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, Connecticut.

SEPTEMBER 18, 2017

AFFIDAVIT OF Timothy B. Abbott

- I, Timothy B. Abbott, the undersigned, being duly sworn, do depose and say:
 - 1. I am over the age of eighteen and believe in the obligations of an oath.
 - 2. I reside at 59 Prospect St., Canaan, Connecticut.

FURTHER the deponent sayeth not.

3. I am the author of the pre-filed written testimony attached, including a Map labelled Candlewood Mountain Core Forest Habitat created at my request by Ryan Williams, Conservation Projects Manager at HVA labeled as Exhibit A. I believe the facts contained therein are true and accurate the best of my knowledge and belief.

Subscribed and sworn to before me this 18 th day of Saptember, 2017. Public Hant, Commissioner of the Superior Court/Notary Public.

My commission expires:_

Joyce Rukklia Hart State of Connecticut

Stade of Connecticut County of Litchfield SS = Cornwall



Housatonic Valley Association

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Petition No. 1312 - Candlewood Solar, LLC

Melanie A. Bachman, Executive Director Connecticut Siting Council Ten Franklin Square New Britain, Connecticut 06051

Dear Ms. Bachman;

I, Timothy B. Abbott, as Regional Land Protection & Greenprint Director at The Housatonic Valley Association, offer the following written testimony on behalf of Rescue Candlewood Mountain, a party with intervenor status in Petition No. 1312 – Candlewood Solar, LLC.

The extensive forest clearing associated with Candlewood Solar LLC's proposed 20 megawatt AC (26.5 megawatt DC) solar photovoltaic electrical generating facility located on a 163 acre parcel at 197 Candlewood Road will significantly impair an area of "core forest" located on the subject property and extending to the North and East along Candlewood Mountain.

What is "core forest"? The State of Connecticut defines "core forest" as "unfragmented forest land that is at least 300 feet from the boundary between forest land and non-forest land, as determined by the DEEP commissioner."

[PA 17-218—SB 943 AN ACT CONCERNING THE INSTALLATION OF CERTAIN SOLAR FACILITIES ON PRODUCTIVE FARMLANDS, INCENTIVES FOR THE USE OF ANAEROBIC DIGESTERS BY AGRICULTURAL CUSTOMER HOSTS, APPLICATIONS CONCERNING THE USE OF KELP IN CERTAIN BIOFUELS AND THE PERMITTING OF WASTE CONVERSION FACILITIES; §§ 1 & 2 — ENVIRONMENTAL IMPACT CONSIDERATION]

How does the State of Connecticut identify Core Forest Habitat? The University of Connecticut (UCONN) Center for Land Use Education and Research (CLEAR) has identified "core forest" throughout Connecticut using Geographic Information Systems or GIS and its Landscape Fragmentation Tool or LFT v. 2.0 developed for ArcGIS 9.3 and 10.0. The LFT further distinguishes between small, medium and large patches of core forest (<250 acres or small patch core forest; 250-500 acres or medium patch core forest; and >500 acres or large patch core forest).

http://clear.uconn.edu/projects/landscape/forestfrag/measuring/core_explained.htm

The LFT identifies core forest using GIS landcover data, buffering forest cover inward by 300' to account for edge effects that compromise habitat values within the core forest. Further fragmentation of forest cover within that 300' buffer will reduce the area of core forest when the new forest edge is buffered inward by 300'.

This tool is further described by UCONN CLEAR at http://clear.uconn.edu/tools/lft/lft2/index.htm and is made available to the public.



