to the RMLD prompt payment discount, on rates and charges applicable on their monthly billing statement.

Customer Transformer Ownership:
A customer requiring a minimal transformer capacity of over 1,500 kVA will be required to furnish its own transforming and protective equipment, including mat, vault, primary and secondary cables, conduits, etc., which must comply with the specifications of the Department. The following discounts apply when the above is complied with:

$.12 per Kilowatt of demand when the service is taken at 2,400/4,160 volts.

$.25 per Kilowatt of demand when the service is taken at 13,800 volts.

Primary Metering:
The Department may, at its option, meter at the customer's utilization voltage or on the high side of the transformer through which the service is furnished.

In the latter case, or if the customer's utilization voltage requires no transformation, a discount of 1.8% will be applied to the bill's demand and consumption charges but in no case will such discount be allowed if the metering voltage is less than 2,400 volts.

Industrial Time-of-Use Schedule I Rate (cont'd)

Meter Reading and Billing:
Bills under this schedule will be rendered monthly. A prompt payment discount of 15% will be allowed on the Customer Charge, Distribution Demand Charge and Distribution Energy Charge, only if the entire bill is paid-in-full by the discount due date.

Granted Holidays
Under the Industrial Time-of-Use Schedule I Rate the holidays granted for Off-Peak are; New Year's Day, President's Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving Day, Columbus Day, Veteran's Day and Christmas Day.

General Terms and Conditions:
Service hereunder is subject to the General Terms and Conditions which are incorporated herein and are a part of this rate schedule.

School Schedule SCH Rate

Designation:
School SCH Rate

Available in:
Reading, Lynnfield Center, North Reading, and Wilmington

Applicable to:
Applicable to public or private schools offering kindergarten, regular elementary, middle, and high school as approved by the Department, who take all their requirements under this rate. All electricity furnished under this rate will be metered through one service unless it is convenient for the Department to do otherwise.

Character of service:
AC 60 cycles: single phase or three phase.

Customer Charge:
$13.09 per month.

Distribution Demand Charge:
$8.95482 per Kilowatt for all demand usage.

Distribution Energy Charge:
$.01767 per Kilowatt-hour for all Kilowatt-hours usage.

Budget Billing:
The customers under the School Rate may elect the Budget Billing program under which the customer is required to pay levelized amount to the Department each billing period during the calendar year.

Energy Conservation Charge:
The bill for service hereunder may be increased or decreased as provided by the Energy Conservation Charge.

Fuel Adjustment:
The bill for service hereunder may be increased or decreased as provided by the Standard Fuel Adjustment Clause.

Purchase Power Capacity and Transmission Charge:
The bill for service hereunder may be increased or decreased as provided by the Purchase Power Capacity and Transmission Charge.

School Schedule SCH Rate (cont'd)

Measurement of Billing Demand:
The billing demand shall be the highest of the fifteen minute Kilowatt demand established during the billing period, but not less than eighty percent of the maximum demand established during the preceding summer season or sixty percent of the maximum demand established during the winter season.

Definitions of Seasons:
The summer season is defined as the months of June through September and the winter season is defined as the months of October through May.

Customer Transformer Ownership:
A customer requiring a minimal transformer capacity of over 1,500 kVA will be required to furnish its own transforming and protective equipment, including mat, vault, primary and secondary cables, conduits, etc., which must comply with the specifications of the Department. The following discounts apply when the above is complied with:

$.12 per kilowatt of demand when the service is taken at 2,400/4,160 volts.

$.25 per Kilowatt of demand when the service is taken at 13,800 volts.

Primary Metering:
The Department may, at its option, meter at the customer's utilization voltage or on the high side of the transformers through which the service is furnished.

In the latter case, or if the customer's utilization voltage requires no transformation, a discount of 1.8% will be applied to the bill's demand and consumption charges but in no case will such a discount be allowed if the metering voltage is less than 2,400 volts.

Meter Reading and Billing:
Bills under this schedule will be rendered monthly. A prompt payment discount of 15% will be allowed on the Customer Charge, Distribution Demand Charge and Distribution Energy Charge, only if the entire bill is paid-in-full by the discount due date.

General Terms:
Service hereunder is subject to the General Terms and Conditions which are incorporated herein and are a part of this rate schedule.

ATTACHMENT 5

2024 BUDGET PRESENTATION

RMLD

Reading Municipal Light Department
RELIABLE POWER

Calendar Year 2024 Budget

1/1/2024 - 12/31/2024

Presented to CAB and BoC October 25, 2023

1

CY 2024 Budget Process
Where have we been and where we are going?

June/July

Proforma budgets sent out to different divisions for review.

August

Different divisions submit their preliminary budget requests

Labor distribution tables updated

Capital Projects assembled

September

Budget modules assembled.

Preliminary numbers assembled

Power supply information provided

Budget adjustments and refinements

October

CAB and Board of Commissioners presentation

Vote on 2024 Budget

(We are here)

November

Work to close old purchase orders, and requisitions for CY 23.

December

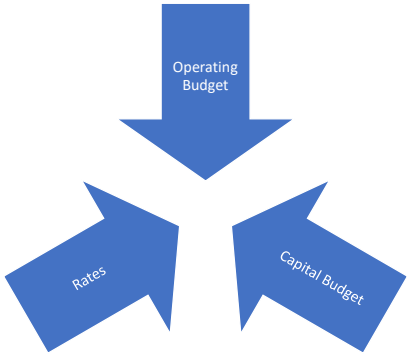
Split CY begins last week of December into January

December 31, 2023, is the last day of the year. CY24 budget is active effective

January 1, 2024

CY 2024 Budget

Key Budget Elements



10/25/2023

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Operating Budget

10/25/2023

4

4

2024 Operating Budget

CY 2023 / CY 2024 Comparative Budgets - Revenue

Line Item	CY 2023 Budgeted Revenue	CY 2023 Projected Revenue	CY 2024 Budgeted Revenue
Base Revenue	$ 32,116,223	$ 36,613,233	$ 40,385,209
Fuel Revenue	$ 41,106,033	$ 31,898,998	$ 33,549,002
Purchased Power Capacity / Transmission	$ 34,515,988	$ 33,467,796	$ 38,263,627
Forfeited Discounts	$ 963,487	$ 896,372	$ 1,211,556
Energy Conservation Revenue	$ 2,001,000	$ 2,594,000	$ 2,733,116
NYPA	$ (1,162,000)	$ (1,237,655)	$ (1,133,940)
Total amount	**$ 109,732,215**	**$ 104,232,744**	**$ 115,008,570**

Source: *CY 24 Operating Budget 2023-10-20*

2024 Operating Budget

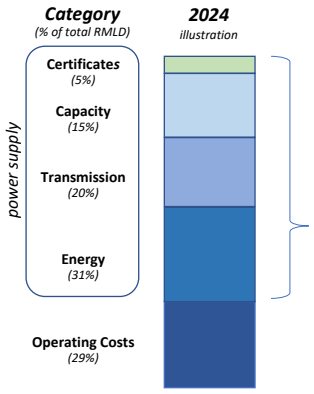
CY 2023 / CY 2024 Comparative Budgets - Income

	CY 23 Budget	CY 23 Projected	CY 24 Budget
Operating Revenue	$ 109,540,730	$ 104,232,744	$ 115,008,570
Power Supply Expense	$ 74,640,021	$ 59,971,660	$ 70,831,054
Operating and Maintenance Expense	$ 7,208,088	$ 6,757,709	$ 7,033,708
General and Administration Expense	$ 18,097,695	$ 12,298,527	$ 19,413,560
Other Operating Expense	$ 7,217,440	$ 6,914,034	$ 7,822,614
Operating Income	$ 2,377,487	$ 18,280,813	$ 9,907,635
Non-Operating Income	$ (1,418,972)	$ (2,556,297)	$ (1,398,587)
Net Income	**$ 958,515**	**$ 15,724,516**	**$ 8,509,048**

Source: CY 24 Operating Budget 2023-10-20

2024 Operating Budget

Power Supply



source: RMLD analysis and forecasts; ISO-NE

- *Power supply ~71% of total RMLD cost structure*
- *Energy markets are highly volatile*

SEPTEMBER 27, 2023

Monthly wholesale electricity prices and demand in New England, August 2023

Prices down in both day-ahead, real-time markets in August

Wholesale power prices averaged $28.81 per megawatt-hour (MWh)[1] in the Real-Time Energy Market in August 2023, down 70% compared to the previous year. Day-Ahead Energy Market averages were $26.94/MWh, down 73% from August 2022.

2024 Operating Budget

2024 Power Supply

	CY 24	CY 25	CY 26	CY 27	CY 28	CY 29
Forecasted kWh Sales	660,173,000	672,056,114	684,825,180	697,836,859	711,095,759	724,606,578
net $/kWh	$ 0.1742	$ 0.1802	$ 0.1790	$ 0.1817	$ 0.1867	$ 0.1917
delta change (%)		3.4%	(0.7%)	1.5%	2.8%	2.7%
Total Operating Revenues	$ 115,008,570	$ 121,111,591	$ 122,576,547	$ 126,824,485	$ 132,773,264	$ 138,895,801
Operating Expenses:						
Purchased Power - Fuel	$ 33,549,002	$ 35,237,985	$ 35,156,185	$ 35,166,895	$ 37,240,796	$ 38,998,326
Purchased Power - Capacity	$ 16,100,402	$ 13,974,812	$ 12,091,449	$ 12,184,905	$ 12,732,525	$ 13,499,421
Purchased Power - Transmission	$ 21,181,651	$ 23,226,911	$ 24,771,592	$ 26,457,018	$ 28,776,979	$ 31,348,654
Total Costs	$ 70,831,054	$ 72,439,708	$ 72,019,226	$ 73,808,818	$ 78,750,300	$ 83,846,401
% Delta Change	6.7%	2.5%	-0.6%	2.5%	6.7%	6.5%

- Base case load growth is approximately 1.0 % next few years (base assumption)
- Power supply is pass through (dampened monthly changes but year over year increases in 2023, 2024, 2025)
- 90% of energy is hedged (contracted) in 2023/2024 – higher mix of wind, hydro, solar pushing average cost up
- 10% of energy is open market - highly volatile, typically higher priced
- Increasing transmission costs (peak management programs increasingly critical to slow cost increases)
- Capacity (3 year forward market auctions) downward through 2027; forecasted back up thereafter

Source: CY 24 Operating Budget 2023-10-20

2024 Operating Budget

CY 24 Operating Budget

Non-Power Supply

Labor

CY 2024 consists of 107 budgeted positions

As of 10/17/2023, we are currently staffed at 92 (of which 7 are Co-Ops students).

2024 Budget added 18 positions (Tree Crew, Director of Engineering, Director of Operations, First Class Linemen…)

Efficiency and Electrification

Included new weatherization program (new incentive amounts added)

Increased number of solar installations (incentive amounts remains the same)

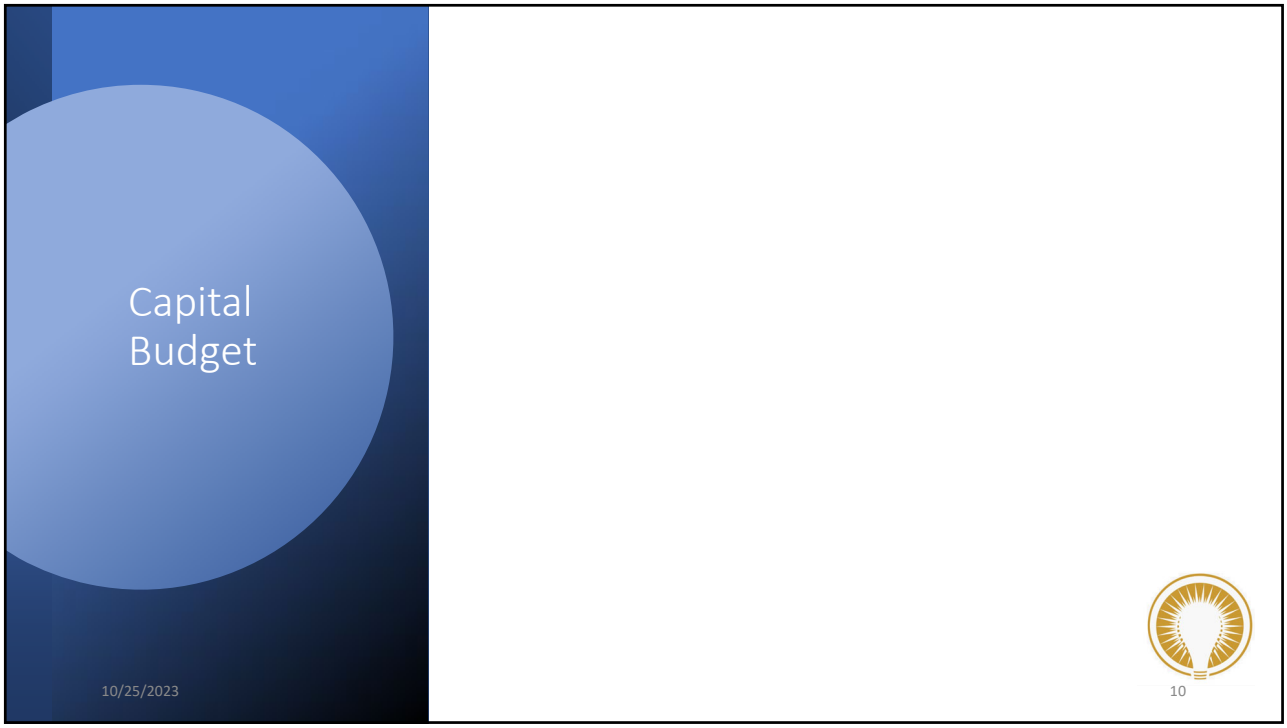
Increased number of ASHP installations (incentive amounts remains the same)

Customer Bills (rates X usage)

Power supply is pass through and a noteworthy variable

Current budget draft assumes 8.4% increase of average monthly residential bill from 2023 average monthly bill

Equates to $12 average monthly increase



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2024 Capital Budget

Contextual Overview

CY24 Capital Budget totals $31.1M

Reduced total $4M in budget for CY24 (EVSE, Grid Modernization, Service Connections, …)

Added $9M for land acquisition in Wilmington

Thereby, only increasing budget by $5M from $26.1M to $31.1M as reported in CY23 for CY24

Carry Forward - Four Key Programs:

Substation 6 – New Wilmington Substation

Transformers and Capacitor Banks

Grid Modernization – AMI / MDMS

Rolling Stock Upgrades

2024 Capital Budget

Capital Budget Overview

Division	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029
Facilities Management	$ 2,172,419	$ 3,175,000.00	$ 750,000	$ 535,000	$ 750,000	$ 535,000	$ 455,000
Engineering	$ 16,632,573	$ 17,927,887	$ 15,785,391	$ 12,284,609	$ 10,678,920	$ 10,051,787	$ 7,488,051
Force Account	$ 383,367	$ 464,067	$ -	$ -	$ -	$ -	$ -
Grid Assets	$ 1,712,176	$ 163,000	$ 2,629,163	$ 2,557,798	$ 2,551,067	$ 20,000	$ 15,000
Intergraded Resources	$ 963,917	$ -	$ 835,000	$ 700,000	$ 528,000	$ 361,000	$ -
Information Tech.	$ 710,000	$ 325,000	$ 325,000	$ 1,020,000	$ 790,000	$ 700,000	$ 357,500
Land Procurement	$ -	$ 9,000,000	$ -	$ -	$ -	$ -	$ -
Operations	$ 105,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Total	**$ 22,849,979**	**$ 31,084,954**	**$ 20,354,554**	**$ 17,127,407**	**$ 15,327,987**	**$ 11,697,787**	**$ 8,345,551**

Source: CY Planned Master 6 Year-2023-10-20

Substation 6 – Wilmington Substation

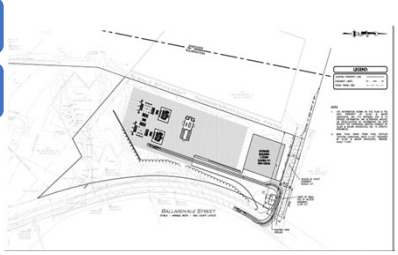
Line 23 – Page 67 – Project 105

2024 Capital Budget

Schedule: 2024 - 2029

Budget (Total): $28,575,000

- In CY2023 RMLD contracted to purchase (2) 75 MVA, 115 kV/13.8 kV substation transformers. The units are slated for delivery in the spring of CY2025.
- PLM will begin the process of preparing two bids, one for the 15 kV substation switchgear and components and the other for the 115 kV structures and equipment.
- The System Impact Study has been completed in CY2023.
- Inclusive of $2,028,429 spent in CY 23



Challenges:

- Supply-Chain Disruptions

10/25/2023

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Grid Modernization - AMI/MDM

Line 12 – Page 59 – Project 103
Line 28 – Page 77 – Project 112

2024 Capital Budget

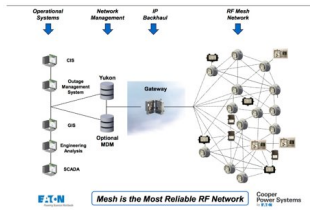
Schedule: 2024 – 2029

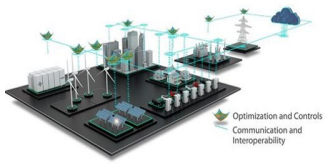
Budget (Total): $18,221,975

- Consists of Upgrading of Scada-Mate Switches, Reclosers, Software Integration, VVO, and Intellirupters
- Inclusive of Meter Data Management (MDM), and AMI Mesh Network.
- Procurement Process: Underway
- Bid Award: 1st Quarter 2024

Challenges:

- Supply-Chain Disruptions





Transformers and Capacitor Banks

Line 30 – Page 81 – Project 116

2024 Capital Budget

Schedule: Ongoing Annual Program

Budget (2024-2029): $16,341,000

- To Be Bid in 2024 for Purchase ($2,000,000)
  - 88 Pole Mount Transformers
  - 45 Pad Mount/UG Transformers
  - 1 Cap Bank for $15,000
- $4,341,000 Carry-Over from 2022 and 2023 Bid Awards

Challenges:

- Supply-Chain Disruptions
- Delivery Schedules

Rolling Stock Upgrades

Line 3 – Page 35 – Project 118

2024 Capital Budget

Schedule: Ongoing Annual Program

Budget (2024-2029): $5,893,000

- CY2024 Procurements:
  - Service Truck with 40’ bucket
  - 4.5-ton Stake Body Dump Truck
  - Digger Derrick
  - Forestry Tree Truck
  - Forestry Chipper
  - Electric 1.5-ton Pick Up Truck
  - Gas 1.5-ton Pick Up Truck

Challenges:

- Supply-Chain Disruptions

Security Upgrades

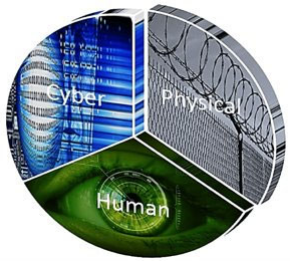
Line 4 – Page 37 – Project 119

2024 Capital Budget

Schedule: Ongoing Annual Program

Budget (2024-2029): $800,000

- Comprehensive Security System Upgrade to Include: Perimeter Access Control, Video Management System, and IP Camera Infrastructure, etc.
- Working with Burns & McDonnell with revised specifications.
- RFP to be generated by First Quarter 2024



Challenges:

- Supply-Chain Disruptions
- Technology Integration
- Data Security

Land Acquisition

Line 43 – Page 103 – Project TBD
Line 44 – Page 105 – Project TBD

2024 Capital Budget

Schedule: 2024

Budget (2024): $9,000,000

- Maple Meadows, Wilmington
  - Support RMLD's strategy to build and operate in-territory generation and storage assets.
- Route 125, Wilmington
  - Purchase land to provide network and operational support for electrification and local industrial load center.

Challenges:

- Uniqueness of Land

Other Capital Budget Items

Line Various – Page Various – Project Various

2024 Capital Budget

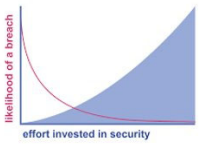
Schedule: 2024

Budget (2024): Investing in $3M+ in various projects

- Routine Construction: $1,501,000
- Pole Replacement Program: $640,000
- Facilities (other): $550,000
- Force Account: $464,000
- IT: $425,000
- Service Connections: $211,000

Challenges:

- Supply-Chain Disruptions
- Technology Integration
- Scheduling



10/25/2023

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Budget Summary

$ Shown in thousands

CY2024	CY2025	CY2026	CY2027	CY2028	CY2029
$31,085	$20,355	$17,127	$15,328	$11,698	$8,346

- Bulk of Budget: CY2024-CY2028 (in order of budgeted amount)
- Major Cost Drivers:
  - Substation 6 (New Wilmington Substation)
  - AMI Mesh Network Expansion and Meter Data Management System (Grid Modernization Program)
  - Transformers (Annual)
  - Rolling Stock (Inclusive of new tree crew equipment)
- Reliability Upgrades (Annual)
- Force Account Credits (CY2024-CY2028):$749,000

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READING MUNICIPAL LIGHT DEPARTMENT

2024 BUDGET

October 1, 2023

Update: 10/20/2023

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INFORMATION TECHNOLOGY

SYSTEM

2024 OPERATING BUDGET

2024 POWER SUPPLY

RMLD

Mission Statement

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

Vision Statement

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

SYSTEM PROFILE

(based on CY22)

SERVICE TERRITORY	51 square miles across the four towns of Lynnfield Center, North Reading, Reading, and Wilmington
TOTAL OPERATING REVENUES	$100,202,359
POWER PURCHASED	$64,682,635
NUMBER OF CUSTOMERS METERS	31,500
ANNUAL PEAK DEMAND	169,152 kW on August 8, 2022, hour ending 5:00 pm (w/o shaving)
ANNUAL SALES	654,041,390 kWh
PLANT VALUE	Gross: $181,789,000 Net: $91,985,000
SUPPLY VOLTAGE	115 Kv
SUPPLY CAPACITY (tie points)	Station 4: (3) 60 MVA Transformers (2) 35 MVA Transformers – feeds Station 5 250 MVA Connected, 190 MVA Firm Station 3: (2) 60 MVA Transformers 120 MVA Connected, 60 MVA Firm
DISTRIBUTION SYSTEM VOLTAGE	13,800 volt wye 4,160 volt wye
OVERHEAD LINES	921 miles
UNDERGROUND LINES	342 miles
DISTRIBUTION TRANSFORMERS	4,055 Transformers – 330 MVA Capacity
STATION TRANSFORMER CAPACITY	370 MVA Capacity
UTILITY POLES	18,150 poles *Pole Ownership*: 50% Verizon, 50% RMLD Pole Custodial (count): 11,300 Verizon, 6,850 RMLD *Pole Custodial By Town:* North Reading – RMLD Lynnfield – Verizon Reading – part RMLD part Verizon Wilmington • all poles with 35 kV sub-transmission circuits, and Concord Street – RMLD • all other locations in Wilmington – Verizon
EV registered in territory (Dec 2022) **ASHP installed in territory** (Dec 2022)	940 (battery only; excluding hybrids) ~1,050

APPLICATION SOFTWARE	
	ChargePoint Cloud Services CMARS Constant Contact EFI (Energy Federation) eRequester ESRI eTrack Facility Dude Filezilla Forecast Pro Forecasting Futura Great Plains/Cogsdale Home Energy Audits Yukon ISO-NE Key Accounts CenturionCARES Team Gantt Itron LexisNexis Meraki ManagerPlus MIlsoft – WindMil Map/LightTable NEPOOL GIS Office 365 E3 PoleForeman Replicon SagLine SharePoint SpryPoint Survalent (OMS) Tangent AMP VMware Windows 10 Windows Server 2016, 2012 Adobe Creative Cloud CivicPlus Fortinet
CONTACT INFORMATION	
Address:	230 Ash Street Reading, MA 01867
Telephone:	781-942-6598
Fax:	781-942-2409
Website:	www.rmld.com
Office Hours	7:30 am – 5:30 pm Monday through Thursday
KEY PERSONNEL	
General Manager	Gregory Phipps email: gphipps@rmld.com
Director of Finance and Accounting	Benjamin Bloomenthal email: bbloomenthal@rmld.com
Director of People Operations	Sarah Harrington email: sharrington@rmld.com
Director of Information Technology	John Pelletier email: jpelletier@rmld.com
Director of Integrated Resources	Bill Bullock email: bbullock@rmld.com
In-House Counsel	Janet Walsh email: jwalsh@rmld.com
GOVERNING BODY (Oct 2023)	
	Philip B. Pacino David Talbot Marlena Bita Robert Coulter Pamela Daskalakis
Number of Employees	92
Year Founded	1894

RMLD Strategy Overview

02 October 2023 update

RMLD

Reading Municipal Light Department
RELIABLE POWER

Outline

Mission and Vision

Strategy - executive summary

Context – seismic changes

Owned generation and storage

Distribution network

Key Milestones

RMLD Reading Municipal Light Department RELIABLE POWER

RMLD Mission and Vision - Updated

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.

