



Solar — Fields and Forests

Testimony to Vermont Senate Agriculture Committee

Annette Smith, Executive Director

Vermonters for a Clean Environment, February 12, 2026

VCE SOLAR IN VERMONT – VIDEOS AND PHOTOS

Public Service Board/Public Utility Commission
*Public Hearings, Developer Presentations, Site Visits, Pre-Hearing
Conferences, Evidentiary Hearings, Oral Arguments*
2012 - 2025

Energy Generation Siting Policy Commission – 2012-2013

Meetings & Videos:

1. Oct. 31, 2012 <https://vimeo.com/52605432>
2. Nov. 14, 2012 <https://vimeo.com/53672205>
3. Nov. 30, 2012 <https://vimeo.com/54658854>
4. Dec. 6, 2012 <https://vimeo.com/55135478>
5. Dec. 19, 2012 <https://vimeo.com/56073156>
6. Jan. 11, 2013
 - Part 1 <https://vimeo.com/57341440>
 - Part 2 <https://vimeo.com/57294940>
 - Part 3 <https://vimeo.com/57299560>
7. Jan 23, 2013, Public Hearing #1, Brattleboro <https://vimeo.com/58268759>
8. Feb. 12, 2013, Public Hearing #3, Lowell <https://vimeo.com/59684535>
9. April 3, 2013, Public Hearing #4, Rutland <https://vimeo.com/63448105>

2014

Rutland Next Sun Park Street Solar PSB Public Hearing, April 17, 2014
<https://youtu.be/gkQ8Lxf4Pa0>

Rutland Next Sun North Main St. PSB Public Hearing, April 17, 2014
https://youtu.be/NIUI_9bNuVQ

Rutland groSolar Cold River Road PSB Site Visit, April 18, 2014
<https://youtu.be/K-ZA0wPVR1M>

VCE has been
documenting
solar siting with
photos and
videos since 2012.

Standard Sizes, Programs and Acreage of Solar Arrays in Vermont

Utility Scale — *lowest cost* — $< 8 \text{ cents/kWh}$

— 4.99 MW ~ 16 - 32 acres

— 5 MW + 5 MW = 10 MW ~ 40 - 50 acres

— 20 MW ~ 85 - 100+ acres

— 50 MW ~ 300 acres

Standard-Offer — *cost driver* ~ 8 - 10 cents/kWh

— 2.2 MW ~ 7 - 15 acres

Net-Metered — *highest cost* — $> 15 \text{ cents/kWh}$

— 150 kW ~ 1 acre or less

— 500 kW ~ 3 acres

**Ranger Solar/NextEra — four 20 MW Solar Projects —
Contract with Connecticut for power and Renewable
Energy Credits (RECs)**

- Ludlow — 20 MW built
- Brandon — permitted at 15 MW, withdrawn
- Randolph — 20 MW proposed community meeting,
no further activity
- 4th project was in SHEI grid-constrained area



NextEra 20 MW — Power & RECs to Connecticut for 20 years

Ludlow “Coolidge Solar”

~85 acres

42 acres forest cut

43 acres prime ag

NextEra Brandon

15 MW - CPG withdrawn

Statewide Ag

DAVENPORT SOLAR, LLC

Carver Street
Brandon, Vermont

MAPPED SOIL CLASSIFICATION	AGRICULTURAL CLASSIFICATION	AG VALUE	AREA OF EACH SOIL GROUP ON PARENT PARCELS HOSTING PROJECT (ACRES)	PROPOSED SOIL DISTURBANCE AREA (ACRES)	PROPOSED SOIL EXCAVATED SOIL (ACRES)	HYDROLOGIC SOIL GROUP	SOIL ERODIBILITY FACTOR
24 - Pinnebog muck	NOT PRIME	11	43.4	0.1	0.0	D	NR
41C - Farmington-Galway-Galoo complex, 5 to 25 percent slopes	NOT PRIME	9	33.4	7.3	3.0	D	0.37
53 - Evers silt loam	NOT PRIME	10	7.8	0.0	0.0	D	0.55
80A - Kingsbury silty clay loam, 0 to 3 percent slopes	STATEWIDE PRIME	6d	128.4	48.6	6.0	D	0.49
80B - Kingsbury silty clay loam, 3 to 8 percent slopes	STATEWIDE PRIME	6d	25.4	17.6	4.0	D	0.49
81 - Livingston silty clay loam	NOT PRIME	10	2.0	0.2	0.1	D	0.49
82B - Vergennes Clay, 3 to 8 percent slopes	STATEWIDE PRIME	6	3.0	0.1	0.1	D	0.49
82C - Vergennes Clay, 8 to 15 percent slopes	STATEWIDE PRIME	7	2.4	0.0	0.0	D	0.49
86 - Linwood muck	NOT PRIME	11	25.7	5.1	0.5	D	NR
106 - Middlebury loam	PRIME	1	14.2	0.0	0.0	D	0.32
109 - Teal silt loam, sandy substratum	PRIME	1	15.5	0.0	0.0	D	0.37
Misc. Water	N/A	N/A	13.8	0.0	0.0	N/A	N/A
TOTAL AREA (acres)			315.0	79.0	13.7		

SOIL DISTURBANCE TABLE

POST-CONSTRUCTION SOIL DEPTH AND QUALITY NOTES

REQUIRED ELEMENTS:

SOIL RETENTION: RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE.

SOIL QUALITY: ALL AREAS SUBJECT TO THE STANDARD SHALL DEMONSTRATE THE FOLLOWING:

- A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 4% DRY WEIGHT IN PLANTING BEDS AND TURF AREAS. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF 4 INCHES, EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA.
- COMPOST AND OTHER MATERIALS SHALL BE USED THAT MEET THE FOLLOWING REQUIREMENTS:
 - THE COMPOST OR OTHER MATERIALS SHALL HAVE A CARBON TO NITROGEN RATIO BELOW 25:1.
 - COMPOST SHALL MEET THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR SHALL MEET THE CONTAMINANT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(C)(6-7), §6-1105(E)(8-9), AND §6-1106(E)(7-9). COMPOST OR OTHER ORGANIC MATERIALS MAY BE AMENDED TO MEET THE FOREGOING REQUIREMENTS.
 - EXCEPTIONAL QUALITY BIOSOLIDS (EQ BIOSOLIDS) MAY BE USED AS A SOIL AMENDMENT, AT A MAXIMUM PROPORTION OF 35% OF THE TOTAL SOIL VOLUME, AND SHALL BE WELL MIXED WITH EXISTING SOIL BEFORE OR DURING APPLICATION.
- THE RESULTING SOIL SHALL BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.
- THE SOIL QUALITY REQUIREMENTS SHALL BE MET BY USING ONE OR A COMBINATION OF THE FOLLOWING METHODS:
 - OPTION 1:** LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION. FAILURE TO ESTABLISH AND MAINTAIN EXISTING VEGETATION & SOIL IN THESE AREAS DURING THE

ORGANIC MATTER CONTENT BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 1:3, OR CALCULATED RATE; INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT;

- REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING, SCREEN TOPSOIL, AND;
- RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
- OPTION 4:** IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.
 - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES, EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
 - PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA; SHOP DRAWING SUBMITTAL IS REQUIRED. FIND USDA SIEVE FOR SAND AND SANDY LOAM.
 - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER; AND
 - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

SOIL MANAGEMENT:

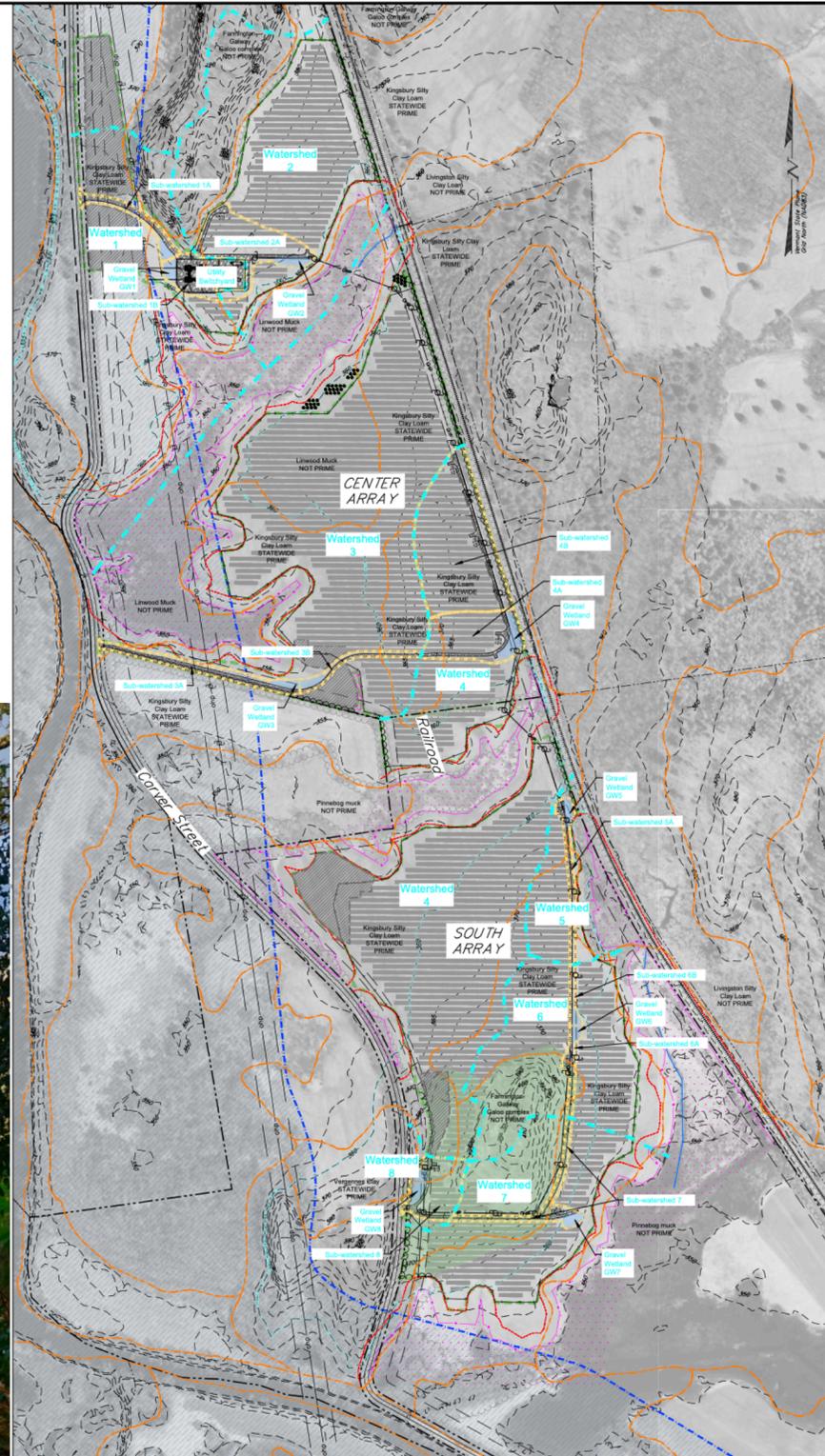
- IDENTIFIES AREAS ON THE SITE SUBJECT TO THE STANDARD;
- SOIL DEPTH AND QUALITY SHALL BE ESTABLISHED TOWARDS THE END OF CONSTRUCTION AND ONCE ESTABLISHED, PROTECTED FROM COMPACTION, SUCH AS FROM LARGE MACHINERY, VEHICLE TRAFFIC, AND FROM EROSION; AND
- NEEDS FOR AMENDMENTS AND PROTECTIVE COVERINGS, AND OTHER TO

