

Light Commission January 21, 2025 meeting minutes

To: Light Commission: Commissioners
Light Department: J. Kowalik, General Manager
From: Jean-Jacques Yarmoff, Secretary
Date: January 16, 2025

A quorum being present, Chair Wolf brought the meeting to order at 4:06 pm. The meeting was held in person and with remote internet access, both available to public participation. A recording of the meeting is made available to the public at the following [link](#).

Participated in meeting:

Commissioners: Commissioners Frechette, Hull, Smith, Wolf and Yarmoff all participated in person. Commissioner Hull joined the meeting at 4:26 pm.
Light Department: General Manager, J. Kowalik.

Marblehead Land Acknowledgment declaration was read by Commissioner Frechette.

Comments from the Public

There were no comments from the public, whether in person or from remote participants.

Outstanding items from previous meetings

Polco Employee Survey. MMLD managers will look at the survey prior to its launch. Following last adjustments, it is anticipated that the survey could launch in the coming week or so.

MIT Sloan School Sustainability Lab: as in the last previous two years, it is proposed that the Commission work with Sloan School students and propose them to study real world problems: this year we are proposing that they “Develop a methodology to systematically evaluate and prioritize projects”.

Distribution system projects: a list of 22 projects was distributed in 2023, and an update on the progression of work was requested. The General Manager commented that the Crowningshield buried wires project is getting a lot of attention as there have been multiple failures. A temporary overhead line will be installed as work progresses to increase reliability of service. Commissioner Yarmoff asked whether, in view of the fires caused by utility wires, MMLD could prioritize the work on the open (non-insulated) wires which are more dangerous should any line/pole fall to the ground. Commissioner Wolf requested a new version of the spreadsheet shared in June 2023 at a future meeting, with an update on completed work and timelines for outstanding work.

General Manager updates

Village 13 substation: the contract with the engineering firm Fischbach and Moore (F&M) has been signed. A kick-off meeting with all participants will take place on January 31. The switchgear manufacturer has updated their delivery schedule to late April/early May. Incorporating both civil engineering F&M and switchgear installation, the new completion date is now **November 2025**. Total project will cost around \$10M, it is the most capital-intensive project MMLD has ever undertaken.

Ludlow Solar array: Sergeant Cotton Solar Photovoltaic Array. MMWEC applied for IRA credit: \$2.3M has been received. This will significantly and favorably affect the cost of capital for this project, resulting in a lowering of the projected Levelized Cost of Energy (LCOE) from \$0.076/kWh to \$0.057/kWh. If the RECs are sold (with a Mass Class 1 REC value taken as \$0.036), the net energy cost would be effectively \$0.021/kWh, making it one of the cheapest energy sources in MMLD's portfolio, well under our average total cost per kWh of \$0.107.

Other sources of energy: MMWEC is investigating whether additional solar farms can be built. The Maine Connector, which will bring hydroelectricity to New England, should also be commissioned shortly, and it is hoped that MMWEC can negotiate some supply contracts for its members. While fusion is getting a lot of attention at the research level, availability for commercial production is not in our planning horizon. Solar: Commissioner Yarmoff remarked that with respect to the REC market, the assumption last year was that the value of RECs was going to decrease when abundant offshore wind RECs became available. This assumption was penalizing the "Solar on school" project. With Off-shore wind uncertain at this point, we should revisit the economics of this project which may be more favorable.

Budget: The General Manager presented the slide page 8 for confirmation of MMLD 2025 Operating Budget, with bulk power purchases representing 58% of MMLD expenses.

Wilkins Plant. MMLD operates a 5 MW diesel generator, currently used and qualified for ISO-NE Capacity market.

Tank update: A 40,000 gallon diesel tank on-site is the source of fuel. We routinely store 12 to 15,000 gallons on site, have no record of keeping 20,000 or more gallons. Tank inspection by specialized firm CommTank shows that the tank is in good conditions where it can be inspected. To check for possible corrosion at the bottom of the tank, it needs to be emptied, for which a plan is being designed.

Depending on the findings, a protective coating might be applied to further protect the tank, or the tank could be replaced by two smaller 10,000 gallon tanks. There is no ISO-NE requirement that would lead us to have to store more than 20,000 gallons, which gives us 48 hours of operations at full production.

