# HINGHAM MUNICIPAL LIGHTING PLANT

31 Bare Cove Park Drive
Hingham, MA 02043-1585
(781) 749-0134 FAX (781) 749-1396
www.hmlp.com

General Manager
Paul G. Heanue
pheanue@hmlp.com

John P. Ryan, Chairman
John A. Stoddard Jr., Vice Chairman
Roger Freeman, Secretary


**Meeting Called to Order:**
A regular meeting of the Board of Commissioners of the Hingham Municipal Light Plant (HMLP) was called to order at 0730 on Tuesday, October 25h, 2016 at the Hingham Municipal Light Offices at 31 Bare Cove Park Drive, Hingham, Massachusetts.

**Present:** John P. Ryan - Chairman, John A. Stoddard, Jr. - Vice Chairman, Roger Freeman - Secretary, Paul G. Heanue - General Manager, Vincent Cameron – consultant Energy New England, Mark LeBel – Acadia Center, John Leonard – resident.

**Approval of Meeting Minutes:**
The meeting minutes from the March 11, May 12 and September 27 were presented for approval.

On a motion duly made and seconded it was voted 2-0-1 to approve the minutes of the May 12, 2016. The Chairman and Vice-Chairman voted to approve. The Secretary abstained.

The Secretary asked for and was granted additional time to further review the March 11 and September 27th meeting minutes.

**Financials:**
The General Manager distributed a handout displaying HMLP's financials. He pointed out that for the month of September net income was $1.2M and $3.6M year to date. He also mentioned that the net income figures for 2015 were $563K for the month of September and year to date was $3.68M. Last year (to date) there were sales of 156,747,000 kWh versus this year's sales to date of 133,602,000 kWh but basically HMLP is tracking financially the same for both years. Our operating revenues are higher in 2016 but we sold 23m fewer kWh and the PCA was $.05 less in 2016 than 2015. Yet despite all that our net income is basically the same.

**Building Updates:**
The status of our Cushing Street facility is as follows: The field personnel who formerly reported out of Cushing Street have relocated to 31 Bare Cove Park Drive. The building has been emptied and is locked. The dumpsters with the building's remaining contents have been taken away. There is equipment on site that needs to be drained of oil, not containing PCBs, before it gets shipped out. The roof is leaking and the General Manager had committed to the Town to have it repaired once we vacated. The water service to the building located on Cushing Street is leaking and the General Manager told the Town HMLP would make that repair as well. As part of the negotiations with the Town over the use of the driveway our employees

and customers currently use to access our new facility, the General Manager had agreed to turn the Cushing Street facility over to the Town within 60 days of getting our permanent certificate of occupancy at 31 Bare Cove Park Drive. We have been and are still operating on a temporary one.

**Automatic Meter Reading:**
The General Manager said there are approximately 275 meters of 10k+ that still remain to be changed over. We will need to make appointments with these customers for that work to be completed. He also mentioned that he will be posting 3 positions for the current meter readers. He believes 2 of those 3 employees will fill positions that will become vacant because of impending retirements.

**LED Streetlights:**
The General Manager indicated we are still waiting for word on the DOER Grant for the LED streetlights. The American Medical Association recently published a study that indicated that the light from brighter LED lights may have negative effects on humans, the environment and animals. The state has not made any announcements on the awarding of grants and it is believed the delay can be attributed to this study's findings. Mr. Heanue will look into sampling the various types of LED lighting.

**Net Metering Rate:**
The consultant from Energy New England presented his financial analysis that looked at the benefits and costs associated with customers that own a solar facility at their home or business. This report outlines the financial benefits received by those customers and HMLP. It included 12 different possible pricing scenarios for the customers who had solar systems at the time of the outset of the study. The analysis considered varying factors including size of system installed, capacity of the system, the excess energy rate, the distribution charge, amount of time to payback the system, etc.

Under HMLP's current Net Metering Program a customer installing a solar array is eligible to receive a credit of $1k per watt installed with a cap of $5,000. It was noted this is the most generous installation benefit in the state of Massachusetts including both muni and IOU customers.

Mr. LeBel asked questions about the current policy and rates including rebates (credits). He discussed his thoughts around a distribution charge for the electricity a customer produces and uses (he was not in favor of it) and offered his opinion on whether or not a SREC program will continue (he expects it will change). He opined that he believes that there is no real problem with the current program as constituted.