Where is the affected core forest habitat located? The Housatonic Valley Association (HVA)'s Litchfield Hills Greenprint Collaborative website http://litchfieldgreenprint.org/ hosts an online map viewer at http://litchfieldgreenprint.org/maps/map-portal-welcome/. This map viewer includes a data layer produced using the Landscape Fragmentation Tool v. 2.0 that consists of core forest habitat greater than 250 acres, or medium and large patch core forest habitat [CT Core Forest Greater Than 250 acres]. The Landscape Fragmentation Tool v. 2.0 identifies an area of core forest of 470.99 +/- acres, including 105 acres on the north and east of the 163 acre parcel at 197 Candlewood Road and extending to the north over the summit of Candlewood Mountain. This core forest area is further shown as Map 1., below, and was created on September 18th, 2017 by Ryan Williams, Projects Manager at the Housatonic Valley Association.

Why is this Core Forest Habitat significant? In addition to being recognized as a resource of conservation significance under PA 17-218—SB 943, several other public policies in Connecticut either prioritize the protection of core forest or the types of forest habitat that this core forest contains:

- The 2016-2020 Connecticut Comprehensive Open Space Acquisition Strategy (Green Plan) states: "protecting existing core forest next to cold water streams (characterized as unfragmented forested areas relatively far from non-forested areas)... can connect large habitat linkages [and] ensure natural vegetated cover needed to maintain cold water streams temperatures..." Green Plan pg. 62. http://www.ct.gov/deep/lib/deep/open_space/greenplan/2016GreenPlan-Section-II.pdf. The core forest habitat within the project area includes the headwaters of Rocky River, a coldwater stream and tributary of the Housatonic River in New Milford.
- The Connecticut Department of Energy and Environmental Protection (DEEP) 2015 Wildlife Action Plan identifies Upland Oak Forest as a Key Habitat and Associated Sub Habitat. http://www.ct.gov/deep/kib/deep/wildlife/pdf files/nongame/ctwap/CTWAP-Chapter2.pdf
- The Connecticut Department of Energy and Environmental Protection Natural Diversity Database (NDDB), most recently updated in June, 2017, identifies nearly the entire core forest and all but a small area of cleared field near Candlewood Mountain Road within the 163 acre parcel as important rare species habitat. This data layer may be viewed either at Connecticut Environmental Conditions Online or through HVA's online map viewer. These areas support one or more rare species or habitat types, in part, because the area of core forest that envelopes them provides a buffer from a range of environmental stressors which could affect their viability. Any vernal pool habitat which may occur on the property would be affected by forest clearing as well, since obligate species like wood frogs and mole salamanders that breed in vernal pools spend much of their life cycle in the leafy substrate of associated upland forests, somethings at a considerable distance from the pools themselves. DEEP should have the opportunity to review this project in detail and consider how these habitat areas may be impacted by the scale and scope of forest clearing envisioned by this project.

The Nature Conservancy or TNC's Terrestrial habitat Map for the Northeast United States and Atlantic Canada identifies a Dry Oak-Pine Forest, Central Apps and Southern Piedmont, as a significant component of the core forest within the subject parcel and extending to the North. https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/habitatmap/Pages/default.aspx. This forest habitat may also be viewed at HVA's Map Portal, above, by selecting the Terrestrial habitat Layer from the Layer List. This TNC data layer also includes two other habitat types that fall within the core forest and are likely to be affected by extensive clearing associated with this proposal. They are an area of North-Central Interior and Appalachian Rich Swamp that is fully within the 163 acre parcel and is the source of Rocky River, and an area of Acidic Cliff and Talus just to the East. The proposed solar area cuts this wetland habitat in half. The cliffs and talus would be affected by the clearing associated with the Interconnected Lease Area proposed for transmission lines between the solar installation and the Rocky River Substation.

The potential impacts to core forest habitat that occurs on and beyond the 163 parcel within which the petitioner plans to conduct a clear cut of at least 68 acres in size, and the key habitats and NDDB areas identified within them, need to be assessed and considered by the siting council and the CT DEEP Commissioner as appropriate.

I respectfully submit that the petitioner has not provided sufficient detail of these core forest and associated habitats and rare species resources and how they might be impacted by the proposed project for the Siting Council to grant its petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for this project.

9118/2017

Timothy Abbott

Regional Land Protection & Greenprint Director

The Housatonic Valley Association

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