LEGEND

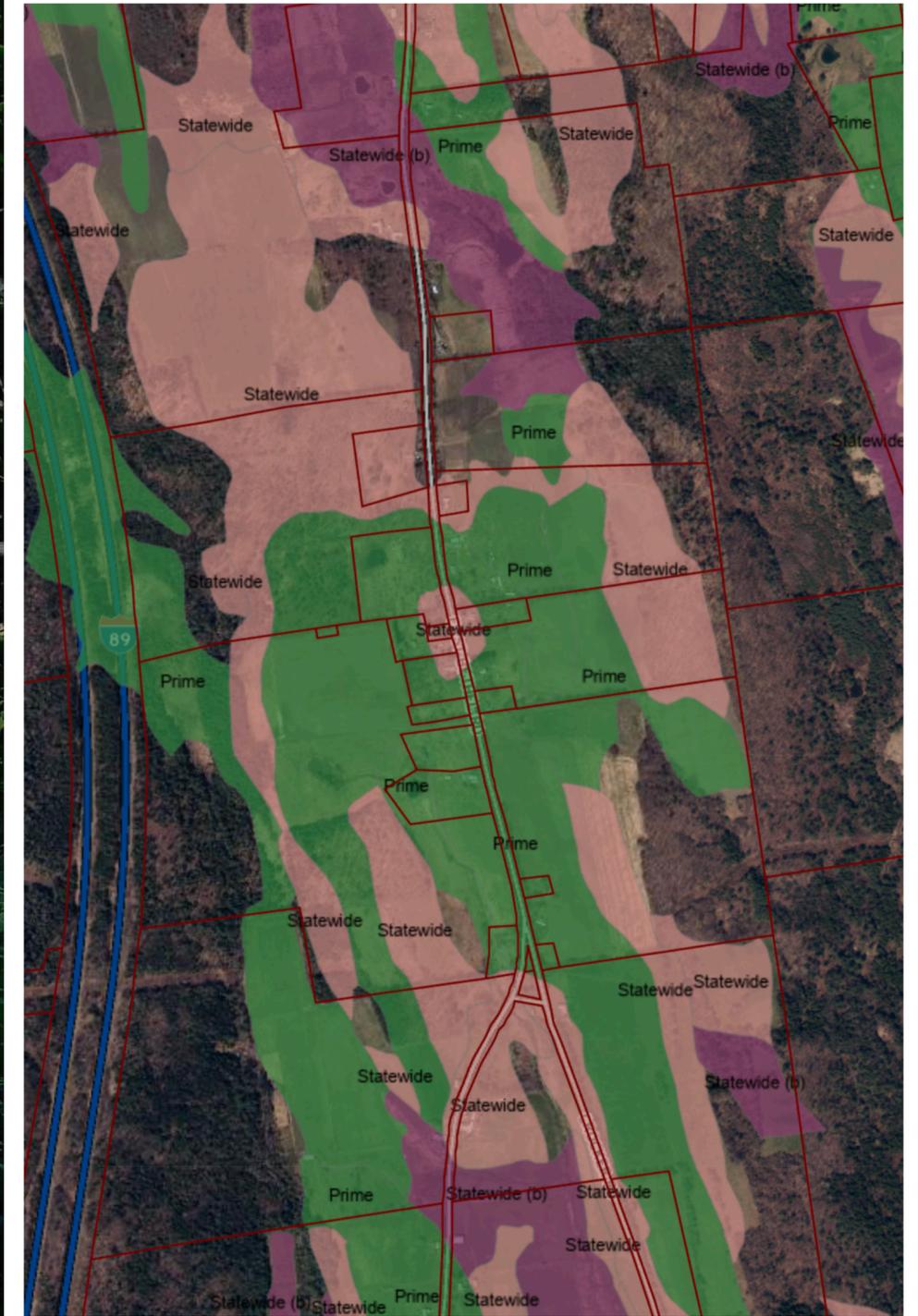
- EXISTING OVERHEAD POWER
- EXISTING GRADE CONTOUR LINES (5 FOOT INTERVALS)
- EXISTING TREELINE
- APPROXIMATE PROPERTY LINES
- STATUTORY SETBACKS 50' PROPERTY LINE AND 100' EDGE OF TRAVELED WAY
- DELINEATED WETLANDS FROM TRC
- 50' WETLAND BUFFERS
- DELINEATED STREAMS FROM TRC
- STATE OF VERMONT RIVER CORRIDOR
- 360' ELEVATION CONTOUR, ASSUMED BFE FOR 100 YEAR FLOOD ZONE AS DIRECTED BY THE AGENCY OF NATURAL RESOURCES ON APRIL 3RD, 2019
- PROPOSED PERIMETER FENCING
- PROPOSED FIXED SOLAR PANEL RACKING
- PROPOSED GRAVEL ACCESS DRIVE
- PROPOSED TEMPORARY CONSTRUCTION STAGING AREA
- PROPOSED OVERHEAD POWER
- PROPOSED LOCATION FOR GRAVEL WETLANDS
- PROPOSED LIMIT OF VEGETATION MANAGEMENT ZONE
- PROPOSED CLEARING AREA
- APPROXIMATE WATERSHED LIMITS
- POST CONSTRUCTION SUB-WATERSHEDS TO STORMWATER TREATMENT PRACTICES
- OVERALL LIMIT OF DISTURBANCE (LOD)

NOTES:

- ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
- THE HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 VERMONT STATE PLANE 4400 (US SURVEY FEET). ELEVATIONS ARE BASED ON THE NAVD88 (US SURVEY FEET).
- ELEVATION CONTOURS ARE FROM 2013 STATE OF VERMONT LIDAR DATA. KREBS AND LANSING FIELD CHECKED ELEVATIONS THROUGHOUT THE SITE IN THE



NextEra Randolph 20 MW - no application Forest, Prime Ag



Freepoint Commodities — two 20 MW Solar Projects, one 50 MW Solar Project

- Shaftsbury — 20 MW, CPG issued, on appeal to Vermont Supreme Court
- Fair Haven — 20 MW, CPG issued
- Panton — 50 MW, requests to change Town Plan denied

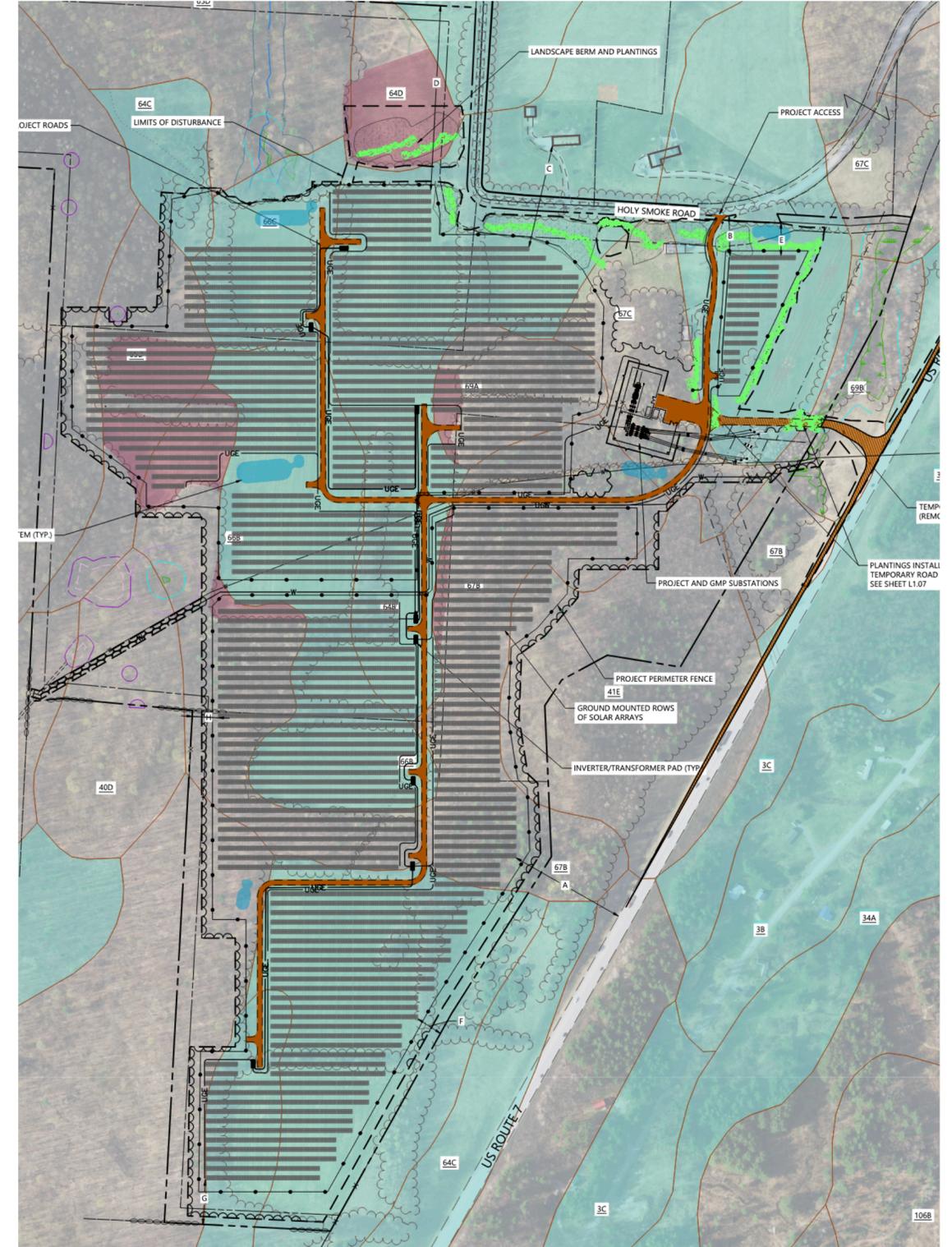
Bid into Connecticut RFP, not chosen; no contract for power or RECs, other regional RFPs possible

