



Town of Reading Meeting Posting with Agenda

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2022-09-15

Time: 6:00 PM

Building: Reading Municipal Light Building

Location:

General Managers Conference Room

Address: 230 Ash Street

Agenda:

Purpose: General Business

Meeting Called By: Jason Small, 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 July 16, 2022, Governor Baker signed into law An Act Relative to Extending Certain State of Emergency Accommodations, which, among other things, extends the expiration of the provisions pertaining to the Open Meeting Law to March 31, 2023.

THIS MEETING WILL BE HELD IN PERSON AND REMOTELY VIA ZOOM.

For remote participation via Zoom please email krybak@rml.d.com. If possible, request the Zoom link in advance of the meeting. Include your full name and address. Comments and questions will be monitored during the meeting.

1. Call Meeting to Order – J. Small, Chair

2. Approval of Minutes – J. Small, Chair

Suggested Motion: Move that the Citizens' Advisory Board approve the minutes of the January 20, 2022, and February 24, 2022, meetings as written. *Note: Roll call vote required.*

3. Interim General Manager's Report – G. Phipps, Interim General Manager

- Talent Acquisition and Talent Management
- Salary Survey
- Flex Time Pilot
- Summer Intern Outcomes
- Joint Economic Development

4. Integrated Resources Report – G. Phipps, Interim General Manager

- RMLD Customer Payment History
- Power Supply Summary

This Agenda has been prepared in advance and represents a listing of topics that the chair reasonably anticipates will be discussed at the meeting. However the agenda does not necessarily include all matters which may be taken up at this meeting.



Town of Reading Meeting Posting with Agenda

- Hydro Power Supply
Suggested Motion: Move that the Citizens' Advisory Board recommend that the Board of Commissioners vote to accept the Interim General Manager's recommendation to execute a contract with FirstLight Power for energy, including associated certificates, from an existing hydro facility in Connecticut, contingent on appropriate environmental justice due diligence.
Note: Roll call vote required.
- 5. Engineering & Operations Report – H. Jaffari, Director of Engineering & Operations
 - Tree Trimming Program
- 6. 2022 NEPPA Annual Conference – G. Phipps, Interim General Manager
- 7. General Manager Search Committee Report – J. Small, Chair
- 8. CAB Officer Appointments: Chair and Vice Chair – J. Small, Chair
- 9. Scheduling – J. Small, Chair
 - October 13 – CY 2023 Budget Review
- 10. Adjournment – J. Small, Chair
Suggested Motion: Move that the Citizens' Advisory Board adjourn regular session. *Note: Roll call vote required.*

Attachment 1

Agenda Item 2: Approval of Minutes



Town of Reading Meeting Minutes

2016-09-22 LAG

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2022-01-20

Time: 6:30 PM

Building:

Location:

Address:

Session: Open Session

Purpose: General Business

Version:

Attendees: **Members - Present:**

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

Members - Not Present:

Lynnfield Position Vacant

Others Present:

Staff: Ms. Coleen O'Brien, Mr. Hamid Jaffari, Ms. Wendy Markiewicz, Mr. Gregory Phipps, Ms. Kathleen Rybak

Ms. Marlena Bitz, RMLD Board of Commissioners

Ms. Karen Herrick, Reading Select Board

Minutes Respectfully Submitted By: Mr. George Hooper, Secretary

Topics of Discussion:

PER GOVERNOR BAKER'S MARCH 10, 2020, ORDER SUSPENDING CERTAIN PROVISIONS OF THE OPEN MEETING LAW, G.L. c. 30A, §20 AND THE JUNE 16, 2021, ACT EXTENDING CERTAIN COVID-19 MEASURES, THIS MEETING WAS HELD REMOTELY VIA ZOOM.

1. Call Meeting to Order – J. Small, Chair

Chair Small called the meeting of the Citizens' Advisory Board to order at 6:33 PM and noted the meeting was being audio recorded. Chair Small asked all members present to state their names.

2. Approval of Minutes – J. Small, Chair

Materials: Draft Minutes from September 23, 2021, and October 20, 2021.

Mr. Hooper made a motion that the Citizens' Advisory Board approve the minutes of the September 23, 2021, and October 20, 2021, meeting as written, seconded by Mr. Kelley. **Motion carried** 4:0:0 (4 in favor, 0 opposed, 0 absent) by roll call vote of those present: Mr. Kelley, aye; Mr. Hooper, aye; Mr. Soni, aye; Chair Small, aye.

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

General/Community Update: Ms. O'Brien reported that staff will be planning Board training sessions (FERC accounting, legal issues, open meeting law, etc.). Notices will be sent to CAB members for anyone interested in attending. Ms. O'Brien provided an update on the following upcoming events: Electric Vehicle Charging Strategies

Webinar and the Elementary School Art Contest Awards ceremony. The High School Art Contest will kick-off at the end of January; this year's theme is "versatility" which will tie into the theme of the Annual Report. The AV room is being updated to accommodate hybrid in-person meetings as allowed by the Board of Health.

Green Communities: Ms. O'Brien provided an update on the status of Green Communities. RMLD staff along with ENE (Energy New England) have been working hard with legislators on this initiative. RMLD is asking that each community be able to join on their own at their own pace. Residents of towns that would like to participate will pay a fee into the renewable trust and RMLD would be the billing agent for such fee. This bill should be passed before the end of the next legislative session. Mr. Ragucci from ENE will be meeting with Lynnfield to bring them up to date on this initiative.

Ms. O'Brien noted the last item to be completed from the Organizational Study is the employee survey. Staff is working with a cultural consultant who specializes in utilities to get this completed. A presentation will be scheduled for either February or March.

Ms. O'Brien noted a draft warrant article for potential procurement of land for the Wilmington substation has been submitted to the Town of Reading.

4. Integrated Resources Report – G. Phipps, Director of Integrated Resources
Materials: Rates, Power, Hydro Quebec I/II Presentation Slides

Rates – Status of 2022 Rates: Mr. Phipps provided an update on the roll-out of the recently approved rates (Slide 3: 2022 Rates – Update). The rate adjustment for basic rates went into effect January 1, and staff anticipates a 4.7 to 5% increase on average monthly residential bills during 2022 (January to December). However, the January bills are closer to 10% higher (than December), and in certain cases 13-14% higher. The reasons behind that include: (1) higher customer usage, and (2) the PPCT and the fuel rates were higher in January than expected. Mr. Phipps noted the monthly PPCT and fuel adjustment rates are pass-throughs at cost to the customer. Another factor is that during September through December, the RMLD used rate stabilization funds to reduce customer billing. The RMLD did not use rate stabilization funds in January.

The Renewable Choice rates will be effective February 1. Starting January 24, residential customers can sign up on the website or by calling Customer Services. The Renewable Choice rate for commercial and industrial customers will be rolled out later in the spring as that billing is a bit more complicated. Staff are continuing to do some testing for the A3 (EV) rate, which is a residential rate scheduled to roll out March 1.

Mr. Phipps noted communication efforts to educate customers on the rates include the RMLD website, press releases, the RMLD newsletter, email blasts, and billing/envelope notes. Staff has developed a rate calculator (for the A3 and Renewable Choice rates), which will be put onto the website.

Power Supply – Status of New Supply Contracts: Mr. Phipps then reviewed *Slide 4 - Power Supply Update*, which outlines accomplishments for 2021 relative to power supply. Transaction Facility Agreements (TFAs) provide an opportunity for RMLD to execute agreements when the pricing is optimal based on IRD's monthly analysis and the forward price curve for energy. Because open market prices are trending up, the TFA model provides fewer opportunities that are advantageous.

The bottom block (of the slide) shows agreements that were approved in 2021. The average of all these agreements is 200,000 MWHs annually, which represents a quarter of the total annual purchase (700, 000 MWHs). The focus with these agreements is to be non-carbon and reduce risk and manage costs. Non-carbon energy is more expensive than natural gas generated energy. Mr. Phipps provided a brief update on each of the items listed. Mr. Phipps noted the forward price curve remains elevated, but a dip is expected over a five-year window; RMLD will take

advantage of that to fill some open positions coming up in August and November of this year.

