Norfolk Conservation Commission, PO Box 552, Norfolk CT 06058

Solar Installation on Town Farm, May 3, 2022 at 10:00 a.m. via Zoom Special Meeting Minutes

Attending: John Anderson, Libby Borden, Martha Klein, Sam Williams, Susannah Wood (NCC), Simran Kaur Ladhad (Connecticut Botanical Society), Joyce Hemingson (Colebrook) Kirt Mayland (Reservoir Road Holdings-Norfolk Consultant), Michael Halloran (Norfolk Land Use Officer), Matt Riiska (Norfolk First Selectman), Hartley Mead (Norfolk Inland Wetland Agency), Tom Strumolo (Norfolk Energy Advisory Committee), Star Childs (Great Mountain Forest), Dan Watson, Jeff Macel, Jaime Smith (Lodestar Energy), Susan McEachron (Norfolk Now).

The NCC shared conservation concerns with the Inland Wetland Agency about energy development on town land, because carbon reductions, while crucial, are only one of the ways to protect the planet's rapidly vanishing biodiversity. We believe that energy siting should not compromise the ecosystem and hydrological benefits provided by forest.

Discussion opened with questions from Martha regarding why the majority of commercial solar installations are constructed on forest and farmland (37% of commercial solar installations are in forest, 34% on farmland, 8% on landfills, 2% parking areas and 2% on buildings according to this recent study: *The siting and impact of photovoltaic systems in Franklin, Hampshire, & Hampden counties: A preliminary study.* Emily Johnson, Brian Hall, Mattea Powers, Anna Therien and David Foster. Harvard Forest, Harvard University, Plymouth State University, Westfield State University. September 2019.)

It is more expensive to build on rooftops or landfills than on greenfields.

Kirt provided a brief history and description of the project. There was an opportunity to lock in up to 4 Megawatts of renewable solar power. The electric grid interconnection upgrade due to wind turbines was one factor. There was disturbed land, and capacity exists for this size of project. Lodestar has a history of success with commercial operations. There is an opportunity to provide electricity cost assistance to low income families. The carbon debt analysis submitted by Lodestar Energy finds that the benefits are significant, including that "the solar Project will have a carbon offset over 230 times greater than the existing condition."

The EPA calculation used to estimate the amount of carbon that can be offset by the increase in solar power produces a regional estimate known as an AVERT score, and because it is regional, Martha believes that the actual score for Connecticut might be lower. CT is a net energy exporter, unlike other New England states, and more renewable power onto the local grid doesn't translate to fewer fossil fueled power plants, in a state where we continue to build new fossil gas infrastructure.

Array 1 is 10.6 acres; Array 2 is 3.1 acres. The total acreage of forest to be cleared is 4.65. Additional cutting will be required at some future point for shade mitigation; trees that reach greater than 40 feet in some areas may be topped. The town may be able to use some of the

cleared areas for operations. Areas that are allowed to regrow will be field-like, with knee high grasses around and under the arrays.

Discussion ensued about protection for wetlands and the vernal pool. If greater than 75% of the borders of a vernal pool are disturbed, the vernal pool is at risk of disappearance. There will be no tree cutting within 50 feet of wetland soil. Any piles will be 100 feet outside the wetlands. The solar panels themselves will be 100 feet from wetlands. The fencing around the project will be amphibian and reptile compatible for wildlife movement.

The Commission requested that Lodestar Energy update the map with the outline of the active vernal pool and the wetlands.

The Inland Wetland Agency had concerns regarding water run-off. Norfolk P&Z seek feedback from the NCC. There will be a town meeting with a vote about the project in June or early July. There will continue to be discussion, with questions and answers.

There is no planting plan yet; NCC can offer plant suggestions.

Minutes submitted by Martha Klein May 9, 2022