



HINGHAM MUNICIPAL LIGHTING PLANT

31 Bare Cove Park Drive
Hingham, MA 02043
(781) 749-0134 FAX (781) 749-1396
www.hmlp.com

General Manager

Thomas Morahan
tmorahan@hmlp.com

Board Members

Laura Burns, Chair
Michael Reive, Vice-Chair
Tyler Herrald, Secretary

REGULAR MEETING HINGHAM MUNICIPAL LIGHT BOARD

November 14, 2023
Zoom Meeting

<https://us02web.zoom.us/j/82742684689>

Meeting Called to Order

A regular meeting of the Board of Commissioners of the Hingham Municipal Light Plant (HMLP) was called to order by the Board's Chair, Laura Burns, at approximately 7:30 am on Tuesday, November 14, 2023, via Zoom.

Present:

Board Members: Laura Burns, Chair
Michael Reive, Vice-Chair
Tyler Herrald, Secretary

HMLP: Thomas Morahan, General Manager
Mark Fahey, Asst. General Manager
Joan Griffin - Business Manager
Stephen Girardi, Engineer
Ellen McElroy, Customer Service
Brianna Bennett, Sustainability Coordinator

Ms. Burns read the following disclaimer into the record:

This meeting is being held remotely as an alternative means of public access pursuant to Chapter 107 of the Act of 2022 and all other applicable laws temporarily amending certain provisions of the Open Meeting Law. You are hereby advised that this meeting and all communications during this meeting may be recorded by the Hingham Municipal Light Plant in accordance with the Open Meeting Law. If any participant wishes to record this meeting, please notify the chair at the start of the meeting in accordance with M.G.L. c. 30A, § 20(f) so that the chair may inform all other participants of said recording.

Electric Vehicle Credit

Discuss as to whether HMLP should keep the \$10/month credit for EV drivers that are signed up for Hingham Drives Electric even though HMLP no longer has the ability to monitor if those

customers are charging off peak hours (10 PM - Noon). In addition, HMLP does not even know if these customers still own the electric vehicle because ENE does not require updated registrations. Decision needs to be made as to whether we should continue giving credit, remove the credit, or just stop new customers from applying for credit. Mr. Morahan explained that he has spoken with Sagewell, a consulting firm, about Time of Use (TOU) programs and whether the cost of going to an AMI system could be justified and assist in identifying EVs.

Ms. Griffin stated that there are currently 142 customers receiving EV credits of \$5 for Level 1 and \$10 for Level 2. Ms. McElroy said that we are averaging around five (5) new customers receiving EV credits per month and that some customers actually receive \$20 credit because they have two chargers. The Town of Hingham will not release excise information, which would help in identifying customers with electric vehicles due to privacy laws. Mr. Morahan stated that there are approximately 500 EVs in town and knowing where they are and when they are charging are very important to HMLP. Ms. Bennett stated that she has spoken with and received a proposal from Sagewell regarding their product that can take our meter data and run it through an algorithm to verify if customers are charging their EVs off-peak. Below is the Sagewell pricing. Mrs. Burns cautioned that Sagewell's pricing seems very expensive. Ms. Bennett said that Sagewell works with Braintree and Wellesley and she can reach out to them to see how their experience with Sagewell is going.

Mrs. Burns mentioned that there is activity on Beacon Hill around legislation that would allow utilities to have access to information about EVs in their territory for grid planning. Mr. Reive questioned the adoption rate of EVs over the last five years and Ms. Bennett responded that she believes that it has increased by about 200 vehicles since she started working at HMLP two years ago. Ms. Susan Wetzel of 239 High Street wanted to address what was said with regards to EV drivers in the town of Hingham. She and her husband checked on this three weeks ago and found there were two hundred thirteen (213) EV vehicles in the town of Hingham out of more than twenty thousand (20,000). The Wetzel's were able to confirm this number with the registrations and the Assessors office here in the town. Ms. Wetzel wanted to clarify the number of EVs because it has been stated to be five hundred (500). Ms. Bennett stated that she uses the Massachusetts vehicle census to get the most recent number. In addition, Ms. Bennett explained that they may be using the number of customers that have EV plates and not all vehicles register for the electric plate. Ms. Wetzel asked if perhaps the Board or an HMLP employee determine the definitive number of EVs and report back to the committee. Mrs. Burns asked again if any of her fellow board members had a reaction to the idea of pausing the program until we can actually determine that customers are charging off-peak and saving ratepayers money. Mr. Herrald responded that he was supportive of pausing the program because there are a lot of data issues. Mr. Herrald went on to say that HMLP wants to support EVs, we want them to charge off-peak and we want to be able to verify that is being done with a modern meter which we do not currently have. Mr. Reive responded that he understands everyone's perspective but believes it would be detrimental to the end goal of electrification.

