

Draft

**TOWN OF RED HOOK
CONSERVATION ADVISORY COUNCIL**

Minutes of meeting
July 12, 2017

Members present: Chairwoman Laurie Husted, Susan Ellis, Mike Zelig, Lori Urbin, Denis Collet, Jen Cavanaugh, Julia Solomon

Guests: Supervisor Robert McKeon,

CALL TO ORDER / QUORUM : Chairwoman Laurie Husted called the meeting to order at 7:05 P.M. A quorum was present.

ENERGY SUBCOMMITTEE: Denis Collet reported that at the July 11, 2017 meeting of the Town Board, the Board passed unanimously a resolution for a shared services agreement with the Village authorizing a study of the feasibility of developing a Community Distributed Generation (CDG) solar power facility on the Village well field. The study is expected to be funded by a \$45,000 Municipal Innovation Grant. The Town Board also approved that the money be spent for the CESIR.

Denis presented a power point describing the CDG proposal that Jeff Irish of Hudson Solar gave at the Town Board meeting. Jeff Irish will likely be the supervisor of engineering and construction, and possibly also for operations and maintenance. The power point showed what the proposed CDG installation would look like and discussed details of the proposal. Some of the points that came up:

- How credits would be allocated monthly to subscribers by Central Hudson.
- The project would require a three phase connector to the Highway Garage.
- Installation would be a 1.7 Megawatt system placed on the Village well field which is not suitable for other uses, and not a conflict.
- Once the project can be put out to bid, there will be an equity investor who will own the system for 1-5 years. The project is expected to be about \$4 million, with an option for the Town to buy afterwards for a depreciated value (about half).
- A power purchase agreement (PPA) with the off-takers of the solar power will be a certain percentage - 20% to the municipalities and 80% to residents.
- 200 – 300 residences might be able to purchase 100% of their electric supply. For further discussion is the question of how applicants will be chosen. In Denis' opinion, some type of lottery system will be needed.

- From years 6 – 25 of the operation of the CDG (expected lifetime of a solar farm before units need replacement) there was discussion of the revenue stream that may be expected if the Town and Village take over the ownership, and how that should be handled. One option is to allocate it to maintenance of the system. Mike Zelig asked what the expected maintenance fees would be for a solar array of this size. Denis replied that it might be about \$10,000 and Supervisor McKeon said that it would be a part of a whole package.
- Denis added that another preparation to evaluate the well field site was a drone scan, which discovered what areas would require screening, so that has already been included in the budget for the RFP.

DANDELION PROGRAM ON GEOTHERMAL OPTIONS: Denis Collet had met Kathy Hannun and Katie Ullman at the last “GREEN DRINKS” mixer and asked if they would come to speak at the July 12 CAC meeting. Denis introduced Katie Ullman of Dandelion Company, joined by Amber and Jake, to speak about their geothermal options. Google X (having acted as an incubator) launched Dandelion a week ago as a new company to promote geothermal energy.

Katie described basic geothermal technology and noted that whereas most geothermal installers use conventional drilling that requires 6” diameter holes, Dandelion is working to use 4” diameter to create less drilling debris and shorter and less disruptive loops for a lower cost. At the launching phase, Dandelion is focusing on covering their costs to promote their system of geothermal installation, so their cost is about ½ of conventional geothermal. As the number of subscribers grows revenues will be applied to a profit margin.

Denis has been in discussions with John Ciovacco of Aztec Geothermal, who says that typical cost of conventional geothermal drilling is \$15 - \$20 per foot, with reductions based on subscriber base and tax and government incentives. Denis asked how Dandelion would compare. The goal for affordability at Dandelion is to have a price point cap for an installation that can serve up to a 5,000 square foot floor space be in the low \$20,000's. Jake noted that geothermal subscribers don't pay installation costs up front, but are receiving benefits from the day it goes online.

Supervisor McKeon, Laurie Husted and Denis asked other questions about the staff, training and marketing, and how Dandelion would handle the increasing diversity of renewable energy projects. They suggested, for example, that in Red Hook there are already Energize New York solar contracts, the CDG proposal for a solar farm and several planned developments that could be approached about the geothermal option. Denis praised their development of a business model that fits a niche in the Cleaner, Greener New York movement. Denis noted that Dandelion said that they have one

group of 200 subscribers ready to go, but only one driller with the rig and training to do the installations. He was concerned how Dandelion would handle all of that and new responses from the launch in a timely manner. He said that there are only 100 well drillers in New York state, and most have not felt that rigging out for geothermal work is presently financially viable. Katie replied that drillers can use old rigs on rural lands with a change of the drill bit assembly, and Dandelion could offer a monetary incentive. Denis agreed that the change has to be market driven; as a response to the affordability and growth of geothermal energy. Katie, Amber and Jake thanked the CAC for inviting them to do a presentation and sharing information. The CAC thanked Dandelion for their unique addition to the energy forum.

Dandelion left the meeting.

CONFERENCE CALL TO ENERGIZE NEW YORK FOR AN UPDATE ON THE STATUS OF THE RED HOOK ENERGIZE PROGRAM: Laurie Husted said that she was now going to try as smart phone conference call to reach someone from Energize NY to answer some questions about the number of vendors that have responded to contract leads for solar installations and weatherization. Denis added that the Energy SubCommittee could ask that they increase their reach to include providers of other renewable energy sources. Supervisor McKeon suggested that as there are a lot of energy related projects on the table for Red Hook that the Town needs a brochure showing all of the possible options. CAC members discussed ideas about the format and content, with questions about how to avoid overwhelming residents with choices or diluting responses to energy campaigns. There is a need to be cautious about making specific vendor recommendations.

Laurie reached Tom Bregman, Community Programs Advisor for Energize NY. On her smart phone. Tom told the CAC that there have been 68 residents signed up, 21 have selected contractors and 8 have completed their energy projects through the end of May for the three municipalities in Red Hook.

MINUTES OF THE CAC MEETING OF APRIL 12, 2017: The minutes of the April 12, 2017 CAC meeting were approved with one amendment by a motion made by Jen Cavanaugh and seconded by Denis Collet.

ADJOURNMENT: The meeting was adjourned at 8:47 P.M.

NEXT MEETING: Wednesday, August 9, 2017 at 7 P.M. at the Town Hall

Respectfully submitted,
Susan H. Ellis, Secretary

