



# HINGHAM MUNICIPAL LIGHTING PLANT

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John P. Ryan, Chairman  
Laura M. Burns, Secretary

## REGULAR MEETING HINGHAM MUNICIPAL LIGHT BOARD

**March 29, 2022**

Zoom Meeting

<https://us02web.zoom.us/rec/share/F-mlhVbkOhnL5TYyfohv7dodYnzszP7OQyBZQFIKFnDDkVJLRt-ZMTftFBQbx40.nXxHjG7hJV4t4mcx?startTime=1648553026000>

### **Meeting Called to Order**

A regular meeting of the Board of Commissioners of the Hingham Municipal Light Plant (HMLP) was called to order at approximately 0730 on Wednesday, March 29, 2022, via Zoom.

#### **Present:**

Board Members: John P. Ryan, Chairman  
Laura Burns, Secretary

HMLP: Tom Morahan, General Manager  
Mark Fahey, Assistant General Manager  
Steve Girardi, Engineering Manager  
Brianna Bennett, Sustainability Coordinator

Guests: Tony Morreale, LIG Consultants  
Brenda Black

Other: Members of the Public

### **Minutes from 2/23/2022**

Mr. Ryan requested comments to the minutes for the meeting on February 23, 2022. There were no comments.

**Motion:** Ms. Burns moved to adopt the minutes. Mr. Ryan seconded the motion. All voted in favor of accepting and said minutes were unanimously approved.

### **Solar Hosting Study**

Mr. Girardi and Mr. Morahan introduced Tony Morreale to the Board, who was invited to the meeting to discuss the outcome of a hosting study that LIG Consulting (“LIG”) conducted to determine the remaining capacity on HMLP’s system for new distributed generation (“DG”) interconnections. With batteries coming online and more solar being added the HMLP’s system, the time was ripe to evaluate the capacity of HMLP’s

system before back feeding occurred. Mr. Morreale, an engineer with LIG, prepared a hosting study report entitled “Hosting Capacity Study.”

Mr. Morreale addressed the Board. He provided his background, adding that LIG has been providing engineering consulting services to HMLP for over 10 years. He explained that LIG had previously built a software model of HMLP’s system for an earlier project, and this model was fine-tuned to simulate impacts to HMLP system with regard the task at hand, i.e., determining the remaining capacity on HMLP’s circuits for new DG capacity. The updated model includes loading and generation data and provides an accurate representation of HMLP’s system.

The first factor that LIG evaluated for each circuit was back feed at transformers at Hobart Substation. To allow back feed is a major protection upgrade and is something HMLP is trying to avoid. Right now, there is no back feed under the conditions looked at. Although there is back feed at the distribution level on Circuit 3 due to the large battery, there is enough load on other feeders to offset this. The second factor that LIG evaluated was thermal loading limits such as overhead wire and underground cable. The load simulations showed limiting elements on Circuits 3, 5 and 9, lowering the hosting capacity of these circuits beyond the back feed limits.

Mr. Morahan asked Mr. Morreale to screen share page 2 of the Hosting Capacity Study. This was done. Mr. Morahan explained that the Table shows overall hosting capacity for each of HMLP’s circuits. This Table was further discussed. Mr. Girardi added that, as an example, if HMLP added a 3 MW battery to Circuit 2, the system at Hobart would need to be upgraded for protection.

Mr. Ryan asked what issues might arise if a significant amount of solar is added to the system. Mr. Morreale explained that there might be voltage issues depending on where the solar is installed on the system. However, this would need to be modeled.

Ms. Burns thanked Mr. Morreale for his work, commenting that she is glad HMLP has this. She then proceeded to ask Mr. Morreale some technical questions regarding units of power and reactive power. Mr. Morreale addressed these questions. Ms. Burns then asked whether the new transformer might expand HMLP’s capacity to host. Mr. Morreale explained that LIG focused on what is currently in place. Ms. Burns noted that this made sense. She added that the Study provides an upper limit as to what can be installed before upgrades are needed.

There were no further questions for Mr. Morreale and he was thanked for his time.

**Heat Pump Rebate Program; Solar Program Recommendations; Electrify Hingham – HNZ Proposal – Brianna Bennett**

Mr. Morahan explained that HMLP is looking at its heat pump and solar rebate programs and is seeking feedback from the Board on budgeting. Brianna Bennett, HMLP’s Sustainability Coordinator, was in attendance to present proposals regarding this to the Board.