Mrs. Burns asked the Customer Service department what their thoughts were if the EV credit program was paused. Ms. McElroy responded that our website states that we can pause programs when we see fit. She stated that we are currently having a problem obtaining

registrations from ENE for the EV customers. Some of the registrations that they are sending to us are expired and yet the customers are receiving the credit. Ms. McElroy believes that it would make sense to reach out to the 142 and get an updated registration for auditing purposes. In addition, Ms. McElroy stated that it would not be a hardship for the Customer Service group to pause the program. Mr. Fahey questioned whether there could be a way that we could look at these 142 EV customers and potentially increase what we give for a charger credit and state that it has to be a Wi-Fi controlled charger so that HMLP could control it during a peak. Mr. Fahey believes this may be a way to eliminate the credit and encourage people to stay with the EV. Mrs. Burns asked if it is worth \$10 a month to have that EV data and Mr. Morahan stated in the affirmative. Mr. Morahan believes HMLP needs to take a deep dive to see what the savings are to have these 500 EVs charging off-peak. Mrs. Burns questioned whether it could save ratepayers more than it would cost to have Sagewell do that program for HMLP. Mr. Morahan asked Ms. Bennett to reach out to Sagewell to send us the cost savings they already have for Braintree. Sagewell should be able to tell us what you save when an EV charges on-peak versus off-peak. Mrs. Burns asked for two proposals for the next board meeting, (1) pause the program and (2) Mr. Reive's suggestion that we check up more frequently on the EV registrations. Ms. Wetzel requested that HMLP get a accurate figure on how many cars are electric vehicles in Hingham because there appears to be a serious data disconnect. Mr. Reive interjected that the number should include hybrids as well as pure 100% electric vehicles. Ms. Wetzel said that the correct number is very important because Hingham has over 20,000 cars in the town and if we are only talking about 200 EVs and we have spent 30 minutes on the topic, that represents a very very small amount of people in town. Ms. Wetzel stated her concern as a Hingham resident on the dollars being spent by HMLP on a small segment of customers at a time when many people are struggling economically. Ms. Burns thanked Ms. Wetzel, agreeing that HMLP needs a firm number of how many electric cars are in Hingham today to begin any analysis. Mrs. Burns provided additional context of the big picture that in 2035 it will no longer be legal to sell a gasoline or diesel vehicle in Massachusetts and therefore the number of electric cars in town will increase. The reason this is of interest to electric ratepayers is because if all those electric cars choose to charge when they get home at 5:00 or 6:00 PM, that is the peak when HMLP has to pay the most for the electricity. The goal is to protect the rate payers by figuring out a way that we can encourage EV owners or any electric appliance to be used at a time when electricity is cheaper, which is usually from 7:00 PM or 8:00 PM through the night. This process will allow us to control electric rates in the future. Ms. Bennett posted the state website the State website where the data for the number of EVs by town was obtained. Ms. Bennett stated that it is a combination of electric vehicles (battery plug-ins) as well as plug-in hybrids. Ms. Bennett pointed out that Ms. Wetzel's figure is probably correct for battery plug-in electric vehicles. Mrs. Burns stated that the Board's goal with the electric vehicle discussion is to figure out how to keep rates low by getting people to charge their cars off-peak.

2024 Capital budget

2023 capital projects were budgeted at \$5.3 million and are at \$4.8 million. The meter tech truck has been ordered. For 2024, one of the large projects is the reconfiguring of circuit 6 on Charles Street & Lazell Street. Engineering distribution work is in order of priority. You will notice that the AMI project is not in budget until 2028. This Project is a large undertaking and we will need

to make a decision on when we want to undertake the move to an AMI system. Ms. Burns asked for clarification on the 2024 tab where it shows Circuit 9 Verizon replacement pole. Mr. Morahan explained that on Main Street there are some poles that are jointly owned between HMLP and Verizon. The poles are being replaced right now. Mr. Fahey pointed out that there was an error on the "Car 19 Replacement" line, it is showing \$550,000 and it should be \$55,000. Mrs. Burns asked about the pop-up issue that we had this year with the insulators. Mr. Morahan stated that the insulators are part of the transmission project. That project is ongoing as we still do not have all the insulators.

