

Harvard Solar Gardens

Ready to build, Critical deadlines ahead

BOS Action Requested

1. A vote to place on the warrant of the next regularly scheduled town meeting a PILOT (Payment in Lieu of Taxes) agreement, along the lines recommended by Harald Scheid, Harvard's Regional Assessor. Given the likely timing of tax liability, a vote at the 2014 Annual Town Meeting is soon enough, and putting this before the town at that time gives ample time for public communication.
2. A vote to add Community Shared Solar to the Solar Panels permit category, using the recently enacted California legislation as the model for permit fees. Because we need to start construction as soon as possible, this vote is requested at the July 30 Board of Selectmen meeting. Site preparation can proceed without permit, so action on July 30 is soon enough.

Background

Nearly two years ago, volunteers in the town of Harvard initiated a community shared solar project, first of its kind in Massachusetts. During Harvard's Solarize Massachusetts project in 2011, it became clear that not all who wanted to purchase PV solar for their property could do so. As many as half of residents and businesses wanting to participate were unable, because of excess shade, lack of southern orientation, or structural limitations.

Harvard Solar Garden I, LLC was formed, with shares owned by 40 local residents and businesses who contributed capital to build a community shared solar system. The goal was to provide solar capacity in the shared system with costs and benefits as close as possible to the same as for Solarize participants who installed on their own property.

When the Board of Selectmen voted in March, 2011 to petition the Massachusetts Clean Energy Center to allow Harvard to participate in the Solarize Massachusetts pilot, as the first non-municipal benefit of having become a Green Community, the board did so with the understanding that the town would be expected to provide expedited permitting. Within two months of the Solar 201 kickoff meeting, a new permit category, Solar Panels, was added to the schedule of Harvard's Building Permit Fees. A flat rate of \$125 was established, with electrical inspection fees set at \$36 per inspection.

No other accommodation for solar projects was needed, or requested, and by the end of October, when Solarize ended, a total of 75 projects were contracted by Harvard residents, for a total over 400 kW. According to MassCEC conditions for Solarize grants, the maximum size of an individual system was 10 kW.

Local Tax

PV Solar installed for the direct benefit of the property on which it was installed is exempt from increased assessment for 20 years, per [MGL 59, Section 5](#), forty-fifth. Because ownership of the LLC is 100 percent composed of individuals and/or businesses owning shares to be net metered to their qualifying property, it seemed reasonable to assume shares (and therefore the total system) would receive the same exemption as if the systems were installed on the owners' properties.

In February this year, when we were getting ready to begin construction, we became concerned that exemption might not apply to shares in the solar garden. The Harvard Solar Garden project was put on hold, pending confirmation that exemption from property tax for 20 years would be granted. If local tax were levied on the full value of the system, the project would not be economically feasible. With the exemption, the project would have the possibility, but not the certainty, of breaking even and possibly producing a small return on investment, over the expected life of the project. Without the exemption, or some other accommodation, recovering the cost of investment would be unlikely.

We asked Harvard Board of Assessors for a determination of exemption, describing our planned project and requesting confirmation that the statutory exemption would apply. Harald Scheid, Harvard's Regional Assessor wrote to Department of Revenue asking for guidance. At the same time, Senator Eldridge called a meeting with representatives from MassCEC and DOER, and we asked them for help in seeking guidance from DOR. Senator Eldridge also wrote to DOR asking for guidance.

We learned that there had been language in last year's energy bill that would have confirmed exemption for large-scale solar arrays, but that it was pulled at the last minute because of objection from MMA about towns not being able to tax large-scale, utility-grade generating facilities. At the beginning of the current session, Senator Eldridge co-sponsored legislation that re-introduced exemption, and we suggested [language](#) to specifically exempt community shared solar. In early April, we gave testimony to the Joint Committee on Revenue, and were told that a key determining factor, as it was last year, would be whether MMA opposed exemption.

In May, after three months delay, Harvard Assessors received a response from DOR, stating that exemption is a local decision, but that if denied, DOR would not be likely to overturn an appeal. Accordingly, Harvard Assessors declined to give a determination of exemption, instead referring the question to Selectmen for negotiation of PILOT. Senator Eldridge and Representative Benson are considering

filing separate legislation to specifically exempt community shared solar, separate from consideration of other large-scale solar.

