

Your Trusted Sustainability Partner.



ZONING COMMISSION

Candlewood Solar



New Milford CT

JUL 25 2017

RECEIVED

Agenda

- Ground Mount Solar PV Systems
- Candlewood Solar – Project Overview
- Candlewood Solar – Project Benefits
- Connecticut Siting Council Process
- CSC Submittal - Environmental Assessment
- Next Steps

Ground Mount Solar PV Systems

- Generate electricity directly from sunlight and feed it to the grid,
- Mounted on racks supported by steel posts
- Tilted to face south, and typically are no more than 8-10 in height
- Generate zero emissions
- Are considered permeable, and the ground around them remains natural grasses.
- Generate no noise, and the panels are designed to absorb light, generating little to no glare
- Minimal site traffic during operation, 1-2 site visits per year

Ground Mount Solar PV Systems

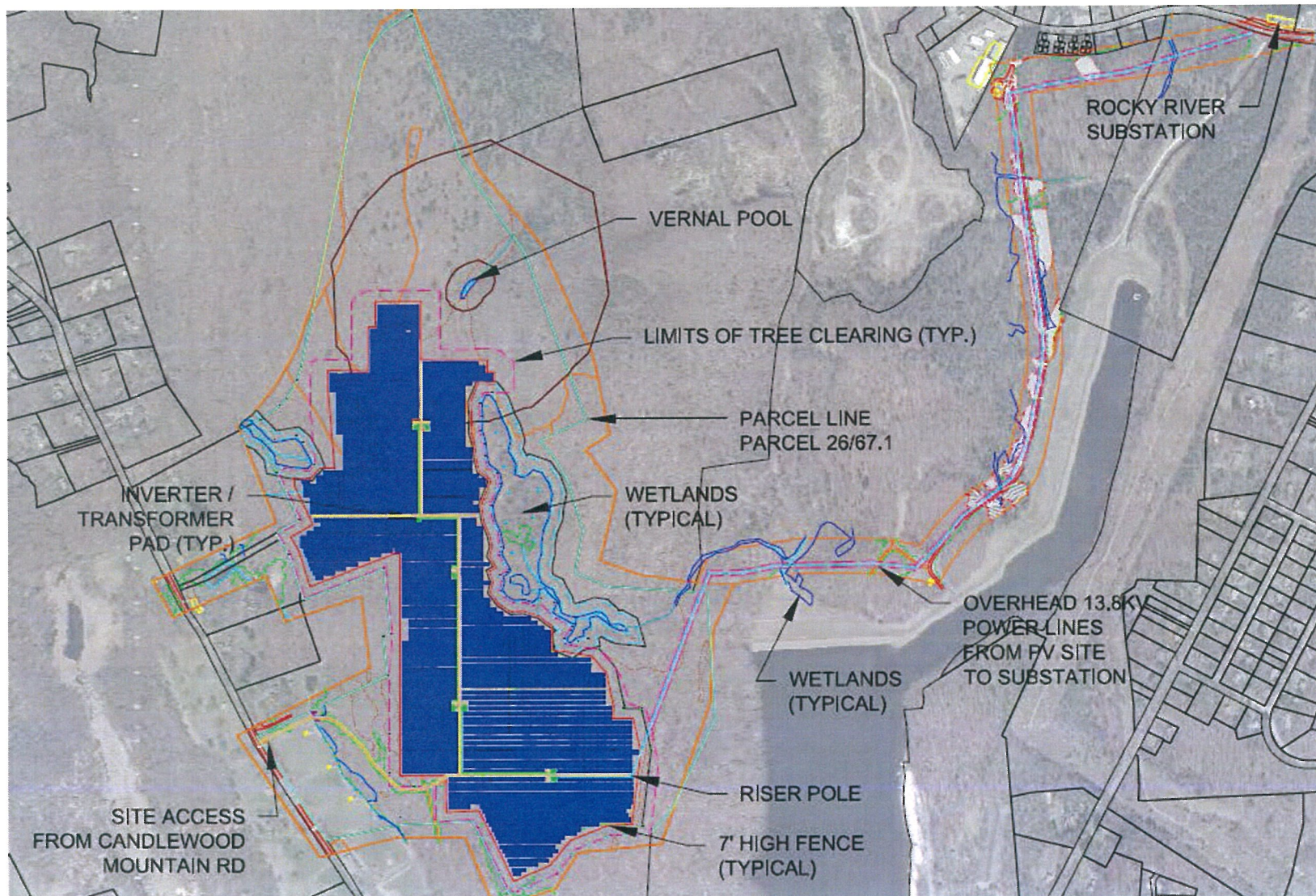


Candlewood Solar – Project Overview

- 20MW AC Fixed Tilt Solar Photovoltaic (PV) Installation
 - > Installation on ~85 acres of land
 - ~ 68 acres is currently wooded and will be cleared
 - ~ 16 acres of already open field
 - > Maximum height 8-10 feet
 - > No audible noise or moving parts; no lights
 - > No hazardous chemicals
 - > Land reclaimed as pasture, farm, or forest land at end of project life
 - > Centrally sited on 163 acre parcel surrounded by existing forest, maintained to minimize visibility from Candlewood Mountain Road and Candlewood lake
 - > Interconnected to Rocky River Substation on Kent Road (Route 7)
- Projected Commercial Operation: Expected Fall 2018
 - > Expected Construction start late 2017
 - > 20 Year Operating life, followed by system decommissioning and removal