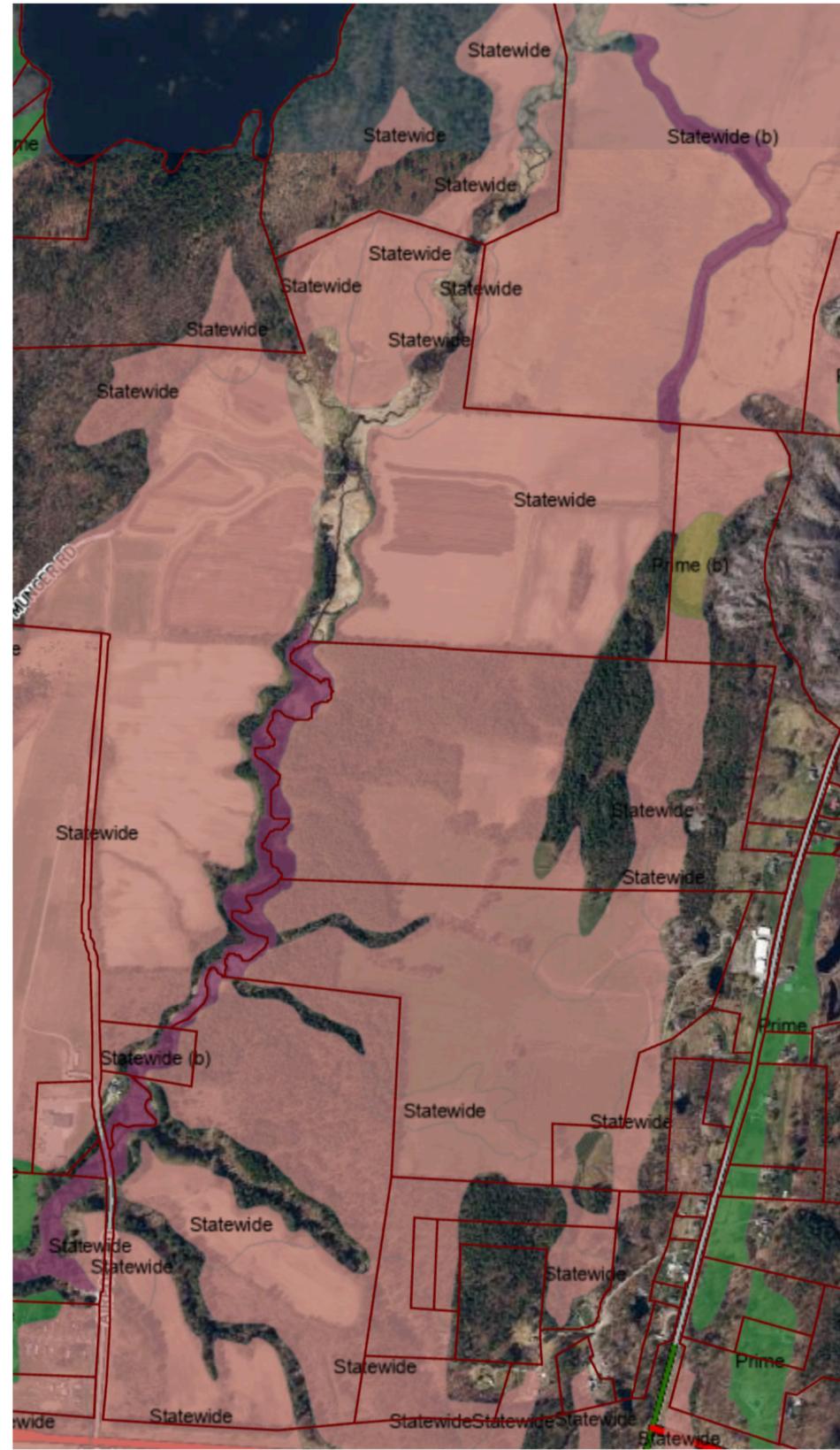
Freepoint Commodities — Shaftsbury Solar 20 MW



20 MW — No contract for power or RECs
CPG issued, on appeal to Vermont Supreme Court
~100+ acres of disturbance.
42 acres forest cut
64 acres prime agricultural soils

<https://www.vce.org/issues/public-utility-commission>





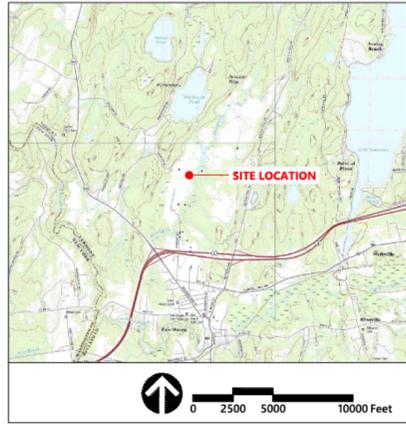
**Freepoint
Commodities
— Fair Haven
Solar 20 MW
CPG Issued
No contract
for power or
RECs
~ 100 acres
limits of
disturbance.
Statewide ag;
active hay and
crop**

Freepoint Commodities — Fair Haven Solar 20 MW

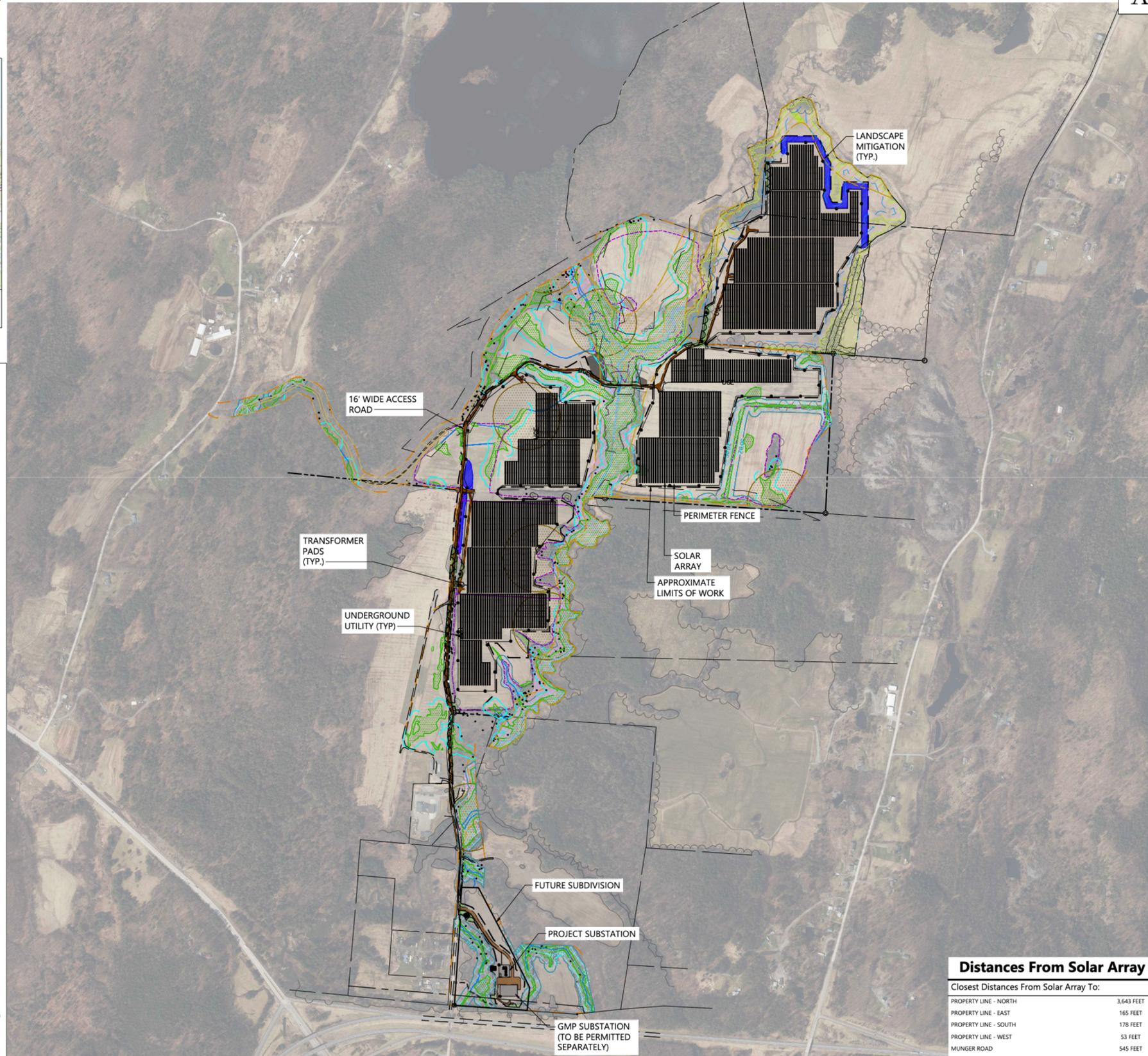
\\vhb.com\gbl\proj\SBurlington\58071.02 Freepoint Fair Haven\cad\ld\PlanSet\45DayNoticePlan\5807102-LM.dwg

Attachment A

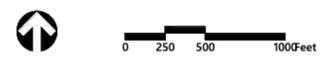
vhb.com



Legend	
	EXISTING NATURAL RESOURCE STUDY AREA
	APPROXIMATE EXISTING PROPERTY LINE
	EXISTING TAX MAP PROPERTY LINE
	EXISTING 50 FT WETLAND BUFFER
	EXISTING STREAM
	APPROXIMATE EXISTING STREAM
	EXISTING VHB RIVER CORRIDOR
	EXISTING GRASSLAND BIRD SURVEY AREAS
	EXISTING SIGNIFICANT NATURAL COMMUNITIES
	EXISTING TREELINE
	EXISTING POTENTIAL ROOST TREE
	EXISTING SETBACK LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING EDGE OF PAVEMENT
	EXISTING WETLAND
	APPROXIMATE EXISTING WETLAND
	EXISTING ANR RIVER CORRIDOR
	EXISTING NHI ELEMENT OCCURRENCE
	EXISTING 50 FT RIPARIAN BUFFER
	EXISTING FEMA FLOOD ZONE
	EXISTING OVERHEAD ELECTRIC
	PROPOSED OVERHEAD ELECTRIC
	PROPOSED EDGE OF GRAVEL
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERIMETER FENCE
	PROPOSED TREELINE
	PROPOSED GRAVEL ACCESS ROAD/TURN AROUND
	PROPOSED LANDSCAPE MITIGATION PLANTINGS



40 IDX Dr
Building 100 Suite 200
South Burlington, VT 0540
802.497.6100



**Fair Haven Solar
VT Real Estate
Holdings 2 LLC**
1020 Sheldon Rd.
Fair Haven, VT 05262

No.	Revision	Date	App'd.

Designed by: ZJD Checked by: SMW
Issued for: Date: Mar. 6, 2024
Review

Not Approved for Construction
Drawing Title:
**45 Day Notice Overall Site
Plan**

Distances From Solar Array

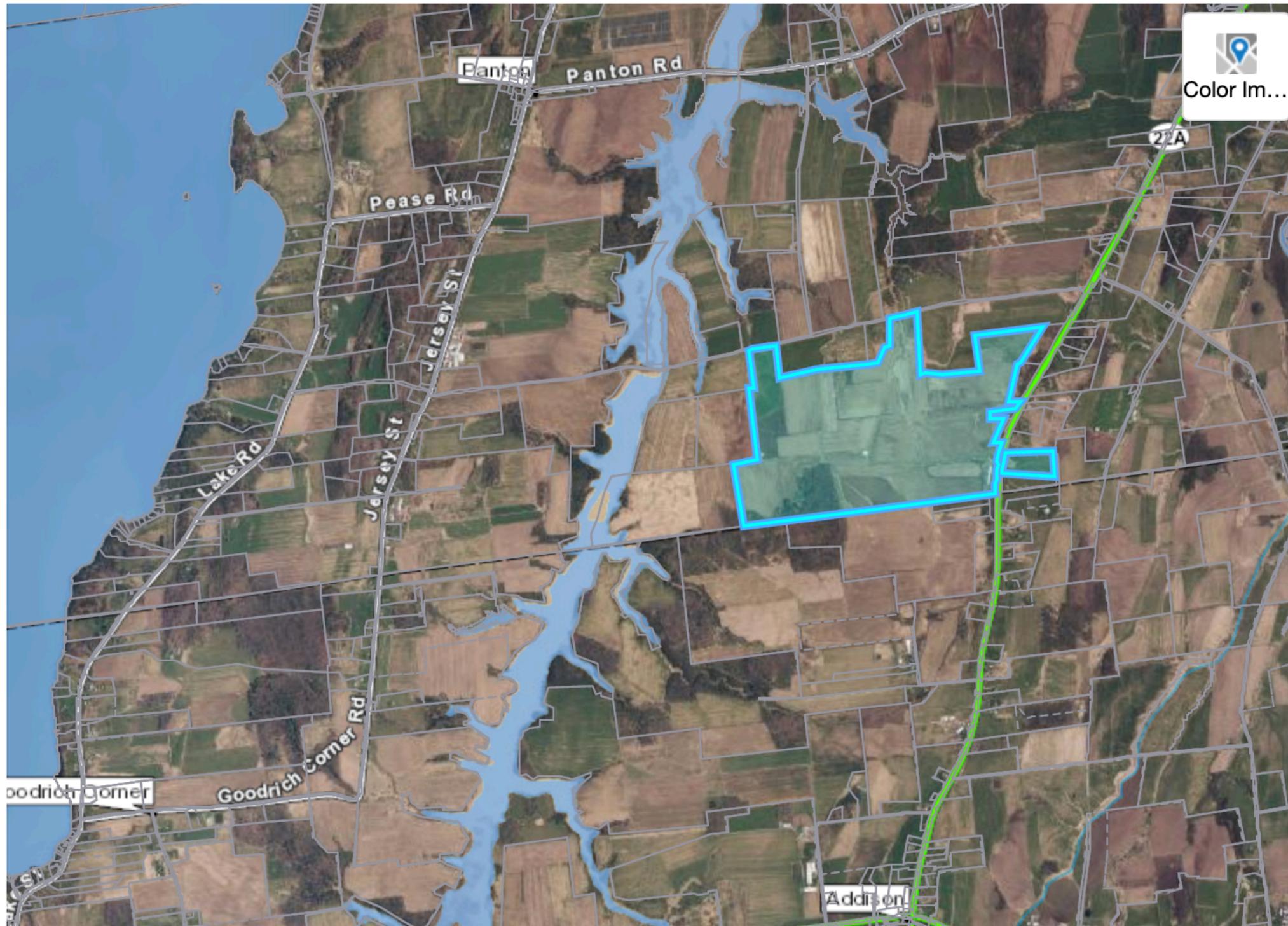
Closest Distances From Solar Array To:

