Town of Dublin Energy Committee Meeting
Wednesday, April 26, 2023
7 PM at Town Hall, ground floor

In attendance:
James Finnegan, Blake Minckler, Jack Munn, and Susan Peters (Select Board). Also in attendance were panelists Greg Blake (South Pack Solar), Andy Hungerford, John Kondos (Clean Energy NH), Caleb Niemala, Karen Niemala, Jay Schechter, Hanne Skov, and Paul Tuller. Other members of the community offered questions, comments, and experiences about solar power. Rick Fuller managed the audio and recorded the meeting (recordings are available at the Dublin library).

Panel discussion about local solar arrays
Residents shared their experiences with installing solar power on their properties in Dublin. Solar power helps meet residential and business electricity needs, and depending upon the size of the array may also offer net metering credits. Industry professionals Greg Blake and John Kondos also shared their expertise and experiences.

Paul Tuller described the pole mounted solar array he installed in an open field on his property. The angle of the array can be changed seasonally (using a crank) to maximize solar exposure. He also has a roof solar array. Ground and roof arrays meet 100% of his residential electricity needs. Caleb and Karen Niemala installed solar panels on the roof of their shop; usage fluctuates depending upon shop needs and they carry a credit every month. Jay Schechter and Hanne Skov use their solar array as another source of electricity if the power is down, which may involve the use of batteries. Andy Hungerford explained that the Dublin School installed solar power (via a power purchase agreement) to supplement their use of other sources including oil and pellets. The school's array is less effective in the winter when the sun's rays are weaker.

John Kondos explained that there are tax credits available under the Inflation Reduction Act, with additional rebates depending upon income eligibility and for brownfield sites. He explained that roof installations are generally less expensive, with an estimated 8 year payback period, than ground mounts with an estimated 12 year payback period.

Greg Blake shared his experience working with the town of Nelson (a) to install a system on the library roof, (b) to install ground mounts behind another municipal property, and (c) now on a proposed additional roof system on their Town Hall. With Nelson's latest project, they have applied for a grant to cover 80% of the cost, with Nelson only having to put 20% down. The grant also offers funding for batteries. Greg suggested looking for grant opportunities, and to work on a design and pricing in order to be ready for when a grant opportunity comes along. Greg holds certifications and recommends asking

prospective installers about their credentials and training. While New Hampshire does not regulate installers, training is very important to ensure an efficient solar installation and operation. When evaluating a site, it is important to consider where the shadows fall as shadows really decrease the efficiency of a system. In New Hampshire, systems are 1/3 as productive in the winter as in summer, and the options of batteries and net metering are important. Bifacial panels are more fragile and can break in delivery. With over 450 solar panel manufacturers, it is important to look for Tier 1 manufacturers as the components do matter.

There was discussion of the use of batteries, which are mostly for back up when the utility grid goes down. Solar batteries are lithium, long-lasting, and a trouble-free technology that is safer than car batteries. Solar power is of most value in locations where there is a lot of sun (i.e California and Hawaii). When deciding on the number of panels to install, it is good to look to the future to anticipate future as well as present needs.

Katherine Gekas shared that farmers are finding ways to use the land under ground solar arrays for agricultural purposes.

The meeting was adjourned at 8:50 pm.

Minutes respectfully submitted by Susan W. Peters