Controls upgrade: MMLD is discussing with vendors a plan for updating the 1970s era Wilkins plant control systems, potentially to allow for remote operations and islanding modes, as may be needed. If a decision were made to update the controls, multiple vendors will be contacted. A decision will also need better clarity on the evolution of the forward capacity markets that is not expected from ISO-NE for several years. Currently Wilkins is a "before-the-meter" asset, operating when dispatched by ISO-NE. It could become a "behind-the-meter" asset with operational control by MMLD. It could become a peak-shaving tool, which would likely mean running it more frequently. This has to be evaluated and compared with the potential of other peak-shaving tools, including utility scale batteries and VPPs. In order to evaluate the different options open to us, we need to have an estimate of the price of each of these options, which will be presented at future meetings.

Human Resources: Open positions: Engineering project manager position: no news, picking up the conversation after the holiday season. Interviews have started for the Energy Efficiency position and the town HR manager is facilitating these interviews. MMLD has two senior positions open following retirements of a senior lineman and senior substation person and filling these positions is urgent. Both positions are Union positions. The Union Contract is up on June 30 of this year.

Gerry Playground EV Charger request. The plans for the Gerry playground (p 8) and the request to work with MMLD to plan for electric interconnection for future EV charging infrastructure were discussed. Conversations are on-going. Interested parties are encouraged to refer to the recording for details.

Utility and Residential battery programs. The General Manager discussed with Lightshift the inverter noise level and the possibility for noise reduction. Installing protective walls would also help abate noise. Separately the residential Duracell battery program that was discussed previously is no longer on the table. This means that utility-scale batteries are important, and we need to consider the possibility of using additional sites and land parcels for the siting of these batteries. The General Manager asked whether the board supports proposing a warrant article to be considered for Town Meeting. Since the wording of the proposed warrant is not yet known, this discussion is about reserving a space on the warrant lists. Commissioner Yarmoff wondered whether town meeting is the best forum for these conversations, but agreed that keeping the option of a warrant open is a good idea.

Vote #2025-01 Motion to have the General Manager file a preliminary warrant proposal before the deadline, to be reviewed at a later date by the Commission was moved by Commissioner Yarmoff, seconded by Commissioner Frechette. **Unanimous.**

Chair Wolf recused herself from the proposed Executive Session to follow, ceded the chair of the meeting to Commissioner Frechette and left the meeting at 5:59.

Executive Session

Vice-Chair Frechette requested a motion to meet in Executive Session to conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel, not to return to open session.

The motion was moved by Commissioner Yarmoff, seconded by Commissioner Hull. Votes: Simon Frechette: Yes; Mike Hull: Yes; Adam Smith, Yes; Jean-Jacques Yarmoff: Yes.

The Executive Session started at 6:00 pm, with Vice Chair Frechette leading the meeting and Commissioners Hull, Smith and Yarmoff participating.

The Executive Session concluded at 6:57 pm at which point a motion to adjourn was proposed, seconded and, after a roll call of the commissioners voting unanimously in favor, adopted.

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Documents shown during the January 21, 2025 Light Commission Meeting



MMLD Board Meeting
January 21, 2025

Joe Kowalik, General Manager
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jkowalik@mhdld.com



Agenda

- 4:00 Call to Order, Land Acknowledgement, and Public Comments
- 4:15 Outstanding items and requests from last meeting
 - Employee survey
- 4:20: Distribution Manager updates
- 4:45 General Manager Updates
- 5:30 Meet in Executive Session – To conduct strategy discussion in preparation for negotiation with nonunion personnel. Not to return to open session



