

Ashfield News – Energy Committee
October 2022
Solar Array on MTRSD Roof?

The Ashfield Energy Committee's most recent column focused on solar for homeowners, and this month will feature an exciting development at our regional school. A group of community members and staff have been working on bringing solar to Mohawk and August 22, after much deliberation and due diligence, the Building Committee voted unanimously to recommend that the full School Committee sign a Letter of Intent with Solect, a solar developer, to put a 372.4 kW DC solar array on the roofs of the middle school/ high school buildings.

What is particularly exciting about this project, in light of the ongoing budget challenges faced by our rural school district, is that this would be at no cost to the district! None. It would actually save us upward of \$700K over 20 years. The district would not own the solar panels and would not bear the capital cost of installing them or the ongoing cost of maintaining them. Instead, we would enter into a 20 year PPA (Power Purchase Agreement) which would commit us to buying the electricity produced by the panels at a significantly reduced rate. Currently the district pays approximately 11cents/ kWh for electricity and the PPA would lock in a rate of approximately 5 cents/kWh. We are projected to save over \$26K in the first year alone.

Solect is based in Hopkinton MA and was founded in 2009. They have done over 600 of these large solar installations in MA, CT, and RI and have worked with many school districts like ours. How did we choose Solect as the company to complete our solar installation? We actually avoided a long and costly procurement process by working with Power Options, a non-profit energy procurement company who considered a large number of solar companies and selected Solect to be the developer for large solar installations for Power Options members. They looked at project development experience, pricing, and corporate financial health, among other factors. Periodically they consider other solar companies and they just selected Solect again for another period starting this year.

The Building Committee members were initially concerned that putting solar panels on the roof could damage the roof, but it became clear that the type of roof Mohawk has, standing seam metal roof, is nearly perfect for solar. The solar panels would be attached to the standing seam metal roof by clamping onto the vertical seams and would not penetrate the roof at all, posing little to no risk to the roof. They invited the roofing company which installed the roof to the school to assess the roof and the company stated the roof was in good condition and they saw no reason solar could not be installed. Furthermore, ground mount and parking canopy options were explored but due to the high cost of steel and the expense of digging trenches for conduit were not financially advantageous.

This solar installation would produce approximately 67% of the power used by the school in a year. The first system design would have produced 100% of power for the school but would have required panels on the flat roofs as well as the sloped metal roofs. Due to concern about snow load and possible leakage on the flat roofs it was decided to avoid them, which resulted in the smaller system size.

The potential benefits of this project are enormous- financial savings for the district, good publicity, educational opportunities for students, and a psychological boost for young people worried about climate change who will take pride in their school doing something positive to make a difference.

Now that the Building Committee has given the project their seal of approval, Solect will be doing an in depth site visit and sending out structural engineers to do a more in depth assessment of the buildings.

There will be an informational meeting for the full school committee Wednesday September 7 at 6:30pm. The meeting will be a posted public meeting of the School Committee, held remotely via GoogleMeet with login information available on the School Committee section of the Mohawk web page. The main purpose of the meeting will be for School Committee members to hear from the Building Subcommittee about the proposal and about the Subcommittee's due diligence work to date, and for members to ask any questions they have without the time constraints inherent in a regular School Committee meeting. There will be a limited opportunity for public comment at the Sept. 7 meeting, and a longer comment opportunity at the Sept. 14 meeting.

The full School Committee will meet Wednesday September 14th at 7pm to vote on whether the district will sign a letter of intent with Solect to move forward with this project. The meeting will be hybrid, both in-person, and with GoogleMeet log-in available for those who wish to participate remotely. Community members are encouraged to show your support, either by speaking at one of the meetings or by writing a letter beforehand. Comments can be emailed to School Committee chair Martha Thurber at mthurber@mtrsd.org. Make your voice heard!