



**READING MUNICIPAL
LIGHT DEPARTMENT**

BOARD OF COMMISSIONERS MEETING

REGULAR SESSION

Thursday, March 24, 2022

APPROVAL OF BOARD MINUTES

ATTACHMENT 1



Town of Reading Meeting Minutes

Board - Committee - Commission - Council:

RMLD Board of Commissioners

Date: 2022-01-19

Time: 6:30 PM

Building:

Location:

Address:

Session: Open Session

Purpose:

Version: Draft

Attendees: **Members - Present:**

Mr. Robert Coulter, Chair; Mr. Philip Pacino, Vice Chair; Mr. John Stempeck, Commissioner; Mr. David Talbot, Commissioner; Ms. Marlena Bitá, Commissioner.

Members - Not Present:

Others Present:

RMLD Staff: Ms. Coleen O'Brien, General Manager; Mr. Greg Phipps, Director of Integrated Resources; Ms. Wendy Markiewicz, Director of Business Finance; Mr. Hamid Jaffari, Director of Engineering and Operations; Ms. Janet Walsh, Director of Human Resources; Ms. Paula O'Leary, Materials Manager; Ms. Erica Morse, Executive Assistant.

RMLD Finance Committee Liaisons: Jackie McCarthy, Reading

Citizens' Advisory Board: Mr. Vivek Soni, CAB, Reading.

Minutes Respectfully Submitted By: Philip Pacino, Secretary Pro Tem

Topics of Discussion:

1. Call Meeting to Order

Chair Coulter called the Board of Commissioner's meeting to order at 6:30 PM and announced that the meeting would be held on Zoom and live on RCTV and YouTube.

Opening Remarks

Chair Coulter read RMLD's code of conduct.

Commissioner Stempeck served as interim Secretary until Vice Chair Pacino was present at the meeting.

Introductions

Chair Coulter welcomed everyone to the meeting of the RMLD Board of Commissioners and asked all attendees to identify themselves.

2. Public Comment

Citizens' Advisory Board

Vice Chair Soni (CAB) noted that the CAB meeting is tomorrow. At the December CAB meeting, the CAB voted to recommend the decarbonization strategy to the RMLD Board.

Liaisons to RMLD Board

There was no comment from the RMLD Board Liaisons during this meeting.

Public Comment

There was no comment from the public during this meeting.

3. Approval of Board Minutes

Materials: Board Packet, Attachment 1 (PDF)

Meeting minutes were approved by the Board as presented.

Chair Coulter made a **motion**, seconded by Mr. Stempeck, that the Board of Commissioners approve the meeting minutes of the November 17, 2021 meeting on the recommendation of the General Manager.

Motion Passed: 3:0:0 (3 in favor) Roll Call: Mr. Stempeck, Aye; Ms. Bitá, Aye; and Chair Coulter, Aye. Messrs. Pacino and Talbot were not present.

Vice Chair Pacino entered the meeting after the vote was taken. Vice Chair Pacino assumed the role of Secretary at this point in the meeting.

4. General Manager's Report

Ms. O'Brien provided the General Manager's Report.

Adopt-An-Island Update

Ms. Bitá asked for the annual cost associated with the Adopt-an-Island project. Ms. O'Brien responded that it is approximately \$2K for vegetation, inclusive of trimming, at 550 Ash Street.

The 580 Main Street project consists of RMLD installing the EV charging station as well as surface restoration. The area for the project encompasses the corner of Main and Haven Street to the end of the parking lot. RMLD will be working collaboratively with the Reading Garden Club on vegetation. Ms. O'Brien added that Mary Higgins was great to work with, and all parties are looking forward to this project.

The DRT confirmed that the planting would not create any hazards.

Pricing needs to be secured for vegetation. Ms. O'Brien will provide the pricing information to Ms. Bitá.

The RMLD is working on a signage operating procedure for the EV charging station that will be provided to the town.

The EV charging station construction bid is due next week. Construction should start in the spring once the ground thaws.

Erin Schaeffer, Economic Development Director and Ryan Percival, Town Engineer, are the Reading representatives on the EV Charging Station Site Selection Committee and will continue working to select sites that are feasible both civilly and electrically in accordance with the town's plan.

Vice Chair Pacino made a **motion**, seconded by Mr. Stempeck, that the Board of Commissioners vote to include 580 Main Street in the "Adopt-An-Island" Town of Reading Program, in addition to the existing 550 Ash Street, for vegetation beautification, utilizing below the line funds.

Motion Passed: 4:0:0 (4 in favor, 1 absent) Roll Call: Ms. Bitá, Aye; Mr. Stempeck, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye. Mr. Talbot was not present.

Mini RMLD Board Trainings

Ms. O'Brien reported on upcoming RMLD Board Trainings

- FERC Training – February/March, Ms. Markiewicz will present basic FERC accounting.
- Legal Training – In accordance with RMLD policies, date to be determined.
- Open Meeting Law Training – Inclusive of all Board members.

Scheduling

The next board meeting will be held on February 24, 2022.

Tentatively scheduled for the end of February or beginning of March, a meeting will be held for the GM Goals/Review in conjunction with the Cultural Survey Presentation.

Joint Meeting on economic development with Select Board

The Economic Development Tour of RMLD's Ash Street campus is scheduled for tomorrow morning.

Ms. Morse did a great job on the tour map and informational brochure. This tour will be beneficial for the Town, new Commissioners as well as, Select Board Members.

