

Town of Dublin Energy Committee Site Visits

Wednesday, July 12, 2023

4 PM beginning at Town Transfer Station, followed by Highway Barn and Town Hall

In attendance:

In person: James Finnegan, Susan Peters (Select Board), Tim Stillman, and John Kondos (Clean Energy NH). At the Highway Barn, Roger Trempe, Tom Trempe, and Cole Jean were available for questions.

Municipal Solar

The site visits started with a walk up to the capped landfill on the hill behind the Transfer Station. John noted the open area of the landfill runs north-south with good southern exposure. As the field runs north, it slopes downward somewhat. It could be desirable to open up more land by taking down trees on the southern, eastern, and/or western sides. Committee members pointed out the proximity of the three phase power lines. In order to proceed with exploring this as a possible municipal solar site, more information will be necessary: determining the dimensions of the capped landfill, identifying the property lines, identifying whether there is available land surrounding the landfill, determining how large an array the site could hold, and conducting an engineering study of the brownfield site. A ground solar array would need to be sited on the surface with a different design than a traditional ground array where the footings can run into the ground. John mentioned that other area communities are considering solar arrays on their capped landfills, and it might be possible to hire an engineer to do a study of multiple sites. Joining together different projects at the study phase could help communities save on engineering costs through economies of scale.

The next site visit was to the Highway Barn where the focus was on the southern facing roof as a possible site for a solar array. Roger Trempe pointed out that some pine trees on the southern side of the parking area have center rot and have been on a removal list. Taking down these pine trees would help to maximize the sun exposure on the roof. John noted the nice southern orientation of the barn roof and pointed out some factors to consider: the structure of the building including roof trusses; the age of the roof shingles (it is not economical to put a solar array on shingles that are older than 7-10 years old); the capacity of the electric panel (the existing barn panel is maxed out at 150 amp and would need to be upgraded, an upgrade that a solar contractor could do). Solar panels will last 30+ years, and it makes sense to put an array on new or relatively new shingles. John mentioned a State grant that will be coming available in the fall, offering funding for municipal solar arrays of up to 60 KW, with the grant to cover 25% of the cost.

The final site visit was to the Town Hall area where the focus was the southern facing side of the Fire Department roof. The same factors discussed at the Highway Barn would also apply here, including the roof structure, age of the roof shingles, and capacity of the electrical panel. Greg Blake (South Pack Solar) is a great resource to evaluate the potential solar capacity, shadowing, and productivity of a particular site. If the Town is interested in exploring this further, it would be desirable to have Greg come

out and evaluate the roofs at the Highway Barn and Fire Department. Greg could crunch the numbers as to how many KW the two roofs would support. John recommends doing this preliminary work with an eye toward teeing up one or two projects in order to be ready when the next State grant application period opens up. The grant currently in the works will be for projects capped at 60 KW, and there will be more grant opportunities in the future.

The last site visit was adjourned at 4:58 pm.

Respectfully submitted,
Susan W. Peters