Executive summary – RMLD strategy

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

2021 Climate Bill is accelerating electrification as part of decarbonization; no softening of legislative targets is expected
- Hence, RMLD load will double, and demand will increase 75% by mid 2040's

Near-term, regional wholesale network supply reliability is increasingly fragile (and over 99% of RMLD energy is wholesale)
- Hence, RMLD needs significant investment (generation / storage assets, data analytics, distribution network, supporting systems (MDM/AMI metering, IT, …), where asset life ranges from 10 – 40 years
- Energy is a scale business and RMLD should look for ways to gain scale

Wholesale energy and transmission costs are increasing and are highly volatile near-term
- Hence, RMLD costs will increase to support load growth and associated buildout

RMLD has new access to tax credits and numerous grants (new funding sources)

In-territory generation and energy storage require creativity, piloting, and investment

RMLD needs land parcels across service territory to support growth and the associated buildout

RMLD will accelerate investment in its employee team (new skills, process efficiency, data, recruiting, …)

Context – external to RMLD

Electrification compliance requires 2X to 3X of regional generation capacity by 2050

- Natural gas generation represents half of current mix
- Nat gas generation capacity utilization will drop from 50% to less than 15% (upward cost pressure)
- Massive transmission investment required to support more distributed generation
- Renewable energy is intermittent (no solar PV at night)

Non-carbon energy generation is intermittent and expensive relative to current sources

New England's wholesale energy network in becoming more fragile

- LNG now economically can ship to Europe (EU energy affects US energy; increased volatility)
- Mystic generation (1,600 MW) shutters in May 2024
- Everett LNG Marine Terminal at risk when Mystic closes
- Mass offshore wind (up to 17,000 MWs) significantly delayed and likely more expensive
- Several New England solar PV projects delayed, cost increased, or cancelled; land limited

MLP's, including RMLD, have access to new state and federal incentives and grants

Technology improvements enabling electrification (ASHPs, EVs, V2G, carbon capture, …)

Context – internal within RMLD

Power supply portfolio solid for current load

- Nearly 90% hedged; compliant with RMLD Policy 30 and already exceeds 2021 Climate Bill goals through 2035
- Weather trends, electrification, and business growth are key load drivers
- More generation and new supply contracts will be required to support growth

Given current daily and seasonal RMLD load shape, RMLD network has capacity of ~220 MW and ~40% capacity utilization and peak load at ~168 MW

RMLD is a unique MLP, having two 115 kV wholesale tie points with Eversource and National Grid

Our core distribution network is primarily 13.8 kV but many poles carry multiple circuits

RMLD has 9 MW of in territory solar generation (none owned; 2% of purchases) and 2.5 MW peak shaving generation

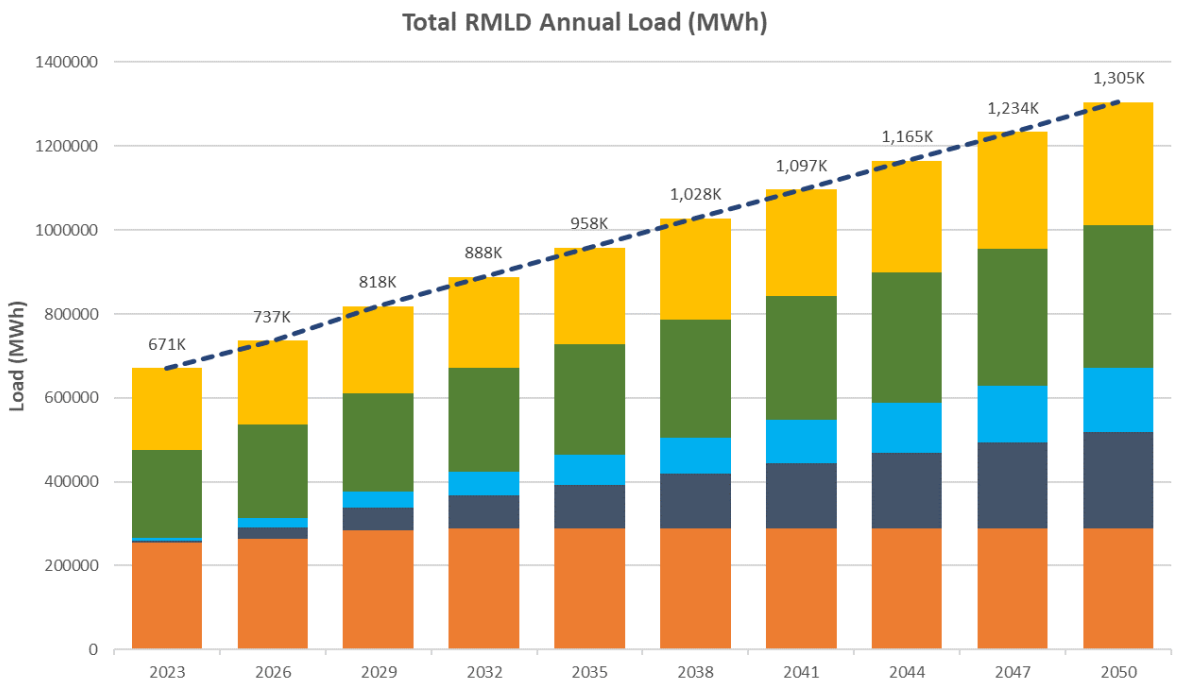
Our 5 MW 2 hour battery storage system will grow to 30 MW 3 hour by early 2025 (reliability enhancement)

RMLD is engaging several long duration (time shifting) and alternate chemistry pilot storage projects

RMLD metering systems have limited capability and replacement is in process (prerequisite MDM scheduled for 2024)

RMLD cost structure enables low rates (70% power supply and 30% operations)

Annual load (MWHs) nearly doubles by 2050



RMLD Total 2.5% cagr (2022 – 2050)

- **Industrial** 1.5% cagr – small scale local manufacturing and local distribution
- **Commercial** 1.8% cagr – ASHP adoption
- **ASHP Residential 12**% cagr – majority (75%) conversion by 2050
- **EV Residential 1**7% cagr – nearly full (97%) adoption by 2050
- **Base Residential** 0.5% cagr – limited living unit additions; lower efficiency reductions

Electrification (especially EV) is primary load driver

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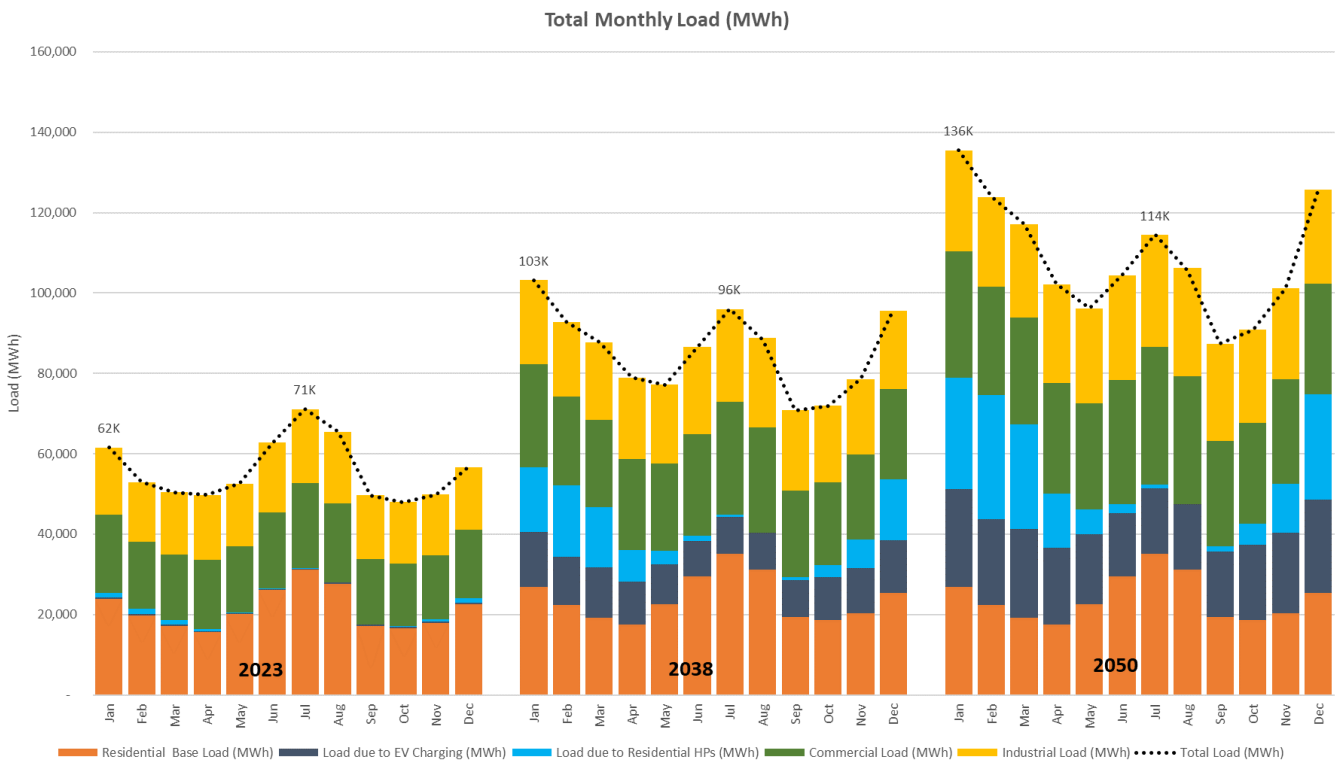
Source: long-term-forecast 2023-10-02; 2023 CELT; RMLD analysis; actual RMLD 2022 is base year and cagr is compound annual growth rate

RMLD Reading Municipal Light Department RELIABLE POWER

Monthly load changes significantly



Winter load doubles by 2050

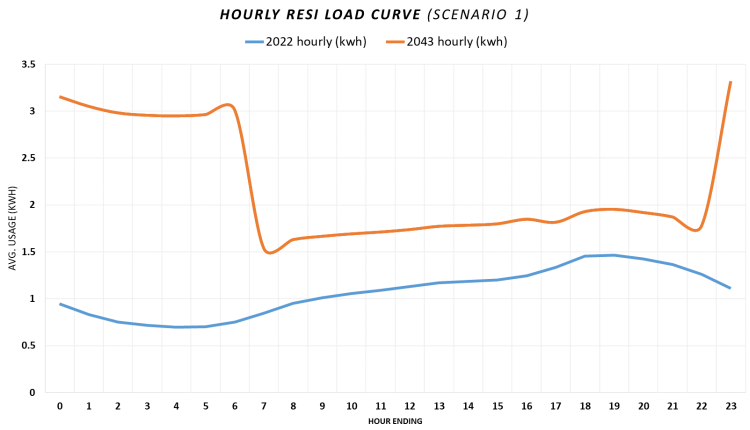
Summer load 60% higher by 2050

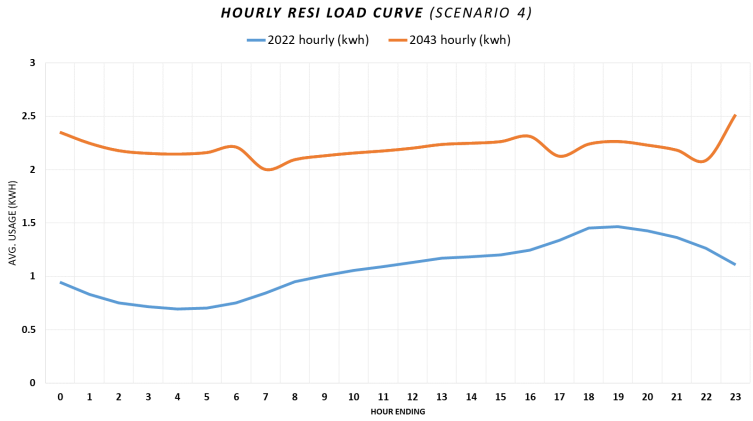
Winter (January) highest load beginning in 2030's primarily due to ASHP and EV load additions

EV unit load slightly higher in colder winter months compared to summer months

Source: long-term-forecast 2023-10-02; 2023 CELT; RMLD analysis; actual RMLD 2022 is base year

Dramatic daily load shape changes possible





Daily loads shown are average over 365 days

Hence, blue 2022 line looks flat despite 2x range

Weather and season significantly affects daily load curves

Scenario 1 – 80% 10 pm to 6 am; illustration of what can happen if not thought through

Scenario 4 – 45% overnight; flatter load yields higher utilization; then overlay hour energy pricing

More importantly, time of use rate schedule is critical to influence timing of charging (suggests a customer controlled and RMLD managed expert system)

Discharging (V2G) likely an option to dampen EV load while reducing participating customer monthly bills

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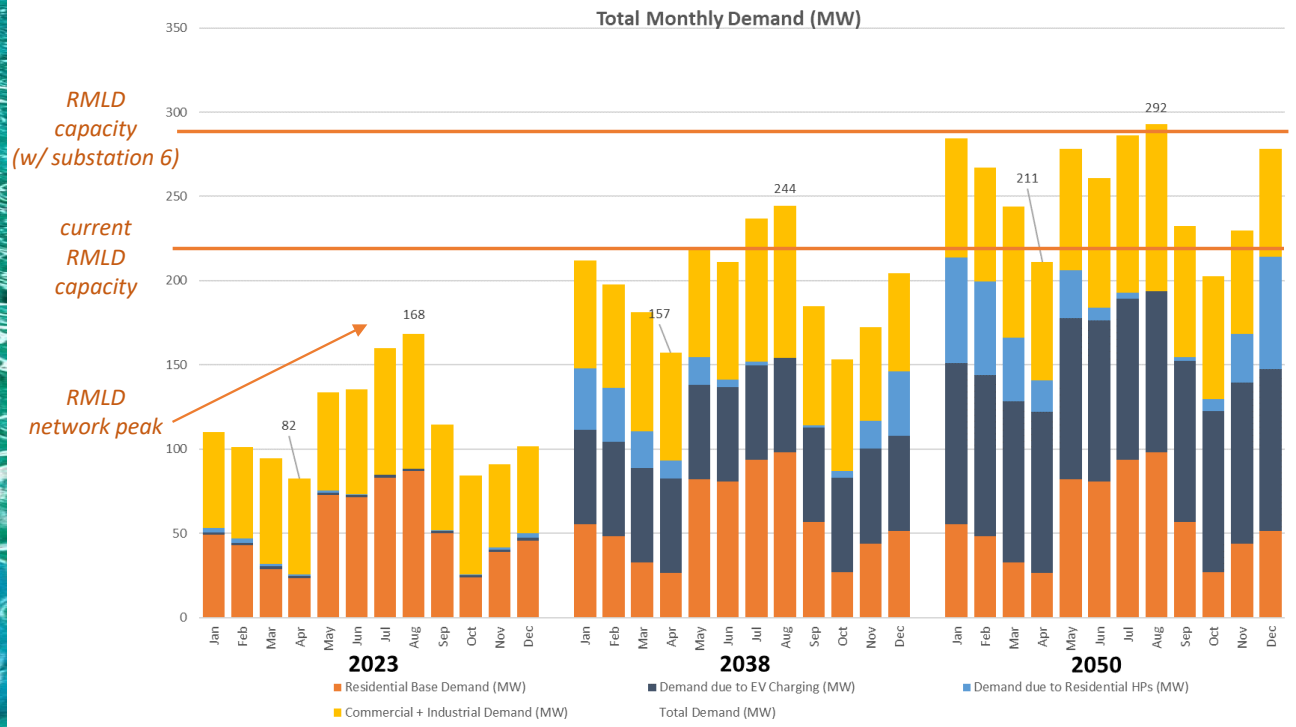
Source: RMLD-avg-house 2023-09-25 JP; RMLD analysis; actual RMLD 2022 is base year

RMLD Reading Municipal Light Department RELIABLE POWER

Demand (MWs) 75% higher by 2050



- **Commercial / Industrial** demand increases primarily first shift; some distribution EV; plus ASHP space heating
- **ASHP Residential** mainly winter addition; summer is AC replacement
- **EV Residential** based on 20% simultaneous charging (ex pre-storm)
- **Base Residential** steady pattern; few living unit additions; few efficiency reductions

Demand growth requires distribution network buildout
Network increasingly bi-directional to support w/in territory generation and storage

10 *Source: long-term-forecast 2023-10-02*

RMLD Reading Municipal Light Department RELIABLE POWER

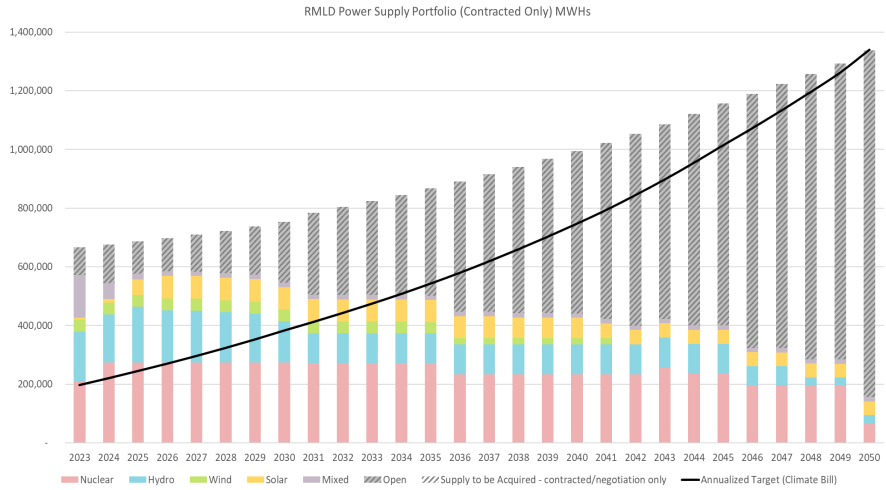
Power supply

Load **increasing** (MWhs growing 2% annually,
30% larger by 2030, 2X larger by 2050)

Non-carbon supply compliance by 2050
(compliant through 2036; non-carbon intermittent; storage needed)

Wholesale supply incurs capacity / transmission costs
(~37% of total RMLD costs and increasing)

W/in territory timing affects **wholesale contracting** in 2030's



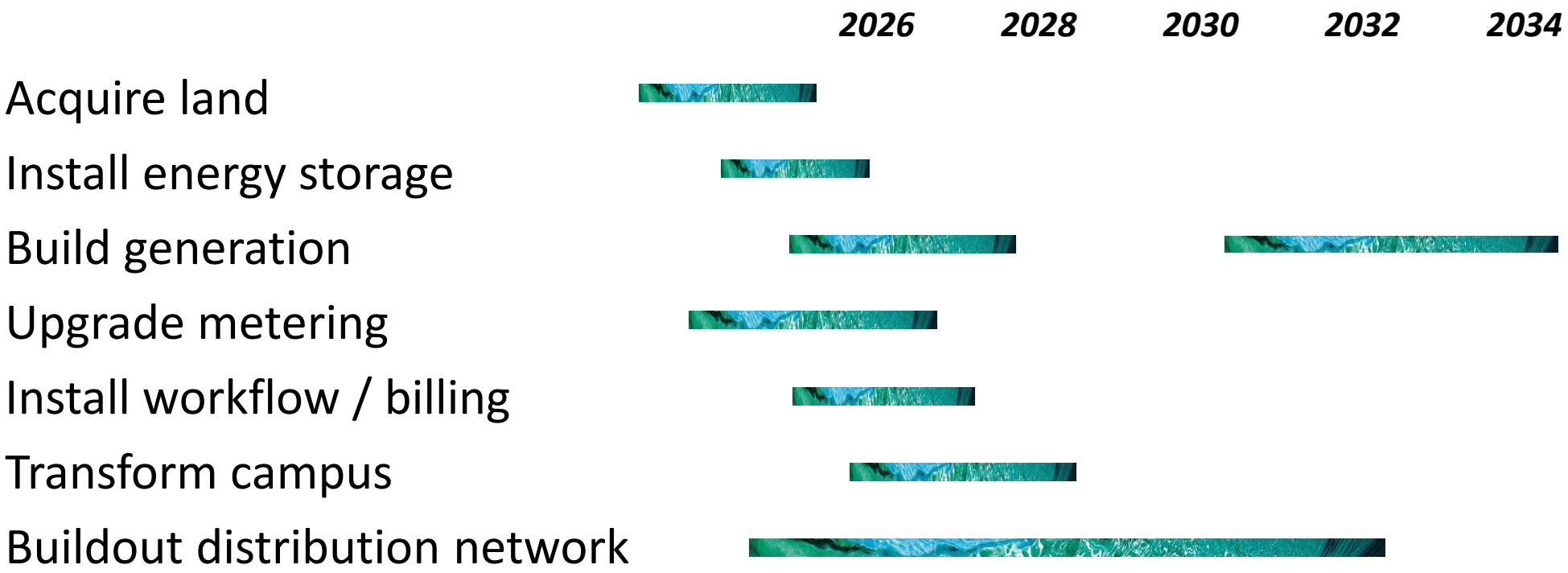
Power supply decisions driven by reliability, low cost, and non carbon (all three)

Solar PV w/in territory limited by land / roofs and capacity factor (but needs doing)

Other generation options are few (tradeoffs and timing)

 source: Energy Position MASTER 2X load 2023-04-10

Investment timing – key initiatives



Thank You
from the RMLD Team

RMLD

Reading Municipal Light Department
RELIABLE POWER

2024 CAPITAL BUDGET

PLANNED PROGRAMS

READING MUNICIPAL LIGHT DEPARTMENT

Capital Improvements CY24 thru CY29

$ Shown in thousands

LINE #	PAGE #	TOWN	PROJ #	FERC #	PROJECT NAME	CY23 Budget	CY23 Spend Estimate	CY23 Carry Over	CY24	CY25	CY26	CY27	CY28	CY29
1	31	A	095	390	Building/Grounds Upgrades	150			550	50	50	50	50	
2	33	R	098	391	Office Upgrades - 230 Ash Street	200			225	30	30	30	30	
3	35	A	118	392	Rolling Stock Replacement (vehicles, trailers, fork trucks)	1,497	235	1,263	2,075	640	425	640	425	425
4	37	A	119	398	Security Upgrades - All Sites	325		325	325	30	30	30	30	30
5	41	A	099	392	Electric Vehicle Supply Equipment (EVSE)	964	113	369	0	835	700	528	361	
6	45	A	127	382	Hardware Upgrades	135	53	82	125	125	125	130	135	139
7	47	A	128	383	Software and Licensing	175		175	100	100	110	110	115	118
8	51	A	139	382	IT Infrastructure Enhancements	150		150	0	0	500	300	200	
9	53	A	140	382/383	IT Security	250	10	150	100	100	285	250	250	100
10	57	W/R/ NR	102	367	Pad-mount Switchgear Upgrade at Industrial Parks	615	440	175	0					
11	59	A	103		GRID AUTOMATION, MODERNIZATION & OPTIMIZATION									
12				365	Scada- Mate Switches	315	83	232	409	450	495	545	599	599
13				365	IntelliRupter®	150		150	196	215	237	260	286	286
14				365	ABB Reclosers	264		264	290	319	351	386	100	100
15				383	Cap Bank Automation									
16				383	Software Integration	37		37	39	41	43	45	47	47
17				397	Communication to Field Devices	552		552	302	302	302	302	302	302
18				383	Power Factor Correction/VVO									
19				383	Meter Data Management (MDM)	281		281						
20		W	105		SUBSTATION 6									
21		W		360	Purchase Land in Wilmington									
22	67	W		361/362/ 366/367	Wilmington Substation Construction & Commissioning	2,993	2,028	964	10,513	7,070	2,667	2,667	2,667	
23	69	A	106	366/367/ 368	UG Facilities Upgrades (URDs, Manholes, etc.) - All Towns	569	209	359	412	424	437	437	450	464
24	71	A	107	365	13.8kV Upgrade (Step-down Area, etc.) - All Towns	134	303	-169	200	333	302	307	316	325
25	73	A	110	370	Primary Metering Inspection and Upgrade Program	170	40	130	45	100	80			
26	75	R/NR/W	111	362	Substation Equipment Upgrade	177	14	163	50	30	30	30	30	30
27	77	A	112	361/370	AMI Mesh Network Expansion & Meter Replacement	1,290	38	1,253	38	2,509	2,458	2,531		
28	79	A	115	394/395	Power/Lab and Tool Equipment	105	19	86	30	30	30	30	30	30
29	81	A	116	365/366/ 367/368	Transformers and Capacitors Purchase (Stock and Projects)	6,998	2,656	4,341	2,000	2,000	2,000	2,000	2,000	2,000
30	83	A	117	370	Meters and Primary Meters (for stock)	60	77	-17	80	20	20	20	20	15
31		W	124	364/365	MA-125 Pole Line Installation for New Wilmington Substation					372	372			
32	85	R	133	362	Station 4 CCVT Replacement	193	62	131	0					
33		W	136	364/365	Pole Line Upgrade - Fordham Road, Wilmington	473	473	0	0					
34	87	R/NR	175	364	Pole Replacement Program, R and NR	599	207	393	640	307	316	326	336	340
35	89	W	201	364/365/ 373	Force Account (MassDOT): Route 38 Bridge over MBTA, W				166					
36	91	W	202	364/365/ 373	Force Account (MassDOT): Lowell at Woburn Street, W	383	77	307						
37	93	W	206	364/365/ 373	Force Account (MassDOT): Butters Row over MBTA, W				298					
38	95	R	315	366/367	Johnson Woods- Create Loop				258					
39	97	A	458	365	Overhead Upgrade Program (Primary, Secondary and Main Replacements) All Towns	460	554	-94	380	389	398	398	398	398
40	99	A	668	366/367/ 368	Aged/Overloaded Transformer Replacement Program	512	169	343	527	543	559	576	593	611
41	101	R	742	366/367	Gazebo Circle, Reading, Underground Feed Relocation	340	50	290						
42	103	W	TBD	360	Maple Meadows (Land)				3,000					
43	105	W	TBD	360	Route 125 Wilmington (Land)				6,000					
44	107	A	various	various	Routine Construction - All Towns	1,458	1,480	-22	1,501	1,546	1,593	1,640	1,690	1,740
45	99	A	various	369	Service Connections (Residential and Commercial) - All Towns	205	105	99	211	217	224	231	238	245
46	n/a	W	TBD	364/365	Industrial Way, Wilmington - Pole Line Upgrade					226	226			
47	n/a	W	TBD	365	Distribution Improvements Associated with New Wilmington Substation					1,000	1,000	500		
48	n/a	R	TBD	364/365	4W24 Partial Circuit Reconductoring						356	30		
49	n/a	W	TBD	364/365	Butters Row, Wilmington - Pole Line Upgrade						378			
					TOTAL	**23,352**	**9,495**	**13,857**	**31,085**	**20,355**	**17,127**	**15,328**	**11,698**	**8,346**

