Issues Concerning Moving Forward with a Municipal Solar Array in Wolfeboro

by Douglas Smithwood

1. We have no clear idea of the municipal entity that would “host” the municipal solar array.

There are too possibilities for consumers of the electricity produced by the solar array: (1) the Wolfeboro Municipal Electric Department and (2) the Waste Water Treatment Plant. In effect, the WMED buys its electricity at wholesale rates and the WWTP buys it at retail rates. The economics of a solar array are much more difficult for a host that with a 6.5 cent/kWh wholesale rate expectation (WMED) and one with a 10.23 cent per kWh retail rate expectation (WWTP). The municipal solar array will not be able to produce electricity below the wholesale rate but it can below the retail rate.

2. We have no clear guidance/direction of how the solar array would be interconnected.

To be economical, it must be interconnected to the WWTP meter. There are at least two issues about interconnecting to the WWTP meter. First, the interconnection can’t be behind the meter at the pumping station which is the major load for this site. The pumping station is just too far away for an interconnection. It would have to be connected directly to the grid at the site. This is done in utilities that have virtual net metering or group net metering policies, we have neither. The second issue is that the Town’s net metering policy only allows for a maximum of a 100 KW system. I have heard that the town does not need to abide by its net metering policy limits but this was not the case for the library solar array proposal.

3. We have no funding to have a professional site plan developed.

If we can resolve issues 1 and 2 above, the next step would be to have a site plan done. Without a professional site plan we are going into this blind. A comprehensive site plan could be used for both grant funding and for requests for bids to solar developers. I would estimate a site plan would cost about $2000 to $4000.