

**Belmont Net Metering Working Group Meeting Minutes**  
**13 July 2015**  
**Town Hall Conference Room 2**

Present: Tony Barnes, Roy Epstein, Robert Gallant, Steve Klionsky & Henry Jacoby

The meeting was called to order at 7:30 p.m.

**Housekeeping Items**

- (1) Chairman Epstein observed that Tommy Vitolo, who was a participant in the 8 July meeting, was a paid consultant who, it was said, was "on the meter". He asked who had retained him, and how he was paid. In the subsequent discussion it was revealed that he was hired by Claus Becker, who is paying him personally thought he hopes the cost will be shared by others.
- (2) Chair Epstein said that an email had been sent to the Committee and to the Light Board charging he was being "deceptive" in his handling of materials for the Committee. He emphasized that he was trying to provide transparent and fair leadership asked the members of the Committee to please speak up if we ever felt this was not the case. Phil Thayer questioned whether and when such a charge had ever been levied against him, and Chair Epstein responded that it was in an email from Mr. Thayer at 10:45 that morning. With Mr. Thayer's agreement the email (the last in a long chain) is included as an appendix.

**Review of Massachusetts Solar Generation Data**

Chair Epstein circulated two sets of data drawn from a solar installation at the Concord landfill, which gives data on the performance of a facility close to Belmont.

Concord Landfill Solar Generation: a distribution by size of average daily generation from 2pm to 3pm in June 2015.

Concord Landfill Solar Hourly Output by hour, averaged over June 2015.

Based on these figures the Committee explored the role of weather and the nature of intermittency, and the hour of peak solar output. Discussion of the solar peak was augmented by data drawn from the web by Member Barnes on the hourly and daily peaks, which cannot be seen in these aggregated data.

It was pointed out that the orientation of this Concord facility (South or West) was not known, which further enriched the conversation with insights into the tradeoff between maximum energy and most valuable peak contribution. Chair Epstein volunteered to call Concord and find out the orientation of this facility.

A pie chart was also distributed:

Massachusetts Solar kWh Generated by System Size, May 2012 – April 2013, which broke out Residential (<10kW), Commercial (10-500 kW) and Industrial or Utility scale (>500kW) installations. This chart led to a discussion of the scope of the Committee's concern. Though utility scale plants are unlikely in Belmont because of space limitations, are we concerned with tariffs for the larger commercial (and

potentially municipal) units? Discussion led to the conclusion that our charge covers solar units of all sizes and owners, not just residential.

#### **Review of ISO LMP Prices and Demand**

To gain an impression of what system load and prices look like, Chair Epstein distributed a set of four figures:

ISO-NEMASSBOST Hourly Load and LMP, Feb. and August 2013 & 2014.

In the subsequent discussion of capacity and transmission charges, and their relation to annual and monthly system demand peaks, questions were raised to be addressed to BL:

Can our Committee get the actual calculation of these charges as paid by BL in a couple of recent years, with an explanation of the specific data and methods underlying Belmont's obligation?

Can BL personnel help clarify who sets the different charges, e.g., (a) the capacity and transmission charges, and (b) the allocation of these costs and other items to different customer classes and components of the utility bill?

#### **Review Massachusetts SREC Values and Federal and Massachusetts Solar Supports**

Chair Epstein distributed a document on SRECs.

NC Clean Energy Technology Center, Solar Renewable Energy Certificates (SREC-II),

which served as the basis for a discussion of the role of renewable portfolio standards, and the Massachusetts certificate market. Issues included the importance of SRECs in the economics of Massachusetts solar. Member Klionsky pointed to a solar project in which he was involved where the SREC price was \$500/MWh, and Member Gallant called attention to the role of SRECs in the slides shown in the May Town Meeting (see meeting notes from July 6).

The Committee also sought a common understanding of the differences between Solar Carve-Out Programs I and II, the role of auctions and spot markets in SREC prices, the existence of futures markets, and uncertainty in future SREC values.

There also was discussion of the Investment Tax Credit (ITC), its contribution to the economics of a residential solar investment, and the fact that it is scheduled to be reduced to zero for residential units at the end of 2016 (and the prospects for legislation to extend it)

Member Klionsky pointed out that there is also a small Massachusetts state tax credit. He also observed that there are other big changes in the country—of prices, subsidies, etc.—and that this volatility may call for flexibility in Belmont's tariff policy.