Ms. Burns asked if the projected cost in 2028 for the AMI project, which is at \$4.5 million, can be rolled over to slowly replace meters over the next three or four years to spread out the cost without distorting the capital plan. Mr. Morahan stated that the only system that allows for that to happen is the Tantalus system. Ms. Burns asked if there is an ability, within our 8% retained earnings limit and our depreciation limit, to set aside \$1,000,000 a year for 4 years in a fund to do this all at once if we choose a different vendor. Mrs. Griffin asked for clarification as to whether Ms. Burns meant that by increasing our depreciation rate. Ms. Burns asked if we could imagine a capital plan for 2024 through 2026 that included an additional \$1,000,000 added for the purpose of switching to AMI meters all at once, with a vendor other than Tantalus. Ms. Griffin stated that it would have to come out of our depreciation account. Ms. Griffin added that we cannot increase it as it is already going to go to 5%. Mrs. Burns acknowledged that it is going to compete with our original plan for that depreciation fund which was devoted to the transmission project so there is really no way to increase that. Mrs. Burns said that she knows that other municipal light plants have taken the route of going to town meetings to ask for permission to borrow to do a project, such as switching over to AMI meters, so that could be something to consider. Mr. Reive stated that he recalled that Utility Financial Solutions (UFS) had done a study that indicated that going to AMI metering would save the town over \$500,000 every year. Mr. Reive stated that it is clear to him that there are a number of advantages to deploying a new system in Hingham and he would like some numbers and timelines for when we are going to do this and how we are going to pay for it. Mr. Reive has a clear idea of the direction HMLP should go in and thinks that if we go to town meeting to finance this, we would be showing a return on investment for that capital expenditure.

Ms. Burns stated that it appears to depend on the time of use rates but if you install AMI and time the development of the rate structure along with the deployment of the technology, you could introduce both at the same time. Utility Financial Solutions had provided a chart showing a \$7.8 million savings over 15 years so UFS assumed a total of \$3.2 million which is lower than the estimated cost on our capital plan. Ms. Burns stated that in either case, you could show savings over 15 years that would presumably help us to pay the cost of the borrowing. Both Mr. Reive and Mr. Herrald agree with the statement of savings. Mr. Morahan said he did have a conversation with Sagewell around time of use and they expressed some concern over the figures presented by UFS. They had some different ideas and thoughts on the savings. Sagewell felt that going to an AMI system at this point, when we know we have 10 years on our current meters, would lower the return on investment. Sagewell is expected to deliver a proposal on time of use, AMI, and the potential savings to Mr. Morahan. Mr. Reive stated that the advantage of moving our load is two-fold; (1) it allows us to lower our cost of electricity and (2) it allows us to reduce

the amount of system build out to meet capacity needs. Mr. Reive said that it is clear to him that the areas that are going to increase our load is heating as more people adopt heat pumps which will be a constant, but more overnight, as you do not get those solar gains during the day. Technology can help homeowners and the residents of Hingham control those loads without having to do anything. He believes that in the long run we will save by deploying the latest technologies to understand and control the grid. Ms. Burns said that she thinks that we are all in agreement on where we want to go, but the question is how fast we can get there given that we have an investment in a system that has not yet run its course. Ms. Burns asked her fellow board members if the right course of action would be to wait for the Sagewell proposal and view their costs and assumptions versus the UFS assumptions. Both Mr. Reive and Mr. Herrald agreed that waiting would be advantageous.

Ms. Burns asked if anyone had any other items that they would like to discuss about the capital plan. Mr. Reive stated that the station transformers are a concern and he would like to see a long-term plan for costs and when the transformers are due to be replaced based on projected loads, longevity and maintenance. In addition, Mr. Reive is concerned with the high voltage power capability coming into town and how we are going to get that to the voltages that we use in our homes. Mr. Morahan stated that when HMLP had a study done on the analysis for future growth, it was found that we are at least 10 years out before we start to see the need for increased transformation at the station. Mr. Girardi stated that the three transformers at the substation are tested every three years. We just recently tested one this past spring. The test includes integrity which measures the power factor, dielectric and oil samples. The load is currently at only 21 MW and these transformers are rated about 44 MW. Since Mr. Girardi began working at HMLP; he has only seen these transformers get up to 16 or 17 MW each. Mr. Girardi stated that going forward, he plans to order larger overhead distribution transformers and discontinued the smaller transformers. Mr. Girardi does monitor overloaded transformers and if they maintain 100% peak for a duration of more than two to three months, they are replaced. Mr. Morahan stated that looking at our load growth for the last five years it is -1.2%. Load growth for the past three years has been -1.87%. There has not been any growth in our load for the past five years. Our peak demand has increased over the past five years by .005%. Mr. Reive sees two issues; (1) what do we need to produce on the coldest day and (2) what do we need on the warmest day to ensure our system is robust enough if we lose equipment. Mr. Morahan stated that the February load growth for the last five years that is a negative. Mr. Morahan also stated that July load growth for the last five years it is a +0.01%. Mr. Girardi said that to maintain our system during an N-1 we have to 80 MW capacity in the substation. Currently, we have 120 MW capacity so, if by chance, we lose a transformer we can maintain a 2-transformer setup. Mr. Girardi stated that the transformers have maintained a normal wear pattern except this year when the primary bushing was red flagged. We have purchased primary bushings so so they can be replaced if needed. Mr. Reive liked the redundancy and Ms. Burns stated that she is feeling comfortable with where we are and having negative load growth is great for a utility that is not-for-profit. She believes that it means we have the ability to meet the load of the future. She shares Mr. Reive's concern for the lead time for the large transformers as we will need them someday, but we just do not know when. Mr. Girardi interjected that this is why we have the testing company here every year. In fact, Mr. Girardi already has them scheduled for next spring.