READING MUNICIPAL LIGHT DEPARTMENT							
Capital Improvements CY24 thru CY29							
$ Shown in thousands							
	CY23	CY24	CY25	CY26	CY27	CY28	CY29
Total Additions:	**12,659**	**31,085**	**20,355**	**17,127**	**15,328**	**11,698**	**8,346**
	CY23	CY24	CY25	CY26	CY27	CY28	CY29
TABLE 1: PLANT VALUES & DEPRECIATION EXPENSE:							
Plant in Service (Beginning)	171,562	183,788	213,873	233,227	249,354	263,682	274,380
Additions	**13,226**	**31,085**	**20,355**	**17,127**	**15,328**	**11,698**	**8,346**
Adjustments (Property Retirement)	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000
Plant in Service (Ending)	183,788	213,873	233,227	249,354	263,682	274,380	281,726
Less Land and Land Rights	-1,266	-1,266	-1,266	-1,266	-1,266	-1,266	-1,266
Depreciable Plant in Service	182,522	212,607	231,961	248,089	262,417	273,114	280,460
Accumulated Reserve For Depreciation	-91,279	-96,754	-103,132	-110,091	-117,534	-125,406	-133,600
Net Plant in Service	92,509	117,118	130,095	139,263	146,148	148,974	148,126
TABLE 2: DEPRECIATION FUND BALANCES:							
Beginning Balance	13,241	15,697	4,652	1,611	2,242	1,985	5,621
Depreciation Rate (3%)	3%	3%	3%	3%	3%	3%	3%
Depreciation Expense	**5,109**	**5,476**	**6,378**	**6,959**	**7,443**	**7,872**	**8,193**
Bond Proceeds and Other Fund Sources	376	6,564	4,935	4,800	628	461	100
Operating Fund Transfer	8,000	8,000	6,000	6,000	7,000	7,000	7,000
Capital Funds Ending Balance	26,726	35,737	21,965	19,370	17,313	17,318	20,914
Capital Improvements	-11,028	-31,085	-20,355	-17,127	-15,328	-11,698	-8,346
Ending Balance	**15,697**	**4,652**	**1,611**	**2,242**	**1,985**	**5,621**	**12,569**
TABLE 3: BOND PROCEEDS & OTHER FUND SOURCES:							
Municipal Bonds/Grants		6,000	4,000	4,000			
New Funding Source							
Force Account (MassDOT): Route 38 Bridge over MBTA, W		166					
Force Account (MassDOT): Lowell at Woburn Street, W	383						
Force Account (MassDOT): Butters Row over MBTA, W		298					
Electric Vehicle Supply Equipment (EVSE)	744		835	700	528	361	
	177						
Interest Income	100	100	100	100	100	100	100
Subtotals:	376	6,564	4,935	4,800	628	461	100

CAPITAL PROJECTS

Facilities

CAPITAL PROJECT SUMMARY

Project Name: Building/Grounds Upgrades **Project #:** 095

Project Schedule: Annual **Project Manager:** Christopher Zaniboni, Facilities Manager

Reason for Expenditure:
Annual budget allotment for miscellaneous upgrades to RMLD buildings and grounds.

Brief Description/Scope:
Design and replacement of warehouse racks in Barbas building and Station 1.

Barriers:
None anticipated at this time.

Change in Scope of Work from Prior Year:
Not Applicable.

Status Update:
Not Applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Building/Grounds Upgrades **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Design and replacement of warehouse racks in Barbas building and Station 1.				$550,000
			$0	$0	$0					
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$550,000**

PROJECT TOTAL: $550,000

CAPITAL PROJECT SUMMARY

Project Name: Office Upgrades - 230 Ash Street **Project #:** 098

Project Schedule: Annual **Project Manager:** Christopher Zaniboni, Facilities Manager

Reason for Expenditure:
Annual budget allotment for miscellaneous office upgrades at 230 Ash Street to accommodate staffing changes and promote efficiency.

Brief Description/Scope:
In 2023 an architect/designer was hired to redesign and develop construction drawings for various office areas at the Ash Street office building.

Areas in need of upgrade/redesign include:

- Grid Asset and Communications (Assistant General Foreman office)
- Materials Management
- Engineering & Operations
- Administration

Barriers:
The scheduling of projects has been negatively impacted due to COVID 19 and the resulting equipment supply chain delays and increased material costs.

Change in Scope of Work from Prior Year:
Office redesign has been expanded to include Administration to remove the wall and install five new cubicles, Engineering & Operations to create two new offices. Additional funds for furniture for new offices.

Status Update:
Will be seeking Citizen's Advisory Board and Board of Commissioner's design approval to go forward with future construction bid.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Office Upgrades - 230 Ash Street **SCHEDULE:** CY 23 - CY 24

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Redesign and construction of various office spaces at 230 Ash Street Campus				$425,000
			$0	$0	$0					
			$0	$0	$0					
			$0	$0	$0					
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$425,000**

PROJECT TOTAL:	**$425,000**
CY 2023 SPENDING	**$200,000**
CY2024 SPENDING	**$225,000**

CAPITAL PROJECT SUMMARY

Project Name: Rolling Stock Replacement **Project #:** 118

Project Schedule: Annual **Project Manager:** Christopher Zaniboni, Facilities Manager

Reason for Expenditure:
Scheduled vehicle replacement, following Fuel Efficiency OP 19-07 FM, and based on the Electrification Program and the "8 to 10" year cycle to reduce maintenance costs and improve reliability. Vehicles removed from the fleet are typically traded-in to the dealer providing the new vehicle.

Brief Description/Scope:
Specifications, bids, and purchase orders will be completed in 2024 for the following:

- One (1) Service Truck – 40’ bucket
- One (1) 4.5-ton Stake Body Dump Truck
- One (1) Digger Derrick
- One (1) Forestry Tree Truck
- One (1) Forestry Chipper Forest
- Two (2) Electric 1.5-ton Pick Ups
- Four (4) Gas 1.5-ton Pick Ups

Barriers:
Supply chain issues have caused delays in delivery of vehicles.

Change in Scope of Work from Prior Year:
Not applicable.

Status Update:

- Trouble truck was bid and ordered in 2022; delivery expected end of 2023.
- Van (Grid Asset Management) is expected to be bid and ordered in 2022; was received in 2023.
- Two (2) Pick-Up Trucks ordered and received in 2023.
- Two (2) ePTO material handler was bid and ordered in 2023 delivery anticipated in 2024.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Rolling Stock Replacement **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Service Truck with 40' Bucket	each	$325,000.00	1	$325,000
			$0	$0	$0	4.5-ton Stake Body Dump Truck	each	$100,000.00	1	$100,000
			$0	$0	$0	Digger Derrick	each	$750,000.00	1	$750,000
						Forestry Tree Truck	each	$400,000.00	1	$400,000
						Forestry Chipper	each	$100,000.00	1	$100,000
						Electric 1.5-ton PU Trucks	each	$80,000.00	2	$160,000
						Gas 1.5-ton PU Trucks	each	$60,000.00	4	$240,000
			$0	$0	$0	Trouble Truck - Ordered (carry-over 22)	each	$252,419.00	1	$252,419
			$0	$0	$0	ePTO Material Handler (carry-over 23)	each	$500,000.00	2	$1,000,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$3,127,419**

PROJECT TOTAL: $2,075,000

CARRY OVER TOTAL: $1,252,419

CAPITAL PROJECT SUMMARY

Project Name: Security Upgrades – All Sites **Project #:** 119

Project Schedule: Annual **Project Manager:** Christopher Zaniboni, Facilities Manager

Reason for Expenditure:
This project represents an annual budget allotment for security upgrades as needed at all RMLD facilities.

Brief Description/Scope:
In 2021 a security consultant was hired to perform a physical security risk assessment for all RMLD properties. This risk assessment outlines a number of recommendations to enhance security at all RMLD facilities. An internal working group has been formed to review and discuss the specifics of each recommendation and then approve and implement recommendations, as necessary.

Barriers:
None anticipated at this time.

Change in Scope of Work from Prior Year:
New security equipment and systems, including perimeter access control, video management systems, and IP camera infrastructure will be procured and installed in 2023 and 2024.

Status Update:
The security working group continued its review of the risk assessment and addressed a number of issues internally. With guidance from the security consultant, a new security system to include perimeter access control, video management systems, and IP camera infrastructure improvements is being designed. An RFP awarded in 2023 based on the security working group. These systems will further mitigate the physical security issues identified in the risk assessment.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Security Upgrades - All Sites **SCHEDULE:** CY2023-2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Comprehensive Security System Upgrade. Implement recommendations of security consultant such as site access, intrusion detection, increased signage, etc.				$650,000
			$0	$0	$0					$0
			$0	$0	$0					$0
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$650,000**

PROJECT TOTAL:	**$650,000**

2023 CARRY OVER	**$324,605.00**
2024 ESTIMATED SPENDING	**$325,000.00**

CAPITAL PROJECTS

Integrated Resources

CAPITAL PROJECT SUMMARY

Project Name: Electric Vehicle Supply Equipment (EVSE) **Project #:** 099

Project Schedule: On-going **Project Manager:** Bill Bullock, Director of Integrated Resources

Reason for Expenditure:

The goal of the EVSE Project is to expand public charging infrastructure for electric vehicles operating within RMLD's service territory. This project will consist of Level 2 and DC fast charger (DCFC) systems.

The goal of the DCFC portion of the project is to deploy high-speed, plug-in, electric vehicle chargers to provide short-duration charging cycles for electric vehicles. This project increases the deployment of EV technology and availability of remote rapid charging capability, thereby supporting State and local efforts to reduce carbon emissions in both the transportation and energy sectors.

Given that ~80% of EV charging occurs at the residence and another portion at work, RMLD anticipates installing only a couple of dozen public chargers within each town. Installations will take place over the next 7-10 years, with the pace of installations partially driven by utilization and EV adoption.

Brief Description/Scope:
In coordination with town leadership, RMLD identified initial locations for the first few chargers in each of the four towns for installing Level 2 and DCFC charging stations in public parking areas owned by the towns.

All charging stations in this deployment project will be owned, maintained, and operated by RMLD. Commercial and industrial customers continue to have the option to install their own EV chargers on their properties.

Barriers:
None anticipated at this time although changes to public parking policies will take persistence to resolve and then adapt as all parties learn more. In addition, certain locations will require electric supply upgrades.

Change in Scope of Work from Prior Year:
This project continues to evolve and expand.

Status Update:

RMLD was awarded a $78,150 state grant in July 2021 to install five dual-head units Level 2 chargers: three in Reading and two dual-head units in Wilmington. These units were installed in spring 2022 and have been operating since June 2022.

Municipal sites for EV chargers in Lynnfield and North Reading have been identified. Two chargers are to be installed in Lynnfield and three Level 2 Chargers are to be installed in North Reading. These projects are awaiting right-of-way approvals from the towns to allow RMLD to install them on town-owned properties.

RMLD also received a $99,136 EVIP grant from the Commonwealth to install the first DC fast charging (DCFC). Supply chain issues delayed delivery of the equipment until mid-2023. The DCFC is installed and energized at the Reading Public Library as of the end of September 2023.

RMLD's installed chargers have seen a steady increase in usage over the last year. An additional grant for multiple Level 2 and DCFC Chargers was submitted in mid-2023 to the US Department of Transportation. The Grant Program is designed for the deployment of EV Charging within 1 mile of interstate highways and RMLD is well positioned along Interstates 93 and 95 to meet the grant application requirements.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Electric Vehicle Supply Equipment (EVSE) **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)							
ITEM/TASK	Straight Time	OT	Straight Time	OT	Vehicle (labor units x vehicle rate)	DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	$7,402	$920					
			$0	$0	$0					
						Carry-Over from CY 23				$368,971
Overhead Contractor 2-man crew - unit rate in weeks			$8,800	N/A	$2,288					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			$10,880	N/A	$1,400					
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			$116	$113						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			$109	$106						
			$0	$0						$0
			$0	$0						$0
Station Techs: unit rate in hours			$101	$99	$21					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			$71	$69	$21					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			$123	$119						
			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$368,971**

CY 23 CARRY OVER TOTAL: $368,971

CAPITAL PROJECTS

Information Technology

CAPITAL PROJECT SUMMARY

Project Name: Hardware Upgrades **Project #:** 127

Project Schedule: Annual **Project Manager:** John Pelletier, IT Director

Reason for Expenditure:
Each year RMLD must replace failed or obsolete computers and related equipment, as well as purchase equipment for new users.

Brief Description/Scope:
RMLD will continue to replace one-third of its workstations annually as well as procure ad hoc hardware as needed. Additionally, IT will purchase hardware for new employees, as necessary.

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
In 2023 RMLD replaced one-third of the user workstations as well as various hardware and equipment. Most of the work force was transitioned to Dell laptop workstations with docking station desktops set up for mobility.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Hardware Upgrades **SCHEDULE:** CY2023

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Miscellaneous Hardware (computers, laptops, printers)				$125,000
			$0	$0	$0					
			$0	$0	$0	Carry Over CY 23:				$82,472
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$207,472**

PROJECT TOTAL: $125,000

CARRY OVER CY 23: $82,472

CAPITAL PROJECT SUMMARY

Project Name: Software and Licensing **Project #:** 128

Project Schedule: Annual **Project Manager:** John Pelletier, IT Director

Reason for Expenditure:

Each year RMLD purchases miscellaneous new software for new users and to update existing users. Additional new software projects may be added at the request of various operating units as outlined below:

Brief Description/Scope:

- *Customer Relationship Management (CMR) Engagement Software:* Cloud-based CRM software that will fully integrate SpryPoint with the Great Plans/Cogsdale system. This item is a carry-over from 2023
- *IT Asset Manager:* This software will allow IT to barcode and asset-tag all equipment as it is added to the production environment. This will help IT better maintain their asset inventory and will help in depreciating and replacing equipment. This item is a carry-over from 2022.

Barriers:

None anticipated at this time.

Change in Scope of Work From Prior Year:

Not applicable.

Status Update:

CAPITAL PROJECT COST SHEET

PROJECT NAME: Software and Licensing **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Miscellaneous Software				$50,000
			$0	$0	$0	IT Asset Manager				$50,000
			$0	$0	$0					
			$0	$0	$0					
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$100,000**

PROJECT TOTAL: $100,000

CAPITAL PROJECT SUMMARY

Project Name: IT Infrastructure Enhancements **Project #:** 139

Project Schedule: 2024 **Project Manager:** John Pelletier, IT Director

Reason for Expenditure:
The RMLD must continually evaluate its IT infrastructure to be sure the environment will accommodate system growth and change, and to remain up to date with current technology and best practices.

Brief Description/Scope:
In 2024 we will address the following items:

- *Network Enhancements*: RMLD will be replacing its core networking stack and substation networking equipment that is well beyond their useful life. The current networking environment needs to be overhauled in order to be better aligned, be more secure, and to take advantage of IT best practices. This overhaul and implementation will provide RMLD with a more robust and reliable network infrastructure.

- Infrastructure to support physical access and security project: RMLD will be building out our infrastructure to support the upcoming physical security project. This will require additional specialized hardware and optical transport components.

- RMLD will be relocating the virtualized environment from the Medford data center to Ash St, backups will be moved to a cloud provider.

Barriers:
Supply chain issues have and may continue to be a concern.

Change in Scope of Work from Prior Year: Increase (Decrease)
Not applicable.

Status Update from Prior Fiscal Year:

.

CAPITAL PROJECT COST SHEET

PROJECT NAME: IT Infrastructure Enhancements **SCHEDULE:** CY2023

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	**$7,402**	**$920**					
			$0	$0	$0					
			$0	$0	$0					
			$0	$0	$0	Carry over from CY 23				$150,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$102**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$199**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$150,000**

PROJECT TOTAL: $150,000

CAPITAL PROJECT SUMMARY

Project Name: IT Security **Project #:** 140

Project Schedule: Annual **Project Manager:** John Pelletier, IT Director

Reason for Expenditure:
The RMLD is continually monitoring both the cyber and internal environments to assess and respond to threats. Systems must be added and/or updated to respond to these threats. The projects listed below are planned for 2024 in order to maintain the security and integrity of RMLD data assets.

Brief Description/Scope:

- *Network monitoring and vulnerability management: This includes network monitoring tools as well as vulnerability detection and management for both the IT and OT environments.*
- *Multifactor Authentication: RMLD is in the process of requiring MFA for all users who access sensative information.*
- *Information Security (Miscellaneous):* This is an allotment to address unforeseen security issues which may arise during the year.

Barriers:
None anticipated at this time.

Change in Scope of Work from Prior Year:
Not applicable.

Status Update:
RMLD IT has implemented Tenable IO in the IT environment and is in the process of implementing Tenable OT in the OT environment. We have also installed PathSolution to monitor hardware status and availability.

CAPITAL PROJECT COST SHEET

PROJECT NAME: IT Security **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	$7,402	$920					
						Network Visibility Software	project			$50,000
			$0	$0	$0	Security Information Event Manager	project			$50,000
			$0	$0	$0	Carry Over CY 23				$150,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$250,000**

PROJECT TOTAL:	**$100,000**
CARRY OVER CY 23:	**$150,000**

CAPITAL PROJECTS

System

CAPITAL PROJECT SUMMARY

Project Name: Pad-mount Switchgear Upgrade at Industrial Parks **Project #:** 102

Project Schedule: FY18-CY24 **Project Manager:** Peter Price, System Engineer

Reason for Expenditure:
Increase distribution system protection in the underground industrial parks in Wilmington and North Reading as well as the three-phase underground distribution areas in Reading, i.e., River Park Drive, Jonspin Road, Haven Street, Woburn Street, Industrial Way, etc.

Brief Description/Scope:
Purchased new units to replace live front pad-mounted switchgear. New units will be dead front with provisions for remote/supervisor control.

Barriers:
Delivery of three switchgear ordered in FY18 was significantly delayed, which has pushed back the installation schedule for all switchgear. Supply chain issues in 2022 has delayed the delivery and installation of switches.

Change in Scope of Work From Prior Year: Increase (Decrease)

Installation of four regular switchgear, and receipt and installation of two motor operated switchgear will be delayed until 2023.

Status Update From Prior Year:
Installation of switches including two motor operated style units in 2024.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Pad-Mount Switchgear Upgrade at Industrial Parks **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
						Carry over from CY 23				$174,518
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$174,518**

CARRY OVER FROM CY 23: $174,518

CAPITAL PROJECT SUMMARY

Project Name: Grid Automation, Modernization & Optimization **Project #:** 103

Project Schedule: On-going **Project Manager:** Peter Price, System Engineer
Brian Smith, System Engineer
Vaughan Bryan, Senior Distribution Engineer

Reason for Expenditure:
In compliance with DPU/OSHA Order DPU 12-76B, increase system reliability, modernize/optimize system operation and functionality, decrease system losses and expenses for labor and truck rolls related to outage management.

Brief Description/Scope:
Continue implementation of the Grid Automation, Modernization and Optimization Road Map including installation and integration of smart switches, IntelliRupters, capacitor banks and Volt Var Optimization (VVO) and controls, cyber security, simulators, fiber rationale connections, Fault Detection Isolation and Restoration (FDIR), economic dispatch, and overall system integration, including GIS and AMI/MDM.

Barriers:
Technology/software integration; merging old technology with new emerging technology.

Change in Scope of Work From Prior Year:
In 2023 the US cellular end system was installed at the RMLD. This system is being piloted as a means of communicating with devices that cannot be connected directly to a fiber connection. Two capacitors and a Scadamate switch have been connected. RMLD is currently in the process of working on an intellirupter and a recloser. Once the testing is completed, approximately 20 devices will be connected directly to SCADA in 2024. RMLD has installed VVO software on its SCADA to minimize system losses by turning capacitor banks on/off as the system load demands KVAR. The testing is awaiting the installation of new SCADA servers to be installed. The system is being tested for functionality to be available as soon as the cellular communication system is tested and accepted. Both VVO and FDIR modules will be integrated with SCADA and OMS to optimize system performance and minimize outage durations when customers experience outages due to system faults.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization
Scada-Mate Switches

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Install Scada-Mate switches and controls	2.0		$15,250	$0	$1,840	Scada-Mate CX Switch	each	$35,000.00	4	$140,000
Replace pole, install bypass disconnects, transfer primary, secondary, etc.	7.0		$53,374	$0	$6,440	55' pole, x-arms, brackets, guys, anchors, miscellaneous hardware, etc.	per switch	$4,000.00	4	$16,000
			$0	$0	$0	6801 IntelliTeam License	per switch	$3,200.00	4	$12,800
Install three (3) repeaters/radios per switch	1.0		$7,625	$0	$920	S&C repeaters/radios	each	$3,800.00	12	$45,600
Install antennas	2.0		$15,250	$0	$1,840	Antennas for radios	each	$850.00	6	$5,100
						Carry Over from CY 23				$231,704
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	120.0		$13,939	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
PoleForeman, construction drawings, etc.	40.0		$4,360	$0						$0
Prepare switching orders, order materials, establish communication	40.0		$4,360	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Controls, programming, commissioning, etc.	80.0		$8,120	$0	$1,680					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Controls, programming, commissioning, etc.	40.0		$4,918	$0		**Police Details**	**weeks**	**$2,427**	**4.0**	**$9,708**
TOTAL LABOR/VEHICLES			**$127,197**	**$0**	**$12,720**	**TOTAL MATERIALS/OTHER**				**$268,040**

PROJECT TOTAL:	**$407,957**
CARRY OVER FROM CY 23:	**$231,704**

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization IntelliRupters

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Install IntelliRupter Switches	2		$15,250	$0	$1,840	IntelliRupter Switches	each	$50,000.00	2	$100,000
Replace pole, install bypass disconnects, transfer primary, secondary, etc.	3		$22,874	$0	$2,760	55' pole, cross-arms, brackets, guys, anchors, miscellaneous hardware, etc.	per switch	$3,700.00	2	$7,400
			$0	$0	$0	IntelliRupter License/IntelliTeam License	each	$3,000.00	2	$6,000
						Carry Over from CY 23				$150,387
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	40.0		$4,646	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
PoleForeman, construction drawings, etc.	32		$3,488	$0						$0
Prepare switching orders, order materials, establish communication	32		$3,488	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Controls, programming, commissioning, etc.	64		$6,496	$0	$1,344					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Controls, programming, commissioning, etc.	16		$1,967	$0		**Police Details**	**weeks**	**$2,427**	**2.0**	**$4,854**
TOTAL LABOR/VEHICLES			**$58,211**	**$0**	**$5,944**	**TOTAL MATERIALS/OTHER**				**$127,962**

PROJECT TOTAL:	**$192,117**
CARRY OVER FROM CY 23:	**$150,387**

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization
ABB Reclosers

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**7,625**	**$7,402**	**$920**					
Install reclosers and controls	1.0		7,625	$0	$920	ABB Reclosers	each	$30,000.00	4	$120,000
Replace pole, install bypass disconnects, transfer primary, secondary, etc.	6.0		45,749	$0	$5,520	55' pole, x-arms, brackets, guys, anchors, miscellaneous hardware, etc.	per recloser	$3,000.00	4	$12,000
			$0	$0	$0	Bypass disconnects	each	$1,000.00	12	$12,000
			$0	$0	$0	Contractor assist with recloser settings	per recloser	$1,800.00	4	$7,200
						Carry Over from CY 23				$263,571
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	120.0		$13,939	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
PoleForeman, construction drawings, etc.	40.0		$4,360	$0						$0
Prepare switching orders, order materials, establish communication	40.0		$4,360	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Controls, programming, commissioning, etc.	80.0		$8,120	$0	$1,680					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Controls, programming, commissioning, etc.	40.0		$4,918	$0		**Police Details**	**weeks**	**$2,427**	**4.0**	**$9,708**
TOTAL LABOR/VEHICLES			**$89,073**	**$0**	**$8,120**	**TOTAL MATERIALS/OTHER**				**$190,032**

PROJECT TOTAL:	**$287,225**
CARRY OVER FROM CY 23:	**$263,571**

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization Software Integration

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Services from vendor for integration of AMI and various devices				$26,500
			$0	$0	$0					$0
			$0	$0	$0	Carry Over from CY 23				$37,200
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Work with vendor for software integration	80.0		$8,721	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Work with vendor for software integration	24.0		$2,436	$0	$504					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision	8.0		$984	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$12,141**	**$0**	**$504**	**TOTAL MATERIALS/OTHER**				**$26,500**

PROJECT TOTAL: $39,145

CARRY OVER FROM CY 23: $37,200

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization
Communication to Field Devices

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Contractor: Cellular Modem	each	$1,200.00	20	$24,000.00
			$0	$0	$0	Configuration and Installation of 20 distribution automation devices	each	$1,000.00	20.0	$20,000.00
			$0	$0	$0	Cellular Contractor for Configuration	each	$5,000.00	20.0	$100,000.00
						Carry Over from CY 23				$552,468.00
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Assit With Device installation	640.0		$69,768	$0						$0
			$0	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Assit With Device installation	160.0		$16,240	$0	$3,360					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
		0.0	$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$122.96**	**$119**						
Supervision of Meter crews		0.0	$0	$0		**Police Details**	**weeks**	**$2,427**	**2.0**	**$4,854**
TOTAL LABOR/VEHICLES			**$86,008**	**$0**	**$3,360**	**TOTAL MATERIALS/OTHER**				**$148,854**

PROJECT TOTAL:	**$238,222**
CARRY OVER FROM CY 23:	**$552,468**

CAPITAL PROJECT COST SHEET

PROJECT NAME: Grid Modernization & Optimization
Meter Data Management (MDM)

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0					$0
			$0	$0	$0					$0
			$0	$0	$0	Carry Over from CY 23				$280,700
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
										$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$280,700**

CARRY OVER FROM CY 23: $280,700

CAPITAL PROJECT SUMMARY

Project Name: Substation 6 **Project #:** 105

Project Schedule: FY17-CY2025 **Project Manager:** Peter Price, System Engineer

Reason for Expenditure:
Substation 5 in Wilmington has reached the end of its useful life. The new substation 6 will replace or partial offload Substation 5, while also providing added benefit to RMLD by providing additional capacity for electrification and load growth in RMLD service territory.

