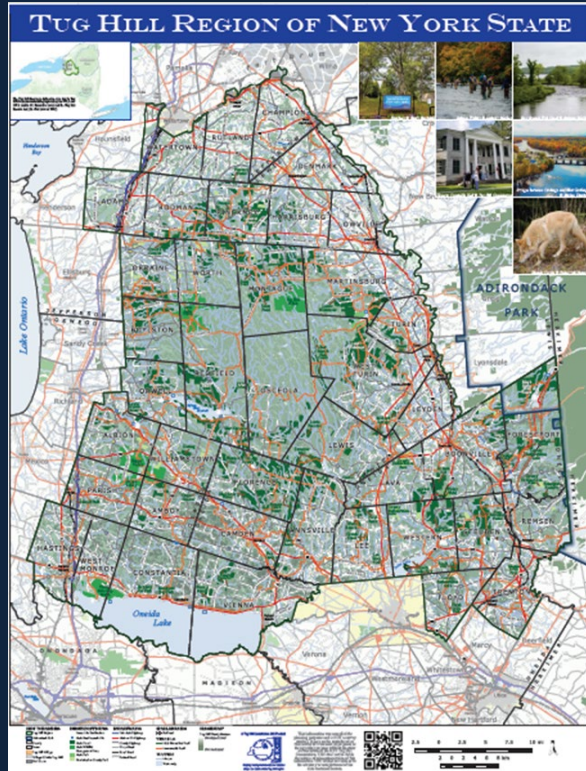


NY's Changing Energy Landscape and Local Considerations



Katie Malinowski, Executive Director
Matt Johnson, Planning Director

Generation, transmission, and storage of, as well as demand for, electricity in NYS is in a state of flux. The Tug Hill Commission will provide an overview and some insights on what it is observing in the four counties that encompass Tug Hill – Jefferson, Lewis, Oneida and Oswego. The discussion will touch on solar, wind, and nuclear, regional transmission line and storage projects, and what is driving increases in energy demand.

About the Tug Hill Commission



- A non-regulatory state agency with a mission “**to enable local governments, private organizations, and individuals to shape the future of the Tug Hill region, and to demonstrate and communicate ways that this can be done by other rural areas.**”
- Governed by a board of 9 unpaid volunteers who must be residents of the region, grassroots, locally driven
- Staff of 14 serving a region of 41 towns containing 18 villages, plus, with a combined population of ~100,000 people, 50 people per square mile
- Provide day-to-day assistance to local governments, and in turn leverage conservation and sustainable development that benefits the region and state