The information gained from this tour can be utilized for the joint meeting with the Select Board in February/March relative to the economic development of the Ash Street area. RMLD needs to know the direction the town is moving in the future to develop a master site plan.

March Finance Committee Meeting

In March, The RMLD will presenting the Payment in Lieu of Taxes (PILOT) to the Finance Committee that demonstrates the new calculation.

RMLD Electric Vehicle Charging Strategies Webinar

RMLD Electric Vehicle Charging Strategies Webinar will be held on February 1, 2022, at 7:00pm. There is a link on RMLD's website to register; the RMLD will continue to promote the event through the newsletter, press releases, and email blasts. Commissioner Talbot volunteered to be on the panel. The purpose is to provide education on electric vehicles, RMLD rebates and to promote electrification.

Reading Rotary Update

The RMLD will provide an update to the Rotary on January 24, 2022.

Upcoming Events

High School Art Contest

High School Art Contest Kickoff for RMLD's annual report theme will be "VERSATILITY"; targeted for the end of January.

Elementary Art Contest Awards

The Elementary Art Contest Awards is tentatively scheduled for February or March and will be held in person or virtual. Audio visual technology is being installed to accommodate hybrid meetings. RMLD hopes to resume in house meetings in the spring.

Town Meeting Land Article

Ms. O'Brien submitted the Warrant Article to the town of Reading regarding the procurement of the land for the new Wilmington substation (all commission members were copied). It has been confirmed that the Article will be on the Warrant for the upcoming Town Meeting.

Mr. Stempeck commended and thanked Mr. Morse for the layout she prepared for the RMLD campus tour. Ms. O'Brien echoed Mr. Stempeck's comments.

5. Policy Review

Materials: Policy Review Packet, (PDF)

Ms. O'Brien reported on the following Policies:

Policy 1: Community Relations

No modifications were made to Policy 1: Community Relations. The policy reflects current RMLD practices, policies, and applicable laws.

Chair Coulter asked a question regarding donations to the communities. Ms. O'Brien responded that the law is very specific, there are no donations/contributions to any charities or 501c's. RMLD receives many requests for donations, and all are reviewed accordingly.

Chair Coulter cited the example of a pole being needed at a ball field; how does the RMLD handle those requests? Ms. O'Brien responded that RMLD has installed and replaced poles in town parks; poles which are not donated.

Vice Chair Pacino made a **motion**, seconded by Mr. Stempeck, that the Board of Commissioners approve Policy 1 Community Relations as presented, with no changes, on the recommendation of the General Manager.

Motion Passed: 4:0:1 (4 in favor, 1 absent) Roll Call: Ms. Bitá, Aye; Mr. Stempeck, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye. Mr. Talbot was not present.

Policy 5: Training and Travel

- The policy name was revised to reflect RMLD's current practice, "Training/Travel".
- The form (Attachment A) was changed to "Training/Travel" permitting authorization for both.
- In accordance with the current RMLD Organizational Chart, Human Resources Manager was changed to Director of Human Resources throughout.
- The approval process, mileage, requisite receipts, and all allowable expenditures were clarified.

Vice Chair Pacino made a **motion**, seconded by Ms. Bitá, that the Board of Commissioners approve Policy 5: Overnight Travel, as presented, on the recommendation of the General Manager.

Motion Passed: 4:0:1 (4 in favor, 1 absent) Roll Call: Ms. Bitá, Aye; Mr. Stempeck, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye. Mr. Talbot was not present.

Policy 17: Tuition Reimbursement

- In accordance with the current RMLD Organizational Chart, Human Resources Manager was changed to Director of Human Resources throughout.
- RMLD has determined that per semester is passe, the department will reimburse six courses per calendar year for higher education (courses are now more condensed - six-week class timeframes).
- The requirement of employees to provide "all receipts" was clarified.
- If the RMLD employee is enrolled in a private college or university, the reimbursement amount shall not exceed the tuition rates applicable to comparable programs at a Massachusetts public university or college.
- The language stating that RMLD employees will not be permitted to use company time or resources for classes nor studying was modified to indicate there are no exceptions.

Mr. Stempeck asked a question relative to course selection: Does RMLD decide if the courses are appropriate in terms of applicability for job training or can employees take any course they wish?

Ms. O'Brien responded that employees receive a list of recommended courses applicable to their position. The goal is to have employees attain skill proficiency through education or for promotion advancement.

Vice Chair Pacino made a **motion**, seconded by Mr. Stempeck, that the Board of Commissioners approve Policy 17 Tuition Reimbursement, as presented, on the recommendation of the General Manager.

Motion Passed: 4:0:1 (4 in favor, 1 absent) Roll Call: Ms. Bitá, Aye; Mr. Stempeck, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye. Mr. Talbot was not present.

Policy 22: Pension Trust

Ms. O'Brien stated that the town handles the Pension Trust per the statute under current law. This was part of the Policy 8 OPEB discussion, where RMLD has authority. The RMLD is recommending to dissolve this policy.

Discussion followed on how RMLD's Pension Fund will be transferred to the town of Reading, who will be the custodian of these funds and if this policy should be dissolved.

Ms. Markiewicz clarified that the Pension Trust and the OPEB trust are two separate trusts. The pension trust is with the town and has always been with the town.

Ms. O'Brien stated that although the RMLD is no longer handling the Pension Trust, it still exists, but the investing is handled by the town. The RMLD's annual payments to the town of Reading are reflected as an operating expense in its rates without the creation of a separate trust.

This policy (governing document) does not apply anymore. There is a Pension Trust, but it comes under the authority of the town with the statutes.