Hydro Quebec I/II Rights Extension: Mr. Phipps provided an update on the existing Hydro Quebec I/II contracts. These contracts were initiated 20 years ago. The RMLD participates in two ways: (1) transmission rights, and (2) a very small equity portion as part of a consortium of seven MLPs. Over the next four years, RMLD will pay ~\$230k as part of the equity contributions to this transmission line. A consortium of MLPs (including RMLD) does not currently take power from this project and the minimum commitment to take power is 100 megawatts and collectively the MLP consortium is at ~90 (megawatts). The Consortium is actively pursuing another 10% of rights to bring it over that 100-megawatt limit. This is primarily hydro power and not run of the river like some smaller plants, so it is very stable. Over the next 20 years it will be a very important and valuable part of the RMLD power supply portfolio. In the interim (as illustrated in the table), RMLD participates with Eversource and National Grid (the primary users) and receives use rights dividends of \$550,000 annually, which more than offsets costs of \$150,000 annually for a net annual gain of \$400,000 per year. Mr. Phipps noted RMLD did not go into this as an investment vehicle; we want access to the transmission facility, and we are going to try and participate in using the access as soon as possible. In the meantime, it is still net positive to our rate payers. This project is financially net positive for RMLD customers, and this transmission line is already built and transmitting electricity.

Mr. Phipps concluded his presentation by noting staff is finalizing a proposal to be presented at the February meeting on battery storage systems to be installed within the network over the next four years.

Mr. Soni asked, relative to the transmission line, what it will take to get above that 100 megawatts commitment. Mr. Phipps responded that someone else would have to sell their equity rights. Mr. Phipps noted the RMLD is currently making money on the contracts, but as we get further out, its valuable from a supply stability perspective; they are both hydro. The one drawback is that currently the Canadian hydro plants do not provide non-carbon certificates of any form. Hopefully by 2050, we'll have figured out a way to have it have non-carbon certificates. This is a commitment to a 20-year block. The next block will renew in 2041, so we want to make sure RMLD can continue to use it, but also get credit for it from a compliance perspective. Mr. Soni asked, what RMLD's share would be at the 100-megawatt limit. Mr. Phipps responded ~10 megawatts.

5. Engineering and Operations Report – H. Jaffari, Director of Engineering & Operations
Materials: Engineering & Operations Report Presentation Slides

Mr. Jaffari presented a review of the CY2021 Engineering & Operations Accomplishments (Slides 3-16). *CY2021 Reliability Indices* (slide 3) were all well below the national and regional averages. *Causes of Outages* (slide 4) shows that RMLD went over the five-year average for Equipment Failure. This was due (in part) to premature failure of transformers. The rest of the categories, with the exception of the weather, show a downward trend.

RMLD Maintenance Programs are outlined on Slide 5. Mr. Jaffari noted the *CY2021 13.8 kV Conversions* (Slide 6) and the *CY2021 Underground Subdivision Upgrades* (Slide 7). These areas are prioritized based on the age and condition; they go through a major overhaul replacing poles, transformers, primary and secondary wire, terminations, elbows, etc. The benefits include reduction of line losses, improved reliability, and supporting better voltage in those areas.

Progress on the *Aged Transformer Replacement* program (Slide 8 and 9) was reviewed. Mr. Jaffari noted some (newer) transformers needed to be replaced because of premature failure due to environmental conditions and manufacturer issues. Therefore, the transformer inspection threshold was dropped from 25 years to 10 years to identify any pending issues. However, the Aged Transformer Replacement

Program will continue to target transformers 25 years and up. Mr. Jaffari reviewed the criteria used to evaluate transformers. Mr. Jaffari then reviewed the 2021 progress with *Miscellaneous Construction Projects* (Slide 10), which include the Switchgear Upgrade Program and New Developments.

CY2021 Smart Grid Automation (Slide 11) outlines the progress made on the Smart Grid Roadmap. Mr. Jaffari reviewed some of the functions and benefits of the smart-grid technology (switches). Additional related *Smart Grid Projects* are shown on Slide 12. Mr. Jaffari noted smart grid devices rely on robust communications. In order to make sure that the right communication method or equipment (radio or fiber) is used, RMLD had a study completed; once the report is received, staff will begin to roll out the recommendations.

The AMI/MDM study is complete, and the recommendation is that the AMI system needs to be upgraded – it is at the end of the technology life. RMLD will also need a meter data management (MDM) system to host the meter data collected throughout the system. This will allow staff to do better data analysis (for transformer load management, demand response, and demand side management programs) and data integration (with Cogsdale and GreatPlains).

The OMS/IVR integration is completed and tested. The GIS model is being updated and the OMS should be ready sometime in April/May. Once completed, staff will start another customer registration campaign. Registered customers will receive a notification (text, email or phone) when RMLD detects an outage.

The Customer Notification System (CNS) is in progress and will allow RMLD to send customer notification for such things as peak shaving or customer alerts.

Volt Var Optimization (VVO) was installed on the SCADA and is being testing. This allows RMLD to improve the power factor automatically on all feeders. This will cut down on system losses.

Mr. Jaffari reported that Smart Grid training was done for SCADA-mate and IntelliRupters for engineers, technicians and line crews. They are all familiar with the safe installation and proper construction for these switches.

Mr. Jaffari then reviewed *CY2021 Substation Equipment Testing and Maintenance* (Slide 13). Mr. Jaffari noted the RMLD has an aggressive inspection program for all substation equipment; NERC and NPCC require testing every five years; RMLD does it every three years. Mr. Jaffari noted Station 5 has been put on an annual inspection and testing schedule; the substation is almost at the end of its useful life, and staff wants to be sure the equipment is working properly. Mr. Jaffari then highlighted *CY21 Accomplishments* (Slide 14) specific to the substations.

Mr. Jaffari then reviewed Slide 15 and 16: *CY21-Accomplishments (Engineering & Operations Special Projects, and Facilities and Purchasing/Materials Management)* and provided a brief overview of each of the projects.

Mr. Jaffari provided an update on the tasks related to the building and commissioning of the *New Wilmington Substation (CY21-CY24)* (Slide 17). *Massachusetts Grant EV-Chargers* (Slide 18) outlines the details of this project which is being completed in collaboration with IRD. Mr. Jaffari concluded with a review of *Double Poles* (Slide 19).

Mr. Jaffari provided clarification to a few questions raised by CAB members. Chair Small thanked Mr. Jaffari for his presentation.

6. Scheduling – J. Small Chair

The next CAB meeting was scheduled for February 24th at 6:00 PM. Mr. Kelley agreed to cover the February Commissioners meeting.

7. Executive Session – J. Small, Chair

Mr. Hooper made a motion that the Citizens' Advisory Board go into Executive Session pursuant to Massachusetts G.L. c.164 section 47D, exemption from public records and open meeting requirements in certain instances, to discuss trade secrets or confidential, competitively sensitive, or other proprietary information and return to regular session, for the sole purpose of adjournment, seconded by Mr. Soni. Roll Call: Mr. Hooper, aye; Mr. Kelley, aye; Mr. Soni, aye; Chair Small, aye.

8. Adjournment – J. Small, Chair

Mr. Hooper made a motion to adjourn regular session, seconded by Mr. Kelley. Roll Call: Chair Small, aye; Mr. Hooper, aye, Mr. Soni, aye, Mr. Kelley, aye.

The CAB meeting adjourned at 7:47 pm.

As approved on _____.

DRAFT



Town of Reading Meeting Minutes

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2022-02-24

Time: 6:00 PM

Building:

Location:

Address:

Session: Open Session

Purpose: General Business

Version:

Attendees: **Members - Present:**

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

Members - Not Present:

Lynnfield Position Vacant

Others Present:

Staff: Ms. Coleen O'Brien, Mr. Hamid Jaffari, Ms. Wendy Markiewicz, Mr. Gregory Phipps, Ms. Kathleen Rybak

Mr. Robert Coulter and Mr. Philip Pacino, RMLD Board of Commissioners

Minutes Respectfully Submitted By: Mr. George Hooper, Secretary

Topics of Discussion:

PER GOVERNOR BAKER'S MARCH 10, 2020, ORDER SUSPENDING CERTAIN PROVISIONS OF THE OPEN MEETING LAW, G.L. c. 30A, §20 AND THE JUNE 16, 2021, ACT EXTENDING CERTAIN COVID-19 MEASURES, THIS MEETING WAS HELD REMOTELY VIA ZOOM.