PROPERTY LINE - NORTH	3,643 FEET
PROPERTY LINE - EAST	165 FEET
PROPERTY LINE - SOUTH	178 FEET
PROPERTY LINE - WEST	53 FEET
MUNGER ROAD	545 FEET

Drawing Number:
C3.00
Sheet 1 of 3

Wednesday, March 6, 2024 1:38:20 PM SWYMAN Plotted Wednesday, March 6, 2024 1:45:10 PM Stephanie Wyman

Freepoint Commodities — Panton Solar 50 MW



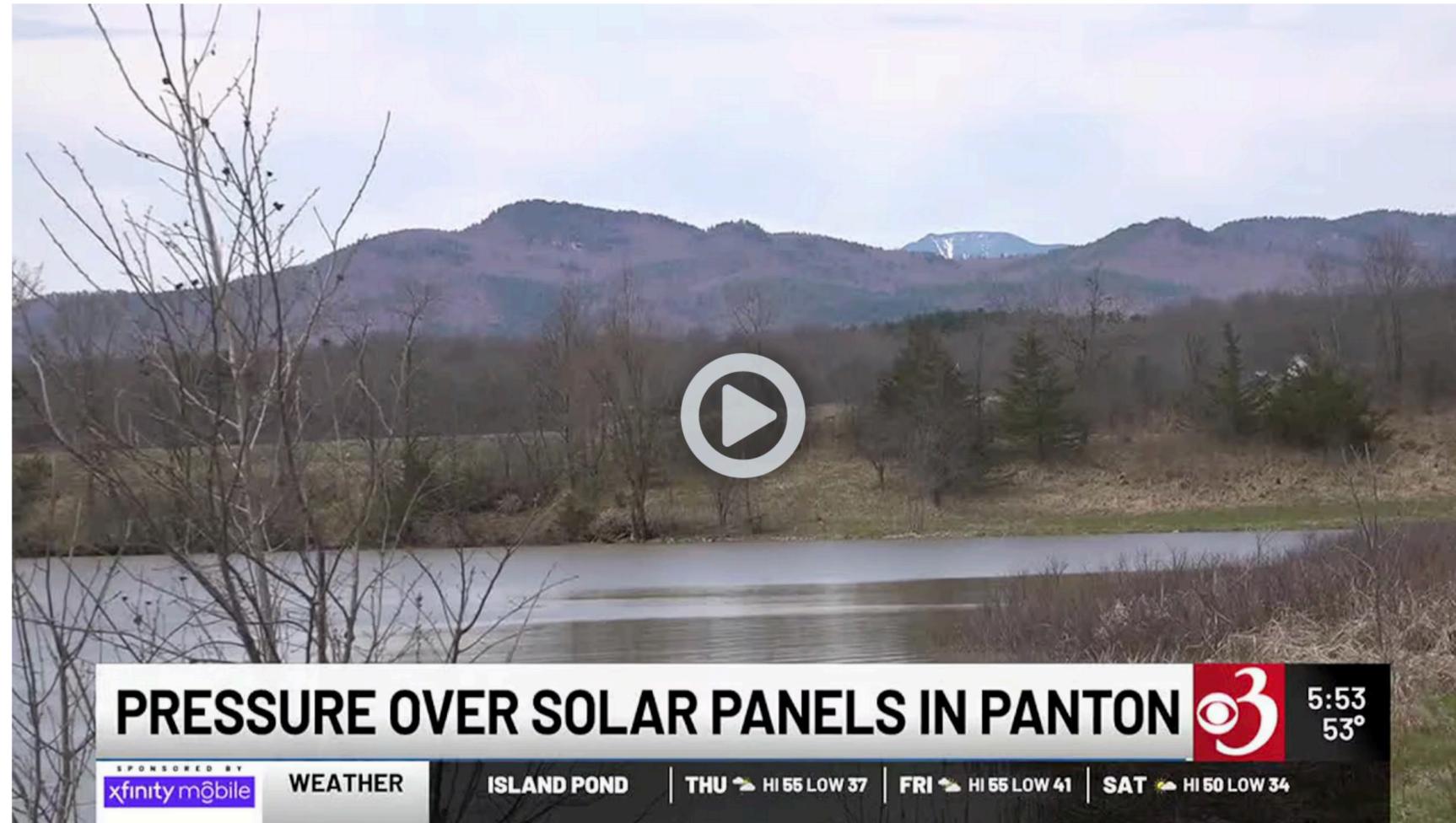
~300 acres

Active ag
lands.

Request to
change Town
Plan denied.

No contracts
for power or
RECs

Backlash over Panton solar project plan



By [Sophia Thomas](#)

Published: Apr. 17, 2024 at 5:14 PM EDT | Updated: 17 hours ago



PANTON, Vt. (WCAX) - Could the Addison County town of Panton become home to Vermont's largest solar array?

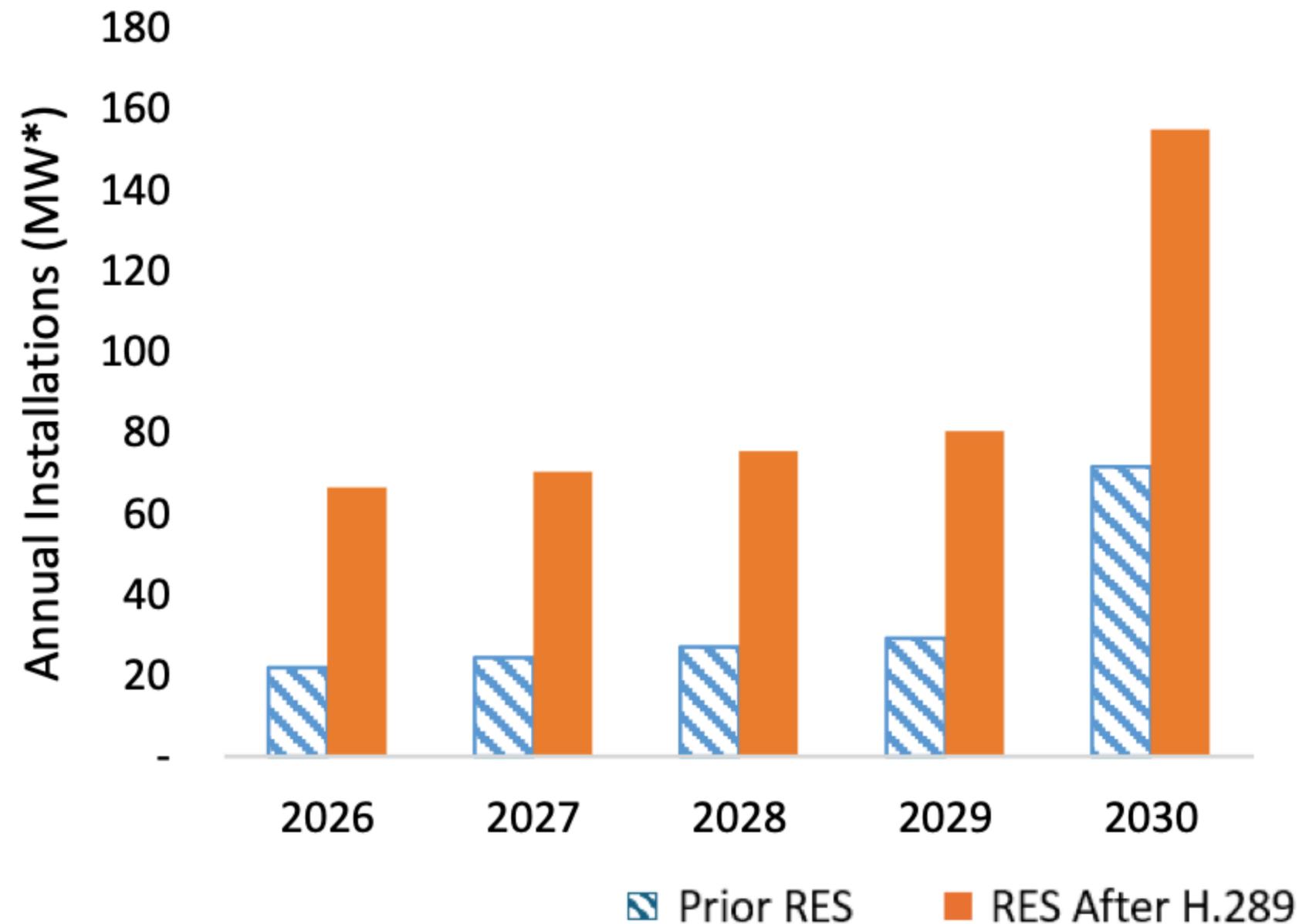
Freepoint Solar and SunEast Development are behind the so-called Viridis Solar project, a 50-megawatt array that would cover 300 acres -- nearly 230 football fields -- adjacent to the Dead Creek Wildlife Area.