Vice Chair Pacino made a **motion**, seconded by Ms. Bitá, that the Board of Commissioners dissolve Policy 22 Pension Trust, as presented, on the recommendation of the General Manager.

Motion Passed: 5:0:0 (5 in favor) Roll Call: Ms. Bitá, Aye; Mr. Stempeck, Aye; Vice Chair Pacino, Chair Coulter, Aye, Mr. Talbot, Aye.

Mr. Talbot joined the meeting remotely at 7:01 PM.

6. Integrated Resources Report Board Packet, Attachment 4, *Integrated Resources Report* (PDF)

Mr. Phipps provided an Integrated Resources Report as follows.

2022 Rates – Update (slide 3)

Massachusetts Department of Public Utilities (MPDU) confirmed the RMLD rates filing. The new rates became effective as of January 1 and reflected in RMLD billings accordingly.

The Purchase Power Capacity & Transmission Charge (PPTC) and Fuel (pass through accounts) were higher than expected in January. Customer billings for January will be closer to a ten or eleven percent increase based on usage, in comparison to December. Customer billings from September to December demonstrated a lower PPTC cost because RMLD utilized funds from the Rate Stabilization Fund to offset the cost. The use of Rate Stabilization Funds did not occur in January, thus contributing to the increase.

Billing examples that illustrate the 2022 rate changes can be found on RMLD's website.

Mr. Phipps stated that the residential portion of Renewable Choice becomes effective February 1. The renewable choice rate will be shown on residential bills as an incremental rate as opposed to usage and is based on per kilowatt consumption. The renewable choice rate will be communicated in RMLD's newsletter, via a press release, RMLD's website and by email. We plan on making Renewable Choice for C&I in March 2022.

The A3 rate is being tested in the billing system and customer communication is being drafted.

The RMLD is developing a calculator for the renewable choice and A3 rates. The calculator will be located on the RMLD's website, and customers will be able to utilize this tool to view the financial impact for participation in the renewable choice program.

Power Supply Update Status (slide 4)

Three Transactional Facility Agreements (TFA's) were executed in the first half of 2021. RMLD performs the TFA analysis monthly. The RMLD is looking at the forward price curves based on analysis and may execute additional TFA agreements for a four-year period. The April to May timeframe would be financially advantageous for the RMLD to secure these contracts.

Mr. Phipps reported on the power supply contract approved in 2021 as outlined in slide 4. The environmental assessment on the Connecticut and Dahowa projects resulted in no findings. Mr. Phipps stated that the New York project will be executed in the spring, and RMLD will take power from Dahowa in April. Seabrook Solar is expected to be executed in February and the Vineyard Wind purchase power agreement will tentatively occur in March.

RMLD is currently working with Millstone through ENE with other municipal light plants to secure the most advantageous contract.

All power contracts addressed are long term contracts, twenty to thirty years.

Hydro Quebec I/II Transmission (slide 5)

RMLD has transmission rights and equity ownership in Hydro Quebec (2,000 megawatts). The RMLD belongs to a municipal consortium, which in total, owns less than 100 megawatts. Currently, the department is not taking power from Hydro Quebec because the minimum bid to participate is 100 megawatts. RMLD is working in conjunction with ENE to obtain additional megawatts and allow for RMLD to take power from Hydro Quebec.

The intention of the project is not an investment vehicle but to have transmission rights; whether RMLD takes power or not, the contract remains beneficial.

RMLD currently sells the transmission rights and receives dividends from the equity portion. RMLD's expenses were under \$150K; the dividend paid out was over \$550K, with the net benefit of \$400K annually. RMLD has another 20-year contract with no exit clause, which will require \$230K over the next four years with a return of \$1m for the following 16 years.

Chair Coulter asked a question regarding the 100-megawatt barrier. Mr. Phipps responded that currently, the consortium level is at approximately 90-92 megawatts in total; with a small portion left to gain transmission rights. The RMLD is working on finding sources willing to sell their rights. Although not critical in the next few years, this would be a benefit in our power supply portfolio in the future.

7. Engineering and Operations Report

Materials: Board Packet, Attachment 4, *Engineering and Operations Report*, (PDF)

Mr. Jaffari reported on the Engineering and Operations update as well as, CY2021 accomplishments.

RMLD Reliability Indices CY2021 (slide 3)

In CY21, RMLD's reliability indices for SAIDI, CAIDI and SAIFI were lower than the regional and national averages. RMLD has one of the most reliable systems in the northeast region.

Causes of Outages as of December 2021 (slide 4)

In comparison to the annual average (2016-2020); in calendar year 2021 RMLD had a higher occurrence of outages due to issues with equipment. This trend will continue in the short term as RMLD proactively addresses the aging infrastructure equipment.

In all other categories the Department is lower than the five-year annual average.

RMLD's Maintenance Programs (slide 5)

RMLD has outstanding reliability largely due to the maintenance programs the Department has in place. RMLD's maintenance programs mitigate load loss, which in turn, results in cost savings.

CY2021 13.8kV (Step-down) Conversions (slide 6)

13.8kV (Step-down) conversions are extremely important to the reliability of the system. This process involves upgrading poles, wires, transformers, and accessories; this transforms an entire area and with proper maintenance, will last 20-30 years.

CY2021 Underground Subdivisions Upgrade (slide 7)

RMLD has approximately 200 subdivisions, most of which are aged and due for upgrades.

Upgrades are prioritized on age and condition, and involve replacing the transformers, primary and secondary cables, as well as termination elbows. The result is brand new equipment.

