

REQUEST TO CREATE A CONCORD MUNICIPAL LIGHT BOARD ADVISORY COMMITTEE TO ANALYZE BENEFITS OF AND REQUIREMENTS TO IMPLEMENT A SINGLE REVENUE DECOUPLED TIME-OF-USE RATE STRUCTURE – BY CITIZEN PETITION

What the heck is that rate and why do we need it? Article 44 is a request for Concord Light to begin the modernization process. A revenue decoupled time-of-use rate like this is needed to address the changes that have occurred to CMLP's business environment. Concord Light's old flat rate structure and work around technology based rates are overly complex. A fundamentally new approach to collecting for expenses needs to be thoroughly reviewed.

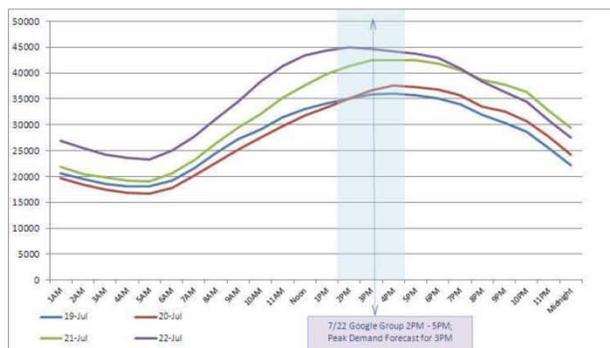
A little over half of the 2016 purchase power expenses (\$8,856,790¹) are incurred NOT based on the amount of electricity used but when we use it. Yet only 10% of customers have smart meters and many customers still have meters that are only read monthly or bi-monthly. This lack of data on when customers use electricity limits Concord Light's ability to fairly charge customers for the expenses they create.

For example if you are part of the Google Group CMLP-CAP email list and reduce your electricity use during the summer peak by turning off your A/C for three hours you help Concord Light avoid an expense of about \$142.00 per kWh². Your savings under the current flat rate structure is nothing as you will run your A/C harder later. All rate payers will benefit equally in a reduced rate in the future. You and the person blasting the A/C both save equally from your efforts.

This volunteer based peak program is better than nothing but shows only a 1% reduction in use. Marblehead Municipal Light Department has full smart meter deployment and used a Critical Peak Pricing rate (CPP) which charged \$1.00 per kWh during the same hours as Concord's google list. Marblehead saw a 40% reduction in electricity use during those hours avoiding millions of dollars in expenses this year.

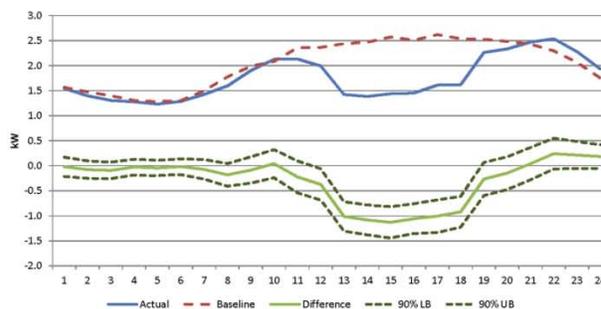
Concord 7/22/11 (purple)

Volunteer program - A 1% reduction at the peak hour



Marblehead 7/22/11

CPP at \$1.00 per kWh - A 40% reduction at the peak hour



¹ Source: CMLP Article 51 hearing presentation

² CMLP will pay \$5,268,300 for capacity in 2016. This is based on the 2010 and 2011 load during the ISO peak hour and FCM auctions rate. (\$5,268,300 / 37,101 kWh load = \$141.99 per kWh)

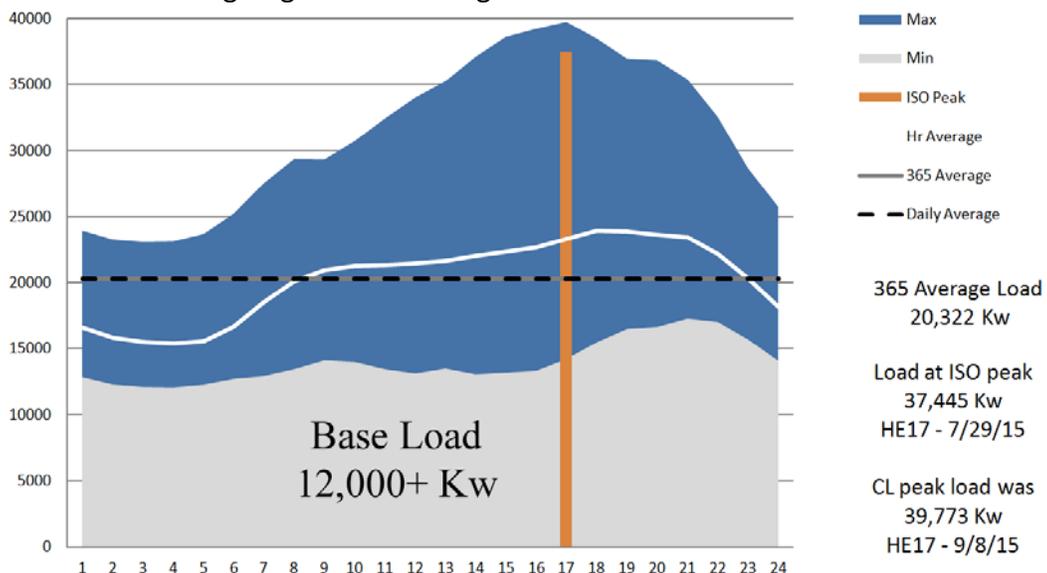
Smart meters for all Concord Light customers is coming. This will be a multimillion dollar investment into one of Concord’s most valuable assets. We must publicly start thinking about this investment now and not rush to a solution later. An investment into smart meters is not simply picking a meter then swapping them out. A new billing system, advanced metering infrastructure (AMI) and clear a understanding what kind of rate structure we want to offer to customers should be planned well ahead of any requests for funds.

Investment into Concord Light does not need to come directly from the light plant and its customers. Many in town have added solar panels which during that one peak hour in the summer generates electricity avoiding the same \$142.00 per kWh expense. Energy storage, demand response and many energy efficiency technologies can be privately funded reducing light plant expenses and future rates. Currently Concord Light’s flat rate structure and dependence on kWh sales to fund operations stifles this investment.

Revenue decoupling is a term for a rate adjustment mechanism that separates a utility's fixed cost recovery from the amount of electricity it sells. Simply put, every customer pays to support Concord Light separate from what they are paying for electricity. Decoupling removes a utility's financial incentive to sell more. Energy efficiency, weather and generation will no longer threaten funding of light plant operations.

This is complex stuff. The town of Concord needs to start discussion around what the light plant and the business environment around it look like in ten years. Then we need to take our time and think through what is the best investment to make into one of Concord’s most valuable assets so it is as valuable then as it is today.

In the months leading up to town meeting, Concord Light has begun discussing “strategic planning”. The topics covered in these discussions show promise in addressing my concerns related to Concord Light’s current flat rate structure and decoupling. I will not move Article 44 to a vote at town meeting to give Concord Light time to address these issues.



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Please email me if you have questions or would like to talk more about this topic.