1. Call Meeting to Order – J. Small, Chair

Chair Small called the meeting of the Citizens' Advisory Board to order at 6:01 PM and noted the meeting was being audio recorded. Chair Small asked all members present to state their names.

2. Approval of Minutes – J. Small, Chair

Materials: *Draft Minutes from November 17, 2021*

Mr. Kelley made a **motion** that the Citizens' Advisory Board approve the minutes of the November 17, 2021, meetings as written, seconded by Mr. Soni. **Motion carried** 3:0:1:0 (3 in favor, 0 opposed, 1 abstained, 0 absent), by roll call vote of those present: Mr. Soni, aye; Mr. Kelley, aye; Chair Small, aye. Mr. Hooper abstained as he was not present at the November 17, 2021, meeting.

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

Ms. O'Brien noted that RMLD is starting to see the impact of supply chain issues, in particular with transformer purchases. Staff has done a good job of making sure RMLD is stocked to stay ahead of the issue, but it is eventually going to have an

impact. Engineering staff will shift gears on the transformer inspection and maintenances program and focus on inspections only. Staff will not be doing as many transformer upgrades unless they are absolutely warranted.

Ms. O'Brien reported that an Electrical Vehicle Charging Strategies Webinar was held on February 1; the recording is available on the RMLD website. Planning is underway for the Elementary Art Contest Awards presentation to be held virtually on March 3rd and 10th. Invitations will be sent for anyone interested in attending. Artwork for the High School Art Contest is due March 25th. This year's theme is "versatility." Work has begun on the 2021 Annual Report.

Ms. O'Brien reported that a combined meeting of the Board of Commissioners and the Reading Select Board is being scheduled to help facilitate discuss around the Ash Street campus and Reading's economic development vision for the area. To help move this discussion, Ms. O'Brien hosted a tour of the Ash Street facilities including the Barbas Building, Station 1, and the operations building so that Town representatives could get a sense of how much room RMLD needs and the current condition of the buildings.

Ms. O'Brien reported that RMLD will be contracting with Cultural Solutions to conduct an employee survey and to then provide staff leadership training. A presentation for the CAB will be scheduled at the end of the spring. This is the last item to be completed from the 2014 Organizational Study.

Ms. O'Brien noted that she and Ms. Markiewicz will be giving the (Reading) Finance Committee an update (on March 23rd) on the new calculation that is being used for the below the line PILOT payment for the Town of Reading. The above the line payment will also be discussed. Ms. O'Brien offered to provide a similar presentation to the CAB.

4. Integrated Resources Report – G. Phipps, Director of Integrated Resources
Materials: *Solar, Hydro, Certs, Batteries, Commercial Incentive Presentation Slides*

Mr. Phipps began the Integrated Resources presentation with review of a proposed solar opportunity in Berlin, New Hampshire (*Slide 3: Polar PV – Milan Road*). The proposal is for a long-term contract with fixed pricing for a utility-scale solar array to be built and operated by Borrego Energy. It is scheduled to come online near the end of 2025 and will be a single-axis tracker. Mr. Phipps reviewed the operation and benefits of this single-axis tracker. The RMLD share is ~35,000 MWhs per year. It is ~5% of the RMLD portfolio in 2022. Towards the end of this contract (2050), RMLD total load will be up over 1.1m megawatt hour of purchases. RMLD will be buying the energy with the certificates. The pricing is favorable (for renewable); ~45% higher than the RMLD portfolio average (including natural gas). Most solar projects are 65-75% higher

Mr. Hooper asked if this project is higher than what is in the portfolio currently for renewables? Mr. Phipps responded that for the renewable only portfolio this is on the lower end, and it brings the average down (for renewables only).

Mr. Soni asked about future value (dollars to dollars) when comparing natural gas (without RECS's and renewable (with REC's). What does the contract do to the rate going out 25 years? Mr. Phipps responded that the RMLD is following Policy 30 and as we get further out, RMLD will be retiring more certificates. Over time RMLD will be selling less and retiring more, which means fewer dollars will go back into (and reduce) the fuel charge. The value of certificates and energy over time will go up. This particular contract is fixed pricing.

Mr. Phipps agreed to create graphs when presenting contracts that show the analysis with forecasts for LNP, the RMLD portfolio by source (hydro, wind, solar, nuclear,

etc.) and the impact of certificate retirements on the energy costs (going out 30 years). RMLD's net costs benefit from being able to do long-term contracts like this and to be ahead of the curve in terms of availability. There is a lot of analysis that is done, but RMLD always wants to have a mix not only in terms of pricing, but also in terms of the energy type, contract length, and geography.

Mr. Hooper made a **motion** that the Citizens' Advisory Board recommend that the Board of Commissioners vote to accept the General Manager's recommendation to contract with Borrego Solar for energy and Class 1 certificates, from a to-be-built 109-megawatt solar project near Berlin, New Hampshire, known as Milan Road, pending environmental justice review. The motion was seconded by Mr. Kelley. **Motion carried 4:0:0** (4 in favor, 0 opposed, 0 absent) by a roll call vote of those present: Mr. Hooper, aye; Mr. Kelley, aye; Mr. Soni, aye; Chair Small, aye.

Mr. Phipps then presented information regarding the *Hydro First Light Extension (Slide 4)*. This is a combination of energy and certificates. This site includes two hydro dams (next to each other) that have been in existence, and that are currently generating power for RMLD. Mr. Phipps noted they have ponding capability and discussed the benefits of ponding to maximize output during high peak hours. As with Milan (presented earlier) RMLD is part of a consortium with Energy New England (ENE) as the aggregator; the actual contract will be between First Light and RMLD. This agreement would be effective when the current contract ends in 2024 with a six-year extension; six years is the longest extension available. RMLD will have a right of first refusal for additional extensions (2030), but the price will change (with every extension).

This project is lower than the current RMLD average hydro portfolio, but all in (certificates and energy) it is about 50% higher than our total portfolio average. However, it brings the RMLD average portfolio hydro costs down. First Light is very reputable and reliable. The group discussed the ponding capabilities for this project; it is not pumped hydro. The ponding does not have capacity for seasonal shift; it is more of an hourly shift to maximize daily output.

Mr. Soni made a **motion** that the Citizens' Advisory Board recommend that the Board of Commissioners vote to accept the General Manager's recommendation to contract with First Light for energy, and Class 2 certificates, from existing hydro facilities known as Shepaug and Stevenson, pending environmental justice review. The motion was seconded by Mr. Hooper. **Motion carried (4:0:0)** by roll call vote of those present: Mr. Hooper, aye; Mr. Soni, aye; Mr. Kelley, aye; Chair Small, aye.

Mr. Phipps then reviewed the *3Q 2021 Certificates – quarterly report (slide 5)*, which outlines the certificate activity for 3Q 2021. Certificates are minted about six months after the power is generated. There is an eight-week transaction window and RMLD is in the middle of the transaction window for the third quarter 2021 certificates. Mr. Phipps reviewed the transaction volume as outlined on the graph. Of note, RMLD normally sells about 80% of what is left over and banks the rest. In this case, 70% of the certificates will be sold. The reason is that Seabrook was being refueled in October. When the system is being refueled, RMLD gets energy from other sources but not certificates. Therefore, RMLD will only sell 70% this transaction period to make sure RMLD has enough to retire in the 4th quarter of 2021. Mr. Phipps noted Integrated Resources continues to streamline the program and reporting.

Mr. Phipps provided a preview for two battery storage projects, noting battery storage is an important part of the RMLD portfolio. Mr. Phipps outlined the economic benefits of peak management using battery storage. As reported previously, storage systems do not generate electricity they only time shift – store and then discharge.

Mr. Phipps reviewed *Slide 6: Battery Storage – Station 3* and noted the five-megawatt per circuit restriction was recently lifted, which means that an additional five-megawatts system can be added at Station 3. This will double the size but will not have any threat of reconstitution of the transmission side of the business. Mr. Phipps reviewed the planning activity underway for consideration of additional storage at Station 3. A full presentation of the proposal will be forthcoming.

