March 16, 2023

Energy Committee March 16, 2023, Meeting Minutes

Barrington, N.H. Town Hall

In attendance: Paul Panish, Rob Gibson, Dan Federico, Jack Bingham, Leah Harrington.

Absent: Alyssa Papineau, Jack Bingham, Doug Bogen

Others present- Rachel Eades of Revision Energy, Jim Anderson, Barrington facilities manager.

Meeting Start time: 7:00 o'clock p.m.

1. Paul Panish called the meeting to order and introduced the guest speaker, who was Rachel Eades of Revision Energy, an employee-owned solar installation company.
2. The group approved the minutes from the meeting on March 3 , 2023.
3. Summary of the Revision Energy presentation: Revision energy has 380 employees in N.H. located in Brentwood, N.H. since 2003; number 1 solar installer in N.H. Its mission to promote clean energy to help ensure that generations to come enjoy our natural world. They employ pitched roof installations, flat roofs, ground installations. The roof surface is not penetrated. 5-7 pounds per square foot weight is added.
    a. Turbo cam is a roof solar customer – rte. 9 location. Schools are ideal places to put solar arrays. Dover H.S. has the largest solar array in the state. The new Oyster River middle school is built to generate more electricity than it uses. Payment is received for excess generation. A building needs to be current with building codes to receive an installation. Three phase electrical goes by the public safety building.

    b. On average, ground mounts work on medium larger scale. The array can offset all town buildings even if array is in one location, and group net meters to the others within a single utility's territory
    c. Landfill installation requires the same permitting process as doing a cap on the landfill, so it's not a likely location. SB 68 will allow municipalities and non profits to join together on solar projects up to 5 megawatts, to aggregate usage and make landfill and other large ground mount systems cost effective. Dry ground is required, town owned, but not conservation. She encouraged its passage and to contact your state representatives.
    d. Rob raised the possibility of an array on the Route 9 athletic fields that abut the Turbocam property. She said land value adds 4 percent value to residential home value. Public arrays have been studied to have a negative impact of 1.5 % of property value (informal google search).
    e. The panels have a warranty for 25 years with life extended well beyond thew warranty. Arrays are removable and recyclable. Ground panels are up to14 feet high – low impact on traffic, pollution compared to commercial buildings. Can be installed in sand and gravel pits. Land owner can be separated from the system owner. Owner of the system receives the tax credit.

f. Maintenance involves the inverters, which are replaced most frequently, 10-20 year warranty. Inverters supply the data. Optimizers can be installed with inverters. Data can be collected and reported in real time. First five years is covered parts/ labor by Revision Energy. Maintenance contracts are an available option at a 1200 to 1800 dollar annual cost. There are contracts to build an array, and a separate one for maintenance. Certain sizes require fencing around the array – commercial scale. Ground maintenance is limited to protecting switches or disconnects and mowing grass. Snow melts off quickly. Owner of the system covers the insurance – which could be the Town. Movable arrays or trackers are not usually installed by Revision any more due to maintenance costs.

g. She Recommended to use school energy use in assessing placement of arrays in Barrington. Include schools in planning. In general, if you can link solar project to a building that has significant electricity needs – best behind the meter, using the energy on site. Credits roll forward and take off dollar charges on your bill which can be zeroed out by solar credits. Typically credits build in summer and are used up in winter. For large projects like field off site, as long as using 20 percent on site, you can net meter , or get paid, for the 80 percent. If you send all to the grid, you get credit for supply – by rule you have to group together and match the usage to KW hr used by the town for example. Listing a group of meters by agreement is allowed. You can also receive a check once per year from energy company.

h. Movement to electrical appliances and heating cooling systems is encouraged to use solar power rather than fossil fuels. You can adjust the size of the array upon construction to compensate for increased electricity demand. N.H. limit is up to 1 megawatt for array capacity Third party electrical suppliers are not mandated to pay net metering. Eversource must pay credits only if they are the default supplier of electricity.

i. Solar array owners can sell energy credits to Eversource, if they are set up to do that. Credits can be sold to pay back the cost of the array. N.H. grid is not under pressure or overcapacity like some other states in the region. Eversource has a capacity map on line that includes capacity that is planned or in the que as well as current capacity.

j. Paul informed her that the town was gathering information at this time for possible solar arrays in the future.
Rachel Eades left the meeting at the conclusion of her presentation and a regular meeting resumed.

4. The group discussed attending a meeting of the town department leaders in the near future to discuss energy topics and community power aggregation.

5. The web site now has a separate page for community power.

6. Possible dates for the presentation of the community power summary to the select board are: April 17th, May 1st or May 22.

Meeting adjourned at 9:00 p.m.