PRELIMINARY PROPOSAL FOR SOLAR FARM AT BRANDON'S CLOSED LANDFILL

The need for additional solar generation for the Town of Brandon:

The Town of Brandon has set a goal of meeting the State of Vermont goal of 90% reliance on renewable energy by 2050. To meet this goal significant steps must be made year by year towards reliance upon renewables, the most feasibly achievable being solar. Electric use by the town costs about $145,000 a year, however through existing solar contracts it is currently reduced to a net of about $100,000 annually. Given the success of the current solar generation contracts, it makes sense to seek further reductions of this $100,000 cost burden to Brandon taxpayers.

Further, the Town currently relies on renewable energy sources for what we estimate is less than ***5%*** of energy used. (Our committee is in the process of determining this amount with more precision.) In broad terms, the town needs to implement steps to convert to renewables at the rate of about ***3%*** a year. We also believe that by setting the example for the rest of the town, movement toward the overall goal for the residential and commercial sectors of the town will be significantly furthered.

The Proposed System

The Energy Committee proposes that a solar system be installed on the former town landfill. The scope of the system is constrained by the availability of 3 phase power which is .8 miles from the site and additionally limited by the substation capacity. The most proximate substation would allow about a 75kW system, making it impossible to justify the cost of extending the 3 phase power. However, a system based upon the onsite available single phase does appear to make sense and falls more clearly in line with the available funding. A system built to close to the capacity of single phase is likely to generate 180kWH a year. This translates roughly into savings of about $30,000 a year, or about 30% of current usage. Based upon a 'back of the napkin' estimate from a well established Rutland solar contractor, such a system should cost under $375,000. This suggests a 12 year payback on these funds. More importantly, from the taxpayer perspective, who has not had to invest these upfront funds, this simply translates into a 1.1% tax reduction for the coming 3 to 4 decades.

Next Step

We encourage the town to take the first step of submitting a simple application with a modest fee to confirm that the system is approvable by Green Mountain Power based on their system capacities. This initial 'green light' can be secured within two days to two weeks once the application is submitted according to Green Mountain Power. The Energy Committee is prepared to support this application effort in any manner the Select Board orTown Manager requests.