Ms. Bennett shared a presentation with the Board entitled “Heat Pump Rebate Program & Budgeting Recommendations.” She explained that MassSave recently rolled-out new incentives for heat pumps for natural gas customers and HMLP is looking at this and at its program. HMLP’s current heat pump program is with Abode. The program started in January 2021 and all were eligible. Incentives were distributed at \$500 per ton up to \$2,000. Approximately 30 customers participated in the program at a total cost to HMLP of approximately \$33,129. This represents a .35% adoption rate. The new MassSave program provides partial and whole home rebates ranging from \$1,250 per ton up to \$10,000. Only natural gas customers are eligible. Some MLP communities are planning to match MassSave incentives. Ms. Bennett explained these programs in detail. For example, Concord plans to match MassSave incentives for non-natural gas customers. Belmont and Holyoke also offer incentive program. Also, Holyoke has a 0% interest finance program, which is a program that HMLP is currently looking into with ENE.

HMLP is proposing heat pump incentives at \$750 per ton up to \$4,500 for residential, small commercial and municipal customers, or up to \$6,000 for commercial, municipal, and industrial customers. The incentives will apply only for non-natural gas customers, which is about 20% of HMLP's customers. As far as budgeting is concerned, Ms. Bennett presented a timeline, evaluating potential adoption rates, costs and future revenue.

Mr. Ryan thanked Ms. Bennet for her presentation. He cautioned that it would take HMLP much longer than suggested to recover any rebate subsidies due to costs associated with the revenue. Ms. Burns added that HMLP would need to have an effective route to clarify those incentives being provided by MassSave and the ones being provided by HMLP.

Mr. Ryan then asked Ms. Bennett whether she has a sense of any upcoming legislation addressing heat pumps. Ms. Bennett explained that communities opting into the new Specialized Stretch Code could promote electrification in new construction, with a building code to support this. Ms. Burns added that the House is putting together an Omnibus Climate Bill addressing such matters, and is evaluating how many "musts" and "shoulds" to include. Mr. Ryan added that perhaps the Town could consider a building permit fee to discourage fossil fuel. He opined that there is a need for legislation if heat pumps are to take hold.

The discussion then turned to solar rebates. Ms. Bennett shared a presentation entitled "Solar Rebate Policies & Budgeting Recommendations." First, she explained that HMLP is currently providing solar rebates "per account" but is considering changing this so that rebates are allowed "per deed." Allowing rebates "per account" incentivizes larger solar arrays installations which have multiple accounts rather than residential installations with only one account. However, if HMLP adopts a "per deed" rebate program, it will likely need to coordinate this with the Town Assessors Office or the Building Department. Second, Ms. Bennett explained budgeting considerations for the rebate program, taking into account potential adoption rates and associated costs.

Mr. Ryan then asked Ms. Bennett whether she might develop additional information to show the anticipated decreases to HMLP's revenue as solar is put in. Having such information would be helpful to the discussion about where to allocate money. He noted that heat pumps might turn out to be better than more solar.

Ms. Burns asked why they might want to look away from subsidizing larger installations. She noted that larger installations are cost effective for customers and can provide a source of renewables for HMLP. So, there is a question as to whom they are incentivizing and why. Ms. Bennett agreed that larger installations are generally better. However, allowing incentives "per account" may result in a scenario where condo communities with several accounts collect on all of them and use up the incentives. The Board and HMLP then discussed issues with regard to condos and deeds, as well as other considerations with regard to this matter.

Ms. Burns turned the conversation to the budget for the programs. Mr. Morahan explained that the budget is based on the last 3 years, and they need to determine whether the budget will be set or will be rolling. Mr. Ryan added that a budget should be set for all of this, with rebates offered on a "first come first serve" basis. Ms. Burns added that this can be looked at over time. Perhaps HMLP can heavily incentivize first adopters, then roll back incentives later. Mr. Ryan asked whether larger installations pay less per watt for solar. Ms. Bennett responded that larger customers recognize an earlier pay back. Mr. Ryan then suggested that perhaps a 2-tier incentive program might work, between residential and small and large commercial customers, similar to what is done with net metering rates. Ms. Burns added that HMLP might get involved with some cheap financing arrangements. There is a green fund program that provides financing for green projects, not just solar. ENE is looking into that. There is also a PACE (Property Assessed Clean Energy Program) program which allows commercial customers to become eligible for commercial loans for clean energy improvements. Towns can opt into PACE at no cost. Mr. Ryan suggested that HMLP ask the Select Board to weigh in on PACE. This was discussed. Ms. Burns suggested that the matter be brought to the Select Board after town meeting. It was also suggested that Ms. Bennett work on a PACE presentation and bring it back to the Board for comment.