Mr. Phipps then provided a brief overview of planning underway to add *Battery Storage at the Solar Choice 2 site at Fordham Road in Wilmington (Slide 7)*. This site will accommodate a 5-megawatt/10-megawatt hour storage system. This energy storage agreement would be structure differently than Station 3; it will be a shared savings provision. In both cases (Fordham Road and Station 3) RMLD does not plan to own the asset; RMLD will pay for the right to use it. At this Fordham Road, Kearsarge Energy owns and operates the currently operating solar PV array. This is in an industrial area, which presents a different set of economic benefits and fulfills the power supply strategy that is to encourage as much within-territory generation and storage as is practical. Mr. Soni asked if this would change the economics of Solar Choice II, which have not been great. Mr. Phipps responded that would be part of the business model that needs to be finished. The \$300k is a pool of money that would come to RMLD. Since this system has been in place for a while, it will have a different set of treatment, but there is not currently a plan to tie it into Solar Choice II.

Mr. Phipps then reviewed *Solar Incentive for Commercial and Industrial (Slide 8)*, noting there is a fair amount of interest from commercial and industrial customers in adding solar onto their platforms (both on the customer and RMLD sides of the meter). Staff plans to increase the maximum rebate from \$50k to \$120k, which equates to a \$1,200 per KW incentive; an 8–10-year payback on a typical 25-year system. \$1,200 per KW is what is currently in place for the residential system. Additionally, RMLD will encourage battery storage by looking at the PPA rate or shared savings that RMLD would accept with commercial and industrial customers. This is a nice mechanism to provide incentive dollars for commercial and industrial customers and it provides the benefit of increasing generation in our territory. Mr. Phipps noted RMLD would limit CY2022 commercial and industrial incentives to \$960k (as per the ECC budget) and will make these incentives effective immediately.

5. FERC Accounting Training – W. Markiewicz, Director of Business & Finance
Materials: *Business and Finance Presents FERC Accounting (presentation slides)*

Ms. Markiewicz began her presentation by noting the financial reporting and compliance standards that RMLD must follow when preparing the general ledger (*Slide 3: RMLD Financial Compliance*). First and foremost, RMLD must follow GAAP (Generally Accepted Accounting Principles), which is the foundation for the approved accounting methods and standards. Next RMLD must follow GASB (Governmental Accounting Standard Board), which is the account reporting standards for state and local governments. Thirdly, RMLD uses FERC (Federal Energy Regulatory Commission) uniform system of accounts specific for public utilities. Ms. Markiewicz went through the *FERC Chart of Accounts (Slide 3)* and *Common FERC Plant Accounts (Slide 4)*. Ms. Markiewicz noted RMLD is (primarily) a distribution plant, although there are some transmission accounts. Distribution Plant and General Plant accounts are used for capital improvement projects. Ms. Markiewicz reviewed *Slide 5 – Capital Project Example* which shows a snapshot of (the Capital Budget) the various FERC numbers (second column) used for capital projects. This illustrates the various FERC numbers that can go into a single project.

Ms. Markiewicz finished with a review the accounts used for *Operations and Maintenance Expenses (Slide 6)* and *General and Administrative Expenses (Slides 7, 8 and 9)*.

6. Scheduling – J. Small, Chair
The next meeting was scheduled for March 24th at 6:00 (pending confirmation of BOC scheduling). Mr. Hooper agree to cover the March BOC meeting.

Mr. Kelley asked if there was any update on the Lynnfield representative. Ms. O’Brien respond that she had not heard anything. However, Mr. Ragucci from ENE had met with the Town Manager to update him on Green Communities and some other issues.

7. Adjournment – Mr. Hooper made a **motion** that the Citizens’ Advisory Bord adjourn, seconded by Mr. Soni. Motion carried 4:0:0 (4 in favor, 0 opposed, 0 absent) by roll call vote of those present: Mr. Hooper, aye; Mr. Kelley, aye; Mr. Soni, aye; Chair Small, aye.

CAB Adjourned at 7:08 PM

As approved on _____

DRAFT

Attachment 2

Agenda Item 3: Interim General Manager Update



Interim General Manager Update

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

15 September 2022

Outline

Talent Acquisition and Talent Management

Salary Survey

Flex Time Pilot

Summer Intern Outcomes

RMLD Customer Payment History

Joint Economic Development

Talent Acquisition and Development

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

July (4 promotions, 2 hires)

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

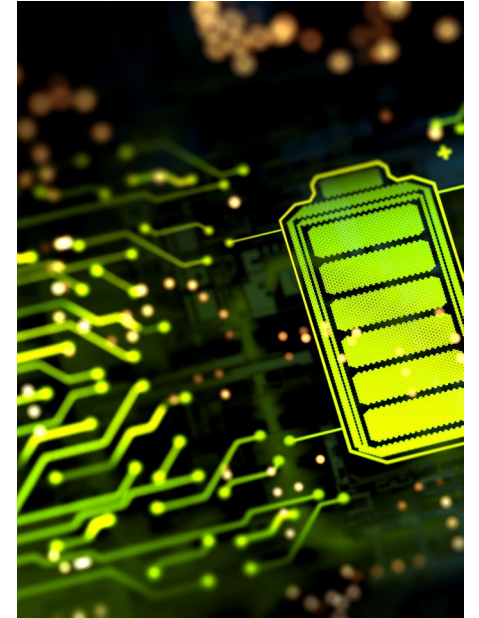
August (1 move, 5 hires)

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

September (1 move, 6 hires)

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

10 openings in process of being filled



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

Team Management / Leadership

External salary survey

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

Employee survey

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

Flex time program

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



Summer Intern Program – Great Success

Summer program purpose

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

Summer 2022 project highlights

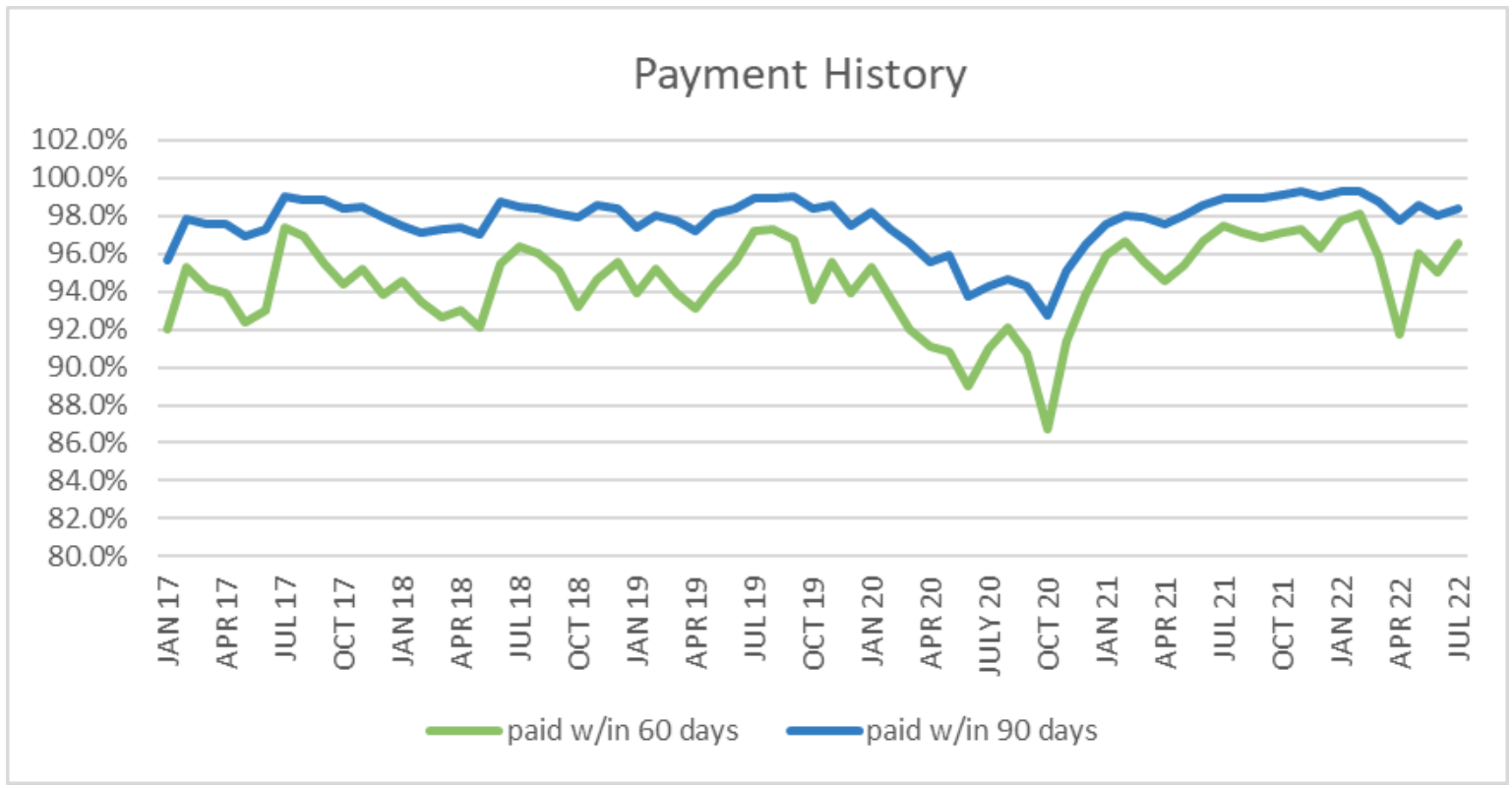
- ASHP load impact
- EV load impact
- Hydrogen as alternate generation
- Solar PV site research
- Mobile app benchmarking
- PCE vs CPI indexing analysis
- ...