Brief Description/Scope:
RMLD will build a new 115kV/13.8 kV substation in Wilmington in the Ballardvale/ Route 125 area. The new substation will include two 75 MVA transformers and 15kV switchgear with eight (or more as needed) feeder/breaker positions. This new substation will also provide backup and load relief for Substation 3, Substation 4, and Substation 5.

Barriers:
Timely delivery of equipment and outsourced service.

Change in Scope of Work From Prior Year: Increase (Decrease)
$5m increase in the cost of the two transformers due to the cost of raw materials and supply-chain disruptions.

Status Update From Prior Year:
In CY2023 RMLD with contract for the purchase of two (2) 75 MVA, 115 kV/13.8 kV substation transformers. The units will be slated for delivery in the spring of CY2025. The System Impact Study has been completed in CY2023. PLM will begin the process of preparing two bids, one for the 15 kV substation switchgear and components and the other for the 115 kV structures and equipment.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Substation 6 Construction and Commissioning

SCHEDULE: CY2023-25

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Power Transformers				$7,600,000
			$0	$0	$0	15kV Switchgear				$3,500,000
			$0	$0	$0	Substation Equipment Package				$750,000
			$0	$0	$0	Construction Contractor				$2,400,000
			$0	$0	$0	Testing and Commssioning				$120,000
			$0	$0	$0	Getaways				$3,000,000
			$0	$0	$0	Indirects				$320,000
			$0	$0	$0	Distribution (Overhead)				$1,710,000
			$0	$0	$0	Fiber				$75,000
			$0	$0	$0	Contingency				$1,000,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Oversite and Management of Project	954.0		$104,000	$0						$0
			$0	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Technical Services Manager: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$104,000**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$28,575,000**

PROJECT TOTAL:	**$28,575,000**

2023 ESTIMATED SPENT	$2,028,429
2023 CARRY OVER	$964,071
2024 ESTIMATED SPENDING	$10,512,500
2025 ESTIMATED SPENDING	$7,069,500
2026 ESTIMATED SPENDING	$2,666,666
2027 ESTIMATED SPENDING	$2,666,666
2028 ESTIMATED SPENDING	$2,666,666

CAPITAL PROJECT SUMMARY

Project Name: Underground Facilities Upgrades (URDs, Manholes, etc.) **Project #:** 106

Project Schedule: Annual **Project Manager:** All Engineers

Reason for Expenditure:

There are 210 +/- underground residential subdivisions in the RMLD service territory, of which, 80 +/- are over 25 years old. These subdivisions are in need of new primary cable and transformers. Some of the URDs are in step-down areas and need to be upgraded before they can be converted to 7,970 volts. Most of the existing transformers are live-front units. The new padmount transformers will be dead-front units, which will improve reliability by eliminating the possibility of animal contacts within the pad transformer. The new transformers will be placed on box-pads that will raise the transformers out of the mulch beds preventing premature rusting and corrosion of the transformers. Manholes in the underground areas are also aging and may need to be replaced.

Brief Description/Scope:

Replace primary and neutral cables, and padmount transformers as needed in the various URDs. The precast transformer pads will be replaced with fiberglass box pads as needed for elevation requirements. Certain areas will be targeted each year. Areas targeted for 2024 include Baldwin Lane, Acorn Knoll, and Hidden Pond Lane, North Reading; Serenoa Lane, Nelson Way and Flynn Way, Arlene Ave & Ring Ave in Wilmington; and Zachary Lane, in Reading; and Pocahontas Way in Lynnfield; In 2024 we will continue with inspection of manholes to determine which manholes will need to be scheduled for replacement.

Barriers:

Availability of transformers due to supply chain issues.

Change in Scope of Work From Prior Year:

No notable change.

Status Update:

Area upgrades either completed or expected to be completed by the end of 2023 include:

- Perkins Lane, Lynnfield
- Pleasant Street (Completed), Equestrian Drive (Completed) and Strawberry Lane in North Reading (In Progress)

CAPITAL PROJECT COST SHEET

PROJECT NAME: Underground Facilities Upgrades (URDs, Manholes, etc.)

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Replace underground and neutral cable (with contractor assist)	18		$133,689	$0	$16,131	#2 CU 15 kV cable and neutral	foot	$6.00	26,300	$157,800
Splice, terminate, elbows, grounding, etc. (with contractor assist)	4		$26,687	$0	$3,220	Splices, elbows, terminations, tape connectors, hardware, etc.	each	$200.00	70	$14,000
Transformer replacement and crabbing (with contractor assist)	4		$28,593	$0	$3,450	Transformer box pads	each	$500.00	25	$12,500
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
Assist RMLD crews to replace URD and neutral cables (assist RMLD crews)	18		$190,763		$24,547					$0
Splice, terminate, elbows, grounding, etc. (assist RMLD crews)	4		$38,080		$4,900					$0
Transformer replacement and crabbing (assist RMLD crews)	3.8		$40,800		$5,250					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	169		$19,584	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Switching, scheduling, notices, plans, etc.	300		$32,704	$0						$0
Station Techs: unit rate in hours			**$101**	**$99**	**$21**					
Testing cables and transformers	75		$7,612	$0	$1,575					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management	25		$3,074	$0		**Police Details**	**weeks**	**$2,427**	**2.0**	**$4,854**
TOTAL LABOR/VEHICLES			**$521,586**	**$0**	**$59,072**	**TOTAL MATERIALS/OTHER**				**$189,154**

BUDGET CY 24:	**$412,000**
CARRY OVER CY 23:	**$359,000**
PROJECT TOTAL:	**$769,812**

Note: Transformers for this project are purchased under Project 116

CAPITAL PROJECT SUMMARY

Project Name: 13.8kV Upgrades (Step-down Areas, etc.) All Towns **Project #:** 107

Project Schedule: Annual **Project Manager:** All Engineers

Reason for Expenditure:
It is expected that at the conclusion of all work in the step-down conversion areas in 2023 that there will be 8 step-down areas remaining in the RMLD service territory awaiting conversion to 13.8kV. These areas on the RMLD distribution system were originally fed from 4.16 kV distribution circuits. When RMLD began moving load over to the 13.8kV distribution circuits, most areas were converted but some areas were re-fed with pole-mount, step-down transformers. Most of the distribution system in these areas are 30+ years old and in need of upgrade before they can be converted.

Brief Description/Scope:

Replace poles, primary cable, and overhead transformers, as needed, in the various step-down areas. Convert areas to 13.8kV and remove step-down transformers. The secondary cable and service upgrades will be done in conjunction with Project 458. Due to supply chain issues, we shifted 4 step-down areas to CY24 from CY23. The areas targeted for 2024 are Faulkner Avenue in Wilmington, Orchard Drive in North Reading, Edward Avenue in Lynnfield, and Whitehall Lane in Reading. Plus the addition of Marblehead St, North Reading.

Barriers:
Transformer supply chain issues may prevent the area conversions from being completed until we receive delivery of the 2024 pole-mount transformers.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Areas completed in 2023 include:

- Linwood Ave, North Reading
- Dorchester Ave, Wilmington
- Lakeview Ave, Reading

CAPITAL PROJECT COST SHEET

PROJECT NAME: 13.8kV Upgrades (Step-down Areas, etc.) **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
RMLD to frame 20 poles for new primary cable (guying and anchors as needed). NOTE: Verizon Set	4		$30,499	$0	$3,680	Hardware, insulators, connectors, guys, cutouts, taps, brackets, ground rods, etc.	per pole	$350.00	20	$7,000
Install 2,500' of single-phase primary cable, energize and cutover	4		$30,499	$0	$3,680	1/0 AAAC primary	foot	$2.00	2,500	$5,000
Transfer (6) pole-mount transformers	2		$15,250	$0	$1,840					
Remove old primary cable	2		$15,250	$0	$1,840	Carry Over (CY23)				$30,996
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	24.0		$2,788	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
PoleForeman, 605As, construction drawings, switching orders, etc.	24		$2,616	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
			$0	$0		**Police Details**	**weeks**	**$2,427**	**8.0**	**$19,416**
TOTAL LABOR/VEHICLES			**$96,902**	**$0**	**$11,040**	**TOTAL MATERIALS/OTHER**				**$62,412**

PROJECT TOTAL: $170,354

Note: Transformers for this project are purchased under Project 116

CAPITAL PROJECT SUMMARY

Project Name: Primary Metering Inspection and Upgrade Program **Project #:** 110

Project Schedule: On-going **Project Manager:** Nick D'Alleva, General Foreman Grid Assets & Communications

Reason for Expenditure:
RMLD has initiated an inspection program of all primary metering revenue equipment. It is predicted that many of these installations will need to be replaced due to age and/or condition. Some primary metering customers are expected to be converted to secondary metering during implementation. This project will cover the cost of any necessary upgrades.

Brief Description/Scope:
Equipment will be repaired, upgraded and/or replaced as necessary based on the results of the assessment.

Barriers:
Possible lead time for equipment due to supply chain disruptions.

Change in Scope of Work From Prior Year:
The primary metering review team is working internally and with its primary metering customers to remove existing primary metering equipment and install more conventional metering equipment. These efforts have reduced the scope and spending originally proposed for this project.

Status Update From Prior Year:
Supply chain issues has caused project to be moved out a year.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Primary Metering Upgrade and Replacement Program **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Materials and Supplies				$35,000
			$0	$0	$0					
			$0	$0	$0					
						Carry over from CY 23				$129,546
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Primary metering installation coordination and design	4.2	8.4	$458	$889						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
Primary metering construction	52.0		$5,278	$0	$1,092					$0
Primary metering installation coordination and design		8.0	$0	$788	$168					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management	2.0	9.0	$246	$1,074		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$5,982**	**$2,752**	**$1,260**	**TOTAL MATERIALS/OTHER**				**$164,546**

PROJECT TOTAL:	**$44,993**
CARRY OVER FROM CY 23	**$129,546**

CAPITAL PROJECT SUMMARY

Project Name: Substation Equipment Upgrade **Project #:** 111

Project Schedule: Annual **Project Manager:** Nick D'Alleva, General Foreman Grid Assets & Communications

Reason for Expenditure:
This is a proactive, preventive maintenance program for RMLD substations to increase reliability and prevent premature failure of long-lead substation equipment. RMLD personnel have identified substation equipment that needs to be replaced or upgraded as a result of their condition assessment.

Brief Description/Scope:
Due to the lack of availability and long lead times for electrical equipment, a spare 115Kv vacuum breaker has been identified as an asset that needs to be purchased. This beaker can be utilized at Station 3, Station 4 or the proposed new Station 6 in Wilmington. Other miscellaneous equipment includes lightning arresters, bushings, and insulators are utilized at all substations.

Barriers:
Availability of equipment due to supply chain issues.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update From Prior Year:
Waiting for the design specification for new Substation 6 to be able to purchase breaker that will work on new equipment.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Substation Equipment Upgrades **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Transformer Bushings	each	$10,000.00	2	$20,000
						Transformer Breathers	each	$4,000.00	2	$8,000
			$0	$0	$0	Lightning Arrestors	each	$600.00	6	$3,600
			$0	$0	$0	Spare 115Kv Vacuum Breaker (Carry Over CY23)	each	$150,000.00	1	$150,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
Lightning Arrestor Install	20.0		$2,030	$0	$420					$0
Transformer Bushing Install	80.0		$8,120	$0	$1,680					
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$2,030**	**$0**	**$420**	**TOTAL MATERIALS/OTHER**				**$181,600**

PROJECT TOTAL:	**$43,850**
CARRY OVER CY 23:	**$150,000**

CAPITAL PROJECT SUMMARY

Project Name: AMI Mesh Network Expansion and Meter Replacement **Project #:** 112

Project Schedule: 2022-2027 **Project Managers:** Nick D'Alleva, General Foreman Grid Assets & Communications

Reason for Expenditure:
The RMLD has ~28,600 Itron non-AMI/AMR meters that are not capable of providing end-of-line voltage. End-of-line voltage readings would provide the ability to monitor voltage, current, demand, power factor and power quality for these locations. Of these ~28,600 non-full AMI meters, there are 3,200 commercial, industrial, and time-of-use meters that cannot produce last gasp signals and communicate with the Outage Management System (OMS). Therefore, customers with these meters are not able to receive outage and restoration notifications.

Brief Description/Scope:
The RMLD hired a consultant who performed a system-wide evaluation of the current AMI/AMR mesh network and metering system and made recommendations for AMI system upgrades to accommodate current deficiencies as outlined above and to address future metering and data needs. The consultant also recommended RMLD purchase and install Meter Data Management (MDM) for housing metering data and data analytics. Katama Technologies, Inc., was then hired to prepare RFPs for both AMI and MDM systems based on the consultant's recommendations. In 2022, RMLD hired PSE (Power System Engineering) to review the RFPs and manage the project from procurement through full implementation. MDM procurement, which is part of the Grid Automation, Modernization and Optimization (Project 103) will take place 2023, followed by the AMI procurement starting in 2024. Once an AMI vendor is selected and materials have been procured, the headend and communication infrastructure installation will commence followed by the full deployment of meters in years 2024 through 2027. An outside contractor will be hired to remove the old meters and install the new meters.

The new AMI/MDM systems will be integrated with OMS/SCADA, Cogsdale-Harris CIS, and billing systems. Metering data obtained from this new system will be used by the Integrated Resources Division for data analytics, load forecasting, demand side management, and demand response programs.

Barriers:
Supply chain disruptions concerns.

Change in Scope of Work from Prior Year: Increase (Decrease)
Implementation has been moved to 2024.

Status Update from Prior Year:
Due to supply chain issues, the project is being pushed out a year.

CAPITAL PROJECT COST SHEET

PROJECT NAME: AMI Mesh Network Expansion and Meter Replacement **SCHEDULE:** CY2023 - 2027

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Headend				$108,500
						Infrastructure				$245,000
						Meters				$6,381,173
						Installation				$1,001,279
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
				$0						
						Police Details	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$7,735,952**

PROJECT TOTAL:	**$7,735,952**

2024 ESTIMATED SPENDING	**$1,290,200**
2025 ESTIMATED SPENDING	**$2,509,163**
2026 ESTIMATED SPENDING	**$2,457,798**
2027 ESTIMATED SPENDING	**$2,531,067**

CAPITAL PROJECT SUMMARY

Project Name: Power/Lab and Tool Equipment **Project #:** 115

Project Schedule: Annual **Project Manager:** n/a

Reason for Expenditure:
This annual project is for the purchase of test equipment and tools. These purchases include the replacement or upgrade of existing equipment and new tools and equipment that assist line workers and technicians in performing their jobs safer and more efficiently.

Brief Description/Scope:

The Line Operations group is looking to convert truck tools from DeWalt to Milwaukee brand equipment.

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Due to supply chain issues Grid Asset and Communications group plans to purchase a DC high-potential tester that will be utilized to test new and existing underground primary cables.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Power/Lab and Tool Equipment **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Convert Tools on Line Trucks	1			$30,000
			$0	$0	$0					
			$0	$0	$0					
			$0	$0	$0	DC High-Potential Tester (Carry Over CY23)	1	$80,000.00	1	$80,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$110,000**

PROJECT TOTAL:	**$30,000**
CARRY OVER CY 23:	**$80,000**

CAPITAL PROJECT SUMMARY

Project Name: Transformers and Capacitors Purchase (Stock and Projects) **Project #:** 116

Project Schedule: Annual **Project Manager:** Vaughan Bryan, Senior Distribution Engineer

Reason for Expenditure:
All transformers and capacitors for planned and ad hoc projects are purchased under this project.

Brief Description/Scope:
Transformer and capacitor bids will be prepared, and units purchased as outlined on the Cost Sheet.

These transformers and capacitors will be used for new construction, as well as reliability projects including Secondary and Main Replacement, 13.8kV Upgrade (Step-down Areas), Underground Facilities Upgrades, and Aged/Overloaded Transformer Replacement.

Barriers:
Supply chain issues have impacted both pricing and delivery time for most transformers.

Change in Scope of Work From Prior Year:

In 2024 additional transformers will be purchased in response to supply chain issues and to meet RMLD new minimum stock requirements.

Status Update:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Transformers and Capacitors Purchase (Stock and Projects)

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Three-phase pad-mount transformers for proposed commercial services and stock	average per transformer	$60,000	5	$300,000
			$0	$0	$0	Single-phase pad-mount transformers for proposed subdivisions and stock.	average per transformer	$20,000	40	$800,000
			$0	$0	$0	Three-phase pole-mount transformers for proposed commercial services and stock	average per transformer	$20,000	2	$40,000
			$0	$0	$0	Single-phase pole-mount transformers for proposed residential services and stock	average per transformer	$10,000	86	$860,000
						1,200 kVar capacitor bank	each	$15,000	1	$15,000
			$0	$0	$0	Carry Over from 2023 and 2022 - Supply Chain Delays				$4,341,334
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$6,356,334**

PROJECT TOTAL:	**$2,015,000**
CARRY OVER FROM CY 23 & 22	**$4,341,334**

CAPITAL PROJECT SUMMARY

Project Name: Meters and Primary Meters (for Stock) **Project #:** 117

Project Schedule: Annual **Project Manager:** Nick D'Alleva, General Foreman Grid Assets & Communications

Reason for Expenditure:
Purchase of meters and metering equipment for new construction, upgrades, and failures.

Brief Description/Scope:
Meter and Primary Meter bids will be prepared, and units purchased as outlined on the Cost Sheet.

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Meters and Primary Meters (for stock) **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0	Residential meters for stock (with disconnect option as available)	each	$350.00	140	$49,000
			$0	$0	$0	Secondary current transformers	each	$350.00	32.0	$11,200
			$0	$0	$0	CT Rated Meter Sockets	each	$450.00	20	$9,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$69,200**

PROJECT TOTAL: $69,200

CAPITAL PROJECT SUMMARY

Project Name: Station 4 CCVT Replacement **Project #:** 133

Project Schedule: 2022-2024 **Project Manager:** Nick D'Alleva, General Foreman, Grid Assets & Communications

Reason for Expenditure:
This project is to replace the existing Coupled - Capacitive Voltage Transformers (CCVT's) at Substation 4 in Reading. The existing CCVT's are more than 40 years old and need replacement.

Brief Description/Scope:
Purchase direct replacement CCVT's that will be installed on the existing structures at the Bulk Electric Supply (BES) - Station 4. The replacements consist of the two sets of three CCVT's on each supply line and seven individual CCVT's on each of 115Kv bus sections.

Barriers
The replacement of the supply line CCVT's is contingent upon the relay upgrade work proposed by National Grid and Eversource.

Change in Scope of Work From Prior Year: Increase (Decrease)
Not applicable.

Status Update From Prior Year:
The CCVT's to be install in 2024.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Station 4 CCVT Replacement **SCHEDULE:** CY2022 - CY2023

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,403	**$7,187**	**$920**					
CCTV Installation			$0	$0	$0					
			$0	$0	$0	Carry over from CY 2023				$130,735
Overhead Contractor 2-man crew - unit rate in weeks			**$8,000**	**N/A**	**$2,080**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$7,691**	**N/A**	**$440**					
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$112**	**$108**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$105**	**$102**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$99**	**$96**	**$21**					
Installation of equipment			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$69**	**$67**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$118**	**$115**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$130,735**

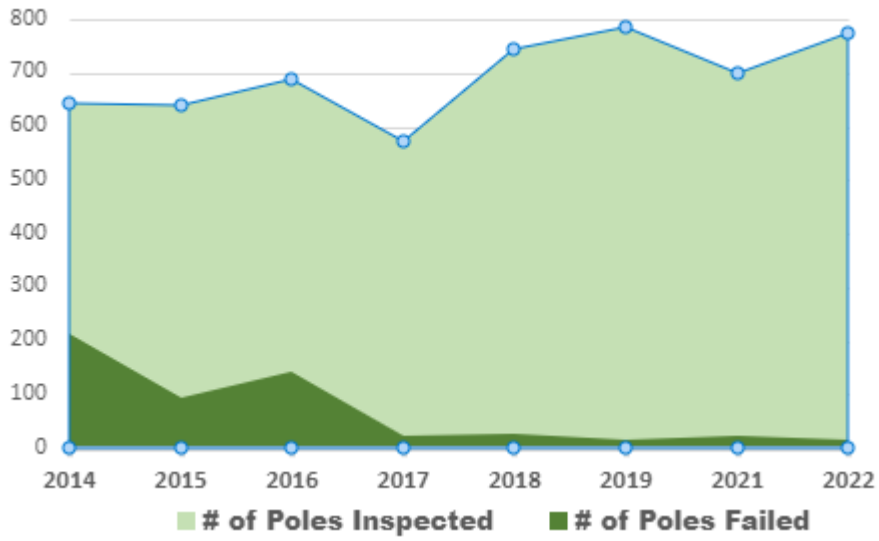
CARRY OVER FROM CY 23 $130,735

CAPITAL PROJECT SUMMARY

Project Name: Pole Replacement Program (R, NR) **Project #:** 175

Project Schedule: Annual **Project Manager:** Matthew Bernard, General Foreman Operations

Reason for Expenditure:
In 2014 RMLD initiated a Pole Inspection Program, which provides RMLD with verifiable data on pole condition. Ten percent of RMLD-owned poles (in Reading and North Reading) are inspected annually (in the fall) by an outside contractor using various technologies. Testing (through 2022) has identified 558 poles that were recommended for replacement. The chart below shows the steady decline in the number of poles identified as "failed".



Note: Testing was not performed in 2020.

Brief Description/Scope:
RMLD will replace poles that are identified as part of the Pole Inspection Program. In 2024 100 poles are budgeted to be replaced. This includes setting poles, transfers, and replacing secondary services as needed.

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Since the inception of the Pole Inspection Program RMLD's failure rate has gone from 33% (in 2014) down to only 2% in 2022.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Pole Replacement Program (R, NR) **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
			$0	$0	$0					$0
			$0	$0	$0					$0
			$0	$0	$0					$0
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
Set and transfer 100 poles.	40.0		$352,000		$91,520	Poles	each	$400.00	100.0	$40,000
			$0		$0	Miscellaneous hardware	per pole	$90.00	100.0	$9,000
Service upgrades as necessary	2.0		$17,600		$4,576	Connectors and wires (for service upgrades)	per service	$213.00	100.0	$21,300
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	400.0		$46,465	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Prepare PoleForemans and Digsafes	80.0		$8,721	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**	**20.0**	**$48,540**
TOTAL LABOR/VEHICLES			**$424,786**	**$0**	**$96,096**	**TOTAL MATERIALS/OTHER**				**$118,840**

PROJECT TOTAL: $639,722

CAPITAL PROJECT SUMMARY

Project Name: Force Account (MassDOT): Route 38 Bridge over MBTA, Wilmington

Project #: 201

Project Schedule: 2024

Project Manager: Peter Price, System Engineer

Reason for Expenditure:

The Massachusetts Department of Transportation to install bridge. This is a reimbursable force account project.