<https://www.wcax.com/2024/04/17/backlash-over-panton-solar-project-plan/>

Regional RFPs — Nov. 2025

Collaboration	Subject	Participating States	Current Status	VT Involvement	Timing	Notes/Links
CT Investment Tax Credit RFP	NE renewable generation procurement for shovel ready projects (MW TBD)	CT, MA, ME, RI, VT	RFP responses received (mostly solar)	DPS participating/observing; DUs participating with GMP as lead for VT as offtaker(s)	Project selections in November 2025	CT kicked off, other states brought in
Longer-term Transmission Planning (LTTP) Upgrade	ISO-NE transmission procurement in Maine – alleviate deficiencies and unlock terrestrial wind (1,200 MW)	All NE states	Six bids between \$1B and \$4B received, ISO-NE reviewing, conducting benefit cost analysis	Participating state, if project selected transmission costs will be allocated to states in transmission rate	Review complete before 09/2026, project in service Q4 2032 – Q3 2035	One project with BCR>1.0 can proceed with regional funding ISO-NE LTTP page
ME RFP	ME transmission and generation procurement (1,200 MW)	CT, MA, ME, RI, VT	Draft RFP responses received; full RFP being drafted	DPS participating/observing; GMP/DUs as VT offtaker(s)	In-service in early 2030s	Transmission component dependent on LTTP proposals
CT Expedited Zero Carbon Procurement (Existing Nuclear, other resources)	NE generation procurement (MW TBD)	CT, MA, ME, RI, VT	RFP being finalized	DPS participating/observing; GMP/DUs as VT offtaker(s)	Final RFP Jan 2026, bids March 2026, selection Q2 2026	Possibility to end up being coordinated with ME RFP
NE States Collaborative	Northeastern States transmission development	All NE states	RFI on potential interregional transmission - responses received	Participating state	TBD	RFP could follow Request for Information , TBD
CT Resource Adequacy	Winter-focused generation procurement	All NE states	On hold	Participating state	TBD	Pending ISO-NE analysis on resource adequacy to be completed by EOY

Projected New Solar Installations in Vermont



Updated Renewable Energy Standard

Increased requirements for utilities to contract for in-state renewable energy and retire RECs

<https://www.revermont.org/wp-content/uploads/Vermont-RES-Reform-Legislation-Overview.pdf>

LAND USE IMPACT BY SCENARIO (ACRES)

THROUGH 2035

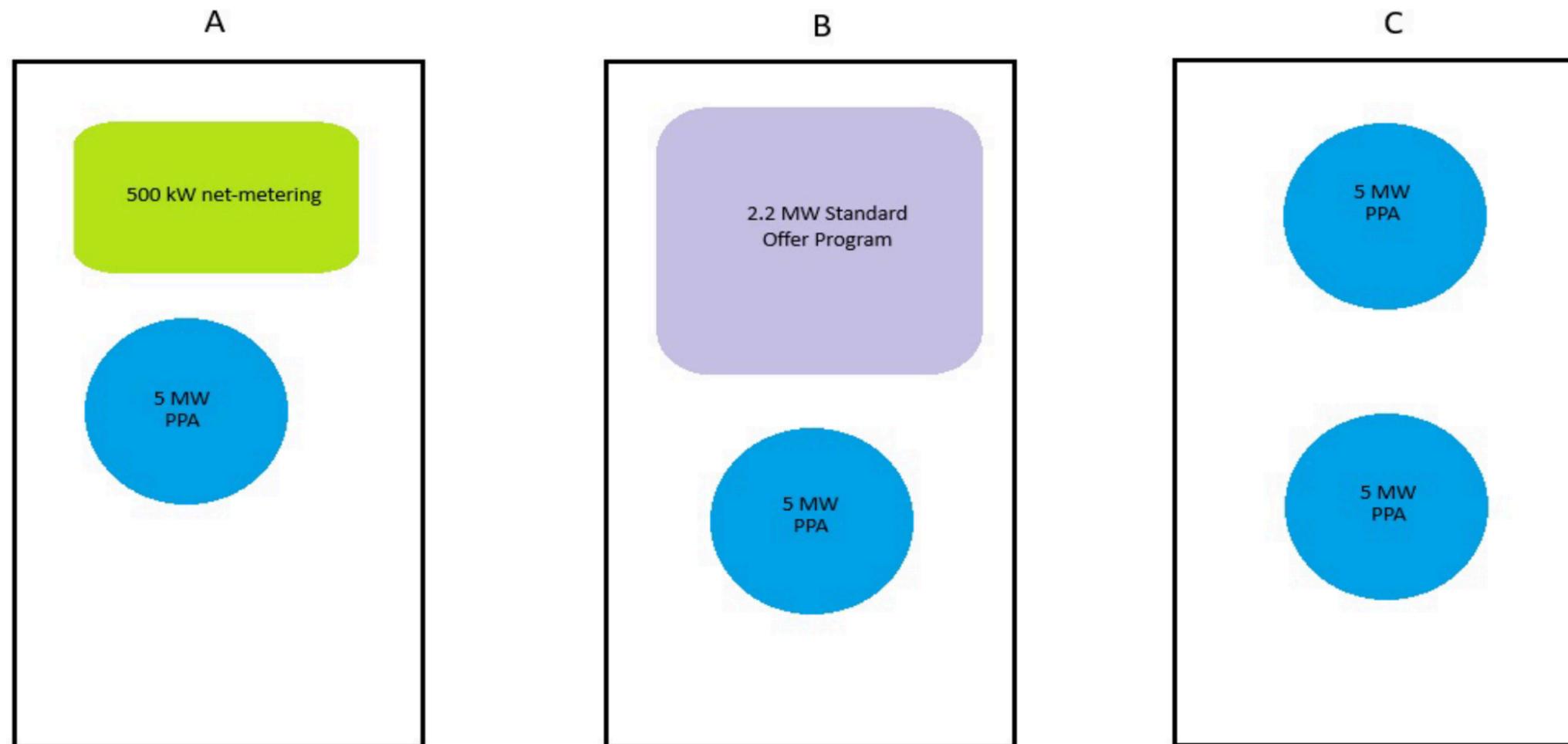
Tech (Location)	BAU	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Solar (In-State)	873.9	2197.8	2232.6	2197.8	2232.6	1582.0	937.0
Wind (In-State)	5.4	5.4	152.4	5.4	152.4	152.4	154.7
Hydro (In-State)	0.0	0.0	3.5	0.0	3.5	3.5	3.5
Total In-State	879	2,203	2,388	2,203	2,388	1,738	1,095
Solar (Out-of-State)	0.0	0.0	5301.2	0.0	5301.2	5007.3	11736.9
Wind (Out-of-State)	0.0	0.0	208.9	0.0	208.9	208.9	212.2
Hydro (Out-of-State)	0.0	0.0	63.0	0.0	63.0	63.0	64.1
Total Out-of-State	-	-	5,573	-	5,573	5,279	12,013

FROM THE SEA MODEL

11

Single Plant Definition Allows for up to 10 MW

What can be sited (Proposed definition)



Lowell, Vermont

[4.999 MW Solar Project](#)

Proposed on Active Farmland

In PUC Process



Updated RES — Tier 2

Requires More In-State Solar Projects with RECs Retired

Key Facts: Northland Solar Project

Applicant: Northland Solar LLC

Location: Off Route 100, Lowell, Vermont

Capacity: 4.999 MW AC (about 6–7 MW DC)

Parcel: about 43.9 acres

Project area: about 33 acres

Current Land Use: Open, actively managed hayfield, agricultural



Orleans County town fights industrial solar project



CONCURRING OPINION OF COMMISSIONER CHENEY

First, we must prioritize improved siting for facilities of this size and scale in Vermont. At 20 MW, this Facility is 40 times larger than the biggest net-metering projects and nine times larger than Vermont's 2.2 MW standard-offer solar facilities. There is only one other plant this size in Vermont, but more are being proposed. Like the majority opinion, I recognize that substantial development of new renewable generation resources will be necessary to meet the GWSA and RES goals, including new projects at this scale. This Facility, however, only narrowly complies with several of the Section 248 criteria; it should be possible for future facilities to be better sited and designed in a manner that minimizes the aesthetic and environmental impacts on immediately surrounding communities.

[Shaftsbury Solar PUC Final Order](#)

CONCURRING OPINION OF COMMISSIONER CHENEY

In its post-workshop comments (9/24/21), the ANR noted that:

In addition to the lost carbon storage and sequestration resulting from forest conversion, large amounts of forest conversion for net-metering systems significantly increases their embodied emissions. It can take years for such systems to turn “net positive” through the displacement of energy generated by fossil fuel plants, which runs counter to the urgent need . . . for immediate emissions reductions. Indeed, a lifecycle greenhouse gas assessment conducted for the 2.2-megawatt Battle Creek I solar project, which proposed to remove 12.72 acres of forest, estimated that the emissions associated with disturbance of forest above-ground biomass, below-ground biomass, and annual sequestration of biomass comprise approximately 35 percent of that project’s total greenhouse gas emissions. *Thus, a significant amount of the carbon dioxide emissions associated with renewable energy generation projects can be avoided by steering them away from forested sites.*¹⁰

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Petition of VT Real Estate Holdings 1 LLC for)
a certificate of public good, pursuant to 30)
V.S.A. § 248, for a 20 MW ground-mounted) Case No. 23-1447-PET
solar array in Shaftsbury, Vermont)

**Stipulation between Shaftsbury Solar and
the Vermont Agency of Agriculture, Food and Markets**

Petitioner VT Real Estate Holdings 1 LLC (“Petitioner” or “Shaftsbury Solar”) and the Vermont Agency of Agriculture, Food and Markets (“AAFM”) (collectively “the Stipulating Parties”) stipulate and agree as follows:

WHEREAS, on May 3, 2023, Petitioner filed with the Public Utility Commission, pursuant to 30 V.S.A. § 248, a Petition for a Certificate of Public Good (“CPG”) for the installation and operation of a 20 MW solar electric generation facility in Shaftsbury, Vermont (“the Project”); and

WHEREAS, the Stipulating Parties have reviewed the Petition, engaged in discovery, and resolved all outstanding issues between them related to the Project;

NextEra — Randolph Solar Planning Commission Public Hearing — 4 11 2018

Former DPS Commissioner Chris Recchia: I don't agree that this should ever be considered to be a temporary thing. You guys need to **think about this as a permanent impact**. And toward that end, **I've never condoned the idea of a decommissioning fund as well because I don't think it's ever decommissioned**. We are evaluating something that needs to be dealt with on its merits as a permanent impact much like a house, a condominium or anything else that's being developed. I just want to relay that to you guys and ask that you think about it that way because there's no way. I did this with Kingdom Community Wind when they said it was going to be a 40 year project when we know it is a permanent impact on the landscape, **it's permanent impact and likely to be recommissioned over time**. So just think about it in the context of likely, you've got these things here, it's going to be here, think of it like any other development as opposed to a temporary development.

NextEra: And we will likely seek recommissioning once the end of our power purchase agreement, **we will seek recommissioning** if our landowners condone of it. What's nice about the restoration funds is that they there should a situation occur that it's no longer economic.

<https://www.youtube.com/watch?v=Z5qErFowl-Y&t=5669s>

<https://legislature.vermont.gov/statutes/section/30/005/00248>

(t) Notwithstanding any contrary provision of the law, primary agricultural soils as defined in 10 V.S.A. § 6001 located on the site of a solar electric generation facility approved under this section shall remain classified as such soils, and the review of any change in use of the site subsequent to the construction of the facility shall treat the soils as if the facility had never been constructed. Each certificate of public good issued by the Commission for a ground-mounted solar generation facility shall state the contents of this subsection.

Field & Forest Solar Siting Issues

[Grassland Bird Habitat](#) — pay into fund

[Wildlife](#) and Bat Habitat — limits on clearing times

[Wetlands](#) — DEC permit

[Stormwater](#) Management — DEC permit, appeals heard by PUC

[Forest Conversion](#) — no permit or mitigation

Rare, Threatened or Endangered ([RTE](#)) species — pay into fund

Prime Ag Soils (PAS) — [AAFMS stipulation](#), stockpiled for life of project

[Agrivoltaics](#)

[Pollinators](#)

[PFAS Chemicals](#) — Not addressed

Oregon, Pennsylvania, Ontario Canada Address Solar Siting on Farmland

[Oregon Restricts Solar Development On Prime Farmland](#) — 2019

the Oregon Land Conservation and Development Commission approved [new rules](#) that restrict commercial solar development on millions of acres of high-value farmland across the state.... The new rules...allow for 12-acre solar developments on lower quality, classes III and IV soils and for 20-acre developments that incorporate agricultural uses such as grazing or shade crops in between the panels. Even larger projects are allowed on farmland that isn't zoned for exclusive farm use. Rules: https://www.oregon.gov/lcd/Commission/Documents/2019-01_Item_6_Solar_Final.pdf

Pennsylvania Legislation Proposed — 2023

“A solar energy facility may not be located on agricultural land with soil that is deemed Class 1 or Class 2 within the Land Capability Classification System of the Natural Resource Conservation Service.”