3 summer interns and RMLD analyst at Cabot Turner Falls hydro

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

RMLD Payment Aging



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

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

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

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

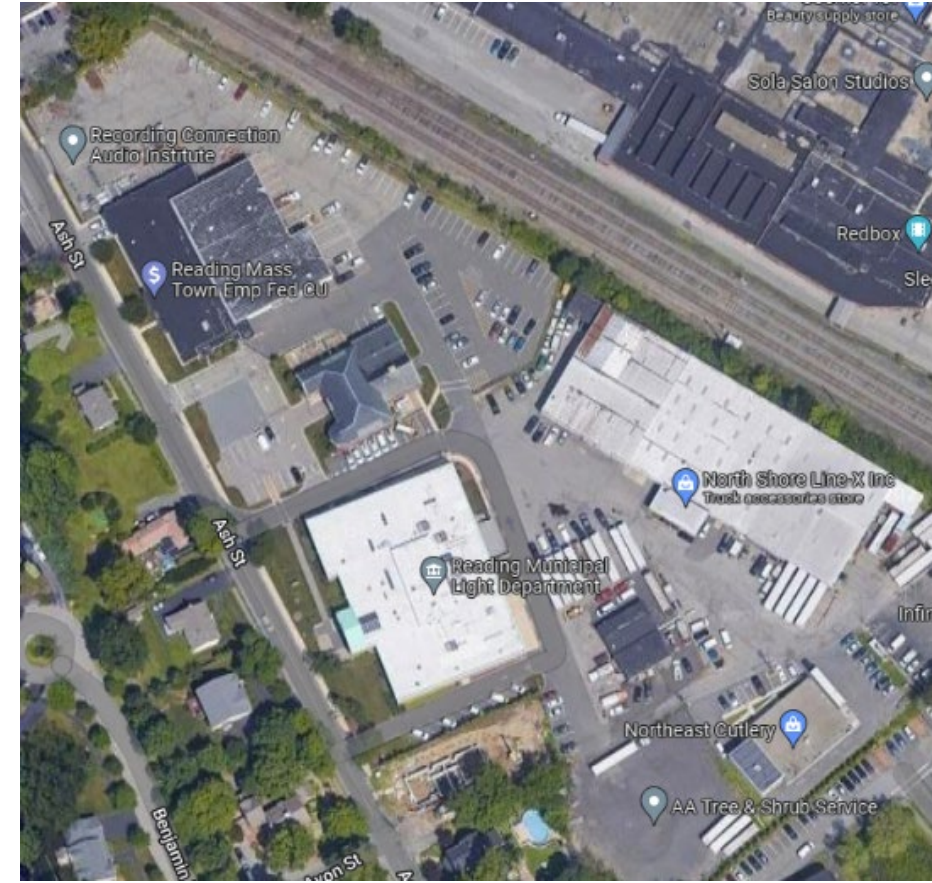
LIHEAP, Good Neighbor Energy Fund, local church and charity services

Joint Economic Development

Proactive support of economic development of Ash Street Campus

Follow-up meetings with Town of Reading and Ash Street Campus owners

RMLD to host on-site neighborhood focused meeting 6 Oct 2022, 7:00 – 9:00 pm (Town of Reading is event organizer)



Thank You

Attachment 3

Agenda Item 4: Integrated Resources Report



Integrated Resources Report

Portfolio update
Hydro PPA
2023 preliminary power supply

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

15 September 2022

Outline

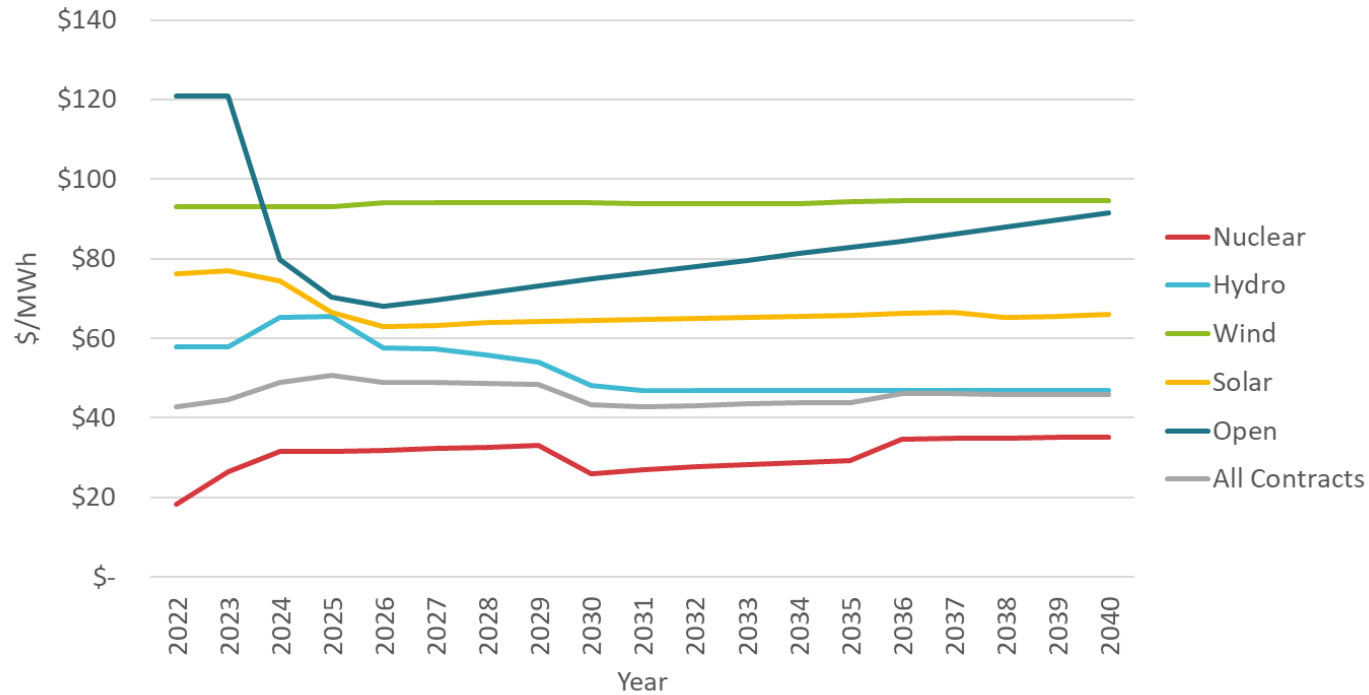
Power Supply Portfolio Update

Power Supply Snapshot

Hydro Addition to Power Supply *(motion)*

2023 Power Supply *(preliminary view)*

Aggressive pursuit of power supply contracts



Nuclear

- Dominion response above FPC, no certificates

TFA's

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

Hydro Quebec

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

Load following option with NextEra

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

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

Power Supply Snapshot

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

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

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



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

Hydro

First Light Falls Village



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

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

Fixed pricing 2025 through 2030, then indexed through 2040

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

Term - 15 years (2025 – 2040)