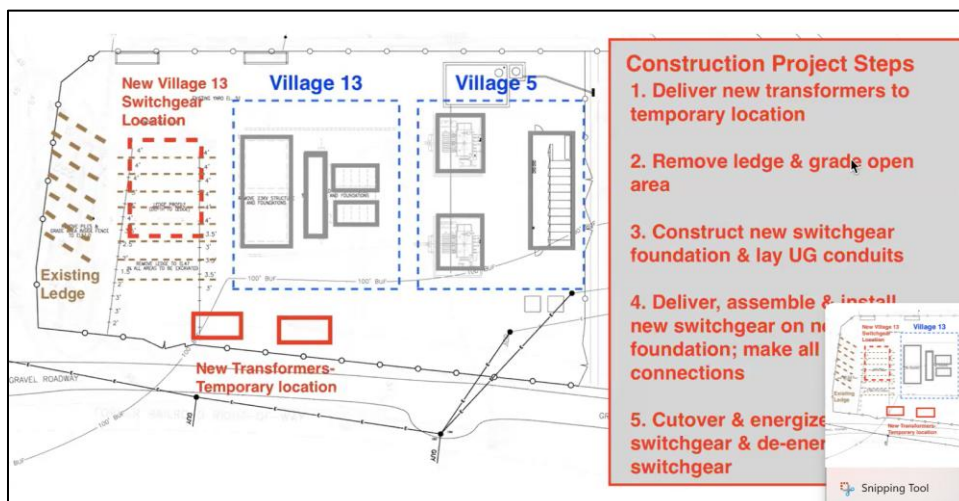
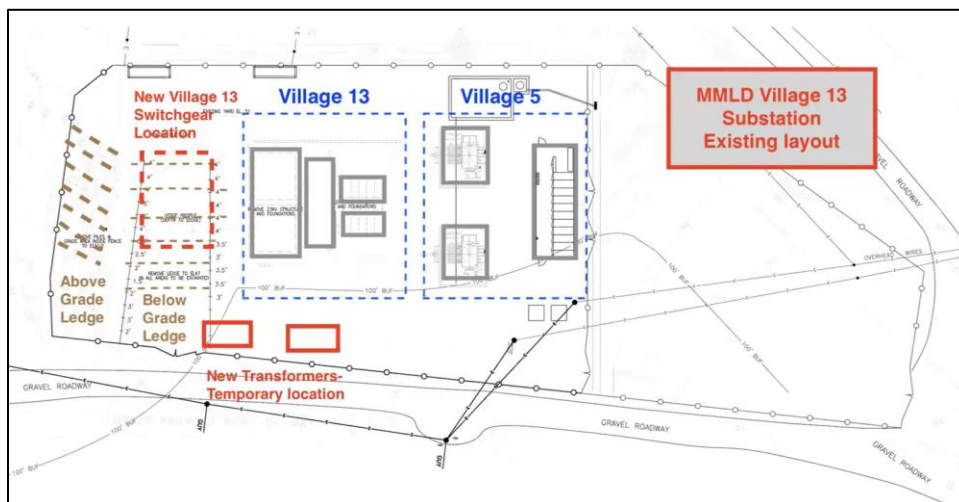
General Manager updates

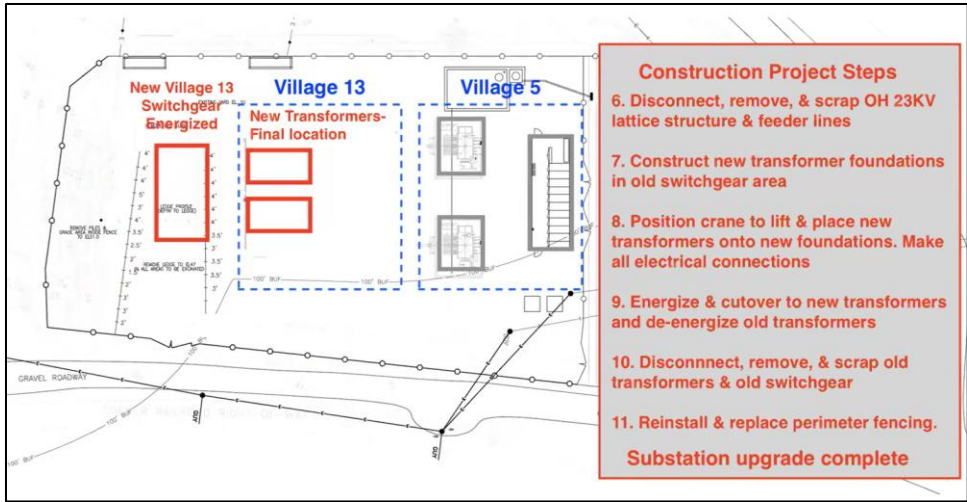
- Village 13 update
- MassCEC-DOE 40101(d) resiliency grant update
- Project 2020A- Master Sergeant Cotton Memorial Solar Project update
- Wilkins Plant update
- Open positions
- Gerry Playground EV Charger request
- Utility & residential battery programs



Village 13 Update – Substation Construction Contract

- Fischbach & Moore (F&M) contract signed
- F&M submittals and Requests For Info – in process
 - Balancing conductor cable trade-offs: cable specs vs delivery times vs order minimums and costs
- F&M – in person kickoff meeting Jan 31
- F&M prelim schedule created – Nov 2025 completion
- Switchgear mfr. Myer Controlled Power Jan 9 mtg - delivery eta- late April/May. Their ETA is incorporated in the schedule