The topic then turned to Ms. Bennett's "Electrify Hingham" presentation. Ms. Bennett explained that Hingham Net Zero (HNZ) proposed the program to HMLP. HMLP is proposing to adopt portions of what HNZ suggested. HMLP's proposed program has four goals, meant to build off nationwide movement for strategic

electrification: 1) promote efficient and electric buildings; 2) promote transportation electrification; 3) expand distributed, renewable energy generation and storage; and 4) establish partnerships and conduct outreach. The strategies that can be used to achieve such goals are (i) having rebates and incentives, (ii) using the website and social media to promote the program, and (iii) stakeholder coordination, finding grants and funding, and expanding partnerships and researching programs, such as PACE. HMLP can also participate in the development of the Climate Action Plan in Hingham. Ms. Bennett then presented an organizational chart for the program and a proposed timeline for Board approval.

Mr. Ryan commented that this all looked like a good start. Ms. Burns added that the timeline may need to be revised if goals are reached sooner than anticipated.

**Motion.** Ms. Burns moved to adopt the Electrify Hingham Program in concept and for HMLP staff to develop drafts. Mr. Ryan seconded the motion. All were in favor. The motion was adopted.

Ms. Burns then asked Ms. Bennett what she needed from the Board to move forward with the rebate programs. This was discussed. Ms. Bennett noted that she still needed to develop additional information as requested by the Board.

Ms. Burns commented that the rate of adoption of heat pumps is unlikely to remain the same. Mr. Ryan added that the rate might resemble a bell curve. Ms. Burns then stated that it might be best for HMLP to adopt a program with a 3 to 4 year time span. Also, they need a budget number on this. Mr. Ryan added that he would like a clear delineation of the upper limit of the program budget, so that the matter will not need to come back to the Board again. Mr. Morahan noted that the program(s) might reduce the estimated return number for 2022, which is 3.74%, by .5 %. Mr. Ryan noted that he is more comfortable with having a heat pump program to move the needle rather than a small, solar program because solar does not provide any financial return. Ms. Burns added that there are advantages to solar, and that more information is required.

Ms. Bennett asked the Board what to do about amending the “per account” language for the solar program. Mr. Ryan commented that he is inclined to say “per deed” or “per building,” and noted that perhaps the Board can provide Mr. Morahan with the discretion to handle this. This was discussed. Mr. Morahan stated that HMLP would put together presentation for the Board on the matter for next month.

**Motion.** Ms. Burns moved that the Board support the heat pump program as described. Mr. Ryan seconded the motion.

Mr. Ryan asked for additional information regarding budgeting considerations, noting his opinion that the program needs a cap. He suggested that the Board wait until next meeting to adopt the motion. Ms. Burns added that there also is a need to consider the financial model for how to pay for the substation, as funds for this come out of the reserve. There was further discussion about all of this among the Board, HMLP and Brenda Black. Ms. Burns noted that the Board will need budget information by next meeting.

Mr. Ryan and Ms. Burns agreed to table the motion for next Board meeting.

### **369 Contract Negotiations**

Mr. Morahan advised that the Agreement was ratified. A second on-call person will be added. Mr. Morahan indicated that negotiations went well and that he would share more about that with Mr. Ryan and Ms. Burns.

## NYPA

This agenda item was in response to a question posed last meeting by Ms. Burns. Mr. Morahan explained that the NYPA credit appears on customer bills due to a low-cost energy agreement with the State. A certain amount of savings from purchasing low-cost power is passed through to customers and appears as a credit on their statements.

## Financials

December 2021 sales were \$14 million kilowatt hours. Revenue was \$2.4 million and expenses were about the same. End of month net income was negative \$33,000. 2021 YTD net income was \$1.7 million. The budgeted return for the year was 3.1 % but the actual return was 2.65%. This decrease was mainly due to the storm in October that cost approximately \$600,000.

Ms. Burns asked whether there was a State disaster declaration on the storm. Mr. Morahan noted that the storm was coastal and did not rise to the level required for a disaster declaration.