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

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

Power Supply Preliminary Budget

Continued and diligent management of power supply costs and rates

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

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

Thank You
from the IRD Team

Attachment 4

Agenda Item 5: Engineering & Operations Report



Reliability Report Sept 2022

By: H. Jaffari,
Director of E&O

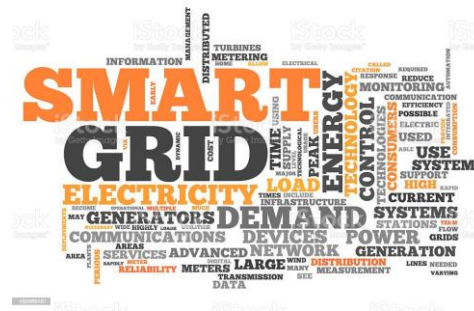
System Reliability

➤ System Reliability Depends on Having a Good:

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



➤ RMLD's System Reliability Remains Strong





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RMLD's Maintenance Programs

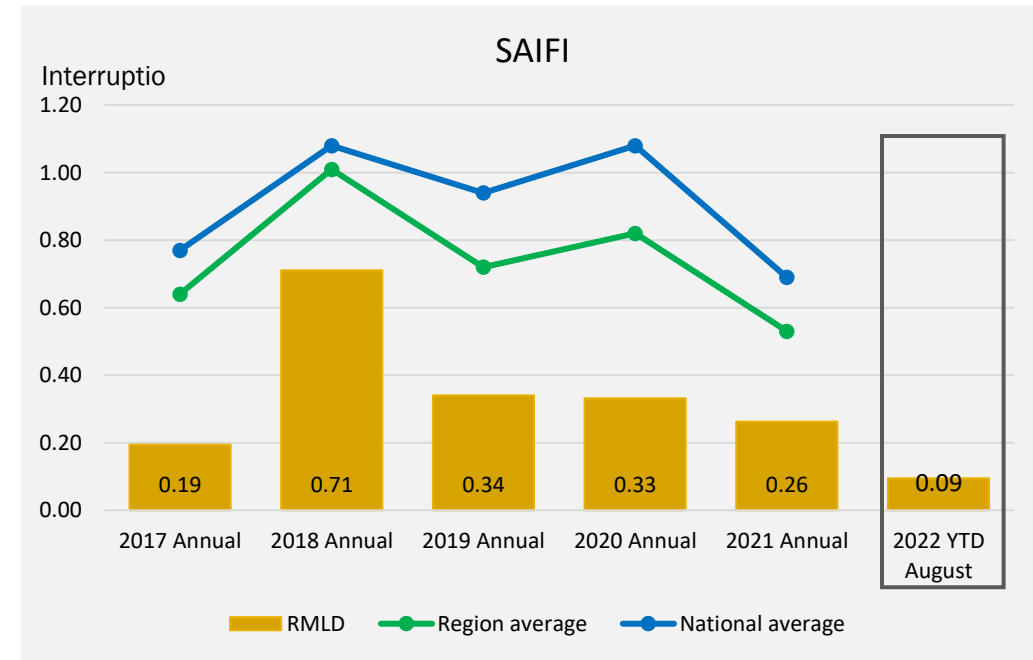
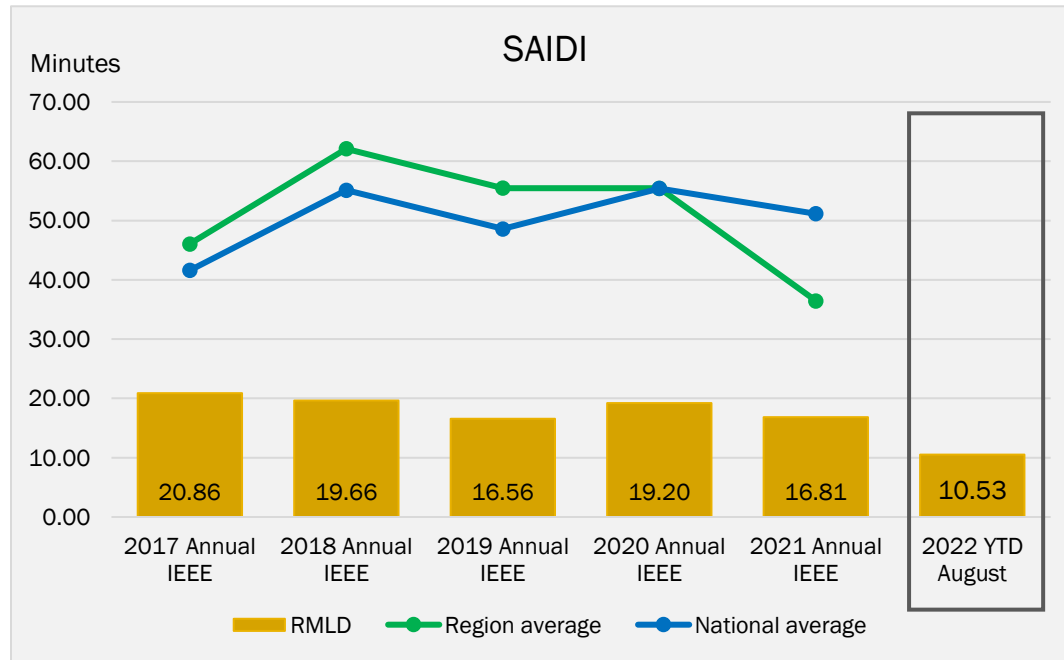


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- **Tree Trimming** – Approximately on Average 2,726 Spans/Year
- **Inspection of Feeders (ongoing)**
- **Pole Inspection/Replacement Program (ongoing)**
 - 324 of 541 failed poles have been set since program began
 - 316 transfers have been completed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

RMLD Reliability Indices As of August 31, 2022



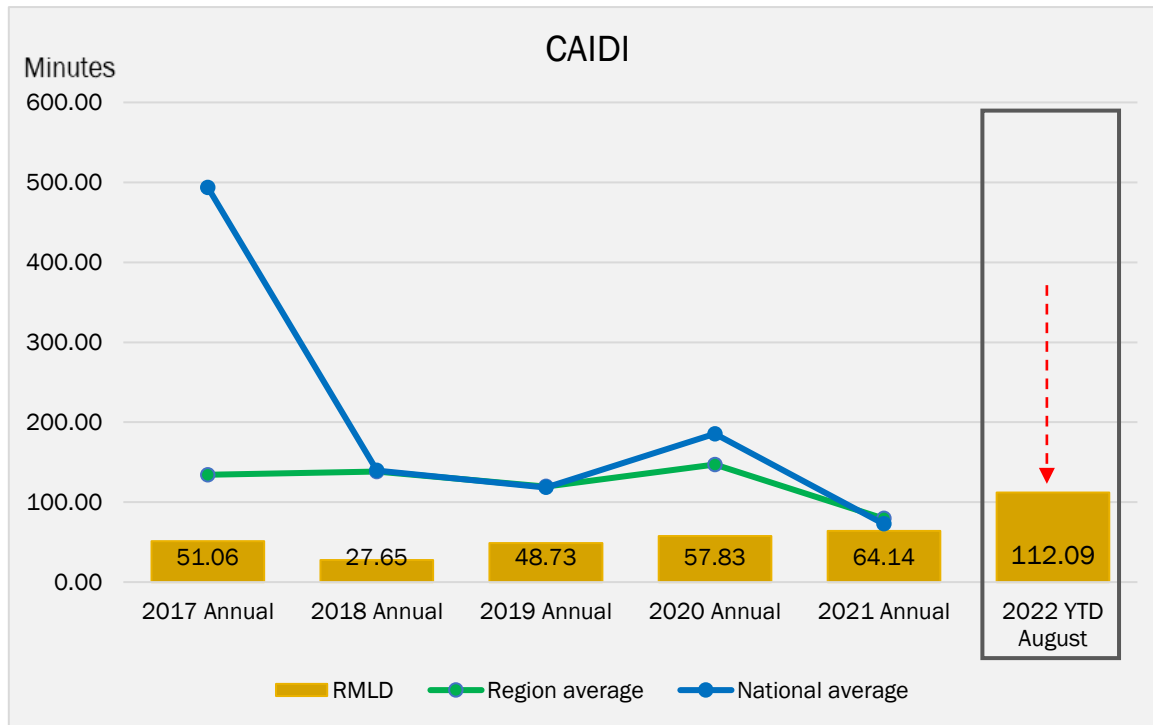
$$SAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