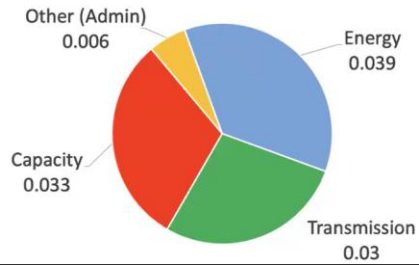


Cotton Solar PV array – IRA credit Impact

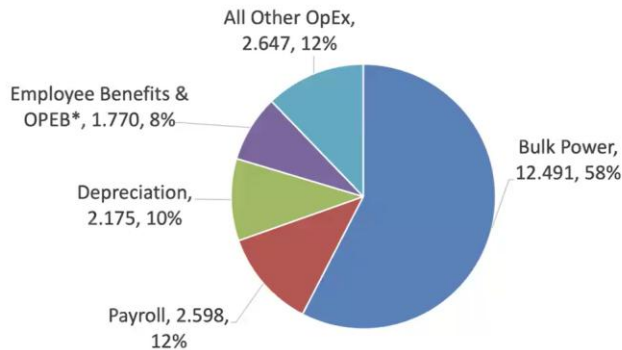
The impact is significant:

- A \$2.3 Million check from the IRS to reduce the capital cost of the project.
- The MMLD levelized cost of energy (LCOE) is reduced from \$0.076/kWh to \$0.057/kWh
- Assuming a Mass Class 1 REC value of \$0.036, **the net energy cost is effectively \$0.021/kWh**

**Wholesale Power Cost Components
January- November 2024**
Average Total Cost Per kWh - \$0.107



MMLD 2025 Operating Budget \$21,681,000





Wilkins Plant update

- Storage tank specialist CommTank externally inspected the tank in December and is preparing two update options now:
 - Apply new coating seal system on existing tank & update the tank controls
 - Replace our 40,000 gal. tank with a smaller, new 10,000 gal. tank(s)
- Multiple meetings with power and electronics controls vendor SEL in Jan. to develop a plan for updating the plant control panel.
- Initial Jan meeting with a power engineering vendor to outline an island mode microgrid plan including Wilkins Plant and a Battery Storage System, .



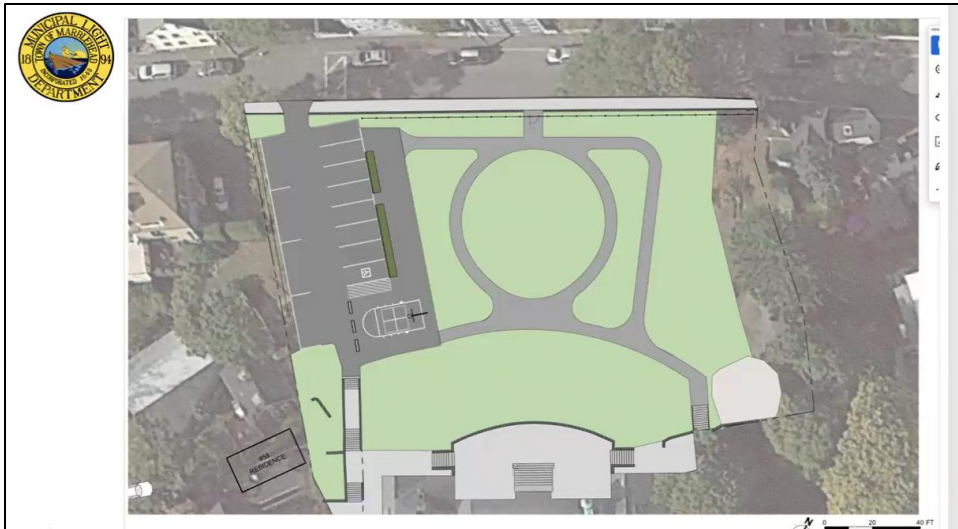
Wilkins Plant controls – functional areas for potential updating

- Metering communications with MMLD-80Comm, MMWEC, Ngrid/ISO.
- Run-time equipment monitoring
- Power quality monitoring
- Start-up controls modernization/upgrading
- Remote start-up controls



General Manager updates

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Gerry Playground EV Charger

- [MassEVIP](#) Level 2 EV charger grants are available.
- Up to \$50,000 reimbursable for qualifying projects...should be sufficient.
- Expenses incurred in advance of grant award are not eligible



Utility Battery update

- [Lightshift](#) to share data on the source of inverter noise emissions and determine options for further reducing noise.
- MMLD has the option of installing fireproof walls, not fencing as a further guard against thermal runaway concerns.
- Use lower risk LFP (lithium iron phosphate) batteries, not LMC (lithium manganese cobalt, the batteries installed at Moss Landing Power Plant 930 MW/3,700 MWh).

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