Brief Description/Scope:

Verizon to set nine (9) permanent poles and two (2) temporary poles, RMLD to transfer construction to new poles and make provisions to be able to de-energize the primary cables along the bridge during bridge installation. Once bridge is in place, Verizon to set two (2) permanent poles and the RMLD to transfer construction from the temporary poles to the permanent poles.

Barriers:

RMLD work is dependent upon MassDOT scheduling for this project.

Change in Scope of Work From Prior Year: Increase (Decrease)

Not applicable.

Status Update From Prior Year:

Not applicable.

CAPITAL PROJECT COST SHEET

Force Account: Mass DOT

PROJECT NAME: Route 38 Bridge over MBTA, Wilmington **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
					$75					
Line Construction	160.0	10.0	$71,419		$39,600	Poles, anchors, guys, insulators, crossarms, brackets, spacer cable, misc harware and connectors	1			$16,367
					$0	Temporary Pole 52 Main St (Twice)	1	$100.00	32 (x2)	$6,400
					$0	Temporary Pole 53 Main St (Twice)	1	$100.00	24 (x2)	$4,800
						Materials Strorage	1	$1,120.00		$1,120
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Engineering:	80.0	16.0	$7,353							$0
										$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
			$0	$0		**Police Details**	**weeks**	**$2,427**	**7.8**	**$19,008**
TOTAL LABOR/VEHICLES			**$78,772**		**$39,600**	**TOTAL MATERIALS/OTHER**				**$47,695**

PROJECT TOTAL: $166,067

CAPITAL PROJECT SUMMARY

Project Name: Force Account: Mass DOT
Lowell at Woburn Street, Wilmington

Project #: 202

Project Schedule: 2024

Project Manager: Peter Price,
System Engineer

Reason for Expenditure:

The Massachusetts Department of Transportation is widening and re-aligning the roads and intersection of Lowell and Woburn Streets in Wilmington. This is a reimbursable force account project.

Brief Description/Scope:

RMLD will relocate/replace 17 poles along Lowell Street and transfer construction. There are three (3) primary spacer cable circuits, two (2) aerial cable circuits, secondary cable, services, and streetlights. The aerial cables will require additional work to switch out and ground to accommodate the additional aerial cable that will need to be installed to get the cables over to the new poles.

Verizon will relocate/replace eight (8) poles on Woburn Street. Because of the distance of the relocations on Woburn Street, the RMLD will install new primary cable, secondary cable, and services on these poles. Streetlights will be transferred to the new poles.

Barriers:

RMLD work is dependent upon MassDOT scheduling for this project.

Change in Scope of Work From Prior Year: Increase (Decrease)

Not applicable.

Status Update From Prior Year:

This will be completed in 2024.

CAPITAL PROJECT COST SHEET

Force Account: Mass DOT

PROJECT NAME: Lowell at Woburn Street, Wilmington **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,403	$7,187	$920					
			$0	$0	$0					$0
			$0	$0	$0					$0
			$0	$0	$0	Carry Over from CY 23				$307,000
Overhead Contractor 2-man crew - unit rate in weeks			$8,000	N/A	$2,080					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			$7,691	N/A	$440					
Splice, piece out, reterminate aerial 4W7 and 4W23 aerial cables			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			$112	$108						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			$105	$102						
Pole loading analysis, construction plans, design, switching etc			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			$99	$96	$21					
Rotation for outages			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			$69	$67	$21					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			$118	$115						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$307,000**

PROJECT TOTAL: $307,000

CAPITAL PROJECT SUMMARY

Project Name: Force Account (MassDOT): Butters Row over MBTA, Wilmington **Project #:** 206

Project Schedule: 2024 **Project Manager:** Peter Price, System Engineer

Reason for Expenditure:

The Massachusetts Department of Transportation will replace Butters Row bridge and re-align the Cross Street/Butters Row/Main Street intersection. This is a reimbursable force account project.

Brief Description/Scope:

Verizon to set four (4) temporary poles. RMLD to build temp primary feed along temporary poles to 613 Main Street and remove construction over bridge. Once bridge is in place, Verizon to set ten (10) permanent poles, RMLD to set one (1) permanent pole & push-brace at pole 73 Main St., RMLD install new primary & secondary cables over the bridge and in the Main & Cross Street intersection. RMLD to re-install switch at P.29 Butters Row, transfer the permanent feed to 613 Main Street back to new pole line and remove construction from temp poles.

Barriers:

RMLD work is dependent upon MassDOT scheduling for this project.

Change in Scope of Work From Prior Year: Increase (Decrease)

Not applicable.

Status Update From Prior Year:

Not applicable.

CAPITAL PROJECT COST SHEET

Force Account: Mass DOT

PROJECT NAME: Butters Row over MBTA, Wilmington **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	**$7,402**	**$75**					
Line Construction	296.0	32.0	$131,305		$73,800	Removal of OH wires P.26 to P.28 Butters	1	$100.00	16	$1,600
						Install of primary on new poles 26 to 28	1	$100.00	24.0	$2,400
						install of sec. cable & street light poles 26 to 28	1	$100.00	24	$2,400
						Poles, anchors, guys, insulators, crossarms, brackets, spacer cable, misc harware and connectors				$41,207
						Materials Storage				$640
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Pole loading analysis, construction plans, design, switching etc	80.0	40.0	$9,898							$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
Rotation for outages			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**	**14.7**	**$35,640**
TOTAL LABOR/VEHICLES			**$141,203**	**$0**	**$73,800**	**TOTAL MATERIALS/OTHER**				**$83,887**

PROJECT TOTAL: $298,890

CAPITAL PROJECT SUMMARY

Project Name: Johnson Woods – Create Loop **Project #:** 315

Project Schedule: CY2024 **Project Manager:** Brian Smith, System Engineer

Reason for Expenditure: The existing subdivision currently only has one feed. The second feed that was planned is not feasible due to easement issues. This would look at another option to bring in a second feed.

Brief Description/Scope: 3 Phase OH line extension, including upgrading poles, on Enos Circle, Reading. Excavate and installation of conduit and Manhole to tie into Johnson Woods. Installation of 4/0UG cable in new ductbank.

Barriers: Easements, permission from town.

Change in Scope of Work From Prior Year: Increase (Decrease)
New Project

Status Update From Prior Year:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Johnson Woods Loop **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	**$7,402**	**$920**					
OH Crew - RP pole, install 3 phase extension	8.0		$60,999	$0	$7,360	8 - 45-1 poles, pole foam, hardware	each	$1,000.00	8	$8,000
			$0	$0	$0	336AL Primary	foot	$3.00	2700.0	$8,100
			$0	$0	$0	Messenger	foot	$2.00	900.0	$1,800
UG Crew - Install UG Primary	1.5		$11,437	$0	$1,380	4/0 UG Primary	foot	$12.00	900.0	$10,800
			$0	$0	$0	#2 CU ground	foot	$2.50	300	$750
			$0	$0	$0	Survey for easements	each	$4,500.00	1.0	$4,500
			$0	$0	$0	Excavation contractor for MH's, Ductbank and paving	each	$110,000.00	1	$110,000
			$0	$0	$0	1 Manhole/fram/cover	each	$3,500.00	1.0	$3,500
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
UG Crew - Install UG Primary	1.5		$16,320		$2,100					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	8.0		$929	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Design/Easements/supervision	80.0		$8,721	$0						$0
			$0	$0		Misc materials				$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
testing	4.0		$406	$0	$84					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management	4.0		$492	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$99,304**	**$0**	**$10,924**	**TOTAL MATERIALS/OTHER**				**$147,450**

PROJECT TOTAL: $257,678

CAPITAL PROJECT SUMMARY

Project Name: Overhead Upgrade Program (Primary, Secondary and Main Replacement) - All Towns **Project #:** 458

Project Schedule: Annual **Project Manager:** All Engineers

Reason for Expenditure:

This preventive maintenance program is intended to upgrade and improve system reliability and address aging infrastructure.

Brief Description/Scope:

This program identifies aging infrastructure and addresses a variety of work to include secondary upgrades and service drop upgrades as needed. Pole replacements, primary cable replacement and transformer upgrades will be done in conjunction with the Stepdown Area Conversions. The Faulkner Avenue area in Wilmington, the Edwards Avenue area in Lynnfield, the Whitehall Lane area in Reading and the Orchard Drive area in North Reading will be targeted for upgrade in 2024 in conjunction with the 13.8kV Upgrade (Step-down Areas) – Project 107. These projects were intended for CY23 but due to supply chain issues they will be re-targeted for CY24

Barriers:

Transformer supply chain issues may impact the completion of each area.

Change in Scope of Work from Prior Year:

Not applicable.

Status Update:

Areas/Sections completed in 2023 include:

- Sylvia Rd in North Reading
- Main St/Chester St/Leclair St in North Reading
- Llyod Rd in North Reading
- Libby Ave in Reading

CAPITAL PROJECT COST SHEET

PROJECT NAME: Overhead Upgrades (Primary, Secondary and Main Replacement) Program

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Frame up to 160 poles	6		$45,749	$0	$5,520	4/0-3/C secondary cable	foot	$3	5,000	$15,000
Install 15,000' of secondary cable	8		$60,999	$0	$7,360	Secondary hardware, brackets, connectors, etc.	per pole	$125	60	$7,500
Replace services	4		$30,499	$0	$3,680	120' of 1/0 - 3/C service wire for each service	per service	$175	50	$8,750
			$0	$0	$0					
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	40.0		$4,646	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Prepare construction documents, PoleForeman, outage set-up, GIS updates	100		$10,901	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**	**28.0**	**$67,956**
TOTAL LABOR/VEHICLES			**$152,795**	**$0**	**$16,560**	**TOTAL MATERIALS/OTHER**				**$99,206**

PROJECT TOTAL: $268,561

NOTE: Transformers for this project are purchased under Project 116.

CAPITAL PROJECT SUMMARY

Project Name: Aged/Overloaded Transformer Replacement Program **Project #:** 668

Project Schedule: Annual **Project Manager:** Vaughan Bryan, Senior Distribution Engineer

Reason for Expenditure:

To expedite the replacement of aged and over-loaded transformers on the system, the RMLD formalized the Aged/Overloaded Transformer Replacement Program as a separate capital project in 2020 with a target of 120-150 aged or overloaded transformers replaced annually. RMLD replaces aged transformers either as part of this program or one of the other reliability programs (i.e., URD Upgrades, Stepdown Upgrades, Secondary and Main Upgrades).

Transformers Replaced 2023
54 Total YTD (through July)

	Pad-mount	Pole-Mount
Single Phase	9	38
Three Phase	4	3
Total	**13**	**41**

Brief Description/Scope:

All transformers over 25 years old have been prioritized for replacement based on age, physical condition, and load. Additionally, the transformer load management program will further identify transformers that need replacement. Any transformer replacement that is not part of an area upgrade under one of the reliability programs, will be replaced under this project.

Barriers:

Supply chain issues have had an adverse impact on transformer inventory. Costs have increased dramatically, and delivery times have been delayed. Therefore, RMLD plans to slow this program for the near future and focus on replacing only those transformers that pose imminent danger of failure or leaking.

Change in Scope of Work From Prior Year:

RMLD has reduced the number of aged transformers targeted for replacement under this program to 77 (25 pad mount and 52 pole mount) for 2024. This number will be contingent on receipt of pending transformer orders and current inventory.

Status Update:

Year-to-date (through October) 54 aged transformers have been replaced as part of this program or one of the other reliability projects as noted above.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Aged/Overloaded Transformer Replacement Program **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Replace three-phase pad-mount transformers system wide.		3.5	$0	$25,908	$3,220	Miscellaneous underground connectors, elbows, hardware and pads.	per transformer	$1,400.00	26	$36,400
Replace single-phase pad-mount transformers system side.	3.8		$28,974	$0	$3,496					
Replace three-phase pole-mount transformers system wide.		1.75	$0	$12,954	$1,610	Miscellaneous overhead connectors, poles, and hardware	per transformer	$1,000.00	60	$60,000
Replace single-phase pole-mount transformers system wide.	9.6		$73,389		$8,855	Carry Over from CY 23				$343,056
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
Replace single-phase pole-mount transformers system wide.	9.6		$84,700		$22,022					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
Replace single-phase pad-mount transformers system side.	3.8		$41,344		$5,320					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	234.0	72.0	$27,182	$8,120						$0
Engineering: unit rate in hours			**$109**	**$106**						
Prepare construction documents, PoleForeman, 605As, outage setup, outages, GIS updates.	670.3	465.2	$73,071	$49,232						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
Test UG cable connections; commercial customers being off hours	76.3	103.2	$7,744	$10,169	$3,770					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
Test rotation of commercial application; commercial customers being off hours	159.0	104.0	$11,368	$7,218	$5,523					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management	43.0	48.0	$5,287	$5,730		**Police Details**	**weeks**	**$2,427**	**7.6**	**$18,445**
TOTAL LABOR/VEHICLES			**$353,059**	**$119,331**	**$53,816**	**TOTAL MATERIALS/OTHER**				**$114,845**

PROJECT TOTAL:	**$526,206**
CARRY OVER CY 23:	**$343,056**

CAPITAL PROJECT SUMMARY

Project Name: Gazebo Circle, Reading Underground Feed Relocation

Project #: 742

Project Schedule: 2022-2024

Project Manager: Brian Smith, System Engineer

Reason for Expenditure:
Improve reliability and access to the feed to Gazebo Circle, which is currently overhead through the woods off Summer Street. Current feed is not accessible by truck and requires an outage to the entire Gazebo Circle complex (approximately 215 customers) to complete any maintenance or trimming.

Brief Description/Scope:
Staff will survey and obtain easement for a new underground feed off Hopkins Street to Gazebo Circle. Crews will then install approximately three manholes and 1,200 feet of four-inch conduit, as well as approximately 750 circuit feet of new underground cable. Crews will then remove overhead feed from the woods off Summer Avenue.

Barriers:
Obtaining easements from the Town and Gazebo Circle condo association.

Change in Scope of Work From Prior Year: Increase (Decrease)
Not applicable.

Status Update From Prior Year:
Project started late in 2023 will be completed in 2024.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Gazebo Circle, Reading - Underground Feed Relocation **SCHEDULE:** CY2023-2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	$7,402	$920					
						Carry over from CY 23				$289,700
Overhead Contractor 2-man crew - unit rate in weeks			$8,800	N/A	$2,288					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			$10,880	N/A	$1,400					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			$116	$113						
			$0	$0						$0
Engineering: unit rate in hours			$109	$106						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			$101	$99	$21					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			$71	$69	$21					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			$123	$119						
			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$289,700**

CARRY OVER CY 23 $289,700

CAPITAL PROJECT SUMMARY

Project Name: Maple Meadows **Project #:** TBD

Project Schedule: CY24 – CY27 **Project Manager:** Greg Phipps, General Manager

Reason for Expenditure:
Support RMLD's strategy to build and operate in-territory generation and storage assets. This acquisition will help support RMLD's mission of providing reliable, low-cost, and non-carbon energy while supporting the load and demand growth due to electrification.

Brief Description/Scope:
Thirty-five (35) of the seventy-five (75) acres of the Maple Meadow property will support up to 10 megawatts of solar PV. In addition, this land will support 10-20 MW of battery storage and associated switch gear equipment.

Barriers:
Current obstacles include a clear and marketable title and clarification from Massachusetts Department of Environmental Protection regarding reshaping of mound of COMM-97 soils.

Change in Scope of Work From Prior Year: Increase (Decrease)
Not applicable.

Status Update From Prior Year:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Maple Meadows **SCHEDULE:** CY 2024 - 2027

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	$7,402	$920					
			$0	$0	$0	Land Purchase	Each	$3,000,000.00	1	$3,000,000
			$0	$0	$0					$0
			$0	$0	$0					$0
Overhead Contractor 2-man crew - unit rate in weeks			$8,800	N/A	$2,288					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			$10,880	N/A	$1,400					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			$116	$113						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			$109	$106						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			$101	$99	$21					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			$71	$69	$21					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			$123	$119						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$3,000,000**

PROJECT TOTAL: $3,000,000

CAPITAL PROJECT SUMMARY

Project Name: Route 125 Wilmington **Project #:** TBD

Project Schedule: CY24 – CY26 **Project Manager:** Greg Phipps, General Manager

Reason for Expenditure:
Purchase land to provide network and operational support for electrification and local industrial load center.

Brief Description/Scope:
Sixteen (16) acres of the forty-one (41) acres is suitable for new battery storage assets and new in-territory generation assets to enhance system reliability and reduce upward cost pressure. In addition, a portion of the land could be utilized for operations and equipment storage

Barriers:
Permitting and Zoning hurdles

Change in Scope of Work From Prior Year: Increase (Decrease)
Not applicable.

Status Update From Prior Year:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Route 125 Wilmington (Land) **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
			$7,625	$7,402	$920					
			$0	$0	$0	Land Purchase	Each	$6,000,000.00	1	$6,000,000
			$0	$0	$0					$0
			$0	$0	$0					$0
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Station Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
AMI Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Grid Assets & Communications Management: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$0**	**$0**	**$0**	**TOTAL MATERIALS/OTHER**				**$6,000,000**

PROJECT TOTAL: $6,000,000

CAPITAL PROJECT SUMMARY

Project Name: Service Connections (Residential and Commercial) – All Towns **Project #:** various

Project Schedule: Annual **Project Manager:** Matthew Bernard, General Foreman Operations

Reason for Expenditure:
Installation of new and upgraded services for both residential and commercial/industrial customers in the service territory.

Brief Description/Scope:
This item includes new service connections, upgrades, and service replacements for residential, commercial, and industrial customers. This represents the time and materials associated with the replacement of an existing or installation of a new overhead service drop and the connection of an underground service, etc. This does not include the time and materials associated with pole replacements/installations, transformer replacements/installations, primary or secondary cable replacements/ installations, etc. These aspects of a project are captured under Routine Construction.

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Service Connections (Residential and Commercial)

SCHEDULE: CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Install new and upgraded service connections at approximately 350 units.	12.0		$91,498	$0	$11,040	Secondary hardware, brackets, connectors, etc.	per service	$130.00	350	$45,500
			$0	$0	$0	120' of 1/0 - 3/C service wire for each service	per service	$180.00	350	$63,000
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
			$0		$0					$0
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews			$0	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
			$0	$0						$0
			$0	$0						$0
Senior Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
Meter Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Technical Services Manager: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**		**$0**
TOTAL LABOR/VEHICLES			**$91,498**	**$0**	**$11,040**	**TOTAL MATERIALS/OTHER**				**$108,500**

PROJECT TOTAL: $211,038

CAPITAL PROJECT SUMMARY

Project Name: Routine Construction **Project #:** various

Project Schedule: Annual **Project Manager:** Various

Reason for Expenditure:
Routine Construction covers unplanned routine activity as well as capital construction projects that develop during the year including, but not limited to items shown below.

Brief Description/Scope:
- Overhead and underground system upgrades
- Miscellaneous projects
- Pole damage
- Station upgrades
- Porcelain cutout replacements
- Street Light Connections – new equipment installation
- Pole setting/transfers
- Underground subdivisions (new construction)

Barriers:
None anticipated at this time.

Change in Scope of Work From Prior Year:
Not applicable.

Status Update:
Not applicable.

CAPITAL PROJECT COST SHEET

PROJECT NAME: Routine Construction **SCHEDULE:** CY2024

	LABOR					MATERIALS/OTHER				
	# of Units		Labor Total (unit rate x labor units)		Vehicle (labor units x vehicle rate)					
ITEM/TASK	Straight Time	OT	Straight Time	OT		DESCRIPTION	Unit	Unit Rate	# of Units	TOTAL
RMLD Line Crews 2-man crew - unit rate in weeks			**$7,625**	**$7,402**	**$920**					
Capital Construction	30.0	10.0	$228,745	$74,023	$36,800	Materials as necessary				$300,000
Street Light Installations	4.0		$30,499	$0	$3,680	Materials as necessary				$50,000
			$0	$0	$0					$0
Overhead Contractor 2-man crew - unit rate in weeks			**$8,800**	**N/A**	**$2,288**					
Pole Setting/Transfers	30		$264,000		$68,640	Materials as necessary				$95,000
			$0		$0					$0
Underground Contractor 2-man crew - unit rate in weeks			**$10,880**	**N/A**	**$1,400**					
Underground Construction	5		$54,400		$7,000	Materials as necessary				$125,000
			$0		$0					$0
			$0		$0					$0
Line Operations Supervision: unit rate in hours			**$116**	**$113**						
Supervision of Line crews	110.0		$12,778	$0						$0
Engineering: unit rate in hours			**$109**	**$106**						
Project Management	400.0		$43,605	$0						$0
			$0	$0						$0
Senior Tech: unit rate in hours			**$101**	**$99**	**$21**					
			$0	$0	$0					$0
			$0	$0	$0					$0
Meter Tech: unit rate in hours			**$71**	**$69**	**$21**					
			$0	$0	$0					$0
Technical Services Manager: unit rate in hours			**$123**	**$119**						
Supervision/Project Management			$0	$0		**Police Details**	**weeks**	**$2,427**	**52.0**	**$126,204**
TOTAL LABOR/VEHICLES			**$634,027**	**$74,023**	**$116,120**	**TOTAL MATERIALS/OTHER**				**$696,204**

PROJECT TOTAL: $1,520,373

2024 OPERATING BUDGET

Reading Municipal Light Department
Six Year Plan
CY23-CY28

	CY24	CY25	CY26	CY27	CY28	CY29
	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET
FORECASTED kWh SALES	**660,173,000**	**672,056,114**	**684,825,180**	**697,836,859**	**711,095,759**	**724,606,578**
OPERATING REVENUES						
SALES OF ELEC - BASE	$ 40,385,209	$ 45,765,057	$ 47,567,285	$ 49,925,195	$ 50,873,774	$ 51,840,376
SALES OF ELEC - FUEL	33,549,002	35,237,985	35,156,185	35,166,895	37,240,796	38,998,326
SALES OF ELEC - CAPACITY/TRANSMISSION	38,263,627	37,201,723	36,863,041	38,641,923	41,509,504	44,848,075
PURCHASED POWER ADJUSTMENT						
FORFEITED DISCOUNTS	1,211,556	1,372,952	1,427,019	1,497,756	1,526,213	1,555,211
EFFICIENCY ELECTRIFICATION	2,733,116	2,688,224	2,739,301	2,791,347	2,844,383	2,898,426
GAW REVENUE						
NYPA	(1,133,940)	(1,154,350)	(1,176,283)	(1,198,632)	(1,221,406)	(1,244,613)
TOTAL OPERATING REVENUES	115,008,570	121,111,591	122,576,547	126,824,485	132,773,264	138,895,801
	70,678,689	71,285,358	70,842,943	72,610,186	77,528,893	82,601,788
OPERATING EXPENSES						
PURCHASED POWER - FUEL	33,549,002	35,237,985	35,156,185	35,166,895	37,240,796	38,998,326
PURCHASED POWER - CAPACITY	16,100,402	13,974,812	12,091,449	12,184,905	12,732,525	13,499,421
PURCHASED POWER - TRANSMISSION	21,181,651	23,226,911	24,771,592	26,457,018	28,776,979	31,348,654
EFFICIENCY AND ELECTRIFICATION EXPENSE	3,450,478	3,512,587	3,579,326	3,647,333	3,716,632	3,787,248
OPERATING & MAINTENANCE EXPENSE	7,033,708	7,420,561	7,455,730	7,884,347	7,940,352	8,416,540
GENERAL & ADMINISTRATIVE EXPENSE	15,963,082	16,841,051	16,920,867	17,893,617	18,020,723	19,101,436
DEPRECIATION EXPENSE	5,798,925	7,510,866	8,091,516	8,575,326	9,005,166	9,326,106
TOWN PAYMENTS - 2% NET PLANT	2,023,689	2,668,884	2,921,009	3,090,961	3,215,256	3,258,355
TOTAL OPERATING EXPENSES	105,100,935	110,393,658	110,987,673	114,900,401	120,648,429	127,736,086
OPERATING INCOME	9,907,635	10,717,933	11,588,874	11,924,083	12,124,834	11,159,715
NON-OPERATING REVENUES (EXPENSES)						
INTEREST INCOME	300,000	300,000	300,000	300,000	300,000	300,000
OTHER INCOME	850,000	850,000	850,000	850,000	850,000	850,000
VOLUNTARY PAYMENT TO READING	(2,528,587)	(2,571,781)	(2,582,338)	(2,605,362)	(2,654,011)	(2,704,437)
LOSS ON DISPOSAL OF ASSETS	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
CUSTOMER DEPOSIT INTEREST EXP	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
TOTAL NON-OPERATING REVENUES (EXPENSES)	(1,398,587)	(1,441,781)	(1,452,338)	(1,475,362)	(1,524,011)	(1,574,437)
NET INCOME	$ 8,509,048	$ 9,276,152	$ 10,136,536	$ 10,448,721	$ 10,600,823	$ 9,585,278
Rate of Return	**8.02%**	**7.88%**	**8.01%**	**7.91%**	**7.93%**	**7.40%**

Town of Reading, Massachusetts
Municipal Light Department
Statement of Budgeted and Actual Revenues and Expenses