Candlewood Solar – Project Overview

Overall Site Plan



Candlewood Solar – Project Overview

Site Plan (cont.)

- Site location is close to Rocky River Substation and the associated transmission node
- Site contains sufficient space for a 20 MW AC system to meet RFP requirements, while still maintaining adequate buffers.
- Interconnection run to the substation can be made with minimal visual impact

Candlewood Solar – Project Benefits

Environmental Benefits

- Annual energy generation of 34,000 MWh
 - > Enough energy to power over 2,400 homes in one year
 - > Offsetting CO₂ emissions:
 - Equal to the consumption of >2,500,000 gallons of gasoline OR
 - Equal to CO₂ intake of over 22,000 acres of forest in one year
- Land owner is working with local conservation groups to set aside a portion of the property for conservation.



Source: EPA Greenhouse Gas Equivalencies Calculator

Candlewood Solar – Project Benefits

Local Investment and Tax Revenue

- Total Project Investment
 - > \$45-50 Million
- Local Investment by the Project
 - > System installation creates more than 100 jobs, local labor hired for civil/ site and electrical work
 - > Development, Permitting, Consulting, and Legal support provided by CT residents working for firms with CT offices
- PILOT agreement will result in \$2.7 M in tax revenue for New Milford (a 500% increase for the parcel)
- PILOT agreement also includes required bonds to ensure adequate treatment for visual impacts, storm water and local infrastructure



Connecticut Siting Council Process

- Petition for Declaratory Ruling Process Steps
 - > Preparation of Siting Council Petition for Declaratory Ruling
 - > Submission of Siting Council Petition for Declaratory Ruling
 - > Stakeholder review and comment period
 - > Site visits and public hearings
 - > Determination of petition approval
 - > Preparation of Development and Management Plan
 - > Development and Management Plan Approval

Ameresco anticipates the CSC process to take several months from submission of petition to approval of D&M Plan

CSC Submittal – Environmental Assessment Components

- Wetlands Delineation & Natural Habitat Assessment
- Natural Diversity Database State Species Review – ongoing
- USFWS Federal Species Review
- Visual Assessment
- State Historic Preservation Office Review - ongoing
- Storm Water Management Plan/Erosion and Sediment Control Plan
- FAA Glare Hazard Determination
- Tree Clearing Quantification

Petition for Declaratory ruling submitted June 2017

CSC Submittal – Environmental Assessment Findings Summary

- The Project will be virtually invisible from Candlewood Mountain Road and Candlewood Lake. The array will be slightly visible from some remote locations but will not dominate landscape views.
- Some temporary, intermittent noise from construction vehicles will occur. Compliance with Town mandated work hours is required. During operation there will be no detectable noise outside of the fenced area of the array.
- Zero emissions during operation; zero water consumption
- Detailed storm water modeling has been conducted and measures are being proposed to maintain existing runoff levels.
- Glare analysis has been completed and submitted to FAA for their evaluation for Candlelight Airport – analysis shows minimal glare which is at acceptable levels for airport operation.

CSC Submittal – Environmental Assessment Findings Summary (cont.)

- No activity in wetland areas or vernal pool are planned for the solar array. Project will have activity in less than 25% of the area within 750 feet of the vernal pool on site.
- Limited forested wetland conversion to emergent/scrub-shrub wetlands to accommodate the overhead interconnection route. No net loss of overall wetland area.
- Tree Clearing – Approximately 68 acres of tree clearing for the array, and an additional 4 acres for the interconnection route. Consultation with licensed forester for clearing is required.
- NDDDB (protected species) and SHPO (historical resources) filings have been made. Currently working with DEEP and SHPO to provide necessary site specific information.

CSC Process – Next Steps

- Local hearings (Planning and Zoning)
- Submittal of Town and public comments to CSC – CSC has asked for Town comments by 7/28
- CSC votes on 7/20 on whether evidentiary hearing will be held
- If an evidentiary hearing is held, likely to be early Fall
- CSC decision after hearing

For More Information:

<http://www.ameresco.com/candlewood-solar-project/>

Joel Lindsay, PE
Director – Solar PV Project Development
jlindsay@ameresco.com
508-661-2265

AMERESCO 

Your Trusted Sustainability Partner.