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

Source: APPA eReliability Tracker

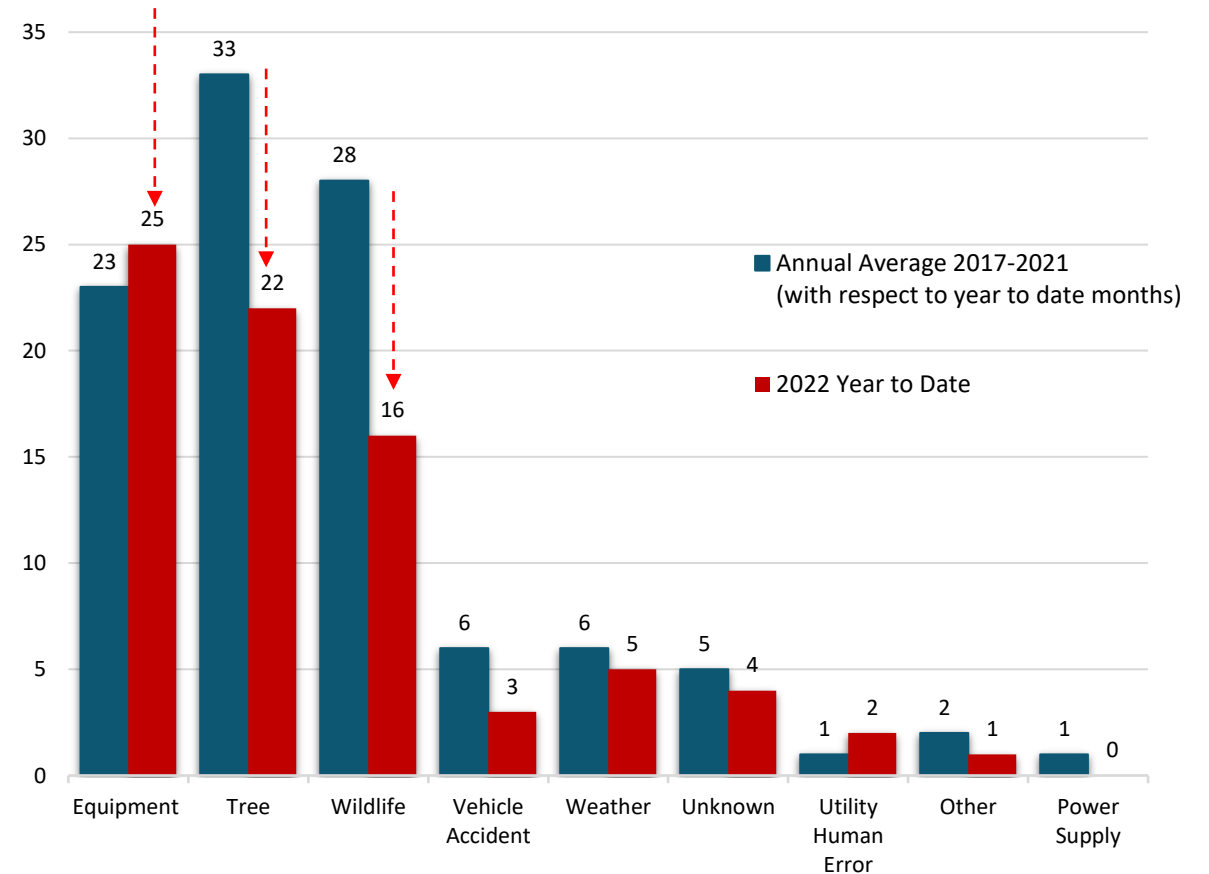
Note: APPA eReliability Tracker using IEEE beta threshold method for outages.

Outage Statistics As of 8/31/2022

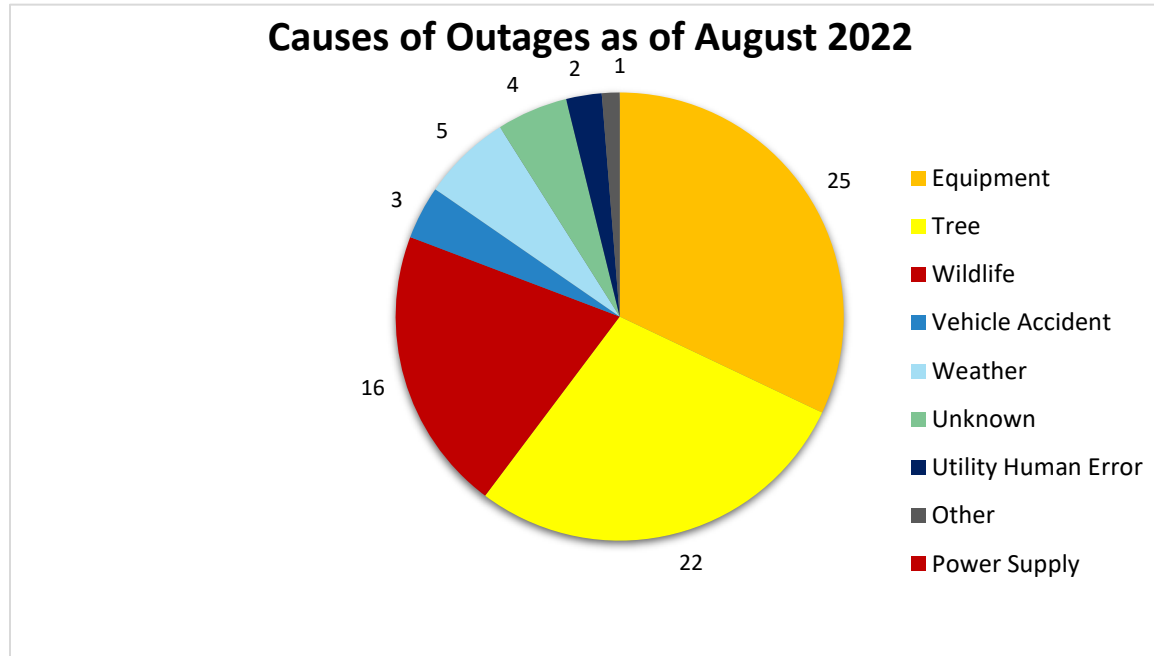


$$CAIDI \text{ (Minutes)} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customer Interruptions}}$$

Causes of Outages as of August 2022



RMLD Outage Causes As of 8/31/2022



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



RMLD Strategy Moving Forward

- **Top Three Outage Causes:**

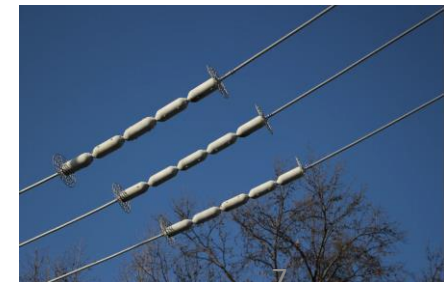
- Equipment Failure/Damages (32%) exceeding 5 years average; Trees (28%); Wildlife (21%)

- **Facts:**

- RMLD has slowed down its [Aged Transformer Replacement Program](#) and [URD upgrades](#) due to [Supply Chain Disruption](#) Issues. Inventory of transformers and wires is reserved for only emergencies, storms and potential leakers.
- Tree trimming is reduced due to changes in laws ([As of January 1, 2022](#)) requiring tree workers be paid prevailing wages, which has impacted budget.
- RMLD is using standard wildlife protectors and animal guards available in the industry and being used by all utilities nationwide to cover energized equipment parts.