Aged Transformer Replacement (slide 8)

The aged transformer program started in CY14. In CY21, 732 pad transformers were inspected over 10 years. There has been a small number of premature failures of less than 25 years. Transformer replacement is prioritized on physical condition, age, and load.

The life of a transformer exponentially decays as it ages. New transformers are extremely beneficial to RMLD as they are more efficient and have lower losses. A substation transformer's life expectancy is between 4-50 years depending on the load and proper maintenance while a distribution transformer's life expectancy is approximately 20-25 years.

Aged Transformer Replacement Program (slide 9)

Mr. Jaffari presented a statistical analysis for system wide pad and pole mounted transformers as outlined in slide 9.

Miscellaneous Construction Projects (slide 10)

Mr. Jaffari presented Pad-mount switchgear upgrades at industrial parks and four new developments.

CY21 Smart Grid Automation (slide 11)

Four SCADA-Mate switches and two IntelliRupters are installed every calendar year, resulting in improved reliability, faster restoration, and the ability to provide metering data to SCADA and OMS. While Smart Grid automation is important for the system reliability, the addition of EV chargers and increased solar load poses a new power quality threat; there is a concern around harmonics in the future.

Smart Grid Projects (slide 12)

RMLD successfully completed a Smart Grid Devices Communication Study; a report will be issued shortly. The results of this study will provide the Department with a guideline for the required radio and communication device(s) that support robust communication between smart switches to support Fault Detection Isolation and Restoration (FDIR).

The Department completed the AMI/MDM study. The study found that the RMLD needs to change the aged Advanced Metering Infrastructure (AMI) system and install the Meter Data Management (MDM) which allows the billing system to integrate with Cogsdale; demand side management; and to implement additional demand programs.

Outage Management System / Integrated Voice Response (OMS/IVR) integration is a method for the RMLD to communicate to the customer base via, phone, text, or e-mail. There are 800 customers currently enrolled.

The Customer Notification System (CNS) which will be utilized for customer alerts during the system peak and demand response, is in progress.

Volt Var Optimization (VVO) is installed and in testing mode. The function of the Volt Var Optimization is to improve the power quality and power factor (lower losses=cost savings).

All required staff have completed the S&C Smart Grid Training.

Substation Equipment Testing and Maintenance (slide 13)

Testing was performed at all RMLD's substations. NERC requires a five-year testing period. RMLD tests the breakers, transformers, and relays triennially. Station 5, due to its age, is tested annually until the new Wilmington substation is built. The Department's plan is to be proactive with equipment testing and maintenance.

CY21-Accomplishments (slides 14-17)

Mr. Jaffari thanked the RMLD supporting staff as well as the management team and stated that it was through their cooperation and collaboration that made CY21 a successful year.

Mr. Jaffari discussed the accomplishments as outlined in slides 14-17, in the following areas:

- Substation
- Engineering & Operations Special Projects
- Facilities and Purchasing/Materials Management

New Wilmington Substation (CY21-CY24) (slide 17)

RMLD has found an option for the new Wilmington substation land in the Ballardvale area.

The load allocation study has been completed to ensure that the location of the substation is at the lowest loss on the system. This new substation will take the load of Station 5 as well as provide load relief for the other two substations.

The Department has completed the site survey, environmental assessment, and land appraisal. The new Wilmington substation will tentatively be completed in CY24 with the load transfers from Substations 3, 4, and 5 to occur from CY24 – CY26.

Massachusetts Grant EV-Chargers (slide 18)

The loading requirement from the transformers has been reduced from 80% to 70% of the name plate due to anticipation of increased load. When fully charged, each EV chargers' load is equivalent to that of three or four homes.

RMLD received a grant in the amount of \$78K for L2 EV chargers at five locations: two in Wilmington and three in Reading. There is an additional grant in the amount of \$99K for L3 EV Chargers at the Reading Library (March-April timeframe) with another in Reading.

Double Poles (slide 19)

Mr. Jaffari presented a statistical analysis for double poles as outlined in slide 19. The RMLD is working to transfer to single poles as soon as possible.

8. Procurement Report

Materials: Board Packet, Attachment 5, *Information on Bidding* (PDF).

Ms. O'Leary reported on procurement and bidding information, as outlined on slide 1.

The RMLD is experiencing delays with lead times for equipment and materials. The supply chain has been interrupted due to shortages of personnel and COVID absences. Ms. O'Leary noted that the RMLD has been impacted by these delays and cited the example of a generator which the RMLD was scheduled to receive in December. The timeline was first pushed to April, and then again to September.

Concurrently, vendors have shortened the timeline for quote pricing. Certain vendors are no longer providing quotes because it could take a year or more to get the supplies, equipment, or materials.

The RMLD had 40 bids last year and as of January 2022 has a total of 15 bids, quotes, or proposals. COVID has not impacted purchasing in this regard.

Ms. O'Leary addressed the question of "why only one bid":

Non bid submittals

- Vendors cannot meet RMLD's specifications
- Vendors are too busy to respond to bids
- Vendors do not have the requisite resources
- Some bids are restrictive.

Ms. O' Leary cited the example of the Tree Trimming bid. This was a restrictive bid because RMLD has high safety qualifications in the bid specifications, such as Electrical Hazards Awareness Program (EHAP). Not all tree trimming companies have this safety qualification in place, and as a result, do not meet the bid specifications.

Prevailing wage

Ms. Leary discussed prevailing wage as outlined on slide 1. Under Massachusetts General Law all employees on "public works" projects must be paid the "prevailing wage." The Division of Labor Standards sets that wage rate.