In the context of this consideration of the ITC and SRECs, Member Jacoby offered a back-of-the-envelope calculation of the subsidy involved in these measures if justified on their contribution to the mitigation of climate change—to be kept in mind when our discussion turns to accounting for the environmental value of

Belmont solar. An MIT study computed that the ITC lowers the investor cost of Massachusetts residential solar by about 10¢/kWh, which, if the solar displaces an NGCC plant, implies a subsidy of around \$200/ton CO<sub>2</sub>. If monetized, a \$200/MWh SREC price implies another \$400/ton CO<sub>2</sub> subsidy.

Member Jacoby raised a question as to how we will obtain answers to our various questions from Belmont Light, and its capacity to respond to us, and the list of inquiries from the July 8 meeting was read out. Also Member Klionsky suggested three readings: a June 19, 2014 Belmont Light document, the Austin solar tariff, and a 2013 study by the Regulatory Assistance Project.

#### **Approval of Minutes**

The minutes of the 6 July 2015 meeting were reviewed, one spelling error was corrected, and they were approved by vote of the Committee.

#### **Public Contributions**

Chair Epstein opened the meeting for public comment.

Claus Becker indicated that his previous criticism was not of the Chair or the Committee but of Belmont Light for spending money on studies to fight solar. He went on to describe the difficulties involved in realizing the nominal value of SRECs for his solar unit, also pointing out that the political risk to solar investors is great.

Doug Koplou discussed the need for incentives to be held constant for the life of a cohort of investment, but argued that the uncertainty and shifting incentives were normal in the energy business, and that tariff policy cannot follow all these moving points: it should simplify and not try to deal with them. On an earlier question about the high per kWh price for street lighting, he pointed out that it covers other services besides the energy itself. On an earlier question about OPEB, he said BL does allow for it, but questioned who bears the risk if they're wrong.

Mark Robbins again raised a concern, on ethical grounds, of the great attention given to small potential subsidies in a Belmont solar tariff when so much money is involved in an inequitable distribution of the responsibility for RECs.

Ben Bauer asked what percentage of Belmont residences are likely candidates for solar installations, and the discussion indicated that perhaps 25% were technically feasible, and many of these are less likely because they are rental units. He further questioned whether the solar policy is displacing costs to people who don't have solar units and the subsidies, and argued for equity for the rate payers.

Member Klionsky read a set of six characteristics of a policy proposal that Patti DiOrio had asked be presented to the Committee.

#### **Adjournment**

The meeting was adjourned at 9:30 p.m.

ATTACHMENT: Letter from Phil Thayer to Chair Epstein

----- Forwarded Message -----

Subject: Re: follow-up from Wed's NMWG meeting  
Date: Mon, 13 Jul 2015 10:45:33 -0400  
From: Phil Thayer <pkt@theworld.com>  
To: Roy J. Epstein <rje@royepstein.com>  
CC: [sbaghdady@belmont-ma.gov](mailto:sbaghdady@belmont-ma.gov), [mpaolillo@belmont-ma.gov](mailto:mpaolillo@belmont-ma.gov), [jwilliams@belmont-ma.gov](mailto:jwilliams@belmont-ma.gov), [klsky@aol.com](mailto:klsky@aol.com), [hjacob@mit.edu](mailto:hjacoby@mit.edu), [tony@energysavvy.com](mailto:tony@energysavvy.com), [rmbhg@verizon.net](mailto:rmbhg@verizon.net), Stephen Klionsky <sklionsky@gmail.com>

Hi Roy,

To be accurate, the tariff in force and on the books at the DPU is the one filed in 2011. It has a phase 1(NM) and a phase 2 ([tinyurl.com/od7yy88](http://tinyurl.com/od7yy88)). It is not a good example of a simple full retail NM tariff([tinyurl.com/q2k6jba](http://tinyurl.com/q2k6jba)). To suggest otherwise to the other WG members is deceptive. The phase 2 language is what has stalled Belmont installations relative to towns with full NM tariffs with no phases.

Regards,

Phil