	CY22 BUDGET	CY22 ACTUAL	CY22 BUDGET/ACTUAL % CHANGE	CY23 BUDGET	CY23 8 MOS ACTUAL 4 MOS BUDGET	CY23 BUDGET/ACTUAL % CHANGE	CY24 BUDGET
Operating Revenues							
Base Revenue	$30,099,569	$29,967,183	(0.44%)	$ 32,116,223	$ 36,613,233	14.00%	$ 40,385,209
Fuel Revenue	26,522,356	36,961,878	39.36%	41,106,033	31,898,998	(22.40%)	33,549,002
Purchased Power Capacity & Transmission	35,435,495	31,737,380	(10.44%)	34,515,988	33,467,796	(3.04%)	38,263,627
Forfeited Discounts	902,987	811,391	(10.14%)	963,487	896,372	(6.97%)	1,211,556
Energy Conservation Revenue	1,991,651	1,943,029	(2.44%)	2,001,000	2,594,000	29.64%	2,733,116
NYPA Credit	(1,057,302)	(1,203,582)	13.84%	(1,162,000)	(1,237,655)	6.51%	(1,133,940)
Total Operating Revenues	93,894,756	100,217,279	6.73%	109,540,730	104,232,744	(4.85%)	115,008,569
Expenses							
Power Expenses							
555 Purchased Power - Fuel	25,465,054	33,700,655	32.34%	39,944,033	29,185,331	(26.93%)	33,549,002
555 Purchased Power - Capacity	16,978,311	14,489,338	(14.66%)	15,469,599	15,403,562	(0.43%)	16,100,402
565 Purchased Power - Transmission	18,457,184	16,416,626	(11.06%)	19,226,389	15,392,768	(19.94%)	21,181,651
Total Purchased Power	60,900,549	64,606,619	6.09%	74,640,021	59,981,660	(19.64%)	70,831,054
Operating and Maintenance Expenses							
580 Supervision and Engineering	1,153,589	1,176,831	2.01%	978,439	1,264,438	29.23%	945,126
581 Station/Control Room Operators	538,942	549,799	2.01%	508,095	615,049	21.05%	526,168
582 Station Technicians	674,564	427,181	(36.67%)	1,337,458	396,030	(70.39%)	1,310,897
583 Line General Labor	1,124,845	788,574	(29.89%)	598,755	927,409	54.89%	819,809
585 Street Lighting	1,000	487	-	2,000	326,717	-	-
586 Meter General	197,788	222,841	12.67%	270,245	213,475	(21.01%)	267,117
588 Materials Management	471,160	447,341	(5.06%)	588,589	485,295	(17.55%)	611,890
593 Maintenance of Lines - Overhead	551,225	433,823	(21.30%)	568,743	423,287	(25.58%)	732,300
593 Maintenance of Lines - Tree Trimming	907,776	1,008,002	11.04%	1,589,788	1,039,126	(34.64%)	829,901
594 Maintenance of Lines - Underground	88,139	259,023	193.88%	194,974	200,778	2.98%	185,192
595 Maintenance of Lines - Transformers	373,160	231,738	(37.90%)	355,040	210,193	(40.80%)	351,742
598 Line General Leave Time Labor	477,783	607,893	27.23%	215,963	655,912	203.71%	453,565
Total Operating and Maintenance Expenses	6,559,972	6,153,534	(6.20%)	7,208,088	6,757,709	(6.25%)	7,033,708
General & Administrative Expenses							
903 Customer Collection	1,176,246	1,177,530	0.11%	1,299,608	1,314,102	1.12%	1,466,599
904 Uncollectible Accounts	105,000	10,233	(90.25%)	75,000	25,000	(66.67%)	75,000
916 Integrated Resources	987,280	801,042	(18.86%)	1,071,429	740,435	(30.89%)	996,716
916 Efficiency and Electrification Expense	2,441,101	1,647,863	(32.50%)	3,064,243	2,005,168	(34.56%)	3,450,478
920 Administrative and General Salaries	2,373,838	2,065,363	(12.99%)	3,224,132	2,195,568	(31.90%)	3,416,126
921 Office Supplies	20,000	16,830	(15.85%)	20,000	20,782	3.91%	20,000
923 Outside Services - Legal	455,918	538,038	18.01%	785,800	524,021	(33.31%)	600,800
923 Outside Services - Contract	735,700	549,564	(25.30%)	740,100	543,487	(26.57%)	642,400
923 Outside Services - Education	329,826	75,291	(77.17%)	329,150	141,193	(57.10%)	338,450
924 Property Insurance	556,500	414,521	(25.51%)	541,550	447,255	(17.41%)	595,705
925 Injuries and Damages	25,600	21,157	(17.36%)	25,600	97,136	279.44%	25,600
926 Employee Pensions and Benefits	3,821,325	1,750,922	(54.18%)	4,568,626	2,034,296	(55.47%)	5,116,479
930 Miscellaneous General Expense	580,127	530,756	(8.51%)	601,400	466,451	(22.44%)	555,522
931 Rent Expense	212,000	212,555	0.26%	212,000	211,036	(0.45%)	233,200
933 Vehicle Expense	379,000	310,298	(18.13%)	389,000	339,974	(12.60%)	389,000
933 Vehicle Expense - Capital	(276,428)	(365,504)	32.22%	(510,268)	(364,762)	(28.52%)	(510,268)
935 Maintenance of General Plant - Technology	713,120	566,879	(20.51%)	668,767	686,925	2.72%	700,000
935 Maintenance of Building & Garage	929,718	1,002,949	7.88%	991,558	870,460	(12.21%)	1,301,753
Total General & Administrative Expenses	15,565,872	11,326,286	(27.24%)	18,097,695	12,298,527	(32.04%)	19,413,560
Other Operating Expenses							
403 Depreciation	5,108,876	5,056,984	(1.02%)	5,445,000	5,140,404	(5.59%)	5,798,925
408 Voluntary Payments to Towns	1,707,839	1,720,644	0.75%	1,772,440	1,773,631	0.07%	2,023,689
Total Other Expenses	6,816,715	6,777,628	(0.57%)	7,217,440	6,914,034	(4.20%)	7,822,614
Operating Income	4,051,648	11,353,212	180.21%	2,377,487	18,280,813	668.91%	9,907,634
Non-operating Revenues (Expenses)							
415 Contributions in Aid of Construction	50,000	50,000	0.00%	50,000	-	0.00%	50,000
419 Interest Income	300,000	300,000	0.00%	300,000	-	(100.00%)	300,000
419 Other Income	710,000	710,000	0.00%	710,000	-	(100.00%)	710,000
421 Intergovernmental Grants	90,000	90,000	0.00%	90,000	-	0.00%	90,000
426 Return on Investment Payment to Reading	(2,528,587)	(2,503,974)	(0.97%)	(2,548,972)	(2,503,974)	(1.77%)	(2,528,587)
426 Loss on Disposal	(100,000)	(50,596)	(49.40%)	(10,000)	(50,596)	405.96%	(10,000)
431 Interest Expense	(40,000)	(1,727)	(95.68%)	(10,000)	(1,727)	(82.73%)	(10,000)
Total Non-operating Revenues (Expenses)	(1,518,587)	(1,406,297)	(7.39%)	(1,418,972)	(2,556,297)	80.15%	(1,398,587)
Net Income	$ 2,533,061	$ 9,946,916	292.68%	$ 958,515	$ 15,724,516	1540.51%	$ 8,509,047

Town of Reading, Massachusetts
Municipal Light Department
Statement of Budgeted Revenues and Expenses

	CY24 BUDGET	CY23 BUDGET	Change in Budget %
Operating Revenues			
Base Revenue	$ 40,385,209	$ 32,116,223	25.75%
Fuel Revenue	33,549,002	41,106,033	(18.38%)
Purchased Power Capacity/Transmission	38,263,627	34,515,988	10.86%
Forfeited Discounts	1,211,556	963,487	25.75%
Energy Conservation Revenue	2,733,116	2,001,000	36.59%
NYPA	(1,133,940)	(1,162,000)	(2.41%)
Total Operating Revenues	115,008,570	109,540,730	4.99%
Expenses			
Power Expenses			
555 Purchased Power - Fuel	33,549,002	39,944,033	(16.01%)
555 Purchased Power - Capacity	16,100,402	15,469,599	4.08%
565 Purchased Power - Transmission	21,181,651	19,226,389	10.17%
Total Purchased Power	70,831,054	74,640,021	(5.10%)
Operating and Maintenance Expenses			
580 Supervision and Engineering	945,126	978,439	(3.40%)
581 Station/Control Room Operators	526,168	508,095	3.56%
582 Station Tech	1,310,897	1,337,458	(1.99%)
583 Line General Labor	813,453	598,755	35.86%
585 Street Lighting	6,355	2,000	217.77%
586 Meter General	267,117	270,245	(1.16%)
588 Materials Management	611,890	588,589	3.96%
593 Maintenance of Lines - Overhead	732,300	568,743	28.76%
593 Maintenance of Lines - Tree Trimming	829,901	1,589,788	(47.80%)
594 Maintenance of Lines - Underground	185,192	194,974	(5.02%)
595 Maintenance of Lines - Transformers	351,742	355,040	(0.93%)
598 Line General Leave Time Labor	453,565	215,963	110.02%
Total Operating and Maintenance Expenses	7,033,708	7,208,088	(2.42%)
General & Administrative Expenses			
903 Customer Collection	1,466,599	1,299,608	12.85%
904 Uncollectible Accounts	75,000	75,000	0.00%
916 Integrated Resources	996,716	1,071,429	(6.97%)
916 Efficiency and Electrification Expense	3,450,478	3,064,243	12.60%
920 Administrative and General Salaries	3,416,126	3,224,132	5.95%
921 Office Supplies	20,000	20,000	0.00%
923 Outside Services-Legal	600,800	785,800	(23.54%)
923 Outside Services-Contract	642,400	740,100	(13.20%)
923 Outside Services-Education	338,450	329,150	2.83%
924 Property Insurance	595,705	541,550	10.00%
925 Injuries and Damages	25,600	25,600	0.00%
926 Employee Pensions and Benefits	5,116,479	4,568,626	11.99%
930 Miscellaneous General Expense	555,522	601,400	(7.63%)
931 Rent Expense	233,200	212,000	10.00%
933 Vehicle Expense	389,000	389,000	0.00%
933 Vehicle Expense - Capital	(510,268)	(510,268)	0.00%
935 Maintenance of General Plant - Technology	700,000	668,767	4.67%
935 Maintenance of Building & Garage	1,301,753	991,558	0.00%
Total General & Administrative Expenses	19,413,560	18,097,695	7.27%
Other Operating Expenses			
403 Depreciation	5,798,925	5,445,000	6.50%
408 Voluntary Payments to Towns	2,023,689	1,772,440	14.18%
Total Other Expenses	7,822,614	7,217,440	8.38%
Operating Income	9,907,635	2,377,487	316.73%
Non-operating Revenues (Expenses)			
415 Contributions in Aid of Construction	50,000	50,000	0.00%
419 Interest Income	300,000	300,000	0.00%
419 Other Income	710,000	710,000	0.00%
421 Intergovernmental Grants	90,000	90,000	0.00%
426 Return on Investment Payment to Reading	(2,528,587)	(2,548,972)	(0.80%)
426 Loss on Disposal	(10,000)	(10,000)	0.00%
431 Interest Expense	(10,000)	(10,000)	0.00%
Total Non-operating Revenues (Expenses)	(1,398,587)	(1,418,972)	(1.44%)
Net Income	$ 8,509,048	$ 958,515	787.73%

Reading Municipal Light Department
Operating Budget Supplemental Information
Budgeted and Actual Fixed and Semi-Variable Costs

	CY22 BUDGET	CY22 ACTUAL	CY23 BUDGET	CY23 8 MOS ACTUAL 4 MOS BUDGET	CY24 BUDGET	CY24 % OF BUDGET
FIXED COSTS						
Purchased Power - Fuel	$ 25,465,054	$ 33,700,655	$ 39,944,033	$ 29,185,331	$ 33,549,002	31.2%
Purchased Power - Capacity	$ 16,978,311	$ 14,489,338	$ 15,289,599	$ 15,403,562	$ 16,100,402	15.0%
Purchased Power - Transmission	$ 18,457,184	$ 16,416,626	$ 19,406,389	$ 15,392,768	$ 21,181,651	19.7%
						65.8%
Depreciation Expense	$ 5,108,876	$ 5,056,984	$ 5,445,000	$ 5,140,404	$ 5,798,925	5.4%
Return on Investment Payment to Reading	$ 2,528,587	$ 2,503,974	$ 2,548,972	$ 2,527,442	$ 2,528,587	2.3%
Town Payments - 2% of Net Plant	$ 1,707,839	$ 1,720,644	$ 1,772,440	$ 1,773,631	$ 2,023,689	1.9%
Loss on Disposal of Assets	$ 100,000	$ -	$ 10,000		$ 10,000	0.0%
TOTAL FIXED COSTS	70,345,851	73,888,221	84,416,433	69,423,137	81,192,255	**75.4%**
SEMI-VARIABLE COSTS						
Labor Expense	9,405,351	-	10,928,640	-	11,831,926	11.0%
Labor - Capital	(1,483,143)	6,896,433	(2,692,323)	7,573,055	(2,692,323)	-2.5%
						8.50%
Overtime Expense	1,036,780	-	1,063,560	-	1,226,560	1.1%
Overtime - Capital	(184,731)	1,021,578	(263,974)	(472,804)	(263,974)	-0.2%
						0.90%
Employee Benefits/Pension	4,782,020	1,730,569	5,649,100	7,774	6,305,000	5.9%
Employee Benefits/Pension - Capital	(960,695)	-	(1,080,474)	-	(1,188,521)	-1.1%
						4.80%
Other Operating and Maintenance Expense	2,575,148	2,630,137	3,400,525	1,990,877	3,468,334	3.2%
Efficiency and Electrification Expense	2,441,101	1,647,863	3,064,243	2,005,168	3,450,478	3.2%
Tree Trimming Services	907,776	1,008,002	1,589,788	1,039,126	829,901	0.8%
Contract/Consulting Services	735,700	549,564	740,100	543,487	642,400	0.6%
Software/Hardware Maintenance	713,120	566,879	668,767	686,925	700,000	0.7%
Property Insurance	556,500	414,521	541,550	447,255	595,705	0.6%
Legal Expense	455,918	538,038	785,800	524,021	600,800	0.6%
Vehicle Expense	379,000	310,298	389,000	339,974	389,000	0.4%
Vehicle Expense - Capital	(276,428)	(365,504)	(510,268)	(364,762)	(510,268)	-0.5%
Transformer Maintenance (Hazardous Material)	360,000	229,330	350,000	207,785	350,000	0.3%
Training & Tuition Reimbursement Expense	329,826	75,291	329,150	141,193	338,450	0.3%
Rent Expense	212,000	212,367	212,000	211,036	233,200	0.2%
Bad Debt Expense	105,000	10,233	75,000	233	75,000	0.1%
Injuries & Damages	25,600	21,157	25,600	97,136	25,600	0.0%
RMLB/CAB	30,000	18,557	30,000	14,380	30,000	0.0%
Office Supplies	20,000	16,830	20,000	20,782	20,000	0.0%
TOTAL SEMI-VARIABLE COSTS	22,165,844	17,532,143	25,315,783	15,012,641	26,457,267	**24.6%**
TOTAL	$ 92,511,695	$ 91,420,364	$ 109,732,215	$ 84,435,777	$ 107,649,522	**100.0%**

2024 POWER SUPPLY

Bulk Power Cost Projections
Reading Municipal Light Department
PRELIMINARY
Total 2024 (Jan-Dec)

FCA14/15
System Peak Demand (KW)
System Energy Requirements (MWH) 675,054.13 9%

		FIXED COSTS			ENERGY VARIABLE COSTS			TRANS. COSTS	TOTAL COSTS	
		Budget		CF		Budget		Budget	Budget	
RESOURCES	(KW)	($/KW-MO)	($)	(%)	MWH	($/MWH)	($)	($)	($)	($/MWH)
NYPA	4,102	4.05	$ 199,120.68		27,722.76	$ 4.92	$ 136,396.00	$ 762,484.42	$ 1,098,001.10	39.61
Millstone Mix 1	2,911	21.47	$ 749,755.63		25,115.97	$ 6.30	$ 158,230.62	$ 32,446.78	$ 940,433.03	37.44
Millstone Project 3	2,075	21.37	$ 531,882.36		17,900.59	$ 6.30	$ 112,773.81	$ 23,122.01	$ 667,778.18	37.30
Seabrook Mix 1	300	16.66	$ 59,873.18		2,373.19	$ 4.79	$ 11,370.06	$ 183.69	$ 71,426.93	30.10
Seabrook Project 4	6,801	16.39	$ 1,337,968.62		53,889.40	$ 4.79	$ 258,191.41	$ 4,179.64	$ 1,600,339.67	29.70
Seabrook Project 5	839	16.84	$ 169,490.85		6,647.03	$ 4.79	$ 31,846.70	$ 515.43	$ 201,852.98	30.37
SUBTOTAL - BASE	13,304		$ 3,048,091.31		133,648.93		$ 708,808.60	$ 822,931.99	$ 4,579,831.90	34.27
ISO FCM Costs			$ 5,357,667.46		-	$ -	$ -	$ -	$ 5,357,667.46	0.00
FCM Payments from LP			$ (280,407.89)		-	$ -	$ -	$ -	$ (280,407.89)	0.00
			$ -		-	$ -	$ -	$ -	$ -	
Saddleback Wind			$ -		14,423.84	$ 95.00	$ 1,370,265.24	$ -	$ 1,370,265.24	95.00
Indian River Hydro			$ -		2,700.71	$ 131.55	$ 355,287.71	$ -	$ 355,287.71	131.55
Pepperell Hydro			$ -		6,912.47	$ 133.17	$ 920,546.21	$ -	$ 920,546.21	133.17
Turners Falls Hydro			$ -		1,457.82	$ 133.26	$ 194,270.09	$ -	$ 194,270.09	133.26
Woronoco Hydro			$ -		6,974.53	$ 133.21	$ 929,068.41	$ -	$ 929,068.41	133.21
Collins Hydro			$ -		4,604.03	$ 94.30	$ 434,151.56	$ -	$ 434,151.56	94.30
Pioneer Hydro			$ -		6,883.11	$ 94.24	$ 648,674.44	$ -	$ 648,674.44	94.24
Silver St Hydro			$ -		1,130.00	$ 68.00	$ 76,840.13	$ -	$ 76,840.13	68.00
Wyre Wind Hydro			$ -		11,721.10	$ 66.34	$ 777,541.92	$ -	$ 777,541.92	66.34
Jericho Wind			$ -		7,189.83	$ 110.00	$ 790,881.08	$ -	$ 790,881.08	110.00
NextEra			$ -		38,492.70	$ 32.36	$ 1,245,763.44	$ -	$ 1,245,763.44	32.36
Shepaug			$ -		18,332.00	$ 81.80	$ 1,499,601.68	$ -	$ 1,499,601.68	81.80
Stevenson			$ -		9,212.00	$ 81.64	$ 752,092.91	$ -	$ 752,092.91	81.64
Solar - Altus			$ -		1,521.01	$ 80.04	$ 121,746.49	$ -	$ 121,746.49	80.04
Solar - Marina			$ -		2,792.75	$ 78.97	$ 220,553.99	$ -	$ 220,553.99	78.97
Solar - Kearsarge			$ -		2,307.22	$ 75.00	$ 173,041.42	$ -	$ 173,041.42	75.00
Quinebaug Hydro			$ -		7,259.97	$ 80.00	$ 580,797.88	$ -	$ 580,797.88	80.00
RoxWind			$ -		25,703.05	$ 87.00	$ 2,236,165.47	$ -	$ 2,236,165.47	87.00
Gravel Pit Solar III			$ -		6,671.44	$ 51.95	$ 346,581.18	$ -	$ 346,581.18	51.95
Cabot/Turners			$ -		34,308.26	$ 46.15	$ 1,583,356.58	$ -	$ 1,583,356.58	46.15
Dahowa			$ -		35,880.81	$ 79.00	$ 2,834,584.37	$ -	$ 2,834,584.37	79.00
NextEra (LFG)			$ -		8,784.00	$ 74.45	$ 653,968.80	$ -	$ 653,968.80	74.45
NextEra (Seabrook)			$ -		128,235.15	$ 47.81	$ 6,130,799.34	$ -	$ 6,130,799.34	47.81
DG NH Seabrook #3			$ -		-	$ -	$ -	$ -	$ -	0.00
DG NH Seabrook #4			$ -		-	$ -	$ -	$ -	$ -	0.00
NextEra (Seabrook-Flat)			$ -		37,519.39	$ 50.66	$ 1,900,732.40	$ -	$ 1,900,732.40	50.66
Broadleaf Solar			$ -		-	$ -	$ -	$ -	$ -	0.00
Gravel Pit Solar V			$ -		-	$ -	$ -	$ -	$ -	0.00
H.Q. Energy Services			$ -		49,392.43	$ 67.18	$ 3,318,183.58	$ -	$ 3,318,183.58	67.18
Granite Wind			$ -		-	$ -	$ -	$ -	$ -	0.00
Battery Storage			$ 274,464.00		-	$ -	$ -	$ -	$ 274,464.00	0.00
Coop / Resale			$ 36,000.00		-	$ -	$ -	$ -	$ 36,000.00	0.00
DG Unit			$ 62,233.66		-	$ -	$ -	$ -	$ 62,233.66	0.00
Watson	11,400		$ 1,368,566.12		-	$ -	$ -	$ -	$ 1,368,566.12	0.00
StonyBrook Inter	56,374		$ 2,240,244.70		13,030.90	$ 41.54	$ 541,331.14	$ 136,342.15	$ 2,917,917.99	223.92
SUBTOTAL - INTERMEDIATE	67,774		$ 9,058,768.05		483,440.55		$ 30,636,827.47	$ 136,342.15	$ 39,831,937.67	82.39
StonyBrook Peaking	33,705		$ 827,341.82		343.72	$ 273.51	$ 94,010.60	$ 78,995.15	$ 1,000,347.57	2,910.35
SUBTOTAL - PEAKING	33,705		$ 827,341.82		343.72		$ 94,010.60	$ 78,995.15	$ 1,000,347.57	2,910.35
REC Potential							**$ (2,725,471.37)**	**$ -**	**$ (2,725,471.37)**	0.00
ISO Energy Net Interchange			$ -		57,620.92	$ 58.30	$ 3,359,419.78	$ -	$ 3,359,419.78	58.30
Eversource Transmission			$ -		-	$ -	$ -	$ 10,080.00	$ 10,080.00	0.01
ENE All Req/Short Supply			$ 411,693.78		-	$ -	$ -	$ -	$ 411,693.78	0.61
ISO Ancillary/Schedule Charges			$ 2,559,641.96		-	$ -	$ -	$ -	$ 2,559,641.96	3.79
ISO Annual Fee			$ -		-	$ -	$ -	$ -	$ -	0.00
PRD Transmission			$ -		-	$ -	$ -	$ 113,400.00	$ 113,400.00	0.17
ISO RNS Charges			$ -		-	$ -	$ -	$ 18,938,321.35	$ 18,938,321.35	28.05
HQ Phase I-VEC			$ -		-	$ -	$ -	$ 4,410.00	$ 4,410.00	0.01
HQ Phase I-NEE			$ -		-	$ -	$ -	$ 8,064.00	$ 8,064.00	0.01
HQ Phase II			$ -		-	$ -	$ -	$ 1,890.00	$ 1,890.00	0.00
HQ Use Right Sale			$ (164,071.87)		-	$ -	$ -	$ (749,720.28)	$ (913,792.15)	-1.35
SUBTOTAL - OTHER CHARGES	0		$ 2,807,263.87		-		$ -	$ 18,326,445.07	$ 21,133,708.94	31.31
TOTAL	101,479		$ 15,741,465.06		675,054.13	$ 47.51	$ 32,073,595.08	$ 19,364,714.35	$ 67,179,774.49	99.52
									$ -	

Description of RMLD's Power Supply Resources for 2024

New York Power Authority (NYPA)

RMLD receives inexpensive hydroelectric power from NYPA at its generating stations in Niagara and St. Lawrence NY. RMLD receives capacity and energy from this contract. The Massachusetts Department of Public Utilities (DPU) has appointed MMWEC as the administrator of this contract. The current contract expires in 2025. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

Seabrook Station

Seabrook Station is a 1,244-megawatt nuclear generating plant located in Seabrook, New Hampshire. An operating license for Seabrook was issued in 1986, but the plant did not begin commercial operation until 1990. The principal owner and operator of Seabrook Station is NextEra Energy Resources LLC, a subsidiary of Florida based FPL Group, Inc. NextEra owns 88.2% of Seabrook Station. The other owners are MMWEC (11.59%) and two Massachusetts municipal utilities, the Taunton Municipal Lighting Plant (0.13%) and Hudson Light & Power Department (0.08%).