Vote to Approve Proposed Warrant Article for Solar Leases on Town Property

Ms. Burns proposed a similar warrant article last year that would allow the Select Board to authorize but not require, the Select Board to negotiate leases with Third Parties for the building of solar generating arrays on Municipal properties. At the time, the select board asked us not to go forward with that because they didn't think it was timely. The thinking is that next year we will have two brand new buildings, the elementary school and the public safety facility, and they think that year would be a good time to go to Town Meeting to bond projects for solar arrays on those buildings because there are likely to be funds remaining from the contingency funds from the building projects that could be applied to bring down a bond for that. They are not looking to bring any new debt to Town Meetings this year but they were interested, in the interim, in possibly exploring some Third Party projects. Both Mr. Herrald and Mr. Reive stated that they would support the article. Ms. Burns entertained a motion to approve the proposed warrant article. Mr. Reive stated he was so moved and seconded by Mr. Herrald.

Mr. Reive - 'Aye'

Mr. Herrald - 'Aye'

Ms. Burns - 'Aye'

Approve Meeting Minutes for October 3, 2023 and October 10, 2023

October 3, 2023 Meeting Minutes: Mr. Herrald had one change and he sent it to Mr. Morahan and Ms. Burns had one change. Motion to approve October 3, 2023 minutes:

Mr. Herrald - 'Aye'

Mr. Reive - 'Aye'

Ms. Burns - 'Aye'

October 10, 2023 Meeting Minutes:

Ms. Burns had two changes. Motion to approve October 10, 2023 minutes:

Mr. Herrald - 'Aye'

Mr. Reive - 'Aye'

Ms. Burns - 'Aye'

Financials (3-year Summary and YTD – September 2023)

Mr. Morahan stated that the kWh sales were in line with the past years and our revenue was in line with expenses which were down. The good news is our net income for September was \$1.3 million and our YTD net income was \$4.7 million, so we are getting closer to 8%. Mr. Morahan said that in speaking with Mrs. Griffin, they made the decision to lower the PCA (Power Cost Adjustment) so that we do not go over the 8%. In reviewing the expenses, Mr. Morahan stated that most were related to transmission and energy. Costs were down in September which is good.

Updates: Transmission Line Project, EV chargers, HMLP Solar, Municipal Solar, Landfill Solar, & Capital Projects

Ms. Burns asked that we discuss the solar credit at our next meeting. This request was approved by Mr. Herrald and Mr. Reive.

Mr. Morahan stated that HMLP continues to work on the Transmission Line Project. HMLP hoped to have that filed with the Siting Board in the fourth quarter, but it looks like it will be in

the first quarter of 2024. Mr. Morahan and Mr. Fahey had a good meeting with Mayor Hedlund from Weymouth to answer some questions and timelines.

Mr. Morahan stated that the level 3 EV chargers have been installed. Installation of chargers and the canopy in our front lot has begun. The footings are being installed tomorrow and excavation should begin in the next few weeks.

Mr. Morahan reported that work is progressing for solar on the roof of the warehouse. The contractor is wiring it right now.

Mr. Morahan reported that he is working with Solar Design, who he believes is out of Acton, regarding the landfill solar project. He is awaiting a proposal from them for the landfill solar.

Motion to adjourn the meeting.

Mr. Reive: 'Aye'

Mr. Herrald: 'Aye'

Ms. Burns: 'Aye'

Meeting adjourned at 9:34 am