

STATE OF CONNECTICUT
SITING COUNCIL

PETITION NO. 1312 - Candlewood Solar LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 20 megawatt AC (26.5 megawatt DC) solar photovoltaic electric generating facility located on a 163 acre parcel at 197 Candlewood Mountain Road and associated electrical interconnection to Eversource Energy's Rocky River Substation on Kent Road in New Milford, CT

OCTOBER 24, 2017

PREHEARING DISCLOSURE

In addition to its disclosure made on September 19, 2017, the following is a supplement to Intervenor's, Rescue Candlewood Mountain's, pre-hearing disclosures:

1. Witnesses:

Please see the pre-filed testimony filed herewith of the following witnesses:

Russel Posthauer, P.E. CCM Engineering, testimony regarding stormwater impacts from the proposed project

2. Exhibits:

2. Prefiled Testimony of:

c. Russel Posthauer dated September 19 and October 20, 2017,

Intervenors reserve the right to file supplemental testimony and exhibits in rebuttal to evidence received during the hearing proceedings.

Respectfully Submitted,

RCM,

By _____

Keith R. Ainsworth, Esq.
Law Offices of Keith R. Ainsworth, L.L.C. #403269
51 Elm Street, Suite 201
New Haven, CT 06510-2049
(203)435-2014
keithrainsworth@live.com

CERTIFICATE OF SERVICE

This is to certify that a true copy of the foregoing was deposited in the United States mail, first-class, postage pre-paid this 24th day of October, 2017 and addressed to:

Ms. Melanie Bachman, Esq., Executive Director, Connecticut Siting Council, 10 Franklin Square, New Britain, CT 06051 (1 orig, 15 copies, plus 1 electronic) (US Mail/electronic).

And electronic copies to:

Candlewood Solar LLC Paul R. Michaud, Esq.
Murtha Cullina, LLP
185 Asylum Street
Hartford, CT 06103
Phone: (860) 240-6131
Fax: (860) 240-5936
pmichaud@murthalaw.com

James J. Walker
Vice President
Ameresco, Inc.
111 Speen Street, Suite 410
Framingham, MA 01701
Phone: (508) 598-3030
Fax: (508) 598-3330
jawalker@ameresco.com

Joel S. Lindsay
Director
Ameresco, Inc.
111 Speen Street, Suite 410
Framingham, MA 01701
Phone: (508) 661-2265
Fax: (508) 598-3330
jlindsay@ameresco.com

Town of New Milford
Rebecca L. Rigdon, Esq.
Town Attorney
Roger Sherman Town Hall
10 Main Street
New Milford, CT 06776
Phone: (860)-457-4193
rrigdon@newmilford.org

Department of Energy and Environmental Protection Kirsten S. P. Rigney
Bureau of Energy Technology Policy
Department of Energy and Environmental Protection
10 Franklin Square
New Britain, CT 06051
(860) 827-2984 (phone)
(860) 827-2806 (fax)
Kirsten.Rigney@ct.gov

Connecticut Department of
Agriculture
Jason Bowsza 450 Columbus Boulevard
Hartford, CT
Tel.: (860) 713-2526
Fax: (860) 713-2514
Jason.Bowsza@ct.gov

(all by e-mail)

Keith R. Ainsworth, Esq.

Russell T. Posthauer, Jr., P.E., President
Michael J. Lillis, P.E., Vice President
Steven C. Sullivan, P.E., Vice President
C.J. Osborne, III, R.L.S.
Paul J. Connelly, L.E.P.
Nancy Levesque, P.E.
Nicholas Yuschak Jr., R.L.S.A.



40 Old New Milford Road
Brookfield, CT 06804
tel 203-775-6207
fax 203-775-3628
www.ccaengineering.com
mail@ccaengineering.com



October 20, 2017

Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Petition no. 1312
Candlewood Solar LLC

To: Council Members

I have had a chance to review the preliminary drainage calculations and have several concerns. They are as follows:

1. In general, the post construction drainage calculations do not take into account the placement of the solar panels on the site.
2. The Time of Concentration (Tc) (Critical part of any drainage calculations) has been determined ignoring the solar panel locations. By creating a longer Tc the amount of post construction flows is under estimated. A shorter Tc increase estimated runoff.
3. I could not find where the increase in impervious area (gravel roads) was incorporated into the calculations which, by its absence decreases the drainage flow for the post construction condition. The location of the gravel roads would also affect the Tc, further reducing that number.
4. With the angle of the solar panels being reported at 15° from horizontal and the apparent width being about 20' one would expect that there would be substantial areas of ground under the panels that would not be rained upon. This would make these areas equivalent to being impervious. Think about placing a large oversize table on the ground and being able to get under it to stay dry while it is raining. Additionally, any growth would be expected to be poor and not good as indicated in the calculations. This would be expected to increase substantially the flow off the site. Again, it also would be expected to affect the Tc further reducing it.

Runoff from the solar panels would be expected to cause concentrated flow from where it flows off the panels. In flat areas, this is not expected to be an issue. In the steeper areas, it has the potential to form rivulets and to cause erosion as it flows downhill. The concentrated flow will

have to drop about 3 feet onto the ground therefore creating the potential of continuous erosion as it moves down the slope towards the lake.

The proposed gravel roads essentially have been designed to be up and down the slopes. This would be expected to cause runoff to travel down the gravel slope at higher velocities. The gravel drives will require ongoing maintenance to avoid being eroded. Additionally, at the lower end of these drives permanent erosion protection and associated maintenance will be required.

At the last hearing in New Milford the applicant indicant they were going to construct the project approximately from April to October. Unless the applicant is going to obtain an individual NPDES permit this time frame is not practical. A NPDES permit will require additional design data which would be very helpful in reviewing this application. At a minimum, it will take two weeks to clear, seed and have the grass grow. Since only five acres can be disturbed at one time and at 70 acres (14 – 5-acre plots). Trying to grow grass in the summer is very difficult and it could be expected to take more than 2 weeks to establish grass. Additionally the access to each 5 acre area counts as disturbance. It would also be expected that a substantial amount of water would be required to start and maintain grass in the summer. Where is this water coming from?

As result of my review of this application it is my opinion that the plans are extremely incomplete and a substantial amount of additional detail should be required. Under estimates of the amount of the drainage runoff would be expected to lead to unstable site conditions and erosion. It must be kept in mind that a substantial portion of this site drains to Candlewood Lake. With the incompleteness of the plans and the deficiencies in the application it is also my opinion the effects of this project on the environment both short and long term cannot be determined. I ask that a full, complete, application be required and that the applicant's current application be rejected.


Russell T. Posthauer, Jr. P.E.

