**Bethlehem Energy Commission**

**Thursday, October 28 at 4:00pm**

**In-Person at Bethlehem Library**

**Attending:** David Van Houten, Mary Lou Krambeer, Bruce Caplain, Chuck Phillips, Josiah Chamberlain, Melissa Elander (Clean Energy, NH advisor)

Contractors: Jack Bingham and Ted Vansant, Barrington Power, and Jeremy and Keira Mains electricians from Mains Electric.

**Excused:** Dan Crosby

**Agenda**

Mission: The Bethlehem Energy Commission was established for the study and planning of energy resources for the town. The commission will evaluate existing energy usage in the town and suggest possible improvements in energy efficiency and conservation, as well as potential clean renewable energy solutions in order to reduce expenses and increase self-reliance.

**Review minutes from last meeting**

To be done at 11/2/2021 meeting.

**Profile project**

Ted gave an update on Profile. We’re in the home stretch. Project slowed down by summer rain and supply chain. Next Saturday the power will be shut down to connect inverters to school. Modules to be delivered Monday (they were stuck in supply chain delays out west). Eversource will need to swap out the meter..

TO DO: BEC needs to plan a ribbon cutting.

**Town solar project**

Goal is to offset all municipal electricity. First phase, Profile High School. Second phase, municipal solar project. Third phase, municipal water supply. Fourth phase, expansion as there is a growing demand for electricity.

Highway garage array: take up pretty much the whole garage. A few issues: we need to fix leaking around the chimney. We need to check the capability of the existing service.

Ted, no panels under the chimneys so there will be no leakage. Standard aluminum frame modules. Put inverters on north wall so they don’t get hot all day that will also protect inverters from snow.

TO DO: fix leaking around chimney in highway garage. Who?

Library array – place array on west side as there is a tree on south side. Make the layout symmetric. Maximize the roof. Consider or at least plan for expansion in the future. It is helpful for developers to know now if we want to expand array sometime in the future.

Barrington Power is trying to maximize usage at each site, overage at any one site is not fiscally wise. Group net metering is a tally of all buildings, so that you don’t lose dollars in excess production.

Best bang for the buck is to use all production as it is created. You lose value if you over-build any one site. You want to match production with usage. We have the opportunity to set up panels for future production. Library will be receive black solar panels as they are aesthetically pleasing on buildings with architectural integrity.

Ground array for BES (3 siting options):

1. beside baseball field Lot 63.1 would be expensive because of the long run and cost of conduit. Right of way for railroad (don’t think so)?

2. trees behind the school (some resistance due to bike trail and trees behind BES)

3. trees behind library Lot 18 (would need to do a wetlands study and either go around on Bethlehem land or get permission to go across Tucker land with conduit); this location is 100 feet longer than behind school). Might be cheaper to go around. Pavement is now cheaper than conduit. This is the preferred spot if engineering studies come out right.

In all scenarios clearing and grading is the responsibility of the Town of Bethlehem. Should we put in a contingency for the work?

TO DO: Next step is to hire an engineering firm to oversee survey, historical review, and wetlands studies now rather than wait until the spring. The budget is approximately $8,000. We would need Selectboard approval to set up site.

TO DO: After getting engineering studies go forward with public education and public input sessions.

Price contingencies: suggestion is to have a 10-15% price contingency in the plan moving forward. (Lots of variables -- China, politics, inflation, supply chain…). The modules and conduit are the biggest variables in the price. Contractors would like to share risk with us by being firm about other prices and if necessary we will delay project by several months if there is a bump in the price. We would start with the library and highway building.

Fundraising: BEC has asked NHCF to move forward in talking to potential donors. TO DO: will discuss project savings with BES on November 9. Ted will send us some figures showing estimated BES savings over the next 25 years.

Financing: grants, town appropriations, small loan options include -- Municipal lease purchase, a way to borrow money, without an appropriation. Certain banks offer this. CDFA borrowed money requires a lot of paperwork with Barrington Power. TO DO: Bruce will look into this financing opportunity.

TO DO: Contract needed from Barrington. A recap of the project cost after today’s discussion.

$415,000 + $18,000 = $433,000 + 15% contingency = $498,000

TO DO: Bruce will reach out to Board of Selectmen to approve the release of $10,000 to begin early work with engineers and applying for a few permits.

Interconnection approvals –need to start applying for an electrical one-line with Eversource $500-$1000.

USDA needs to see a stamped letter on highway garage and library.

TO DO: Barrington will take care of permits after BEC releases some early funds.

TO DO: Barrington will get letters stamped for USDA

Approximate start date – start library (will take 3-4 days) and highway garage (will take about 1.5 weeks). Big array for BES start date TBD.

TO DO: Establish ongoing contact with USDA RD – Melissa.

**Public Input**

None

**Upcoming meeting dates**

Tue., November 2 at 7pm at the library (focus on Town Energy Audit)

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Bethlehem Energy Commission (BEC) is appointed by the Select Board. All meetings are open to the public.

Clerical Assistant Nicole McGrath ensures that BEC meeting notices, agendas, and minutes are posted as necessary.

To find BEC info go to: [www.bethlehemnh.org](about:blank)

-go to government tab

-our committee is listed under: boards and committees’ tab

-our meetings are posted through Nicole on: agendas and minutes tab

 Nicole also posts a hard copy of meeting notices in the Town Hall and at the post office.