On March 12, 2019, NextEra received an extension of its Seabrook operating license from the current license expiration of 2030 out to March 15, 2050. RMLD signed 3 different projects to finance Seabrook; Mix 1, Project 4, and Project 5. The debt service associated with these projects will be paid-off in 2014, 2017 and 2018, respectively. RMLD has a Life of Unit (LOU) entitlement for 0.635% or approximately 8 MWs of the unit. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

Quick Facts – Seabrook Station

Location	Seabrook, New Hampshire
On-Line Date	1990
Fuel	Nuclear – Pressurized Water Reactor
Principal Owner/Operator	NextEra Energy Resources, LLC
Total Capacity	1,244 MWs

Millstone Unit 3

Millstone Unit 3 is a 1,237-megawatt nuclear generating plant located in Waterford, Connecticut. Millstone Unit 3, which began operation in 1986, is the newest and largest

of the Millstone Station's three nuclear units, one of which is retired from service. The principal owner and operator of Millstone Station is Dominion Nuclear Connecticut, Inc., a subsidiary of Virginia-based Dominion Resources, Inc. Dominion Connecticut owns 93.4% of Millstone Unit 3.

The Nuclear Regulatory Commission (NRC) on November 28, 2005, approved Dominion Nuclear Connecticut's request for a 20-year operating license extension for Millstone's Unit 3 reactor. The license now expires in November 2045. RMLD signed two different projects to finance Millstone #3, Mix 1 and Project 3. The debt service associated with these projects has been paid off as of 2018. RMLD has a LOU agreement for 0.404% of the units which equates to approximately 4.6 MWs. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

Quick Facts – Millstone Station

Location	Waterford, Connecticut
On-Line Date	1986
Fuel	Nuclear – Pressurized Water Reactor
Principal Owner/Operator	Dominion Nuclear Connecticut, Inc.
Total Capacity	1,237 MWs

Hydro-Quebec Interconnection

The Hydro-Quebec Interconnection Phase 1 is an approximate 2,000 MW, DC electric transmission line connecting central New England with the Canadian utility Hydro Quebec. Construction of the U.S. portion of the interconnection, which stretches from Groton/Ayer, in Massachusetts to the Canadian border in northern Vermont, was a joint effort of many New England electric utilities. RMLD has an entitlement of approximately 0.47% of the capacity of the facility from this contract. Currently, RMLD sells it share of the facility's capacity.

The Hydro-Quebec Interconnection Phase 2 is a 450 kV DC electric transmission line connecting the Canadian utility, Hydro Quebec's hydro facilities at La Grande in James Bay with Sandy Pond in Massachusetts. This was a joint effort between Hydro Quebec and a number of New England electric utilities. RMLD receives approximately 0.48% of the capacity of the facility from this contract. Beginning in 2024 RMLD will enter into an agreement with Hydro-Quebec to sell the transmission rights in exchange for a firm supply of 49,000 MWh per year for five years.

Eagle Creek Energy Holdings - Hydro

In March 2011 RMLD signed purchase power agreements with Swift River Hydro, LLC for the output of four hydro systems located in Massachusetts that are effective from February 1, 2011, through January 31, 2026. Swift River Trading Company is the lead market participant for and represents these hydroelectric generators with a total nameplate capacity of approximately 7 MWs and average annual generation of 25,000 megawatt-hours per year.

These facilities include the Woronoco Hydro facility in Russell, MA, Pepperell Hydro in Pepperell, MA; Indian River Power Supply in Russell, MA; and Turners Falls Hydro in Turners Falls, MA. Each of these facilities is owned by a special purpose entity, e.g., the Woronoco facility is owned by Woronoco Hydro, LLC. In 2016, Swift River Trading Company assigned the projects to Eagle Creek Energy Holdings. The four facilities are now managed by the Eagle Creek Energy Holdings as the lead market participant for each of the facilities. RMLD is the only buyer. These are non-carbon generating resources and RMLD is entitled to the associated output certificates for its share of the facilities.

- **Pepperell Hydro:** 15-year term beginning on February 1, 2011 and ending January 31, 2026. RMLD is purchasing all of the products produced by or attributable to the facility. The facility has a nameplate capacity of 1.9 MWs. The products include, but are not limited to, Energy, Installed Capacity, Ancillary Services, Renewable Energy Certificates, and Environmental Attributes (to the extent not included in the RECs).

- **Woronoco Hydro:** 15-year term beginning on February 1, 2011 and ending January 31, 2026. RMLD is purchasing all the products produced by or attributable to the facility. The facility has a nameplate capacity of 2.7 MWs. The products include, but are not limited to, Energy, Installed Capacity, Ancillary Services, Renewable Energy Certificates, and Environmental Attributes (to the extent not included in the RECs).

- **Turners Falls Hydro:** 15-year term beginning on February 1, 2011 and ending January 31, 2026. RMLD is purchasing all the products produced by or attributable to the facility. The facility has a nameplate capacity of 1 MW. The products include, but are not limited to, Energy, Installed Capacity, Ancillary Services, Renewable Energy Certificates and Environmental Attributes (to the extent not included in the RECs).

- **Indian River Hydro:** 15-year term beginning on February 1, 2011 and ending January 31, 2026. RMLD is purchasing all the products produced by or attributable to the facility. The facility has a nameplate capacity of 1.4 MWs. The products include, but are not limited to, Energy, Installed Capacity, Ancillary Services, Renewable Energy Certificates and Environmental Attributes (to the extent not included in the RECs).

Collins Hydro

In August 2013, RMLD signed a purchase power agreement with Swift River Hydro LLC. for the output of Collins Hydro located in between Ludlow and Wilbraham Massachusetts. The contract with Swift River Hydro is effective from September 1, 2013, through August 31, 2028. RMLD receives energy only from this contract. The average annual generation is approximately 5,667 MWHs per year. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility.

Pioneer Hydro

In August 2013, RMLD signed a purchase power agreement with Ware River Power Inc. for the output of Pioneer Hydro located in Ware, Massachusetts. The contract for Pioneer Hydro is effective from September 1, 2013, through August 31, 2028. RMLD receives energy only from this contract. The average annual generation is approximately 4,480 MWHs per year. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility.

Hosiery Mills Hydro

In March 2014, RMLD signed a purchase power agreement with Silver Street Hydro Inc. for the output of Hosiery Mills located in Hillsborough, New Hampshire. The contract for Hosiery Mills Hydro is effective from March 1, 2014, through February 28, 2024. RMLD receives energy only from this contract. The average annual generation is approximately 2,046 MWHs per year. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility.

Saddleback Ridge Wind

In December 2013, RMLD signed a purchase power agreement with Saddleback Ridge Wind, LLC for the output of Saddleback Ridge Wind located in Carthage, Maine. The contract for Saddleback Ridge Wind is effective from January 1, 2015, through December 31, 2035. RMLD receives energy plus all attributes under this contract. The average annual generation is estimated to be 15,820 MWHs per year. This is a non-

carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

Jericho Wind

In November 2014, RMLD signed a purchase power agreement with Jericho Power, LLC for the output of Jericho Wind located in Berlin, New Hampshire. The contract for Jericho Wind is for 20 years. The project went into commercial operation in December 2015. RMLD receives energy plus all attributes from this contract. The average annual generation is estimated to be 10,788 MWHs per year. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

RoxWind - Wind

RMLD has contracted for 50% of the output from four wind turbines in Maine. RMLD's receives 25,600 MWHs per year, starting at the end of 2021, continuing for 20 years, through 2041. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

One Burlington - Solar

In March 2015, RMLD signed a purchase power agreement with CREECA Energy, LLC for the output of 2 MW AC solar array located at One Burlington Ave., Wilmington, Massachusetts. The solar array went on-line in November 2015. The term of the contract for One Burlington is effective for ten years. The average annual generation is estimated to be 3,450 MWHs per year. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility, once the forty quarters of Solar (SRECs) has run its course.

Altus Power – Community Solar

In March 2016, RMLD signed a purchase power agreement with ECA Solar, LLC for the output of a 1MW AC solar array located at 326 Ballardvale Street, Wilmington, Massachusetts. The solar array went on-line in June 2017. In May 2017, the contract was assigned to Altus Power America, Inc. DBA WL MA Solar LLC. The term of the contract for WL MA Solar LLC is twenty years. The average annual generation is estimated to be 1,700 MWHs per year. RMLD has developed a Community Shared Solar program called Solar Choice. This project is RMLD's first Solar Choice project and is fully subscribed by 500 residential customers. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility, once the 40 quarters of Solar (SRECs) has run its course.

Kearsarge – Community Solar

In October 2017, RMLD signed a purchase power agreement with Kearsage Wilmington, LLC for the output of 1.8MW AC solar array located at 40-50 Fordham Road, Wilmington, Massachusetts. The solar array went on-line in February 2018. The term of the contract for Kearsage Wilmington LLC is twenty years. The average annual generation is estimated to be 2,376 MWHs per year. This project is RMLD's second Solar Choice project and is fully subscribed by 617 residential and commercial customers. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility, once the 40 quarters of Solar (SRECs) has run its course.

Battery Energy Storage System – NextEra

In December 2017, RMLD was awarded a $1 million grant for the installation of an energy storage unit at its North Reading substation. The grant is funded by the Massachusetts Department of Energy Resources (DOER). RMLD's project consists of a 5 MW Lithium-Ion Battery unit with 10 MWHs of storage capacity at its North Reading substation to reduce peak demand, thereby lowering future transmission and capacity costs related to the purchase of wholesale electricity. The battery unit will be co-located with RMLD's new 2.5-megawatt Distributed Generator. RMLD is negotiating a Battery Energy Storage System (BESS) Agreement with NextEra. BESS was placed in service on June 1, 2019.

FirstLight Hydro

RLMD has multiple contracts with FirstLight Hydro. All contracted FirstLight hydro plants are non-carbon generating resources and RMLD is entitled to the associated output certificates for its share of the output.

- **Shepaug & Stevenson**: In March 2019, RMLD signed a purchase power agreement with FirstLight Power Resources Management, LLC. for 10.3% and 7.3% of the output of the Shepaug and the Stevenson Hydroelectric Station, respectively, from May 2019 through December 2023. The average annual generation is approximately 12,000 MWHs per year on-peak and 8,000 MWHs per year off-peak. In June 2022, RMLD executed an extension of the Shepaug and Stevenson hydroelectric contract, starting in January 2024 through to 2030. RMLD will receive 13.49% of Shepaug and 9.53% of the Stevenson output. The average combined production is approximately 27,500 MWH per year.
- **Cabot-Turners Falls**: RMLD executed a contract with FirstLight in 2020 for two hydroelectric generating stations along a 2.7 mile stretch of the Connecticut River, Cabot and Turners Falls Generating Stations. Together, they are

anticipated to deliver 22,250 MWHs in 2022, 42,000 MWHs in 2023, and 34,000 MWHs from 2024 through 2030.

- **Falls Village**: RLMD is in active negotiations to receive 100% of the output from Falls Village, a hydroelectric plant in on the Housatonic River that generates 38,000 MWH annually. The contract will begin in 2025, running through 2040.

Gravity Renewables - Hydro

- **Quinebaug:** In February 2020, RMLD signed an agreement with Gravity to receive approximately 10,700 MWH per year from 2021 to 2030. The Quinebaug hydroelectric plant is located in northeastern Connecticut, near the confluence of Five Mile and Quinebaug Rivers. The facility is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the output.
- **WyreWynd Hydro:** RMLD has been receiving power from the WyreWynd (Aspinhook) hydro facility since 2016. The contract expired in June 2022, and RMLD and Gravity extended the contract in the spring of 2022; RMLD will continue to receive approximately 10,000 MWHs per year in 2022 and 2023. This is a non-carbon generating resource and RMLD is exploring acquisition of the associated output certificates for the facility
- **Dahowa:** In July 2021, RMLD entered into an agreement with Gravity to purchase approximately 35,000 MWH per year, from 2022 to 2045, from the Dahowa Plant in Upstate New York. The facility is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the output.

NextEra Transaction Facilitation Agreement (TFA)

In December 2017 RMLD signed a Master Supply Agreement, as well as a Transaction Facilitation Agreement with NextEra that enables RMLD to leverage NextEra's trade floor. RMLD approved a Risk Management Strategy that secures transactions based on price and time triggers. The Risk Management Strategy will permit RMLD to take advantage of price opportunities consistently over the next several years and beyond. This strategy will allow RMLD to secure monthly quantities that are below the four-year average versus locking in annual quantities. Additionally, the strategy of utilizing time triggers will smooth out variations in the market over time. The TFA has prompted RMLD to purchase on-peak and off-peak energy blocks out to the year 2025. Under the TFA, RMLD has currently secured 284,947 MWHs for 2022, 174,373 MWHs for 2023, 82,300 MWHs for 2024 and 5,363 MWHs for 2025.

NextEra LFG & Seabrook

In June 2020, NextEra entered into an agreement with RMLD to provide firm around-the-clock power from 2022 through 2030. RMLD will receive 100% of the output of a landfill gas power generating station in Woburn, MA, while the remainder of the energy will come from Seabrook Nuclear Generating Station. Together, these facilities will provide approximately 43,800 MWH per year of firm, around-the-clock power. These two facilities are non-carbon generating resources and RMLD is entitled to the associated output certificates.

NextEra Swap & Swap Shape Option

In July 2021, NextEra entered into an agreement with RMLD to provide approximately 93,000 MWH per year of power from the Seabrook Nuclear Generating Station, starting April 2023. This is a non-carbon generating resource and RMLD is entitled to the associated output certificates for its share of the facility.

Stony Brook Intermediate Unit

The Stony Brook Intermediate Unit is a 354-megawatt, combined-cycle power plant that entered commercial operation in 1981.

The unit's three gas turbines generate electricity using either No. 2 oil or natural gas, with additional electricity produced using a single steam turbine in the combined-cycle process. MMWEC completed construction of a natural gas pipeline to serve the Intermediate Unit in September 2002. RMLD has a Life of Unit (LOU) entitlement for 14.453% of the unit or approximately 51 MWs. RMLD has paid off the debt service associated with this project.

Quick Facts – Stonybrook Intermediate Unit

Location	Ludlow, Massachusetts
On-Line Date	1981
Fuel	No. 2 oil/natural gas
Principal Owner/Operator	MMWEC
Total Capacity	354 MWs

Stony Brook Peaking Unit

The Stony Brook Peaking Unit is a 172-megawatt peaking plant that entered commercial operation in 1982.

The unit's two turbines generate electricity using No. 2 oil. RMLD has a Life of Unit (LOU) entitlement for 19.516% of the unit which is equivalent to approximately 33 MWs. RMLD has paid off the debt service associated with this project.

Quick Facts – Stonybrook Peaking Unit

Location	Ludlow, Massachusetts
On-Line Date	1982
Fuel	No. 2 oil
Principal Owner/Operator	MMWEC
Total Capacity	172 MWs

Braintree Electric Light Department - Watson Unit

The simple-cycle gas fired plant is powered by the first two Rolls-Royce Trent 60 gas turbines built for the U.S. power generation market – known as Watson Units #1 and #2. The units entered commercial operation on June 23, 2009.

Both Watson Units are bid into the ISO New England market system daily and are dispatched based on their bid price.

The units two turbines generate electricity using natural gas, with No. 2 oil as backup fuel. RMLD has a 20-year entitlement for 10% of the unit which is equivalent to about 10 MWs.

Quick Facts – Watson Unit

Location	Braintree, Massachusetts
On-Line Date	2009
Fuel	Natural gas/No. 2 oil
Principal Owner/Operator	BELD
Total Capacity	100 MWs

ATTACHMENT 6

POLICY REVIEW

POLICY 25: ANONYMOUS COMMUNICATIONS

REVISION NO. #0 | RMLD POLICY NO. 25 | EFFECTIVE DATE: 10/24/02

ANONYMOUS COMMUNICATIONS

10/29/07
Acting General Manager/ Date

Per Board Vote 10/24/02
Chairman/Date

I. PURPOSE/CONSIDERATION:

A. This policy applies to employees, RMLD Board of Commissioners, Citizen's Advisory Board Members and contractors for the RMLD.

B. This policy will establish proper procedures to follow when an anonymous letter, phone call, or other communication is received at the RMLD.

C. It is by definition impossible to ascertain the motivation behind an anonymous communication. The motivation may be for the highest or for the lowest purposes.

D. While no charges should be dismissed arbitrarily, it seems unreasonable to give more attention to an anonymous communication than would be given to an identified one.

II. RESPONSIBILITIES:

A. General Manager, or designee, has the responsibility for overall implementation of this policy and investigation should it be deemed necessary.

B. Human Resources Manager, or designee, will review each case to determine that correct procedures have been followed and that Policy #25 has been implemented according to its purpose and intent.

C. RMLD Board of Commissioners will be responsible for reviewing and updating this Policy on a periodic basis.

III. POLICY ELEMENTS:

A. Incident Investigation Procedure – Individual

1. An employee who receives an anonymous communication pertaining to the RMLD should notify the General Manager or Human Resources Manager verbally and then follow it up immediately in writing.

2. If the anonymous communication relates to the General Manager, the employee must inform the Human Resources Manager who will then notify the RMLD Board of Commissioners.

3. The employee should reduce the entire communication to writing. If it was received through a telephone message, transcribe it. If it was a telephone conversation, write it down to the best of your recollection. If it was in e-mail form or a letter, save it.

4. The employee should respect other people's rights and keep information confidential. Failure to maintain confidentiality will be taken as a serious matter.

III. **POLICY ELEMENTS:**

B. Incident Investigation Procedure – General Manager

1. If a complaint relates to a possible violation of Federal/State Law on Sexual Harassment, the General Manager will refer to Policy #15 and follow those procedures.

2. For other complaints relating to alleged misconduct, the General Manager will refer the communication to legal counsel for further specific actions to follow, if any. The Human Resources Manager will notify the RMLD Board of Commissioners and legal counsel for course of action should the complaint pertain to the General Manager.

3. The General Manager will inform all individuals referenced of the specific text or reference, but will not inform individuals about references to any other individuals.

4. When appropriate, the General Manager will inform supervisors of complaints against particular individuals.

5. The General Manager may refer the communication to other public agencies, depending on the nature of the complaints, as deemed necessary.

_____ _____

I have received and read Policy #25 Date
Rev #0

_____

Please print your name

ATTACHMENT 7

RMLD PROCUREMENT REQUESTS FOR BOARD APPROVAL

RMLD
Reading Municipal Light Department
RELIABLE POWER

October 20, 2023

Town of Reading Municipal Light Board

Subject: IFP 2023-01 MDM System and Customer Portal

Pursuant to M.G.L. c. 164 § 56D, on February 9, 2023, an invitation for proposals was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle and posted on the RMLD website requesting sealed proposals for Meter Data Management System (MDMS) and Customer Portal.

An invitation for proposals was sent to 35 companies:

Sealed proposals were received from the following six (6) companies: Harris Computer Systems/Cogsdale, DataCapable, Inc., IP Keys Power Partners, Inc., Professional Computer Systems, LLC (PCS), Trynzic, LLC, and Utilismart Corporation. Note: DataCapable, Inc. did not meet the requirements of the IFP.

The sealed proposals were publicly opened and read aloud at 11:00 a.m., March 15, 2023, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

> Move that IFP 2023-01 for Meter Data Management System (MDMS) and Customer Portal be awarded to: **Professional Computer Systems, LLC (PCS) for a sum not to exceed $500,000**[1]**,** pursuant to M.G.L. c. 164 § 56D, on the recommendation of the General Manager.

[1]See attached analyses.

The 2023 Capital Budget amount for this item is $281,000.

William Bullock (Oct 23, 2023 10:45 EDT)

Bill Bullock, Director of IRD

Gregory J. Phipps, General Manager

RMLD IFP 2023-01 Proposal Price Comparison

MDMS

#	Category	COGSDALE SaaS	COGSDALE On-Prem	DATACAPABLE SaaS	DATACAPABLE On-Prem	IPKEYS SaaS	IPKEYS On-Prem	PCS SaaS	PCS On-Prem	TRYNZIC SaaS	TRYNZIC On-Prem	UTILISMART SaaS	UTILISMART On-Prem
1	MDMS Master Software and Servers	$ 82,371	$ 90,894			$ 145,000	$ 81,500	$ 80,000		$ -		$ 54,400	
2	INTEGRATION and TESTING	$ 397,352	$ 397,352			$ 15,000	$ 225,000	$ 22,500		$ 10,000		$ 140,000	
3	TRAINING, DOCUMENTATION, and PROJECT MANAGEMENT	$ 10,000	$ 15,000			$ -	$ 19,500	$ 37,000		$ 10,000		$ 20,150	
	Total Upfront Costs	**$ 489,723**	**$ 503,246**			**$ 160,000**	**$ 326,000**	**$ 139,500**		**$ 20,000**		**$ 214,550**	
	Annual Fees PHASE I	**$ 84,866**	**$ 35,822**			**$ 99,600**	**$ 34,000**	**$ 41,899**		**$ 46,020**	Years 1-3	**$ 98,703**	
										$ 92,150	Years 4+		

CUSTOMER PORTAL

#	Category	COGSDALE SaaS	COGSDALE On-Prem	DATACAPABLE SaaS	DATACAPABLE On-Prem	IPKEYS SaaS	IPKEYS On-Prem	PCS SaaS	PCS On-Prem	TRYNZIC SaaS	TRYNZIC On-Prem	UTILISMART SaaS	UTILISMART On-Prem
1	CUSTOMER PORTAL Master Software and Servers	$ 55,000				$ -		$ 29,300				$ 25,000	
2	INTEGRATION and TESTING	$ 29,060				$ 25,500		$ 97,360				$ 50,000	
3	TRAINING, DOCUMENTATION, and PROJECT MANAGEMENT	$ 15,000				$ 7,750		$ 49,440				$ 8,650	
	Total Upfront Costs (SaaS)	**$ 99,060**				**$ 33,250**		**$ 176,100**				**$ 83,650**	
	Annual Fees PHASE I (SaaS)	**$ 60,000**				**$ 19,000**		**$ 44,640**				**$ 49,100**	
	MDMS AND CUSTOMER PORTAL including ANNUAL FEES PHASE 1 TOTALS:	**$ 733,649**	**$ 539,068**			**$ 311,850**	**$ 360,000**	**$ 402,139**		**$ 158,170**		**$ 446,003**	

Reading Municipal Light Department, Reading, MA

IFP 2023-01

Attachment B - Pricing Schedule - SUMMARY as of 10/18/2023

The cells below are linked formulas - do not change.

#	Category	MDMS - SaaS	Customer Portal - SaaS
1	SOFTWARE and SERVERS	$ 80,000	$ 29,300
2	INTEGRATION and TESTING	$ 67,500	$ 97,360
3	TRAINING, DOCUMENTATION, and PROJECT MANAGEMENT	$ 37,000	$ 49,440
	Total Upfront Costs	**$ 184,500**	**$ 176,100**
4	ANNUAL SYSTEM COSTS	**$ 64,788**	**$ 44,640**
	TOTALS PER PROJECT:	**$ 249,288**	**$ 220,740**
	COMBINED PROJECT TOTAL:	**$470,028.00**	

Maureen Sullivan

From: Bill Bullock
Sent: Wednesday, May 24, 2023 5:51 PM
To: Greg Phipps
Cc: John Pelletier; Benjamin Bloomenthal; Paula O'Leary; Maureen Sullivan; Nick D'Alleva; Brian Smith; Ajey Pandey
Subject: MDMS Evaluation Team Recommendation

Greg:

The evaluation team has completed its review of the qualified lowest cost proposals for the Meter Data Management System (MDMS). The MDMS will help increase the efficiency of RMLD's operation, while increasing accuracy, improving customer service and reliability of the RMLD electric system.

We evaluated three proposals and ranked these proposals based on meetings with the proposers and the following observations:

1) Professional Computer Solutions / Central Service Administration (PCS/CSA)
   PCS / CSA has 30 –40 existing customers, including Norwood Light Department.
   PCS was the only proposer that included a full demonstration of their product to the evaluation team.
   PCS offers customer support that is staffed during normal business hours.
   The PCS/CES product is a packaged software solution that provides defined reporting with options for customization for RMLD .
   The communication protocol is based on MultiSpeak, providing flexibility and compatibility with many device types, and has undergone ESRI compatibility testing.
   The PCS/CSA system can provide information on feeder loading, transformer loads and and line loss calculations.
   PCS does not support Demand Response (DR) Applications, but the evaluation team feels that DR is better included as part of the AMI project.
   AMI bulk data is imported and available as soon as delivered.
   The PCS MDM system is updated and available every 5 minutes - near real time.
   MDM can process as often it can be made available. Current voltage, everything coming out of AMI, alarms, temperature. Cloud cover is not yet included, but PCS is planning to develop that capability.

2) IP Keys
   IP Keys owned by Parsons with locations in San Diego, CA and Plano, TX
   IP Keys is a single User Platform - fully integrated with dozens of third-party solutions, including AMI, SCADA, GIS DERMS, Analytics, The MDM and ODM are all delivered from a single platform.
   It is a modular design with many of the modules requiring additional subscriptions beyond the base MDM module.
   A service bus is included in the platform with an open ADR to add new modules.
   The IPKeys Mobile Application was shown, with very modern graphics and functionality including "Ways to Save"
   IP Keys showed screen shots, not a full demonstration of the software. They indicated data validation could take as long as 24-48 hours.

IPKeys could add a DERMS system, but there would be additional costs for each device model added to the platform.
The IPKeys software provided Feeder loading, transformer load with a GIS overlay, but some of these functions were add-ons.