Legislation as Introduced: <https://www.palegis.us/legislation/bills/text/PDF/2023/o/SBo798/PNo985>

Ontario, Canada — 2024

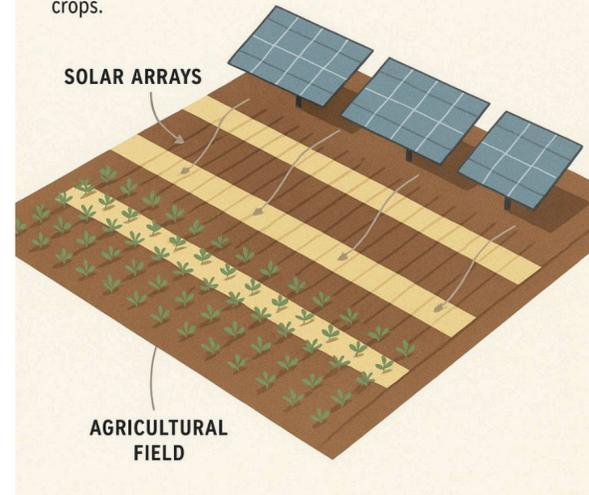
[Ontario's Ban on Solar Farms and Prime Farmland Explained](#)

Ontario's decision to ban solar installations on prime farmland highlights the importance of preserving agricultural resources while also addressing the need for sustainable energy solutions.

Protecting Farms from Solar Panel Dark Side: Farmer's Guide & Tips

HOW SOLAR INSTALLATIONS AFFECT AGRICULTURAL PRODUCTIVITY

The physical footprint of solar arrays directly removes land from production, but their influence extends far beyond the immediate panel locations. The shadows cast by panel rows create alternating bands of light and shade that move throughout the day, disrupting uniform growing conditions across fields. This variability makes consistent crop production challenging in nearby areas, especially for light-sensitive crops.



American Farmland Trust — Solar Siting Guidelines for Farmland

Prioritize agriculture - protect farmland for the future

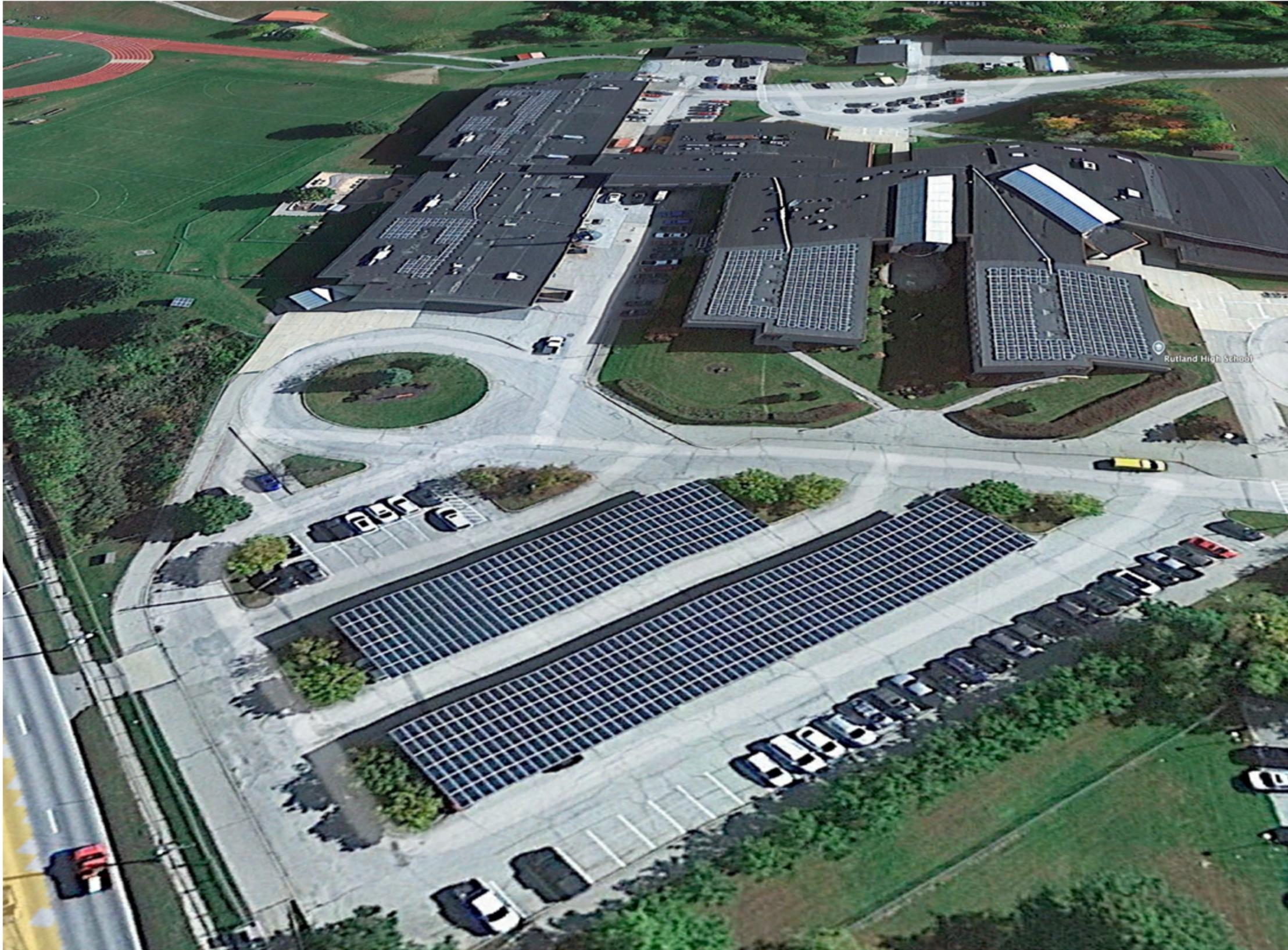
1. Prioritize solar development on state preferred siting (brownfields, rooftops, building mounted, solar canopies, etc...).
2. Avoid siting solar projects on farmland in a location or in such a way that it displaces agriculture from the land.
3. Incentivize agricultural dual-use arrays and follow smart solar siting guidelines when dual-use* is not an option.

Elements of Vermont's Current Solar Siting

- **Access to Grid** — 3-Phase power or upgrades paid for by developer
- **Substation Capacity**
- **Land** — Leased or Purchased
- **Contract to sell the power** — Long-term, to Vermont or out-of-state utility; or sell on open market
- **Contract to sell the Renewable Energy Credits** — or sell on open market
- **Environmental Constraints** — wetlands, grassland bird habitat, prime ag soils, forest clearing, stormwater management — state agencies enter into Stipulations/MOUs
- **Community and Neighbors** — aesthetics, compliance with municipal and regional plans

Proposed Paradigm Change for Solar Siting

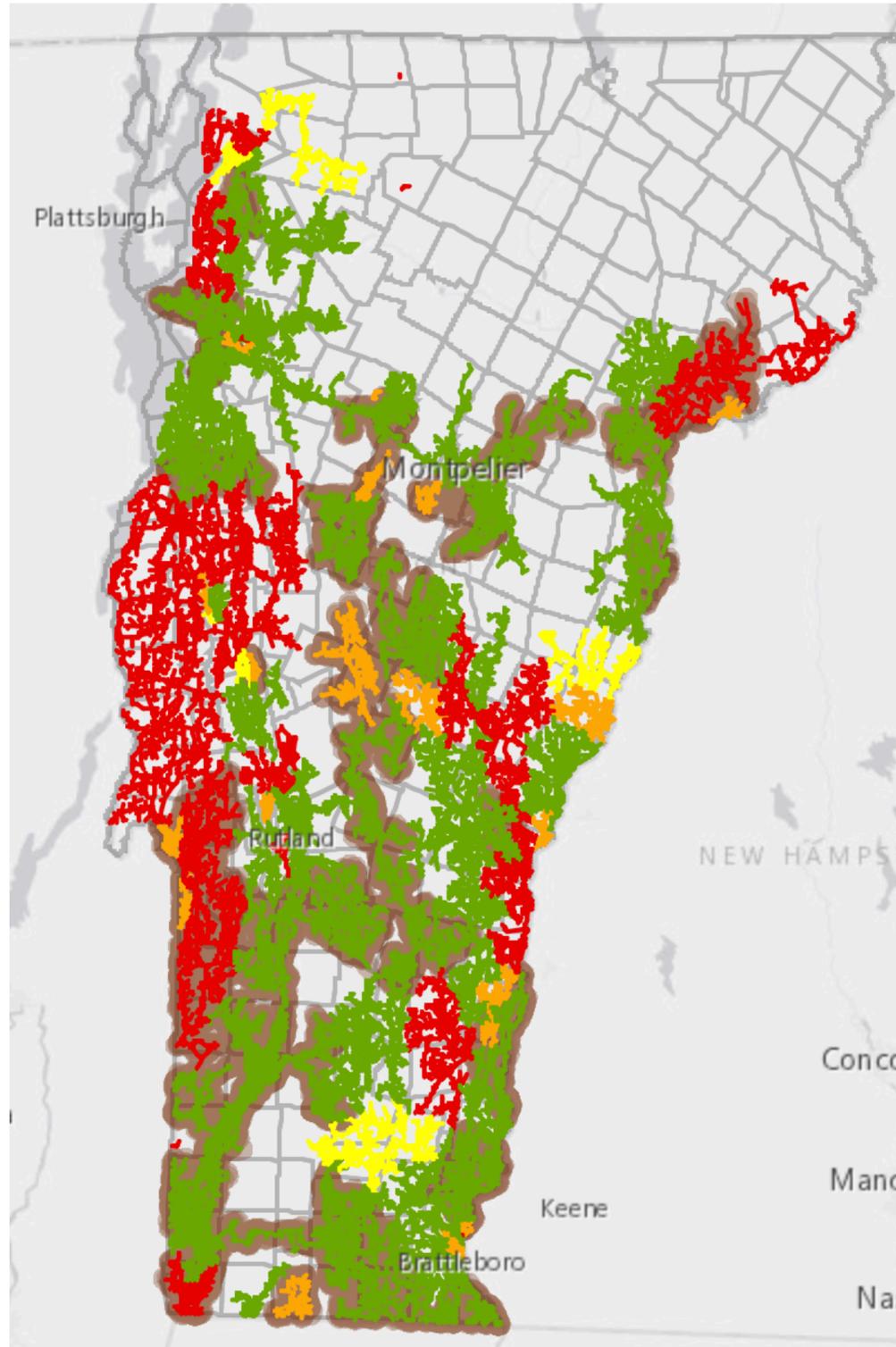
- Update Section 248 to Protect Fields and Forests
- Prohibit Solar Arrays on NRCS Class 1 and 2 soils
- Put Communities first, not Developers
- Build Close to Load, Reduce Transmission Costs
- Incentives for Built Landscape
- Disincentives for Fields and Forests
- Collaborate, not Litigate
- Regulate Merchant Developers
- Update Solar Taxation Policy
- End of Life Solar Panel Disposal
- Create Stakeholder Process to Evaluate Moving Land use siting from PUC to Act 250



Solar parking lot canopy at Stafford Technical Center and Rutland High School rooftops

Specific comments on Section 10

(5) With respect to an in-state facility, will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, agricultural soils of statewide importance or local importance as defined in 10 V.S.A. § 6001 and as designated by the Natural Resources Conservation Service, and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K), impacts to primary agricultural soils, ~~agricultural soils of statewide importance or local importance as defined in 10 V.S.A. § 6001 and as designated by the Natural Resources Conservation Service~~, and greenhouse gas impacts. The siting of a facility or group of physically adjacent or interrelated facilities such that facility structures and related infrastructure preclude the tilling of soil, seeding, growing, or harvesting of agricultural crops on greater than five acres of primary, statewide, or local importance agricultural soils, or reduce future Vermont-based food security or will result in the destruction of forest ecosystems, forest soils and their unique biology, or increased volatilization and release of forest soil carbon on more than five acres shall be considered undue and not in the public good.