The Board had a lengthy discussion on the study's various pricing scenarios and SREC payments/incentives. The consultant pointed to his analyses and observed that in his opinion SREC payments clearly were an important part of the customer decision making process. The Secretary agreed that SREC values are important to a customer's decision, but they should not be factored into decisions made by HMLP for determination of an appropriate net metering rate. It is not HMLP's business to be assessing the overall economic considerations a customer makes in deciding whether to generate their own renewable electricity. Those decisions are for customer and should not be part of our decision making process. The Secretary stated that HMLP should create a net metering policy that fairly weighs the costs and benefits to HMLP from customers who install their own solar power and deliver excess energy to HMLP. He noted that in several other states that have recently considered this issue in regulatory proceedings involving dozens of stakeholders and expert testimony far more comprehensive than we have been exposed to, it was determined that the value of excess solar power delivered to the utility may equal or exceed the full retail rate. He noted that the economic analysis provided by Energy New England did not consider any scenario where customers received a full retail net metering credit as is done under the Massachusetts Net Metering Law applicable to

Investor Owned Utilities. The Secretary noted that he previously introduced into our deliberations an analysis prepared by the Acadia Center which quantified the net benefits of solar power to the utility in Massachusetts as equal to or greater than the full retail rate. The Secretary also noted that the overall "revenue erosion" impact on HMLP from customers generating their own solar power was miniscule and not material to HMLP operations. The General Manager stated that the concern was for the future when possibly lots of customers would decide to generate their own electricity. The Secretary suggested adopting a policy that would have a size limitation so that the policy could be re-assessed when the target limit was reached similar to the net metering law applicable to the Investor Owned Utilities.

The General Manager reported having had several large customers reach out to him over the past few months about installing solar arrays. They have inquired about our rates and net metering policies. The General Manager relayed having to continue to tell them the rules are being discussed and should be considered to be in flux. That uncertainty is making it difficult for them to make a go/no go decision at a time when the state subsidy program going forward is also unclear. The Board agreed that potential solar customers should be made aware that the net metering policy could change and the going forward rules might be different.

John Leonard, a Hingham solar customer who attended the meeting, distributed some data on his solar system and his estimates on its payback rate. He said initially he calculated it would take10.2 years to pay for his system. That payback time went down to slightly longer than 7 years after HMLP stopped charging the distribution fee on electricity he produces and uses and the size of the excess energy payment increased. The General Manager relayed having had multiple conversations with Mr. Leonard while he was considering solar and pointing out to him then that the system he was contemplating was greatly oversized for his consumption. The General Manager described having told Mr. Leonard that an oversized system would take much longer to payback from electric bill savings. He pointed to the consultant's analysis which demonstrates that assertion to be true in all of the 12 scenarios that were considered. The Chairman noted that the analysis demonstrates the size of an installed system, its efficiency and the amount of energy it produces varies widely from customer to customer and that some systems are not properly sized to their consumption history. He wondered aloud whether HMLP should tailor its incentive program not to be a one size fits all but rather should it be designed so as to incent people to size their systems more closely to their consumption. The General Manager noted that type program would likely put HMLP in the position of possibly having an undue influence on what type and size system a customer installs on their house. He commented that it might not be an unreasonable proposition for us to have a say in what gets installed, given we are helping to pay for it, but we could get pulled into disagreements with our customers and their potential vendors. The Secretary concurred.

The discussion moved to community solar projects and whether the light plant should promote this type initiative for those who would like to avail themselves to the benefits of solar but can't for reasons related to a lack of financial resources or home ownership or buildings whose locations are not conducive to a solar array. The Chairman stated that since HMLP is a municipally owned electric utility the benefits of a utility owned solar system should be shared across all of its customers and not just solar customers. HMLP exists for all Hingham residents and businesses and everyone should benefit from what we do .