- **New Outage Reduction Strategy:**

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



RMLD Tree Trimming Plan

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



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

Tree Damages to RMLD Assets



Edgemere Road, Lynnfield
on 8/8/2022



Flash Road, North Reading
on 7/24/2022



Martin Road, Reading
on 8/19/2022



Chestnut Street, Lynnfield



Ash Street, Reading
on 8/22/2022



Hillview, North Reading

Thank
you



Attachment 5

Agenda Item 6: 2022 NEPPA Annual Conference



Summary Notes

NEPPA 2022 Annual Conference

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

15 September 2022

Outline

Kelly-Detwiler - Keynote

Joe Cutatone – Clean Energy Goes Mainstream

Benjamin Byboth – Commercial Fusion

Ted Wiley – Form Energy Storage

Elizabeth Whitney – Legislative

Barney Rush - Regional Energy Challenges

Mike Hyland – EV Chargers

Peter Kelly-Detwiler Keynote

Key Points

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

New England States mandating decarbonization (use and source)

Use – heating and transportation will dramatically increase electric load

Source – renewables are intermittent and distributed

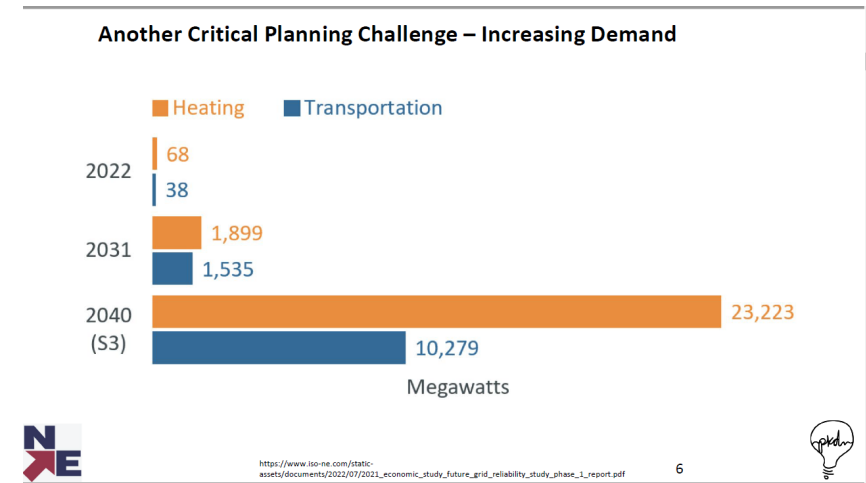
Intermittent renewables causing supply volatility and price volatility

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

Data increasingly critical to manage, predict, enable distributed control

Implications for RMLD

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



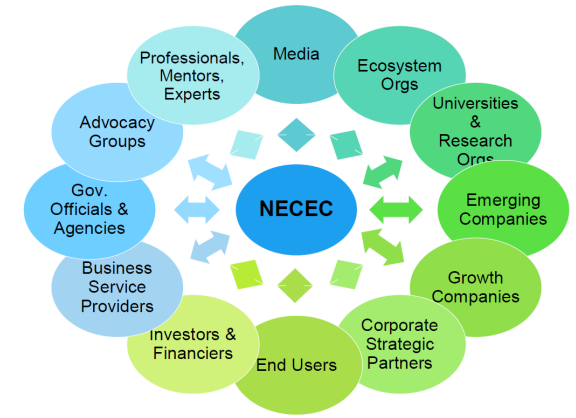
Joe Cutatone - Clean Energy Goes Mainstream

Key Points

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



NECEC's Community



Implications for RMLD

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

Ben Byboth – Commercial Fusion Energy

Key Points

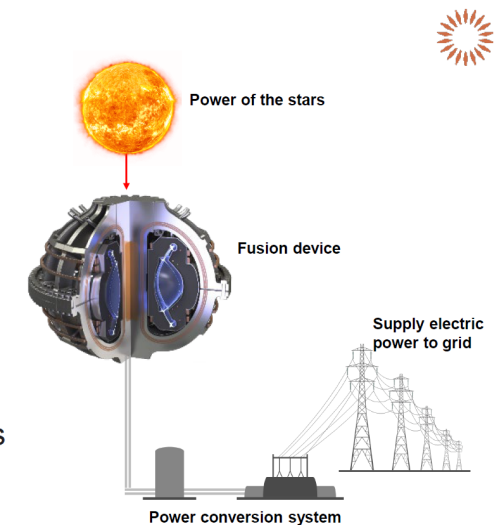
- Solar, wind not price competitive above 50% mix
- More than renewables required to achieve Net Zero
- Commonwealth Fusion Systems founded 2018, MIT spin-off
- Raised \$2 billion; strong team; diverse investor set
- Building facility in Devens, MA
- HTS magnets are the game changing technology
- Commercialization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

Implications for RMLD

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

Why fusion is disruptive

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

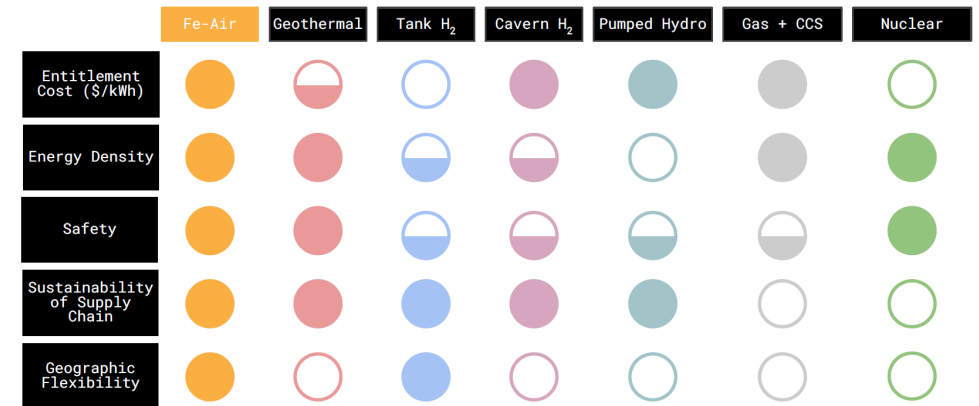


Ted Wiley- Form Energy Storage

Key Points

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

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



Implications for RMLD

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

Elizabeth Whitney – Legislative Update

Key Points

Infrastructure Investment and Jobs Act – implementation clarifying

- Reliability hardening, EVs

Inflation Reduction Act significant for MLPs

Extensions of Production Tax Credit and Investment Tax Credit

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

EV tax credits (with new strings)

New grant and loan programs (environmental and climate)

2022 LEGISLATIVE UPDATE

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

Implications for RMLD

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

Barney Rush – Regional Energy Challenges

Key Points

Regional and national threats: threats from climate change, growth authoritarianism (Tocqueville, Russia, China)

Decarbonization is a massive and global issue, but it remains a regional job (avoid cynicism)

Decarbonization will take time resolve (be realistic)

Fossil fuel generation is a component of the transition to intermittent non-carbon generation (ISO-NE four pillars)

Economic market forces (money) enable the transition (“get prices right”)

Russia invasion of Ukraine directly affects local energy prices (sword)

China has long head start in resources for renewable energy (sword)

Civil, transparent, tolerant, and fact-based discussions are foundation of short-term and long-term solutions

Implications for RMLD

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

Mike Hyland – Public EV Chargers

Key Points

EV early on adoption curve but accelerating

Majority charging is and will be at home

Location, location, location (customer value, install costs, ...)

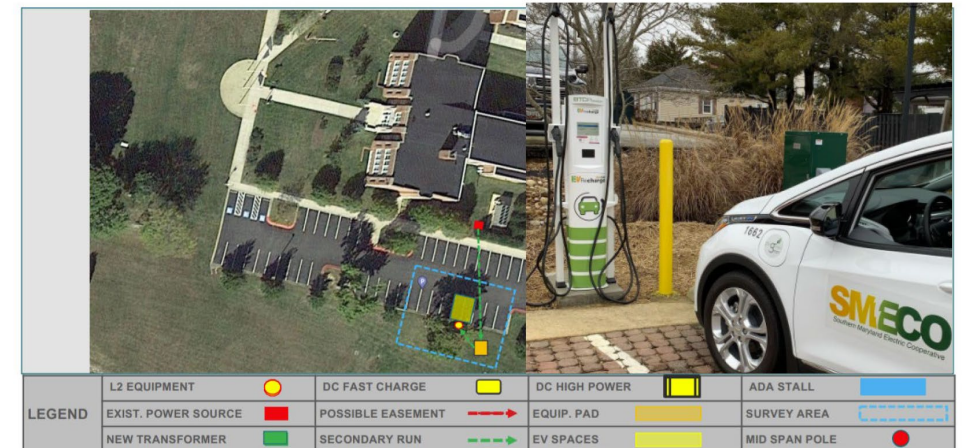
Think total cost of ownership (ongoing maintenance, cellular, ...)

Communicate (EV community (social media), cellular carriers, ...)

Many rate options to consider

The utility is expected to be the expert – “become the expert”

SMECO Deployment in Practice



Implications for RMLD

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

Thank You