To comply with this, vendors must fill out a weekly certified payroll form report and a certified compliance statement submitted with their invoices.

This requires additional paperwork, which acts as a barrier to submitting bids for some potential vendors. In many circumstances, smaller companies cannot afford to pay the prevailing wage rate.

During the bid process, the RMLD circulates a "non-response" form as a way for vendors to provide feedback as to why they did not bid. Calls and emails are made as well. Currently there are few responses to the non-response form. Purchasing is considering changing the order of where the form is located to ensure visibility.

Based on the feedback from the Board all bids are going out for a minimum of three weeks to return the bid, in a more complicated bid, four weeks.

Rejection of a Bid:

- Submitted after specified timeline
- Non-responsive - Does not conform to terms and conditions
- Not responsible - Does not have the integrity, capability, reliability to do the work
- Statutorily required forms not submitted- Non submittal of non-collusion certification, tax compliance certification

- Bid security is not included with submittal
- Bid was not signed by the authorized person

Ms. O' Leary stated that some bidders take exceptions to the bids, and in some cases these exceptions are acceptable. The RMLD may also reject a bid when the bid comes in significantly higher than the budgeted amount.

Chair Coulter thanked Ms. O'Leary for the presentation.

9. Procurement Requests Requiring Board Approval

IFB 2021-37 Electric Utility Excavation Including Emergency and Construction Services

IFB 2021-37 Electric Utility Excavation Including Emergency and Construction Services postponed to the next RMLD Board meeting. No vote was taken.

10. Scheduling

The next RMLD Board of Commissioner's meeting will be held on February 24, 2022.

- February CAB Meeting Coverage: Chair Coulter
- February AP: Mr. Talbot
- February Payroll: Mr. Stempeck

11. Executive Session

At 8:04 PM Vice Chair Pacino made a motion seconded Mr. Talbot by that the Board of Commissioners go into Executive Session pursuant to Massachusetts G.L. c.164 section 47D, exemption from public records and open meeting requirements in certain instances, to discuss competitively sensitive issues regarding Massachusetts G.L. c.30A, sec 21 (a)(1) and to consider the purchase, exchange, lease or value of real property, and return to regular session for the sole purpose of adjournment.

Motion Carried: 5:0:0 (5 in favor) Roll Call: Mr. Stempeck, Aye; Ms. Bitz, Aye; Mr. Talbot, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye.

12. Adjournment

The Commission returned from Executive Session for the sole purpose of adjournment.

At 8:36 PM Vice Chair Pacino made a **motion**, seconded by Mr. Talbot that the Board of Commissioners adjourn regular session.

Motion Carried: 5:0:0 (5 in favor) Roll Call: Mr. Stempeck, Aye; Ms. Bitz, Aye; Mr. Talbot, Aye; Vice Chair Pacino, Aye; and Chair Coulter, Aye.

BOARD MATERIALS AVAILABLE BUT NOT DISCUSSED

- Accounts Payable / Payroll Questions through pay date 11/15/2021
- Financial Update through November 2021
- Surplus and Scrap Material Report December 2021

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

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

INTEGRATED RESOURCES REPORT

ATTACHMENT 2



Integrated Resources Report

Battery Storage and Energy Cost Snapshot

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

24 March 2022

Outline

Battery Storage at Fordham Road (*motion*)

Wholesale Energy Cost Snapshot

Add battery storage at existing Fordham Road solar site



<i>base case model</i>	<i>annual average</i>	<i>project life (20 years)</i>
Initial RMLD Investment	\$0	\$0
Total RMLD Avoided Costs <i>(capacity & transmission savings)</i>	\$928,945	\$18,578,905
Base Cost <i>(storage services w/ performance warranty)</i>	(\$500,000)	(\$10,000,000)
Shared Savings <i>(50% / 50% after base cost)</i>	(\$214,473)	(\$4,289,452)
Net RMLD Cost Savings	\$214,473	\$4,289,452

Existing 2.16 MW DC solar array, Fordham Road, Wilmington;
PV array owned and operated by Kearsarge Energy