GMP Solar Map 2.0

DG Circuit Capacity Per Substation Nameplate Rating

- Unrated
- Substation transformer with at least 20% capacity remaining
- Substation transformer with less than 20% capacity remaining
- Substation transformer with less than 10% capacity remaining
- Due to system limitations, interconnections on this circuit may experience higher costs and delayed interconnections

TGFOV Circuits

- Interconnections on these circuits subject to GMP TGFOV Tariff fee of \$37 per kW of AC capacity authorized by VT PUC Docket # 19-0441-TF.

Towns

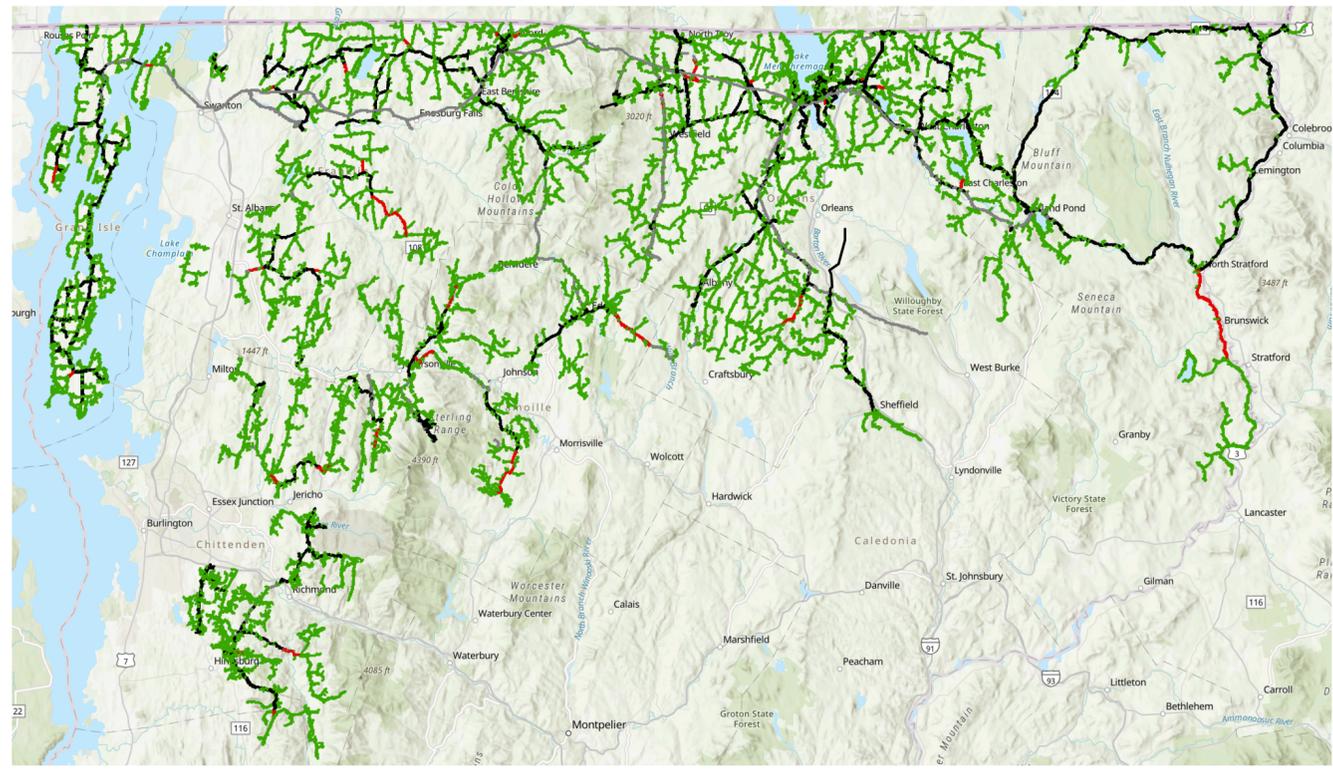


[GMP 3-Phase Map](#)

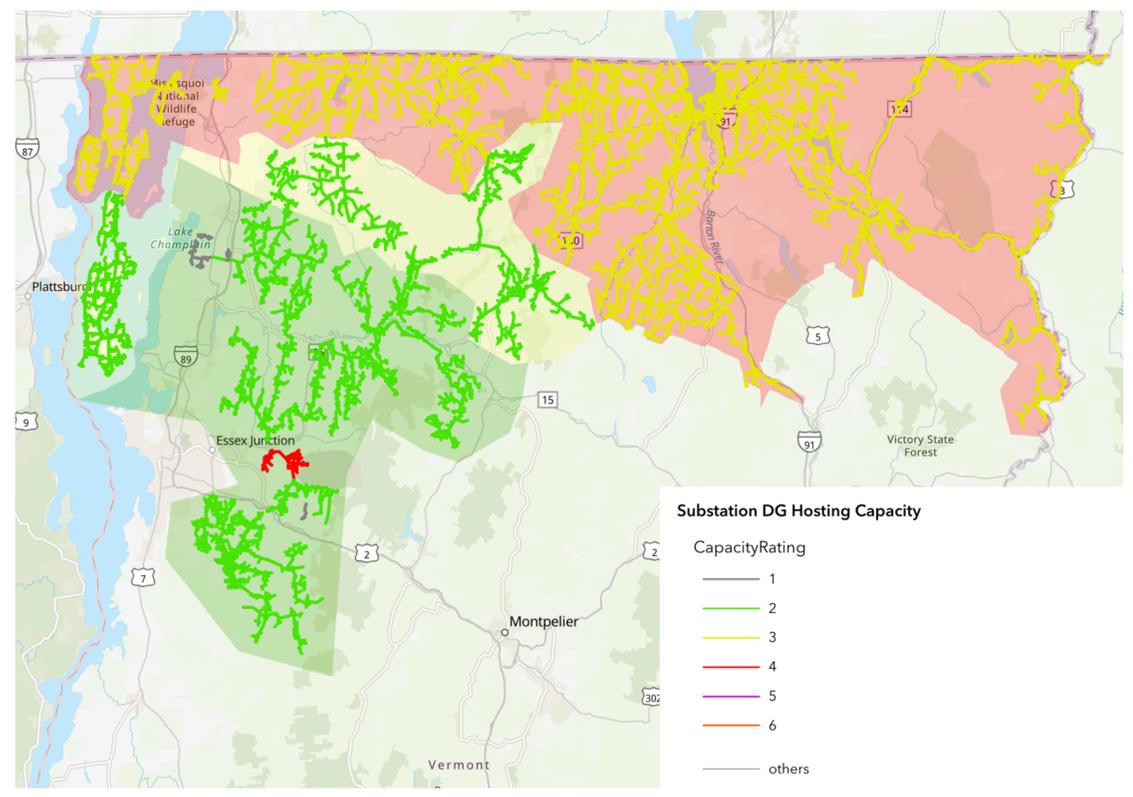


Grid Data and Mapping

VEC Grid Data



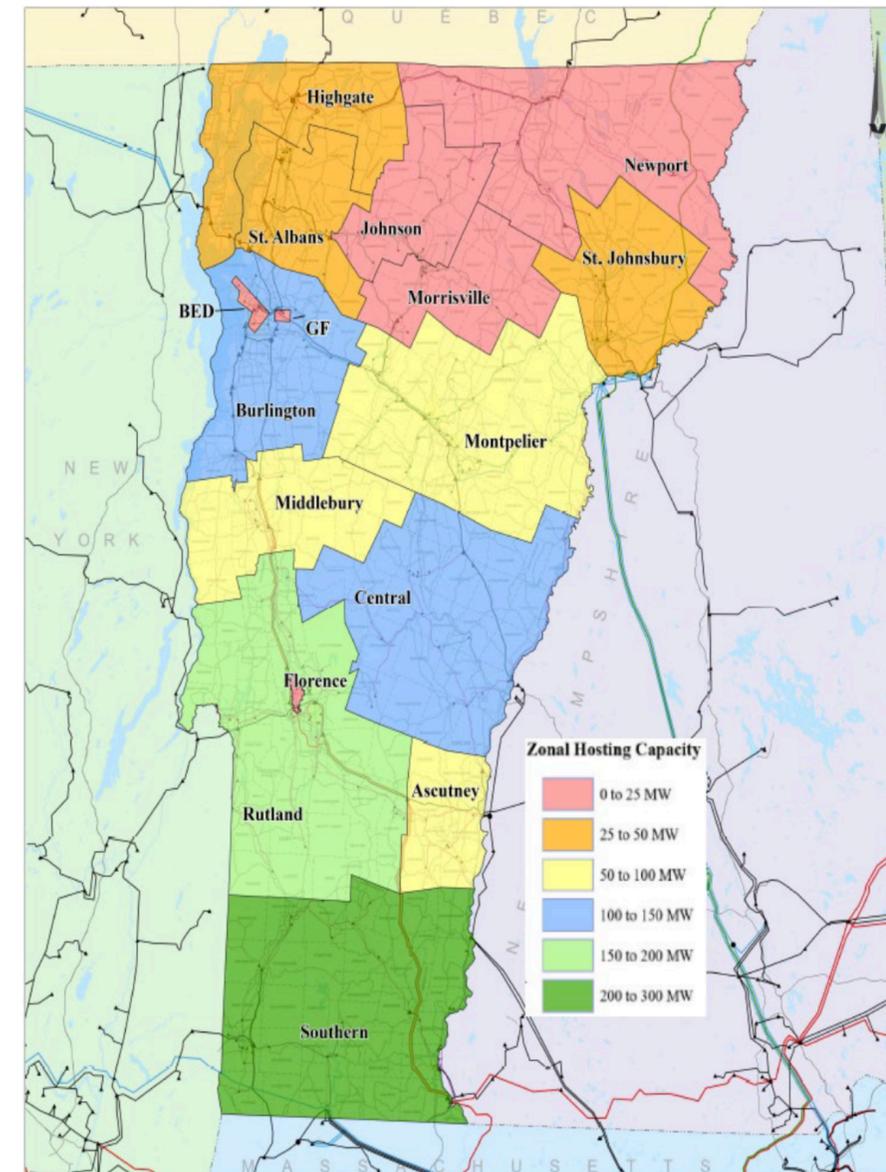
VEC Distributed Generation Hosting Capacity



Optimized geographical distribution of distributed generation (DG)

- Allowed 5% overloads
- Maximum DG amount
 - 1175 MW (considering Transmission limits)
 - 1057 MW (considering Transmission and subtransmission limits)

UTILITY	INSTALLED SOLAR PV AS OF 2023 (MW)	ADDITIONAL SOLAR PV (MW)	OPTIMIZED SOLAR PV DISTRIBUTION (MW)
BED	9	0	9
GMP	396	525	921
HYDE PARK	1	0	1
VEC	41	34	75
VPPSA	25	7	32
WEC	10	4	15
STOWE	3	0	3
TOTAL	487	570	1057



Growing Solar, Protecting Nature

Building the solar Massachusetts needs while protecting the nature we have

Mass Audubon and Harvard Forest | October 2023



<https://storymaps.arcgis.com/stories/932be293f1af43c8b776fdad24d9f071>

NextEra – Owner of Coolidge Solar, Ludlow 20 MW and some Standard Offer projects

<https://www.nexteraenergy.com/home.html>



State fines energy company \$57,500 for violations at Ludlow solar project

By Jasper Goodman
July 29, 2020, 1:54 pm



From left, Vermont Public Utility Commissioners Margaret Cheney, Anthony Roisman, and Sarah Hofmann. Photo by Mike Dougherty/VTDigger

[Freepoint Commodities](https://www.freepoint.com/) – Shaftsbury, Fair Haven, Panton Solar Developer

<https://www.freepoint.com/>

<https://www.suneastdevelopment.com/>

The screenshot shows the top navigation bar of the U.S. Department of Justice Office of Public Affairs website. It includes the department's logo, the text "Office of Public Affairs U.S. Department of Justice", and links for "Our Offices", "Find Help", and "Contact Us". A search bar is also present. Below the navigation bar is a menu with links for "About", "News", "Documents", "Internships", "FOIA", "Contact", and "Information for Journalists". A breadcrumb trail reads: "Justice.gov > Office of Public Affairs > News > Press Releases > Commodities Trading Company Agrees To Pay Over \$98M To Resolve Foreign Bribery Case".

