Discussion of Wolfeboro’s New (2020) Net Metering Policy As Written versus As Implemented

By Douglas Smithwood

Preface: It is my opinion that the new net metering policy has not been implement consistent with the way that it was written. In fact, as it has been implemented is not a net metering policy at all. Only solar generators in the Town that receive an electric bill and also have thoroughly reviewed the new net metering policy would be aware of this apparent discrepancy. The end result is that the new policy significantly reduces the economic incentive for new, renewable energy resource development in the Town. I estimate, based only on my own electric bills, that the reimbursement rate I receive for my solar generation is 15-30% less than it would be if the net metering policy was to be implemented as written and 20-40% less than it was under the pilot program what preceded the new policy.

Explanation of Terms Used

Net Metering is a term defined by the NH Public Utilities Commission and this definition is applied **to all regulated utilities in the State** as given below:

*Puc 902.23 “Net energy metering” means “net energy metering” as defined in RSA 362-A:1-a, III-a, namely, “measuring the difference between the electricity supplied over the electric distribution system and the electricity generated by an eligible customer-generator which is fed back into the electric distribution system over a billing period.”*

Net Metering Policy as defined in the new Wolfeboro Net Metering Policy:

*If the utilities’ “Delivered” kilowatt-hour (kWh) usage is in excess of the customer’s generated “Received” kilowatt-hours, a net payment must be made as billed under the customers current rate schedule or existing credits reduced by such amount. Potential future credits will not be considered as a method of offsetting the current balance of accounts. If the customer generated “Received” kilowatt-hours of electricity is in excess of the utilities “Delivered” kilowatt-hour usage value, credits will be issued on the account which can be utilized to offset future (kWh) energy usage. The customer’s excess generated “Received” kWh electricity will be credited based upon the Generation “Energy Supply Rate” of the current billing cycle.*

Note- The new WMED policy uses the term “delivered” to describe electricity imported from the WMED to the solar generator customer and the term “received” to describe electricity generated by the solar customer that is exported onto the WMED’s distribution system. This document uses the term imported instead of delivered and exported instead of received.

Overview: A solar array can export electricity onto the distribution system when the generation of the solar panels is more than the home is using. This is frequently called “exported” energy but on the WMED’s bill is identified as “received energy” and identified by an “R” at the end of the meter number. At other times the solar array is either not producing enough energy for the house’s needs or is not producing any energy at all (such as at night). During these conditions electricity is being “imported” from the distribution system into the house. On the WMED electric bill this is identified as the meter number with a “D” at the end. Solar generators have two meter readings unlike the one meter for non-solar rate payers.

There are two situations that can occur during a billing cycles for a solar generator (a ratepayer with solar panels fed into the municipal distribution system). In the first situation the solar generator exports **more** electricity from the solar array during the billing cycle (month) than it imports from the WMED distribution system. During this billing cycle the solar generator would be a “net exporter”. In the other situation the solar generator export **less** electricity than it consumes from the grid. During this billing cycle the solar generator would be a “net importer”.

Currently in Wolfeboro we have an import rate of approximately 14 cents per kWh (a combination of 3.52 cents for distribution and 10.24 cents for generation as shown on the electric bill) and an export rate of 10.25 cents per kWh. In all regulated utilities, the utility first determines the difference between the amounts of electricity exported to imported- this is the “net” amount. The utility then applies the export rate (10.25 cents per kWh in WMED’s case) to the net amount if the solar generator was a net exporter during the bill cycle. If the solar generator was a net importer during the billing cycles then the exported electricity is subtracted from the imported electricity and the customer is billed for the net amount of imported electricity at the 14 cent kWh rate. Both of these situation are visually displayed below.

Example One: Situation in Which the Solar Customer in a Net Importer

In the case shown in Graph One the solar generator should be charged the import rate (14 cents per kWh) on the net import of 400 kWhs. The electricity charge to the customer would be $56.00 (400 kWh X 14 Cents per kWh).

Example Two: Situation in Which the Solar Customer in a Net Exporter

In the case shown in Graph Two the solar generator should be credited the export rate (10.25 cents per kWH) on the net export of 200 kWhs. The electricity **credit** to the customer would be $20.50 (200 kWh X 10.25 Cents per kWh).

How the New Net Metering Policy is implemented in Practice by Wolfeboro MED

In practice, as is shown on the actual electric bill of solar generators, the **entire** amount of electricity exported to the grid is credited at the 10.25 cents per kWh rate and the entire amount of electricity import from the grid is charged at the 14 cents per kWh rate- **NOT** the net between the two! Using the situation shown in Graph One above the solar generator would be credited 10.25 per kWh for the entire 600 kWhs exported, $61.50, and charged 14 cent per kWh for the entire 1000 kWhs imported, $140. So instead of being charged $56.00, with net metering, the costumer is charged $78.50 ($140-$51.50), a $22.50 overcharge (40.2%) from what it would have been if net metering was truly applied.

Similarly, in the net export situation shown in Graph Two, with how billing is actually applied by the WMED, the solar customer receives a credit of $82.00 for the 800 kWhs exported to the grid (800 X 10.25 cents per kWh) and is charged $84 for the 600 kWhs imported from the grid (600 X .14 cents per kWh). In this situation, instead of getting a $20.50 credit on the bill the generator would be charged $2.00.

Final Comments: I am a current member of the Wolfeboro Energy Committee although I was not a member when the new Net Metering Policy was proposed by the WMED in consultation with the Energy Committee (which I understand gave a split vote on the policy). I opposed the new policy in front of the Board of Selectmen at the meeting in which they voted to implement this policy. I am writing this document as a private citizen and solar generator that has a strong belief that all citizens of Wolfeboro will benefit by increasing renewable energy resources in our Town. Specifically, the energy section of the Town’s new 10 year master plan sets a very ambitious Town-wide goal of 50% renewable electricity by 2029. I feel that the new net metering policy will not promote the adoption of in town solar development.

Discussion: Even if the current net metering policy is implement as written, I believe that it does not promote the master plan goal of dramatically increasing the amount the renewable energy in our electric system.



However, I believe that a net metering policy could be developed in this Town that meets the concerns and desires of all ratepayers, namely: (1) is fair to non-solar ratepayers, promotes the adoption of in town solar development, and moves the Town to have more sustainable, low cost electricity. Furthermore, I believe the development of a comprehensive net metering policy is beyond the scope of what should be expected to be done solely by the WMED.

I would like to make the following recommendation:

* The Wolfeboro Board of Selectmen appoint an advisory committee to develop a proposal for a comprehensive net metering policy that will promote the accomplishment of meeting the master plan goals.
* Develop a comprehensive net metering policy that reflects the economic difference between large and small solar arrays and promotes both in a manner that is neutral or cost beneficial to non-solar ratepayers. The current new net metering policy is only economically viable for large solar arrays.
* Develop a comprehensive net metering policy that allows for a community solar choice option for WMED ratepayers that is cost neutral or beneficial to non solar rate payers.
* Develop a framework for municipal solar arrays that is cost neutral or beneficial to non-solar rate payers.

Sincerely,

Douglas Smithwood, Wolfeboro Citizen and in town solar generator.

Supporting Signatures of Other Supporting Wolfeboro Citizen Solar Generators