Kearsarge invests; adds new 5 MW / 10 MWH storage system; then operates

Base case - charge from grid; exploring solar charging economics / logistics

Site access, safety, permitting, ... completed prior to construction

Additional interconnection analysis in process

Aligned incentives and low risk to RMLD

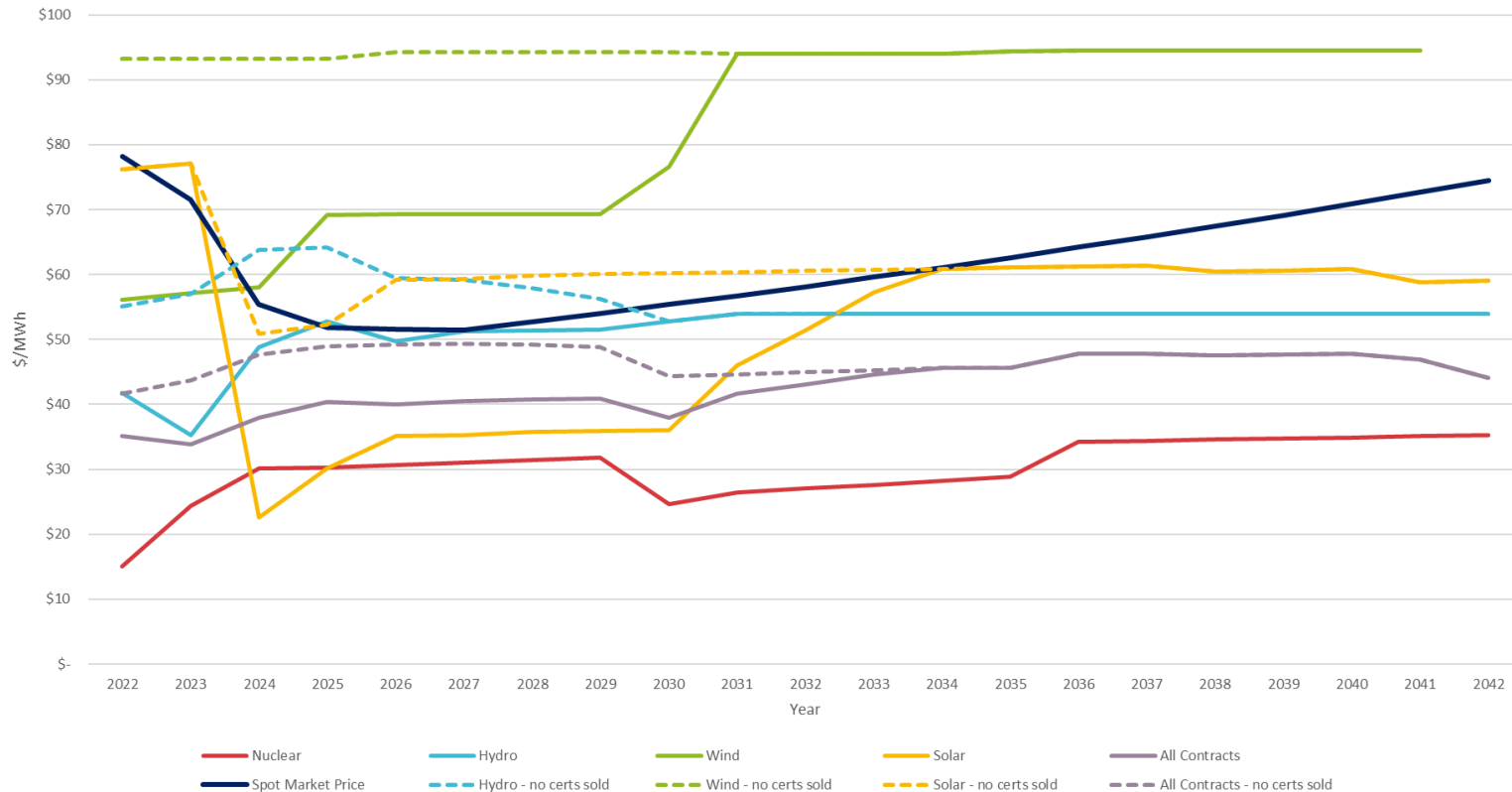
Average \$200,000 annual savings (base case)

key model assumptions – base case

- a) Commission 2Q 2023
- b) 3.4 MW (trans) and 4.7 MW (capacity) reduction during peak hours
- c) 85% peak hit rate
- d) Transmission costs - 5% annual increase
- e) Capacity costs - 2% annual increase
- f) No discount rate included

RMLD wholesale energy cost forecast

snapshot of current RMLD portfolio (line steps due to specific contracts ending and starting); energy only (capacity and transmission excluded)



- Solid lines - costs net of certificate sales
- Certificate sales decrease over time to meet compliance → pushing net costs higher
- Open market prices expected to double by 2050 (electrification and non-carbon gen)
- Nuclear lowest and 24/7 (firm for base load)
- Solar cost influenced by certificate sales
- Hydro good overall dispatch and price fit
- Wind is consistently expensive but less intermittent (good dispatch match to solar)
- Diverse mix increasingly important

*RMLD wholesale energy costs are steadily increasing, but less than open market cost forecasts
(one benefit of proactively executing long-term supply contracts)*

Thank You
from the IRD Team

**ENGINEERING AND OPERATIONS REPORT:
SUPPLY CHAIN UPDATE
ATTACHMENT 3**

Engineering & Operations Report



Hamid Jaffari
Director of Engineering & Operations

RMLD Board of Commissioners Meeting

March 24, 2022



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

SUPPLY CHAIN ISSUES

LEAD TIME/PRICING

TRANSFORMERS

Sample Comparison

Pole Mount Transformers	2021 Average Price (from Bid)	2022 Average Price (from Bid)	% Increase
37.5 kVa 1Ø WYE 240/120	\$1,619.00	\$4,081.75	152%
50 kVa 1Ø WYE 240/120	\$1,898.50	\$4,618.00	143%
Delivery Range	14-20 weeks	52-102 weeks	

Pad Mount Transformers	2021 Average Price (from Bid)	2022 Average Price (from Bid)	% Increase
25 kVa 1Ø FR3 240/120	\$2,550.33	\$16,022.00	528%
37.5 kVa 1Ø FR3 240/120	\$2,763.67	\$10,359.67	275%
75 kVa 1Ø FR3 240/120	\$3,660.67	\$22,463.00	514%
225 kVa 3Ø DF 208Y/120	\$9,724.25	\$19,915.87	105%
300 kVa 3Ø DF 208Y/120	\$10,866.50	\$23,927.37	120%
300 kVa 3Ø DF 480Y/277	\$9,654.33	\$22,188.94	130%
Delivery Range	18-32 weeks	22-102 weeks	

Supply Chain Impact on Maintenance & Capital Projects

TRANSFORMERS

Approximate Current Transformer Inventory

Type	# in System	# Available in Stock	Stock as % of System
Pad-mount	1,023	183	18%
Pole-mount	2,865	180	6%
Total	3,888	363	9%

- ❖ Targeted stock amount is 10% of the number of transformers currently in the system.
- ❖ Limited transformer supply will impact the following Capital Projects
 - Aged Transformer Replacement Program
 - Underground Area Upgrades
 - 13.8kV Upgrades (Step-down Areas)
- ❖ RMLD will limit transformer replacement to those transformers identified as a potential for leak or overloading.
- ❖ RMLD will suspend disposal of old transformers; old transformers will be maintained as emergency use stock.

