

Community Shared Solar Brookline Working Group

Minutes

03/11/2015, 6:00 pm, room 408, Town Hall

Jenny Fariborz, Blake Cady, , David Lowe, Willy Osborn, Ernie Frey, Tom Kilday, Mary Dewart, Jack Spence, Werner Lohe, David Lescohier, Joyce Jozwicki, Celinda Shannon, Tom Nutt-Powell, David Pantalone, Marcia Hnatowich, Don Hnatowich, Elissa Yanover

Action Items for Next Meeting, (on 2nd Wednesday) April 8, 6:00 – 7:30 pm, Town Hall, Room 408)

Tasks:

- Thomas Nutt-Powell – Contact Brookline Housing Authority about using Housing Authority roofs to host solar PV plant.
- Blake Cady – Explore availability and interest, Allendale Farm. (Werner Lohe can make introduction.)
- Willy Osborne, David Lescohier –Identify commercial realtors, Newton Needham Chamber of Commerce to explore sites on the 128 corridor.
- Celinda Shannon – Investigate Brookline Medical Marijuana growing facility in Franklin, Mass. as possible site.
- Werner Lohe – Continue to investigate 5 Washington Street as possible site.

Mission Statement:

Werner Lohe offered a draft mission statement. After comments, the following represents a consensus:

The mission of the Community Shared Solar Working Group is to develop a project that will permit Brookline residents and businesses to own an off-site solar photovoltaic facility. This will enable those who cannot install solar on their property to invest in a new solar PV installation in Brookline, or, if necessary, in a nearby community. The project will be community-based in the sense that to the greatest extent possible, the financial benefits will accrue to the participants and the community.

Introductions:

Paul Vesey representing Coop Power, based in Hatfield.

Presentation:

Paul Vesey has worked on Solar PV in

Germany & Spain – 2004 – 2005

Ontario – 2006 – 2007

Costa Rica & Panama 2008 + (including off grid, stand-alone)

Coop Power 2015

Coop Power is commencing a community shared solar project that will build a 600 kW ground mounted plant in Greenfield adjacent to the Coop Power's Bio Diesel cooking oil recycling plant. The project will serve 150 household coop members at an average of 5 kW per household. Commissioning will happen in late summer.

Overall, Coop Power is about to finalize financing to build 5 MW of community shared solar (CSS) projects state-wide in Massachusetts by the end of 2016. Massachusetts is a favorable market for CSS due to the SREC and net metering policy regime, as well as the high utility rates.

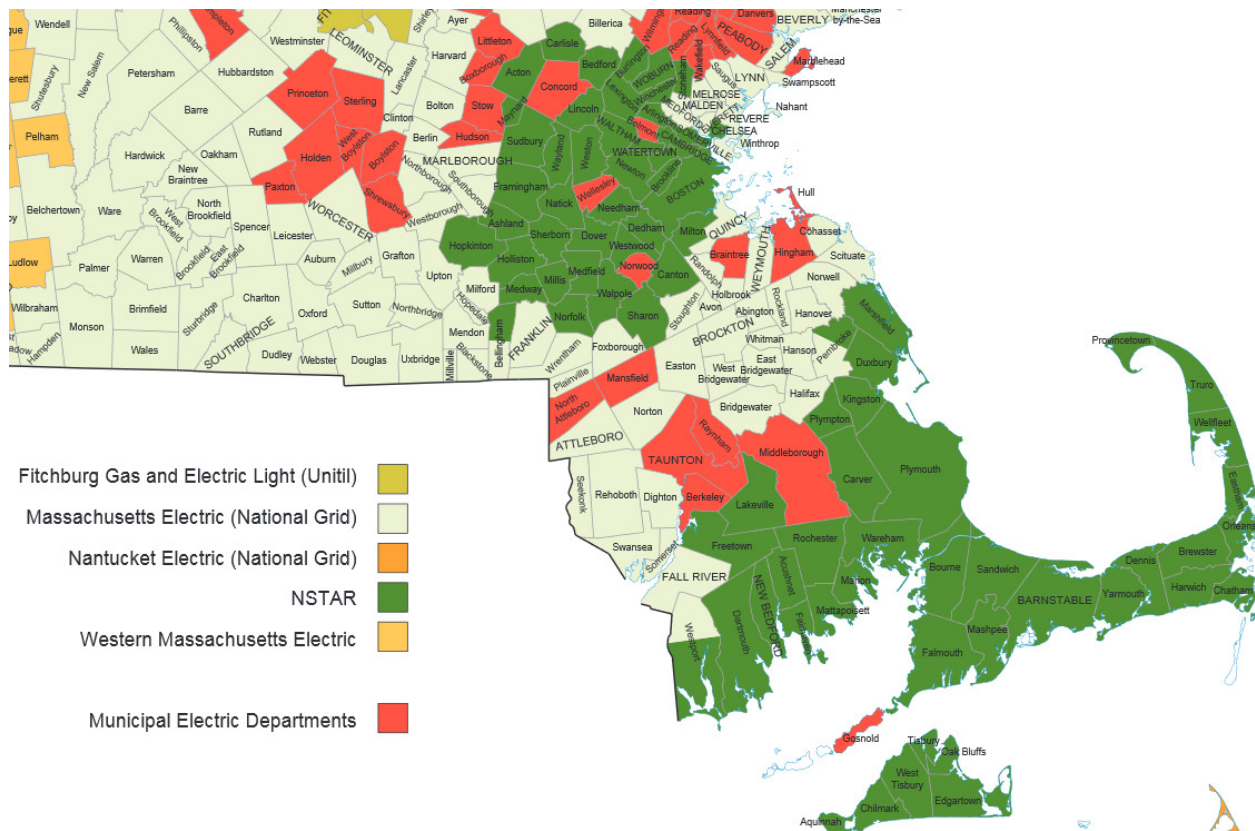
Financing:

