

## Town of Dublin Energy Committee Site Visits

Thursday, October 5, 2023

3 PM beginning at Highway Barn, followed by the capped landfill and Fire Department

In attendance:

In person: Blake Minckler, Jack Munn, Susan Peters (Select Board), Carole Monroe (Select Board), Greg Blake (South Pack Solar), Roger Trempe (Highway Department), Tom Vanderbilt (Fire Department), Brian Barden (Fire Department).

### **Municipal Solar**

The site visits started at the Highway Barn. Greg noted that the barn roof has fairly good southern exposure, and he will come back later with his solar path finder to take more precise measurements. He asked about town electricity usage. We need to look at our Eversource bills to determine how much we use. Greg explained that all of the electricity from a solar installation can go toward offsetting the electricity usage recorded on the meter on the solar property. Any excess kilowatt hours generated can be monetized through consolidating meters or group net metering at 70% benefit. Dublin could help cover electricity costs on other municipal properties. Battery technology is still being refined with batteries expensive and having a relatively short life expectancy. Greg said the vast majority of arrays are on asphalt shingle roofs rather than ground arrays. The light bombardment on asphalt arrays delays disintegration of the roof. Solar panel technology has improved over the years. Considerations include the need for an interconnect application to Eversource and transformer assessment as to whether it will need to be upgraded to handle an array. Building Inspector Mike Borden would need to sign off, and Eversource would need to switch out the meter (which Eversource would pay for). Greg explained two reasons why there is less solar in NH than in MA, VT, and Maine: (1) the reimbursement rate is low, including net metering rules for arrays installed after 2016, and (2) RECs are priced artificially low in NH. The Inflation Reduction Act can help towns capture a 30% tax credit, though these funds are not available until after the project is built. There is an additional 5% available if US-made products are used. There are various funding sources to help municipalities. Some municipalities have gone with power purchase agreements so they don't need to raise the funds for an array. For smaller arrays, towns like Nelson have funded the arrays themselves, offsetting some of the costs through grants.

The next stop was the capped landfill behind the transfer station. Greg noted the proximity of the three-phase power lines, the distance from the landfill to the meter at the transfer station (about 500 feet which might require putting in a shed midday), and the orientation of the landfill. The southern end of the landfill appears to be more suitable for an array. A power purchase agreement could offer the potential for a larger array. An array would require an amendment to the landfill permit. Ideally a solar array would receive seven hours of sun per day on average during the year. NH arrays receive on average 4.4 hours of sun per year, with approximately two hours in the winter and six hours in the summer. A ground mount offers the advantage that you can aim it to maximize sun exposure. We would need to have some site work done for a ground array.

The final stop was the Fire Department. Tom mentioned that he is thinking of putting in a mini-split instead of window A/C which could increase electricity usage. Greg will come back with a ladder and the solar path finder to do calculations and determine sun exposure and what size array the roof will hold.

The last site visit was adjourned at 5:30 pm.

Respectfully submitted,  
Susan W. Peters