3) Trynzic

Trynzic is a relatively new start-up company. Their focus is on the delivery of meter data, but they do not have the reporting and analysis functionality that the other evaluated MDMS offered.
Selection of Trynzic as an MDMS provider, would mean that RMLD would need to devote significant resources to developing data presentation and analysis functionality.

Based on the above, the Evaluation team recommends that RMLD move ahead with PCS, as their system provides the best solution based on functionality, speed of implementation and cost to RMLD.

Bill Bullock
Director of Integrated Resources
Reading Municipal Light Department
Office: 781-942-6516
Mobile: 413-687-2571
www.rmld.com

BOARD MATERIALS AVAILABLE

BUT NOT DISCUSSED

From: Erica Morse
To: Erica Morse
Subject: AP and Payroll Questions for the 2023-10-25 BoC Board Book
Date: Wednesday, October 18, 2023 10:28:00 AM

AP

From September 8, 2023, through October 13, 2023, there were no Commissioner questions.

Payroll:

From September 11, 2023, through October 16, 2023, there were no Commissioner questions.

Erica Morse
Executive Assistant
Reading Municipal Light Department
O: 781-942-6489
C: 617-791-3304
www.rmld.com

From: Maureen Sullivan
To: Erica Morse
Cc: Paula O"Leary
Subject: Surplus Update - September 2023
Date: Wednesday, October 18, 2023 9:24:45 AM

Good morning Erica,

I am sending this email to inform you that there were NO Surplus Items of Substantial Value that were disposed of in September 2023.

Thank you,
Maureen

Maureen Sullivan
Assistant Materials Manager
Reading Municipal Light Department (RMLD)
230 Ash Street
Reading, MA 01867

Tel. No. 781-942-6441
Email: msullivan@rmld.com

Town of Reading, Massachusetts
Municipal Light Department
Statement of Net Assets
7/31/2023

	2023	2022
ASSETS		
Current:		
Unrestricted Cash	$ 25,626,899	$ 20,836,568
Restricted Cash	31,782,698	30,431,296
Restricted Investments	1,606,172	2,107,835
Receivables, Net	10,283,192	10,334,470
Prepaid Expenses	2,027,678	1,682,242
Inventory	2,850,037	2,223,945
Total Current Assets	74,176,676	67,616,356
Noncurrent:		
Lease Receivable	1,993,599	-
Investment in Associated Companies	990,365	964,409
Construction in Progress	852,660	717,209
Capital Assets, Net	93,341,407	86,427,375
Total Noncurrent Assets	97,178,031	88,108,993
Deferred Outflows	6,113,387	6,754,497
TOTAL ASSETS	**177,468,094**	**162,479,846**
LIABILITIES		
Current		
Accounts Payable	1,55[illegible]	[illegible]
Accrued Liabilities	[illegible]	[illegible]
Customer Deposits	1,750,969	1,606,254
Advances from Associated Companies	200,000	200,000
Contribution in Aid of Construction	3,181,176	2,630,487
Total Current Liabilities	17,197,628	15,778,796
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	**37,553,353**	**37,872,073**
NET POSITION		
Invested in Capital Assets, Net of Related Debt	93,341,407	86,427,375
Restricted for Depreciation Fund	11,490,631	11,593,583
Restricted for Pension Trust	7	6,801,573
Unrestricted	35,082,697	19,785,242
TOTAL NET POSITION	**139,914,741**	**124,607,772**
Total Liabilities and Net Assets	**$ 177,468,094**	**$ 162,479,846**

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
7/31/2023

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Operating Revenues					
Base Revenue	$ 3,456,142	$ 2,835,763	$ 19,994,902	$ 17,127,595	16.7%
Fuel Revenue	2,768,635	3,567,143	18,804,750	20,024,446	(6.1%)
Purchased Power Capacity & Transmission	3,013,956	3,220,452	18,396,698	17,799,908	3.4%
Forfeited Discounts	64,806	41,062	479,868	437,341	9.7%
Energy Conservation Revenue	226,345	183,007	1,318,977	1,109,656	18.9%
NYPA Credit	(58,047)	(89,193)	(903,149)	(688,020)	31.3%
Total Operating Revenues	9,471,837	9,758,234	58,092,046	55,810,927	4.1%
Expenses					
Power Expenes:					
547 Purchased Power Fuel	3,825,028	4,105,919	15,593,748	20,389,963	(23.5%)
555 Purchased Power Capacity	1,057,083	1,140,799	9,635,197	8,693,226	10.8%
565 Purchased Power Transmission	1,320,367	1,613,114	7,684,567	9,112,636	(15.7%)
Total Purchased Power	6,202,478	6,859,832	32,913,513	38,195,825	(13.8%)
Operations and Maintenance Expenses:					
580 Supervision and Engineering	116,426	87,817	750,759	634,543	18.3%
581 Station/Control Room Operators	48,179	40,203	378,024	281,562	34.3%
582 Station Technicians	169,059	68,770	375,149	316,267	18.6%
583 Line General Labor	60,366	64,939	566,969	432,707	31.0%
586 Meter General	16,581	16,773	104,580	114,296	(8.5%)
588 Materials Management	48,825	32,262	287,414	252,075	14.0%
593 Maintenance of Lines - Overhead	72,175	(3,620)	562,135	178,851	214.3%
593 Maintenance of Lines - Tree Trimming	196,615	153,965	647,651	573,876	12.9%
594 Maintenance of Lines - Underground	3,479	23,765	53,564	123,890	(56.8%)
595 Maintenance of Line - Transformers	20,158	1,248	44,457	47,093	(5.6%)
598 Line General Leave Time Labor	56,549	32,451	303,748	231,632	31.1%
Total Operations and Maintenance Expenses	808,412	518,573	4,074,450	3,186,792	27.9%
General & Administration Expenses:					
903 Customer Collections	100,277	88,181	784,682	642,014	15.4%
904 Uncollectible Accounts	3,333	5,000	23,333	35,000	(33.3%)
916 Energy Audit	112,408	112,394	436,925	517,594	(15.6%)
916 Energy Conservation	257,737	150,562	1,159,176	694,696	66.9%
920 Administrative and General Salaries	175,148	131,703	1,321,677	1,152,355	14.7%
921 Office Supplies and Expense	2,233	1,815	12,817	8,447	51.7%
923 Outside Services - Legal	-	8,361	191,092	214,826	(11.0%)
923 Outside Services - Contract	111,298	14,266	274,065	167,736	63.4%
923 Outside Services - Education	17,638	2,163	78,271	27,081	189.0%
924 Property Insurance	37,158	32,768	287,803	250,679	14.8%
925 Injuries and Damages	-	4,955	77,729	6,705	1059.3%
926 Employee Pensions and Benefits	255,924	338,045	2,426,140	2,214,156	9.6%
930 Miscellaneous General Expense	29,677	8,731	231,606	244,709	(5.4%)
931 Rent Expense	13,937	13,828	124,594	125,815	(1.0%)
933 Vehicle Expenses	32,558	26,533	183,280	147,579	24.2%
933 Vehicle Expenses - Capital	(30,119)	(32,476)	(236,184)	(239,282)	(1.3%)
935 Maintenance of General Plant	34,906	41,352	424,179	310,577	36.6%
935 Maintenance of Building & Garage	69,774	57,800	462,933	582,458	(20.5%)
Total General & Administration Expenses	1,223,887	1,005,981	8,264,116	7,103,146	15.7%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
7/31/2023

	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	3,047,474	2,950,151	3.3%
408 Voluntary Payments to Towns	152,217	143,387	1,065,526	1,003,709	6.2%
Total Other Expenses	587,571	564,837	4,113,000	3,953,860	4.0%
Operating Income	649,489	809,011	8,726,967	3,371,304	160.2%
Non Operating Revenues (Expenses):					
419 Interest Income	6,819	29,360	428,177	99,966	327.9%
419 Other	9,427	4,314	333,875	568,647	(41.3%)
426 Return on Investment to Reading	(211,551)	(210,620)	(1,475,272)	(1,450,873)	1.7%
426 Loss on Disposal	-	-	-	-	0.0%
431 Interest Expense	(4,179)	(2,006)	(28,314)	(14,077)	101.1%
Total Non Operating Revenues (Expenses)	(199,483)	(178,953)	(741,535)	(796,337)	(6.8%)
Change in Net Assets	450,006	630,058	7,985,433	2,574,967	211.8%
Net Assets at Beginning of Year	131,929,309	122,032,806	131,929,309	122,032,806	8.1%
Ending Net Assets	$ 132,379,315	$ 122,662,864	$ 139,914,742	$ 124,607,772	12.3%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Budgeted Revenues, Expenses and Changes in Fund Net Assets
7/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Operating Revenues				
Base Revenue	$ 19,994,902	$ 18,734,463	1,260,438	6.7%
Fuel Revenue	18,804,750	23,978,519	(5,173,769)	(21.6%)
Purchased Power Capacity & Transmission	18,396,698	20,134,326	(1,737,628)	(8.6%)
Forfeited Discounts	479,868	562,034	(82,166)	(14.6%)
Energy Conservation Revenue	1,318,977	1,167,250	151,727	13.0%
NYPA Credit	(903,149)	(677,833)	(225,316)	33.2%
Total Operating Revenues	$ 58,092,046	$ 63,898,759	(5,806,713)	(9.1%)
Expenses				
Power Expenses:				
555 Purchased Power Fuel	15,593,748	23,300,686	(7,706,938)	(33.1%)
555 Purchased Power Capacity	9,635,197	9,023,933	611,265	6.8%
565 Purchased Power Transmission	7,684,567	11,215,394	(3,530,826)	(31.5%)
Total Purchased Power	32,913,513	43,540,012	(10,626,499)	(24.4%)
Operations and Maintenance Expenses:				
580 Supervision and Engineering	750,759	570,756	180,003	31.5%
581 Station/Control Room Operators	378,024	296,389	81,635	27.5%
582 Station Technicians	375,149	780,184	(405,034)	(51.9%)
583 Line General Labor	566,969	350,440	216,529	61.8%
586 Meter General	104,580	157,643	(53,063)	(33.7%)
588 Materials Management	287,414	343,344	(55,930)	(16.3%)
593 Maintenance of Lines - Overhead	562,135	331,767	230,368	69.4%
593 Maintenance of Lines - Tree Trimming	647,651	927,376	(279,725)	(30.2%)
594 Maintenance of Lines - Underground	53,564	113,735	(60,171)	(52.9%)
595 Maintenance of Line - Transformers	44,457	207,106	(162,649)	(78.5%)
598 Line General Leave Time Labor	303,748	125,978	177,770	141.1%
Total Operations and Maintenance Expenses	4,074,450	4,204,718	(130,268)	(3.1%)
General & Administration Expenses:				
903 Customer Collection	784,682	758,105	26,577	3.5%
904 Uncollectible Accounts	23,333	43,750	(20,417)	(46.7%)
916 Energy Audit	436,925	625,000	(188,075)	(30.1%)
916 Energy Conservation	1,159,176	1,787,475	(628,299)	(35.2%)
920 Administrative and General Salaries	1,321,677	1,880,744	(559,067)	(29.7%)
921 Office Supplies and Expense	12,817	11,667	1,150	9.9%
923 Outside Services - Legal	191,092	458,383	(267,291)	(58.3%)
923 Outside Services - Contract	274,065	431,725	(157,660)	(36.5%)
923 Outside Services - Education	78,271	192,004	(113,733)	(59.2%)
924 Property Insurance	287,803	315,904	(28,101)	(8.9%)
925 Injuries and Damages	77,729	14,933	62,795	420.5%
926 Employee Pensions and Benefits	2,426,140	2,665,032	(238,892)	(9.0%)
930 Miscellaneous General Expense	231,606	350,817	(119,211)	(34.0%)
931 Rent Expense	124,594	123,667	928	0.8%
933 Vehicle Expense	183,280	226,917	(43,637)	(19.2%)
933 Vehicle Expense - Capital Clearing	(236,184)	(297,656)	61,473	(20.7%)
935 Maintenance of General Plant	424,179	390,114	34,064	8.7%
935 Maintenance of Building & Garage	462,933	578,409	(115,476)	(20.0%)
Total General & Administration Expenses	8,264,116	10,556,989	(2,292,873)	(21.7%)

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Budgeted Revenues, Expenses and Changes in Fund Net Assets
7/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Other Operating Expenses:				
403 Depreciation	3,047,474	3,176,250	(128,776)	(4.1%)
408 Voluntary Payments to Towns	1,065,526	1,033,923	31,603	3.1%
Total Other Expenses	4,113,000	4,210,173	(35,447)	(0.8%)
Operating Income	8,726,967	1,386,867	7,278,374	524.8%
Non Operating Revenues (Expenses):				
415 Contribution in Aid of Construction	-	29,167	(29,167)	(100.0%)
419 Interest Income	428,177	175,000	253,177	144.7%
419 Other Income	333,875	414,167	(80,292)	(19.4%)
421 Intergovernmental Grants	-	52,500	(52,500)	(100.0%)
426 Return on Investment to Reading	(1,475,272)	(1,486,900)	11,629	(0.8%)
426 Loss on Disposal	-	(5,833)	5,833	(100.0%)
431 Interest Expense	(28,314)	(5,833)	(22,481)	385.4%
Total Non Operating Revenues (Expenses)	(741,535)	(827,734)	86,199	(10.4%)
Net Income	$ 7,985,433	$ 559,134	$ 7,426,299	1328.2%

Town of Reading, Massachusetts
Municipal Light Department
Statement of Net Assets
8/31/2023

	2023	2022
ASSETS		
Current:		
Unrestricted Cash	$ 26,518,591	$ 22,242,230
Restricted Cash	31,760,745	31,893,837
Restricted Investments	1,411,376	1,050,394
Receivables, Net	11,186,725	9,777,805
Prepaid Expenses	1,694,088	959,030
Inventory	3,157,162	2,293,371
Total Current Assets	75,728,686	68,216,665
Noncurrent:		
Lease Receivable	1,993,599	-
Investment in Associated Companies	990,598	964,516
Construction in Progress	874,520	736,188
Capital Assets, Net	93,640,813	86,448,244
Total Noncurrent Assets	97,499,529	88,148,948
Deferred Outflows	6,113,387	6,754,497
TOTAL ASSETS	**179,341,602**	**163,120,111**
LIABILITIES		
Current		
Accounts Payable	9,791,596	10,138,213
Accrued Liabilities	1,307,817	546,680
Customer Deposits	1,761,979	1,631,327
Advances from Associated Companies	200,000	200,000
Contribution in Aid of Construction	3,241,442	2,627,763
Total Current Liabilities	16,302,834	15,143,983
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	**36,658,560**	**37,237,260**
NET POSITION		
Invested in Capital Assets, Net of Related Debt	93,640,813	86,448,244
Restricted for Depreciation Fund	11,191,225	11,583,701
Restricted for Pension Trust	7	6,815,651
Unrestricted	37,850,997	21,035,255
TOTAL NET POSITION	**142,683,042**	**125,882,851**
Total Liabilities and Net Assets	**$ 179,341,602**	**$ 163,120,111**

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
8/31/2023

	Month Current Year	Month Last Year	Year to Date Current Year	Year to Date Last Year	Percent Change
Operating Revenues					
Base Revenue	$ 3,919,729	$ 3,232,381	$ 23,914,631	$ 20,359,977	17.5%
Fuel Revenue	2,873,462	4,338,139	21,678,212	24,362,585	(11.0%)
Purchased Power Capacity & Transmission	3,806,832	3,511,311	22,203,530	21,311,219	4.2%
Forfeited Discounts	112,692	102,359	592,560	539,700	9.8%
Energy Conservation Revenue	269,797	207,651	1,588,774	1,317,307	20.6%
NYPA Credit	(75,395)	(140,931)	(978,544)	(828,950)	18.0%
Total Operating Revenues	10,907,116	11,250,911	68,999,162	67,061,838	2.9%
Expenses					
Power Expenes:					
547 Purchased Power Fuel	2,701,943	4,224,249	18,295,691	24,614,213	(25.7%)
555 Purchased Power Capacity	1,159,442	1,428,500	10,794,639	10,121,725	6.6%
565 Purchased Power Transmission	1,603,094	1,885,361	9,287,661	10,997,997	(15.6%)
Total Purchased Power	5,464,479	7,538,109	38,377,992	45,733,935	(16.1%)
Operations and Maintenance Expenses:					
580 Supervision and Engineering	117,876	101,972	868,635	736,515	17.9%
581 Station/Control Room Operators	92,577	48,081	470,602	329,643	42.8%
582 Station Technicians	42,545	47,332	417,694	363,599	14.9%
583 Line General Labor	63,155	62,171	630,124	494,878	27.3%
586 Meter General	9,296	23,204	113,876	137,500	(17.2%)
588 Materials Management	41,571	36,502	328,986	288,576	14.0%
593 Maintenance of Lines - Overhead	34,726	25,614	596,861	204,465	191.9%
593 Maintenance of Lines - Tree Trimming	150,868	18,068	798,518	591,944	34.9%
594 Maintenance of Lines - Underground	8,980	7,382	62,544	131,272	(52.4%)
595 Maintenance of Line - Transformers	2,359	15,091	46,816	62,185	(24.7%)
598 Line General Leave Time Labor	41,810	32,646	345,558	264,278	30.8%
Total Operations and Maintenance Expenses	605,764	418,063	4,680,214	3,604,855	29.8%
General & Administration Expenses:					
903 Customer Collections	120,909	91,337	905,591	733,351	12.2%
904 Uncollectible Accounts	3,333	5,000	26,667	40,000	(33.3%)
916 Energy Audit	104,086	76,612	541,011	594,206	(9.0%)
916 Energy Conservation	173,159	173,545	1,332,335	868,241	53.5%
920 Administrative and General Salaries	178,294	166,146	1,499,971	1,318,501	13.8%
921 Office Supplies and Expense	1,097	1,698	13,913	10,145	37.1%
923 Outside Services - Legal	26,148	34,618	217,240	249,444	(12.9%)
923 Outside Services - Contract	17,515	41,455	291,579	209,191	39.4%
923 Outside Services - Education	5,939	7,312	84,210	34,393	144.8%
924 Property Insurance	37,158	32,768	324,961	283,448	14.6%
925 Injuries and Damages		1,000	77,729	7,705	908.8%
926 Employee Pensions and Benefits	442,856	462,773	2,868,996	2,676,929	7.2%
930 Miscellaneous General Expense	6,434	21,300	238,039	266,010	(10.5%)
931 Rent Expense	13,898	34,779	138,492	160,594	(13.8%)
933 Vehicle Expenses	22,317	34,819	205,597	182,399	12.7%
933 Vehicle Expenses - Capital	(40,272)	(36,724)	(276,456)	(276,007)	0.2%
935 Maintenance of General Plant	88,811	47,147	512,989	357,725	43.4%
935 Maintenance of Building & Garage	67,688	73,693	530,621	656,151	(19.1%)
Total General & Administration Expenses	1,269,368	1,269,278	9,533,484	8,372,424	12.9%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Revenues, Expenses and Changes in Fund Net Assets
8/31/2023

	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	3,482,827	3,371,601	3.3%
408 Voluntary Payments to Towns	152,217	143,387	1,217,744	1,147,096	6.2%
Total Other Expenses	587,571	564,837	4,700,571	4,518,697	4.0%
Operating Income	2,979,935	1,460,624	11,706,902	4,831,928	144.0%
Non Operating Revenues (Expenses):					
419 Interest Income	5,700	30,476	433,876	130,442	231.9%
419 Other	(1,614)	(3,391)	332,260	565,256	(41.2%)
426 Return on Investment to Reading	(211,551)	(210,620)	(1,686,822)	(1,661,493)	1.5%
426 Loss on Disposal					0.0%
431 Interest Expense	(4,168)	(2,010)	(32,483)	(16,087)	101.9%
Total Non Operating Revenues (Expenses)	(211,633)	(185,545)	(953,168)	(981,883)	(2.8%)
Change in Net Assets	2,768,301	1,275,078	10,753,734	3,850,045	181.4%
Net Assets at Beginning of Year	131,929,309	122,032,806	131,929,309	122,032,806	8.1%
Ending Net Assets	134,697,610	123,307,884	142,683,043	125,882,851	13.4%

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Budgeted Revenues, Expenses and Changes in Fund Net Assets
8/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Operating Revenues				
Base Revenue	$ 23,914,631	$ 21,410,815	2,503,815	11.7%
Fuel Revenue	21,678,212	27,404,022	(5,725,810)	(20.9%)
Purchased Power Capacity & Transmission	22,203,530	23,010,659	(807,129)	(3.5%)
Forfeited Discounts	592,560	642,324	(49,764)	(7.7%)
Energy Conservation Revenue	1,588,774	1,334,000	254,774	19.1%
NYPA Credit	(978,544)	(774,667)	(203,878)	26.3%
Total Operating Revenues	$ 68,999,162	$ 73,027,154	(4,027,992)	(5.5%)
Expenses				
Power Expenses:				
555 Purchased Power Fuel	18,295,691	26,629,355	(8,333,664)	(31.3%)
555 Purchased Power Capacity	10,794,639	10,313,066	481,574	4.7%
565 Purchased Power Transmission	9,287,661	12,817,593	(3,529,932)	(27.5%)
Total Purchased Power	38,377,992	49,760,014	(11,382,022)	(22.9%)
Operations and Maintenance Expenses:				
580 Supervision and Engineering	868,635	652,293	216,343	33.2%
581 Station/Control Room Operators	470,602	338,730	131,871	38.9%
582 Station Technicians	417,694	891,638	(473,944)	(53.2%)
583 Line General Labor	630,124	400,503	229,621	57.3%
586 Meter General	113,876	180,163	(66,287)	(36.8%)
588 Materials Management	328,986	392,393	(63,407)	(16.2%)
593 Maintenance of Lines - Overhead	596,861	379,162	217,699	57.4%
593 Maintenance of Lines - Tree Trimming	798,518	1,059,858	(261,340)	(24.7%)
594 Maintenance of Lines - Underground	62,544	129,983	(67,439)	(51.9%)
595 Maintenance of Line - Transformers	46,816	236,693	(189,877)	(80.2%)
598 Line General Leave Time Labor	345,558	143,975	201,583	140.0%
Total Operations and Maintenance Expenses	4,680,214	4,805,392	(125,178)	(2.6%)
General & Administration Expenses:				
903 Customer Collection	905,591	866,405	39,186	4.5%
904 Uncollectible Accounts	26,667	50,000	(23,333)	(46.7%)
916 Energy Audit	541,011	714,286	(173,275)	(24.3%)
916 Energy Conservation	1,332,335	2,042,828	(710,494)	(34.8%)
920 Administrative and General Salaries	1,499,971	2,149,421	(649,451)	(30.2%)
921 Office Supplies and Expense	13,913	13,333	580	4.4%
923 Outside Services - Legal	217,240	523,867	(306,627)	(58.5%)
923 Outside Services - Contract	291,579	493,400	(201,821)	(40.9%)
923 Outside Services - Education	84,210	219,433	(135,224)	(61.6%)
924 Property Insurance	324,961	361,033	(36,073)	(10.0%)
925 Injuries and Damages	77,729	17,067	60,662	355.4%
926 Employee Pensions and Benefits	2,868,996	3,045,751	(176,755)	(5.8%)
930 Miscellaneous General Expense	238,039	400,933	(162,894)	(40.6%)
931 Rent Expense	138,492	141,333	(2,841)	(2.0%)
933 Vehicle Expense	205,597	259,333	(53,736)	(20.7%)
933 Vehicle Expense - Capital Clearing	(276,456)	(340,179)	63,723	(18.7%)
935 Maintenance of General Plant	512,989	445,845	67,144	15.1%
935 Maintenance of Building & Garage	530,621	661,039	(130,418)	(19.7%)
Total General & Administration Expenses	9,533,484	12,065,130	(2,531,646)	(21.0%)

Town of Reading, Massachusetts
Municipal Light Department
Business Type Proprietary Fund
Statement of Budgeted Revenues, Expenses and Changes in Fund Net Assets
8/31/2023

	Actual Year to Date	Budget Year to Date	OVER/UNDER $	OVER/UNDER %
Other Operating Expenses:				
403 Depreciation	3,482,827	3,630,000	(147,173)	(4.1%)
408 Voluntary Payments to Towns	1,217,744	1,181,627	36,117	3.1%
Total Other Expenses	4,700,571	4,811,627	(35,447)	(0.7%)
Operating Income	11,706,902	1,584,991	10,046,302	633.8%
Non Operating Revenues (Expenses):				
415 Contribution in Aid of Construction	-	33,333	(33,333)	(100.0%)
419 Interest Income	433,876	200,000	233,876	116.9%
419 Other Income	332,260	473,333	(141,073)	(29.8%)
421 Intergovernmental Grants	-	60,000	(60,000)	(100.0%)
426 Return on Investment to Reading	(1,686,822)	(1,699,315)	12,493	(0.7%)
426 Loss on Disposal	-	(6,667)	6,667	(100.0%)
431 Interest Expense	(32,483)	(6,667)	(25,816)	387.2%
Total Non Operating Revenues (Expenses)	(953,168)	(945,981)	(7,187)	0.8%
Net Income	$ 10,753,734	$ 639,010	$ 10,114,724	1582.9%