SUPPLY CHAIN ISSUES

LEAD TIME/SHIPPING

continued...

- Substation Parts
 - Breaker for Station 5: ordered mid-July 2021; typical turnaround 16-18 weeks. Delivery has been delayed several times – delivery pending any time now.
 - 35kV Breaker for Station 4: ordered December 2021; typical turnaround 4-5 months. July 2022 delivery pending.
- Itron Meters: typical turnaround 6 weeks; current lead time 4-6 months.
- Overhead Wire (various types) - average current turnaround 2-10 weeks; previous turnaround within one week.
- Underground Wire (various types) - current turnaround 1 week; this is standard.
- Poles (various types) - current turnaround 2 weeks; this is standard.
- Terminations & Elbows (various types) - current turnaround 3-4 weeks; this is standard.
- Switchgear – order placed on December 1, 2021. **July 1, 2022, estimated receipt (this is standard).**

The Stock Department is monitoring lead times and is currently ordering above normal ordering patterns for standard stock items.

SUPPLY CHAIN ISSUES

LEAD TIME/SHIPPING

Continued...

- Generator for Substation 3 – BOC approved in May 2021; ordered July 13 with estimated 22 weeks delivery. Has been delayed several times; September 2022 current anticipated delivery.
- Rolling Stock
 - Material Handler – BOC approval in July 2021; estimated 47-52 weeks delivery. August 2022 current anticipated delivery.
 - Trouble Truck – pending March 2022 BOC approval; estimated 57-70 weeks delivery.



Any Questions?

**PROCUREMENT REQUESTS
REQUIRING BOARD APPROVAL**

ATTACHMENT 4



March 14, 2022

Town of Reading Municipal Light Board

Subject: IFB 2021-28 Electric Vehicle Charging Stations Site Construction and Installation

Pursuant to M.G.L., c. 30 § 39M, on December 29, 2021, an invitation for bid was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle, was published in the Central Register, and was posted on COMMBUYS and the RMLD website, requesting sealed bids for Electric Vehicle Charging Stations Site Construction and Installation.

An invitation for bid was sent to thirty-three (33) companies.

Sealed bids were received from seven (7) companies: Brite-Lite Electrical Co., Inc., CDS Unlimited LLC, Coviello Electric & General Contracting Co., Inc., Cullen Electrical Contractors Inc., McDonald Electrical Corporation, Phillips Electric, Inc., and Your Electrical Solution, Inc.

The sealed bids were publicly opened and read aloud at 11:00 a.m. on January 19, 2022, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid 2021-28 for Electric Vehicle Charging Stations Site Construction and Installation be awarded to: **Coviello Electric & General Contracting Co., Inc. for \$95,000.00**¹, pursuant to M.G.L., c. 30 § 39M, as the lowest responsible and eligible bidder, on the recommendation of the General Manager.

¹See attached analysis.

This work is part of the 2022 Capital Project #099, which is budgeted for \$130,000.

[Brian Smith \(Mar 16, 2022 07:28 EDT\)](#)

Brian Smith, Systems Engineer

John McDonagh, Assistant Director of E&O

[Hamid Jaffari \(Mar 16, 2022 09:17 EDT\)](#)

Hamid Jaffari, Director of E&O

[coleen obrien \(Mar 16, 2022 13:10 EDT\)](#)

Coleen O'Brien, General Manager

Electric Vehicle Charging Stations Site Construction and Installation							
IFB 2021-28							
Vendor	Base Bid			BASE BID TOTAL AMOUNT	Alternates		Total Amount of Bid (Base Bid + Alternates)
	Location #1*	Location #2*	Location #3*		Alternate #1*	Alternate #2*	
Coviello Electric & General Contracting Co., Inc.	\$ 19,300.00	\$ 29,300.00	\$ 33,800.00	\$ 82,400.00	\$ 6,300.00	\$ 6,300.00	\$ 95,000.00
Cullen Electrical Contractors, Inc.	\$ 33,500.00	\$ 44,500.00	\$ 31,000.00	\$ 109,000.00	\$ 14,500.00	\$ 14,500.00	\$ 138,000.00
Brite-Lite Electrical Co., Inc.	\$ 29,900.00	\$ 39,900.00	\$ 65,695.00	\$ 135,495.00	\$ 8,300.00	\$ 8,300.00	\$ 152,095.00
Phillips Electric, Inc.	\$ 30,800.00	\$ 44,000.00	\$ 64,200.00	\$ 139,000.00	\$ 16,000.00	\$ 16,000.00	\$ 171,000.00
CDS Unlimited, LLC	\$ 34,245.08	\$ 48,955.00	\$ 49,990.00	\$ 133,190.08	\$ 23,492.00	\$ 23,492.00	\$ 180,174.08
McDonald Electrical Corporation	\$ 41,858.00	\$ 54,738.00	\$ 72,652.00	\$ 169,248.00	\$ 9,709.00	\$ 8,696.00	\$ 187,653.00
Your Electrical Solution, Inc.	\$ 57,500.00	\$ 57,500.00	\$ 59,000.00	\$ 174,000.00	\$ 12,000.00	\$ 13,000.00	\$ 199,000.00
*Location Addresses							
Location #1 - 580 Main Street, Reading, MA							
Location #2 - 32 Lincoln Street, Reading, MA							
Location #3 - 64 Middlesex Avenue, Reading, MA							
Alternate #1 - 175 Middlesex Avenue, Wilmington, MA							
Alternate #2 - 121 Glen Road, Wilmington, MA							