Accordingly, the Harvard Solar Garden volunteers asked the Board of Selectmen in late May for an expedited negotiation of a PILOT, to fix the maximum tax liability the project might have to absorb. That process has been underway for several weeks, with the most recent meeting in mid-June yielding tentative agreement for a payment of \$12,500 per MW DC. As part of the last discussion, we looked at timing of tax liability, and learned that property that exists on January 1 of a given calendar year is the basis for personal property taxation in the fiscal year that begins the following July. If Harvard Solar Garden is operational January 1 of 2014, tax liability would be incurred beginning July 1, 2014. If (as is likely) interconnection and production is accomplished in January or February of 2014, tax liability will begin July 1, 2015. With this in mind, the PILOT agreement could be deferred for consideration until the Annual Town Meeting of 2014. If the Board of Selectman would make a binding commitment now, to put the PILOT question on the warrant of the 2014 Annual Town Meeting, Harvard Solar Gardens would immediately initiate construction.

There is another reason for urgency. All along, Harvard Solar Garden volunteers have cited expiration of Commonwealth Solar II grants as a reason for haste. To date, however, the Massachusetts Clean Energy Center has accommodated project delays, and extended the grants. In late May, however, the Department of Energy Resources announced that the SREC program would soon close, having reached the 400 MW limit between 250 MW built and more than 150 MW more known to be in progress. Harvard Solar Gardens scrambled to register Garden 1 and Garden 2 so they would not be left out, but a week later further "guidance" suggested that projects over 100 kW that did not already have their interconnection agreement would be excluded. Comments on the new regulations would be open for two weeks, but it looked as though there would be no way to meet the latest restriction.

A direct appeal to Mark Sylvia, DOER Commissioner, and Dr. Dwayne Breger, Director of Renewable and Alternative Energy at DOER, yielded an adjustment to the emergency regulations, as follows, quoted from the June 28 DOER communication from Dr. Breger:

"Units equal to or less than 100 kW, or designated as a Community Solar Garden by MassCEC, regardless of their placement in the 400 MW capacity limit, will be qualified under the current program provided they submit a Statement of Qualification Application to DOER and have an Authorization to Interconnect by December 31, 2013 or prior to the effective date of the new solar program, whichever is later".

DOER used the grants awarded by MassCEC as the basis for qualifying a community shared solar facility as a collection of sub-100 kW systems, rather than large-scale commercial systems.

Harvard Solar Garden volunteers are encouraged that this may be a helpful precedent, and that pending exemption legislation might use the same approach to qualify community shared solar systems for the same exemption that individual property owners receive.

Permit Fees

As Solarize began, MassCEC asked the town to establish an expedited permitting process, with minimum fees. In response, a new permit category, Solar Panels, was established, with a flat building permit fee of \$125, and electrical inspections set at \$36 per inspection. Under Solarize, the maximum size of a single system was 10 kW. When the solar garden project was initiated, it was not assumed that a 500 kW array would be permitted for \$125, but it seemed logical that some multiple of the single system fee would be used. Inspecting a single 500 kW system would certainly not be 40 or 50 times more time consuming than inspecting that number of individual systems, especially given that most of the individual systems would be installed on an existing structure, necessitating making sure that structural considerations were in compliance. A single ground-mounted system would have no such structural considerations, and given that construction methodology involves the use of driven piers, without the need for poured concrete or other permanent foundation. All permit documents would be submitted with engineer's wet stamps, ensuring code compliance without the need for detailed inspection.

Instead of the ~\$5,000 fee that would result from treating the shared system as 40 individual systems using the Solar Panels category, a fee of over \$17,000 was assessed, applying the commercial construction schedule of \$12 per thousand of construction cost. Together with electrical inspections, total permit costs would be nearly \$20,000.

Recognizing the problem of cost-based permit fees, California passed [legislation](#) earlier this year establishing the principle of fees based on the likely cost of inspection services, rather than on construction cost. Applying the California fee schedule to a 500 kW system would result in a fee of \$3,650.

We request reconsideration of the earlier request to add a sub-category of Community Shared Solar to the Solar Panels category added for Solarize, with fees based on the size, not the value, of the array. This would be equitable treatment for solar garden participants, comparable to the treatment afforded Solarize participants, and would yield an adequate compensation to the Building Commissioner for the inspection services provided.