Mr. Ryan stated that, given such numbers, HMLP may need more income to serve its needs and should look into rates. Ms. Burns noted that she would like additional information with regard to how power cost adjustments work. This was discussed. Mr. Ryan noted that the adjustment might be only a half cent, which is not an unusual fluctuation, and that this has been done many times. Ms. Burns noted that she would reach out to Attorney Diedre Lawrence for more information about all of this.

Mr. Morahan continued with his discussion regarding the financials. For Jan 2022, \$16 million kilowatt hours were sold. Revenue was \$2.6 million and expenses were \$2.4 million. Net income was \$187,000. For 2022, HMLP projects a return of 3.74%. He then noted that energy costs are increasing and this will need to be watched. Energy costs for January were 10 cents per kilowatt hour but increased to almost 16 cents per kilowatt hour in February. A lot of this increase is due to the price of oil and gas. He also noted that HMLP is in the market every month for about 20% of the supply. Mr. Ryan commented that this might be an enormous hit. Mr. Morahan added that February costs needs to be reviewed for accuracy. Mr. Ryan stated that they need to discuss a temporary rate increase at next meeting.

## Updates: battery storage, additional transmission line and new substation, landfill, EV chargers, choice connect, municipal solar, HMLP Solar

Mr. Morahan provided the following updates:

**Battery Storage.** The batteries are working. Last month, cost savings associated with the battery were approximately \$23,000. A cost analysis will be sent to Mr. Ryan and Ms. Burns.

**Additional Transmission Line and New Substation.** There are upcoming meetings scheduled with Weymouth City counselors. At next Town Meeting, there will be a vote on the transfer of land. HMLP meets on a weekly basis about all of this.

Brenda Black asked about statements Mr. Morahan made at a recent Climate Action Planning Committee meeting about the transformers. She stated that Mr. Morahan indicated that the plan did not include the new transformers. Mr. Morahan explained that this is because, after borrowing for the transmission project, there might be money left in the reserve to pay for the transformers. Ms. Burns added that HMLP cannot yet bond for the transformers because they do not know when they will be put in.

**Landfill.** No updates. Still looking at late summer to start construction.

Ms. Burns expressed frustration over the delays in this process. Mr. Morahan attributed the delays to supply chain issues.

**EV Chargers.** HMLP received approval from the Planning Board for the EV chargers. HMLP will be going out for bids on this work. The chargers need to be installed by July.

**Choice Connect.** No discussion.

**Municipal Solar.** Ms. Burns noted that there has been progress on this matter. Mr. Burns explained that her committee has been calling solar developers to ask if they are interested in looking at 3 projects in Town so that the committee can better understand the capacity and cost to production, so that they can understand the best ownership model. Town ownership is off the table at this time. One developer has offered to do this pro bono. Ms. Burns' committee is discussing this option with the School Building Committee, with the goal to develop how best to go forward with this.

**HMLP Solar.** HMLP has hired a designer. The designer is BL Companies. The proposal is for canopies in the parking lot and additional solar over the warehouse part of the building.

Ms. Burns asked if the projected cost of this is still \$1 million. Mr. Girardi stated the base number is \$3.25 per watt.

### **Other New Business; Other Business**

None.

### **Executive Session: GM Contract Negotiations**

**Motion:** Mr. Ryan moved that the Board enter Executive Session to discuss the GM contract, not to return to public session. Ms. Burns seconded the motion. All voted in favor and the motion was unanimously approved.

**Public Session Closed at approximately 0907 am**

### **List of Documents Provided to Board Members for the Meeting**

- Meeting Agenda
- Draft minutes for Board meeting on 2/23/2022
- "Hosting Capacity Study, Revised Draft Report, HMLP Electrical System" prepared by LIG Consultants, dated March 15, 2022
- HMLP presentation entitled "Solar Rebate Program Policies & Budgeting Recommendations," prepared for the Hingham Light Board
- HMLP presentation entitled "Heat Pump Rebate Program & Budgeting Recommendations" prepared for the Hingham Light Board
- HMLP presentation entitled "Electrify Hingham" prepared for the Hingham Light Board

### **Documents Shared During Meeting**

- Page 2 of the document entitled "Hosting Capacity Study, Revised Draft Report, HMLP Electrical System" prepared by LIG Consultants, dated March 15, 2022
- HMLP presentation entitled "Solar Rebate Program Policies & Budgeting Recommendations," prepared for the Hingham Light Board
- HMLP presentation entitled "Heat Pump Rebate Program & Budgeting Recommendations" prepared for the Hingham Light Board
- HMLP presentation entitled "Electrify Hingham" prepared for the Hingham Light Board