The General Manager offered that we have been talking about our net metering policy for a year, it was in October of 2015 that we temporarily discontinued the distribution charge, and that it might be time to make a decision. The Secretary stated that our policy should recognize the value that our solar customers provide to HMLP because they are producing renewable energy. He pointed to the results of a non-binding referendum ballot question (basically the question asked if HMLP should support and promote solar projects) from a few years ago as proof Hingham residents want HMLP to support solar initiatives. The

General Manager pointed out that more people did not take a position on that ballot question than voted for it which, in his opinion, did not indicate great support for the question's position. The Secretary also noted that the study provided by the Consultant from Energy New England recommended that HMLP set a net metering credit equal to the Locational Marginal Price, which would not provide any compensation for capacity value and other financial benefits that HMLP would receive, thereby undervaluing the solar energy being provided to HMLP and that HMLP would make a profit off its customers in such a case. The Secretary stated that customers who install solar are customers like any other and we should not discriminate against them or be making money on the backs of its solar customers who are selling their excess energy back for others to use. The Chairman invited Mr. LeBel to review and quantify some of the "values of solar" that his study talks about. The Secretary stated his belief that HMLP's solar customers should receive the full economic value for producing their own power.

The Chairman asked his fellow Board members if there was support for a two tiered pricing structure, based on system size, for the excess energy being sent to HMLP. He described a per kWh excess energy rate for customers whose facilities have a total capacity of 15 kW or less that would be the average per kWh cost of HMLP's total power supply. To calculate that per kWh number HMLP will take the total cost of all of HMLP's power supply resources and divide by the total amount of kWh received from those suppliers. To calculate the size of the credit on a customer's monthly bill, HMLP will multiply the number of kWh's it receives from that HMLP customer by the average per kWh cost of HMLP's total power supply. For the time period studied that number was $.1085/kWh. The excess energy rate for customers whose facilities have a total capacity of greater than 15 kW would be the average per kWh cost of HMLP's renewable power supply. To calculate that per kWh number HMLP will take the total cost of HMLP's renewable power resources, subtract the dollar value of any renewable energy certificates, solar renewable energy certificates or later iterations received by HMLP and divide by the total amount of kWh received from those renewable resources. To calculate the size of the credit on a customer's monthly bill, HMLP will multiply the number of kWh's received from that customer by the average per kWh cost of HMLP's renewable power supply. For the time period studied that number was $.0636. For purposes of calculating the total cost for both scenarios, greater than and equal to or less than 15 kw, the costs associated with capacity and transmission should be included. It was also discussed that there should be an annual recalculation to determine the correct reimbursable amount. The amount of the reimbursement might change but the way to calculate the excess energy amount would remain the same. The General Manager suggested that it be done as soon as HMLP has its prior year supply costs. All three Board members indicated they could support such a structure. The consultant raised the possibility of a rate discrimination claim if some customers are treated differently than others in the same class. The General Manager pointed out that municipal light plants operate under very different rules than investor owned utilities.

A motion was made by the Vice-Chairman to adopt a net metering policy that would pay HMLP customers for the excess energy sent to HMLP as just described. The Secretary added he would like to add language that would preclude future Boards from changing this method of calculation with regard to systems that had already been put into operation because these are multi-year investments and it will be a dis-incentive if people are uncertain what rate may apply in the future. The Chairman said that there needs a policy for today and if circumstances change then the policy would need to change. Additionally he said that sort of thing would not be fair to future Boards and their members. Their hands would be tied to a policy they had no part of creating. He was comfortable that future board members would ensure there would be fair treatment of all HMLP customers whether they have solar or not. If board members going forward adjust this policy so that some class of customers feel they are not being treated fairly, the voters can vote them out. This discussion ended. The Vice-Chairman again made the motion to adopt a net metering policy that would pay HMLP customers for the excess energy sent to HMLP as just

described. The Secretary seconded that motion. On a motion duly made and seconded it was unanimously voted to adopt a net metering policy that would:
-pay customers whose facilities have a total capacity of 15 kW or less the average per kWh cost of HMLP's total power supply for every kWh of excess energy received by HMLP.
-pay customers whose facilities have a total capacity of greater than 15 kW the average per kWh cost of HMLP's renewable power supply as just described for every kWh of excess energy received by HMLP.
-recalculate those rates annually
The other aspects of the current policy were maintained.

**Motion to Adjourn the Regular Meeting :**

On a motion duly made and seconded it was unanimously voted to adjourn the meeting at 10:12am.