Equity Investment Tax Credit (ITC) - 30% (80 – 85% of the project is eligible for Federal tax credits, i.e. materials, labor, development & soft costs)

SREC – actual cash flow depends on supply/demand, which has been favorable, but there is some future risk.

Net Metering & virtual Net metering are the essence of how the benefit of the production is delivered to the CSS coop members.

The net metering must be in the same utility company service area *and* ISO-NE Load zone as Brookline (northern green area on map).



Structure:

Set up a Brookline local coop. Members of the local coop set up a special purpose CSS entity. Local coop owns this entity. Each coop member-participant is CSS coop owner of the solar PV plant. The other owner is the ITC tax equity partner. The Coop Power ITC lender is a socially responsible investor. This investor is seeking an Internal Rate of Return (**IRR**) of one-third of the prevailing 18 – 20% IRR. This has a major economic impact. The project cost is \$1.60 - \$1.80 per peak watt rather than the typical, prevailing \$2.80 - \$3.30 per watt which results in a cost per kWh for participants which is estimated to be half of current rates in Massachusetts (disregarding the current temporary hike due to last winter).

The project will employ a partnership flip structure: ITC equity partner owns 99% share for 5 – 7 years, local coop, 1%. Then the ownership flips and the ITC owns 5% and the local coop 95% for the rest of the 20 years.

Coop member benefits from a low rate that will never increase and is a renewable source, no carbon dioxide emissions.

Also the jobs and funds stay local, benefiting the Brookline economy.

Project:

Coop Power is looking to encourage and finance 500 kW projects. On Ground or parking lot, a 2½ to 3-acre site would be required. A roof (50,000 - 100,000 SF) might be doable. The rent to the site owner runs \$7,000 to \$10,000 / MWh / yr.

Coop Power partners with a local coop. The local coop would provide:

- 1) ID a site
- 2) Community outreach marketing to recruit member participants
- 3) Build support in the community

Roof:

- 1) Age
- 2) Structural
- 3) Shading

Parking Lot:

- 1) \$ 0.15 – 0.20/w higher than roof due to racking

Site:

- 1) Permitting
- 2) Property Tax?

Process:

- 1) Pre-application – 1 wk – learn about capacity constraints
- 2) Application for cap allocation
- 3) Interconnection application (\$6,000 -10,000 cost) – 3 phase, medium tension, proximity to interconnection, 60 days
- 4) Impact study (maybe)

- 5) Geo tech and wetlands studies (ground mounted – maybe)
- 6) Town/City Permitting & outreach to participants for sign up (concurrent – ongoing - Coop Power supports permitting outreach with technical assistance and budget)
- 7) Construction & financing (30 – 35% ITC; 40% member investment; 20 – 25% debt), 60 – 90 days to close and build
- 8) Manage project (Coop Power) (Engage EPC - engineering, procurement, construction)
- 9) Coop power ongoing production monitoring and management, and maintenance under contract with local coop

Paul Vesey pointed out that in view of the possible expiration of the federal Tax credit in 2016, Brookline should have a site identified with the next couple of months.

- David Lescohier

The next meeting will be on 2nd Wednesday, April 8, 2015 at 6:00 – 7:30 PM in Town Hall, room 408. Group will review tasks identified under “Action Steps”.