News

- All News
- Blogs
- Photo Galleries
- Podcasts
- Press Releases**
- Speeches
- Videos

PRESS RELEASE

Commodities Trading Company Agrees to Pay Over \$98M to Resolve Foreign Bribery Case

Thursday, December 14, 2023

For Immediate Release
Office of Public Affairs

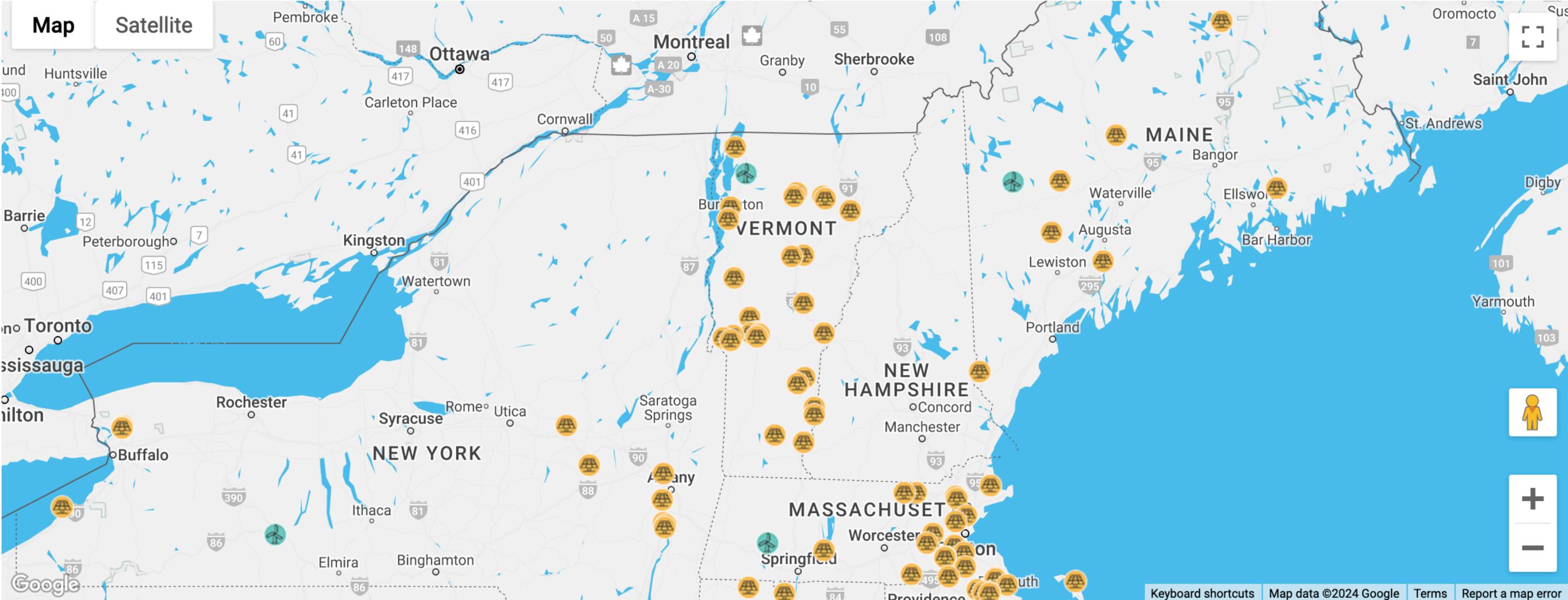
Share >

Freepoint Commodities LLC (Freepoint), a commodities trading company based in Stamford, Connecticut, has agreed to pay over \$98 million to resolve an investigation by the U.S. Justice Department into violations of the Foreign Corrupt Practices Act (FCPA) stemming from the company's involvement in a corrupt scheme to pay bribes to Brazilian government officials.

Freepoint has also agreed to disgorge more than \$7.6 million to the Commodity Futures Trading Commission (CFTC) in a related matter.

<https://www.justice.gov/opa/pr/commodities-trading-company-agrees-pay-over-98m-resolve-foreign-bribery-case>

Greenbacker Capital – Owner of Georgia Mountain Wind Encore Redevelopment, Norwich Solar and other Solar projects in Vermont



<https://greenbackercapital.com/impact/#project-gallery>

Brookfield Renewables – Owner of Sheffield Wind and some Solar projects

Brookfield
Renewable U.S.

Renewable Energy Solutions

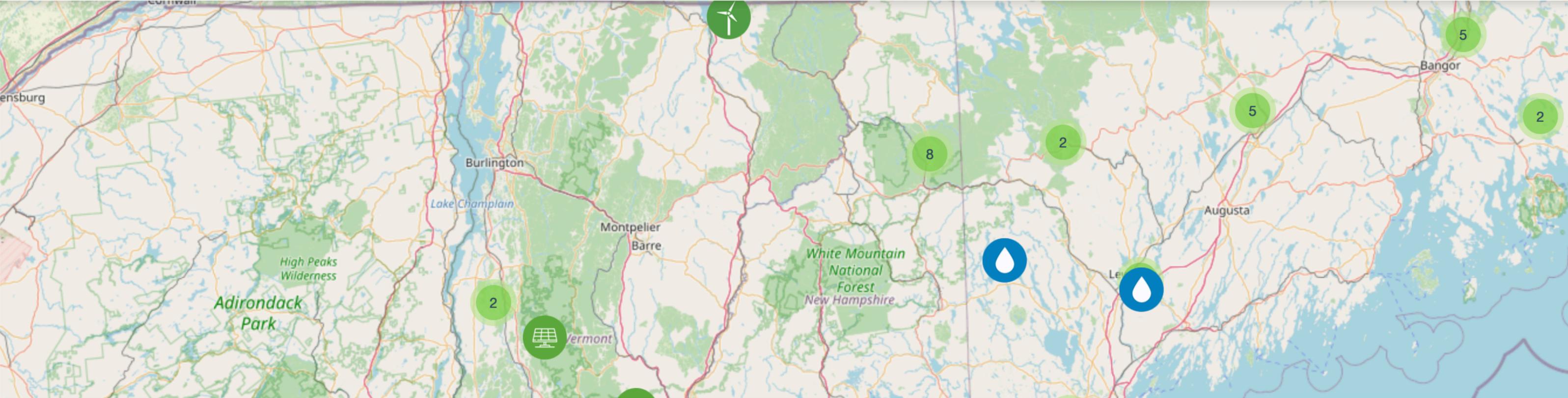
Our Operational Expertise

Community Commitment

US Renewable Facilities

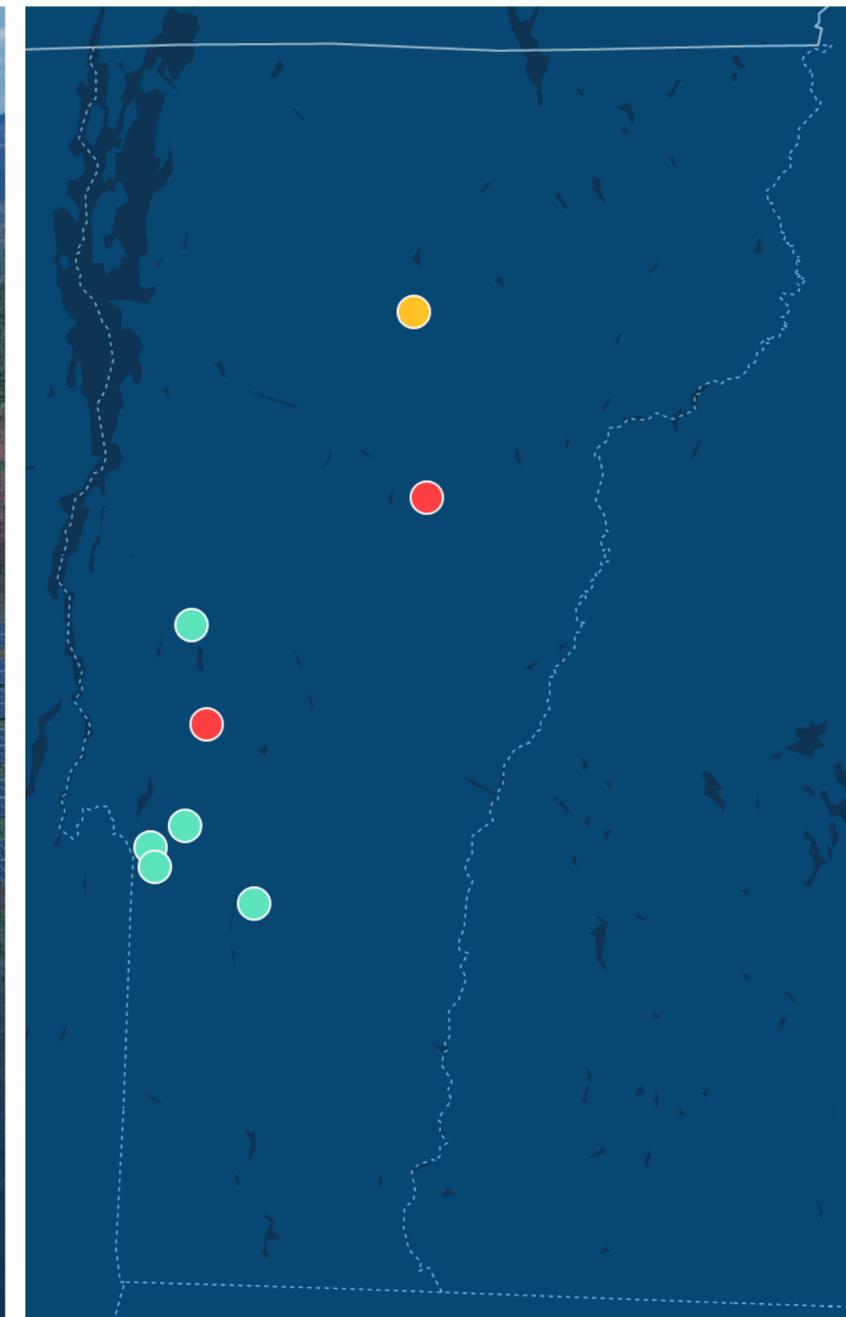
About Us

Contact Us



<https://brookfieldrenewableus.com/explore-market/iso-ne/>

Standard Solar – Owner of projects permitted by MHG Solar



<https://standardsolar.com/projects/?state=vermont>

500 kW AllEarth Hardscrabble Road in Bristol sold to Marina Energy LLC



Legacy Case - Commission Issued Documents-Portal

Caption: Petition of Hardscrabble Solar, LLC for a certificate of public good, pursuant to 30 V.S.A. § 219a and Board Rule 5.100, for a 500 kW group net-metered photovoltaic electric generation facility to be located in Bristol, Vermont. Transfer notice to Vermont AllSun Solar VII, LLC deemed approved 11/10/2014. Transfer notice to Marina Energy, LLC deemed approved 03/18/2015.

<https://www.sjindustries.com/marina/home>