



Memorandum

To: Natick Board of Selectmen
CC: Melissa Malone, Town Administrator
Anna Nolin, Natick Public Schools, Superintendent
James Errickson, Deputy Town Administrator, Operations
Jeremy Marsette, Director, Public Works
John Gadson, Director, Facilities
From: Jillian Wilson Martin, Sustainability Coordinator
Date: June 18, 2020
Subject: Community Solar – Electricity Savings Opportunity

As reflected in the FY21 amended budget, Natick pays approximately \$2.4M a year for electricity. These costs include electricity used by school buildings (\$1,095,128); municipal buildings, street and traffic lights, and park lights (\$652,600); water distribution (\$431,929) and sewer pumps (\$259,463).

Natick has sought to leverage solar as a cost reduction strategy for nearly ten years. In FY20 alone, our on-site solar projects are estimated to generate approximately \$200,000 in savings on our electricity bills.

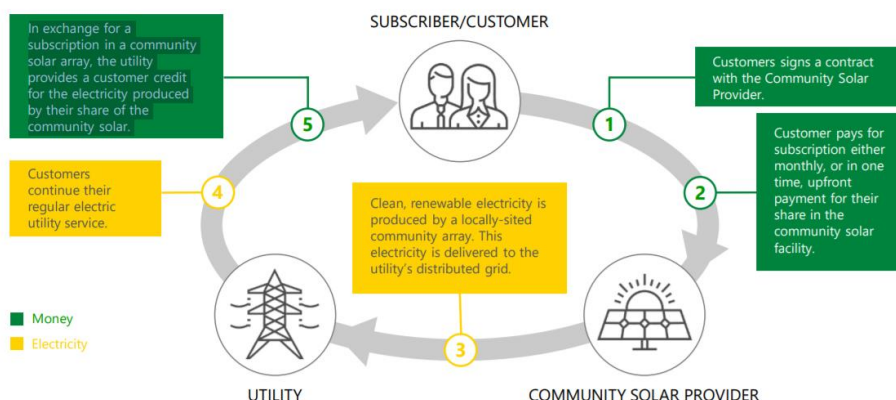
While we are proud of these savings, additional opportunities exist to reduce our community’s electricity costs by subscribing to offsite or “community” solar projects.

How Community Solar Works

A community solar project follows this process:

- Developer builds community solar facility offsite (not in Natick), within customer’s utility zone
- Developer sells “subscriptions” to customers for rights to a share in the community solar facility
- Clean, renewable electricity is produced by the community solar facility. This electricity is delivered to the utility’s distributed grid.
- Utility certifies the electricity as “alternative on-bill credits”
- Customer (Natick) pays per kilowatt-hour of the certified electricity produced by its share of the community solar facility
- In exchange, the utility provides the customer (Natick) an “alternative on-bill credit” for the electricity produced by their share of the community solar. The credit has a higher value than the cost of the certified electricity.

A visual depicting this process is provided below (Source: Clearway Energy Group).



Opportunity: \$65,000/yr in Average Electricity Savings

In 2019, Natick, in conjunction with Wayland, Framingham and MAPC, participated in an RFI focused on identifying potential community solar projects and was introduced to the Clearway Energy Group.

Clearway is in the process of developing a number of community solar facilities on Cape Cod, which, due to a change by the Department of Public Utilities, now fall within Natick's utility zone. Clearway has the capacity to service Natick's full on-bill credit "appetite" and is offering the Town a host customer agreement that would provide a guaranteed 10% discount for "alternative on-bill credits". These projects will be operational beginning mid 2021 through early 2022 (Fiscal Year 2022). Clearway has been selling subscriptions to these projects over the last six months and large scale opportunities, such as the proposed 4 megawatt agreement, are expected to be fully subscribed by the end of this summer (i.e., if Natick wishes to move forward with this opportunity, it should do so now).

Based on an analysis of Natick's electricity usage, (see Appendix A), the Sustainability Office recommends the Town pursue an Alternative On-Bill Credit Purchase Agreement with Clearway for approximately 50% of its total load (4,936,270 kwh). The full load is not recommended as planned solar projects and energy efficiency measures should lower electricity consumption, and therefore constrain the Town should it consider credits above and beyond projected future usage.

The benefits of this approach are articulated in the enclosed Pro Forma, which project an average savings of \$64,500/year over the agreement's 20 year life. The credits would be paid by and applied to the different energy budgets to ensure costs and savings are distributed by account, and may be divided as follows (note the level of savings is directly tied to the department's subscription level).

Department	Proposed Kilowatt-hours subscribed	Subscription Costs in Year 1	Credit Value in Year 1	Savings in Year 1
Schools	1,764,490	\$179,688.44	\$199,653.82	\$19,965.38
Municipal	1,501,029	\$152,858.60	\$169,842.89	\$16,984.29
Water/Wastewater	1,670,751	\$170,142.46	\$189,047.18	\$18,904.72
Total	4,936,270	\$502,689.50	\$558,543.89	\$55,854.39

Next Steps

As noted above, the Clearway opportunities are not expected to remain available for long, and other towns are expected to vote in the coming weeks to finalize contracts. The execution of other towns' agreements will, at a minimum, tie Natick's potential subscription to a project with a later commercial completion date.

To vet this opportunity, Natick's solar consulting firm of record, Cadmus, reviewed the Clearway opportunity and proposed contract (this was completed for free to the Town of Natick due to its SolSmart Gold status). Cadmus provided its comments, which have been provided to Natick Town Counsel.

To protect the Town's ability to quickly move forward with this opportunity, the Sustainability Office respectfully requests the Board vote to allow the Town Administrator, upon review and final approval from Town Counsel, with collaboration from Natick Public Schools to enter into a contract with Clearway Energy Group for the opportunity described above.

Appendix A: Detail on Natick’s “Appetite” for Alternative On-Bill Credits

Natick’s ability to participate in community solar projects is dependent on both the amount of electricity we use and state statute (M.G.L. c. 164, § 138).

State Statute

State statute allows the Town of Natick to register as the host customer for up to 10 megawatts (MWs) of solar electricity. Natick’s current and planned future solar projects amount to 4 megawatts, meaning the Town has the bandwidth to take on 6 megawatts of additional capacity. The proposed Clearway projects would add approximately 4 megawatts, keeping Natick well within the limits of the statute.

Electricity Load

In Fiscal 2019, Natick used 10,465,931 kilowatt-hours (kWh) across school, municipal and water/sewer accounts. Customers cannot use credits for electricity on their bills that they do not use, meaning Natick should not purchase credits tied to a load greater than 10.4 kWh.

Using this as a baseline, Natick should calculate its credit “appetite” by adjusting the 10.4 kWh figure based on:

- Planned future reliance on grid-based electricity (expected to decline slightly in coming years due to new KMS solar + battery storage system)
- Energy efficiency goals (Natick is working to reduce electricity usage by 40% from 2010)
- Portfolio of current and potential solar credits (including high school solar canopies, canopies behind the Public Safety Building, ground-mount, rooftop and canopy systems across water and sewer properties)

In completing this analysis, Natick recommends entering into a credit subscription for electricity associated with the production of 4,936,270 kWh of solar electricity (approximately 50% of its current load).