March 14, 2022

Town of Reading Municipal Light Board

Subject: IFP 2022-01 Trouble Truck with Trade-In

Pursuant to M.G.L. c. 164, § 56D, on February 2, 2022, an invitation for proposal 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 a Trouble Truck with Trade-In.

An invitation for proposal was sent to eighteen (18) companies.

Sealed proposals were received from two (2) companies: Altec Industries, Inc., and James A. Kiley Company.

The sealed proposals were publicly opened and read aloud at 11:00 a.m. on February 23, 2022, 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 proposal IFP 2022-01 for one (1) Trouble Truck with Trade-In be awarded to: **James A. Kiley Company for \$252,419.00¹**, pursuant to M.G.L. c. 164, § 56D, on the recommendation of the General Manager.

¹See attached analysis.

The 2022 Capital Budget amount for this item is \$250,000.


Paul McGonagle (Mar 15, 2022 12:18 EDT)


John McDonagh


Hamid Jaffari (Mar 15, 2022 14:05 EDT)


Coleen O'Brien (Mar 16, 2022 13:09 EDT)

**Trouble Truck with Trade-In
IFP 2022-01**

Proposer	<u>Trouble Truck Before Trade</u>	<u>Trade-In Value</u>	<u>Trouble Truck Purchase Price Less Trade</u>	<u>*Extended Warranty 22.1</u>	<u>*Extended Warranty 22.2</u>	<u>*Extended Warranty 22.3</u>	<u>Trouble Truck Price Less Trade - including Warranties</u>	<u>Electric Drive PTO System</u>	<u>Trouble Truck Price Less Trade - including Warranties and Electric Drive PTO System</u>	<u>Delivery Date ARO</u>	<u>Documents Complete</u>	<u>Exceptions</u>
Altec Industries, Inc.	\$299,193	(\$7,000)	\$292,193	\$3,335	\$225	\$6,820	\$302,573	\$45,910	\$348,483	180-192 weeks	No ¹	Yes ²
James A. Kiley Company	\$253,182	(\$4,500)	\$248,682	\$2,387	\$150	\$1,200	\$252,419	\$82,882	\$335,301	57-70 weeks	Yes	No

***Extended Warranty - 22.1:** Extended 5 year manufacturer warranty, 100,000 miles, 9,000 hours to include engine, electronics, and injectors, extended 5 year manufacturer warranty for transmission.

***Extended Warranty - 22.2:** Extended 5 year manufacturer warranty for front and rear axles.

***Extended Warranty - 22.3:** Extended 5 year manufacturer warranty, excluding engine and transmission.

¹ Altec did not have an authorized signature on the Proposal form or a signature on the Tax Compliance form which RMLD deemed statutory with proposal submittal.

² Altec had 16 exceptions (too many to list) in their bid and the truck will take almost three and one half years to build.



March 9, 2022

Town of Reading Municipal Light Board

Subject: IFB 2022-04 Home Energy Assessment Program

Pursuant to M.G.L. c. 30B, on February 2, 2022, an invitation for bid (IFB) requesting sealed bids for a Home Energy Assessment Program was placed as a legal notice in the Middlesex East Section of the Daily Times Chronicle and was posted on COMMBUYS, and the RMLD website. On February 7, 2022, the invitation was published in the Commonwealth of Massachusetts Goods and Services Bulletin.

An invitation for bid was sent to fifteen (15) companies.

Sealed bids were received from one (1) company: Energy New England, LLC

The sealed bids were publicly opened and read aloud at 11:00 a.m. on February 23, 2022, in the Town of Reading Municipal Light Department's Audio Visual Spurr Room, 230 Ash Street, Reading, Massachusetts.

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

Move that bid IFB 2022-04 for Home Energy Assessment Program be awarded to: **Energy New England, LLC. for \$82,500.00**, pursuant to M.G.L. c. 30B, as the lowest responsive and responsible bidder, on the recommendation of the General Manager. This is a three-year contract.

These services will be paid from the Operating Budget.

Sarah Shenstone-Harris

Greg Phipps

[coleen obrien \(Mar 10, 2022 11:08 EST\)](#)

Coleen O'Brien

MATERIALS AVAILABLE BUT NOT DISCUSSED

From: [Erica Morse](#)
To: [Erica Morse](#)
Subject: AP and Payroll Questions for the 22-3-24 Board of Commissioners Book
Date: Thursday, March 17, 2022 10:32:50 AM

AP

From February 11, 2022, through March 11, 2022 there were no Commissioner questions.

Payroll:

From February 14, 2022 through March 14, 2022 there were no Commissioner questions.

Erica Morse
Executive Assistant
Reading Municipal Light Department
781-942-6489

From: [Maureen Sullivan](#)
To: [Erica Morse](#)
Cc: [Paula O'Leary](#)
Subject: Surplus Update - February 2022
Date: Monday, February 28, 2022 11:40:42 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 February 2022.

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@rmlld.com