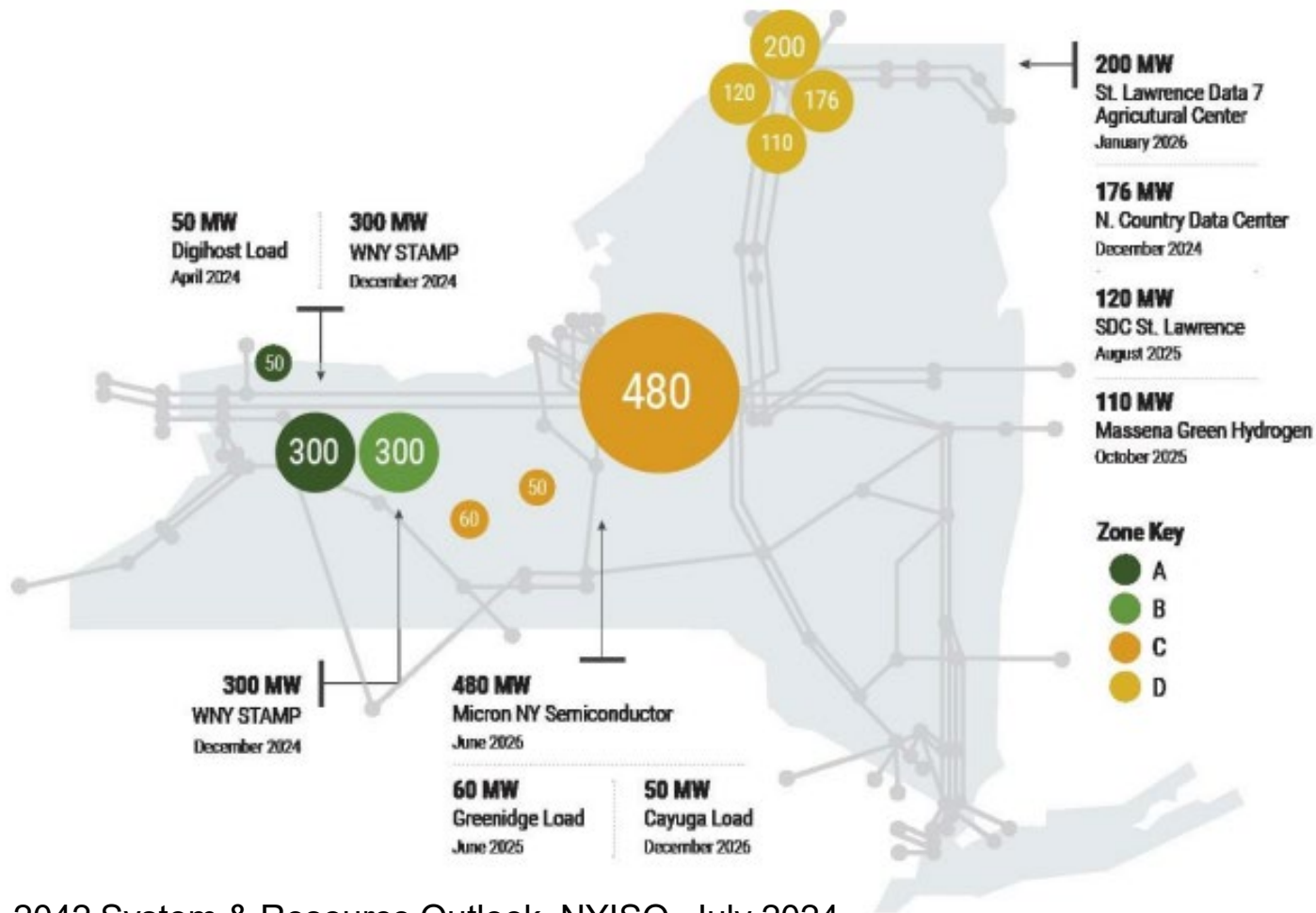


Mickey Dietrich, NYS Tug Hill Commission

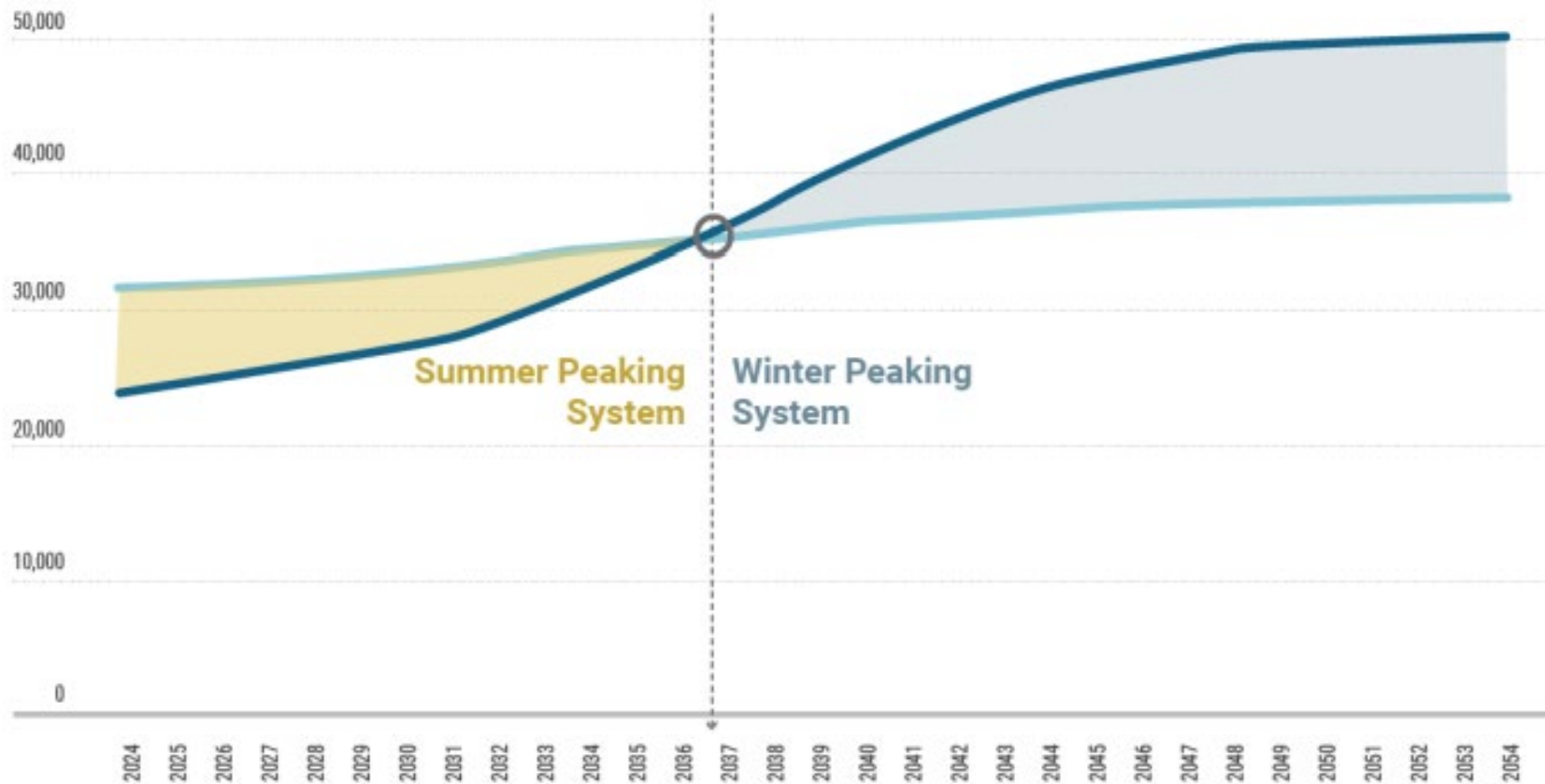
Takeaways



- Demand for electricity is increasing
- State policy is creating demand for cleaner energy sources
- The four county Tug Hill region already has hydro, wind, solar, and nuclear (Oswego)
- Expect more projects to be proposed – i.e. Hydrostor, Sugar Maple Solar, etc.
- Another large nuclear is likely to be sited soon
- New technologies may come into play (small modular reactors, hydrogen-powered generators, etc.)
- Changing federal landscape may affect some clean energy projects, at least in the short term



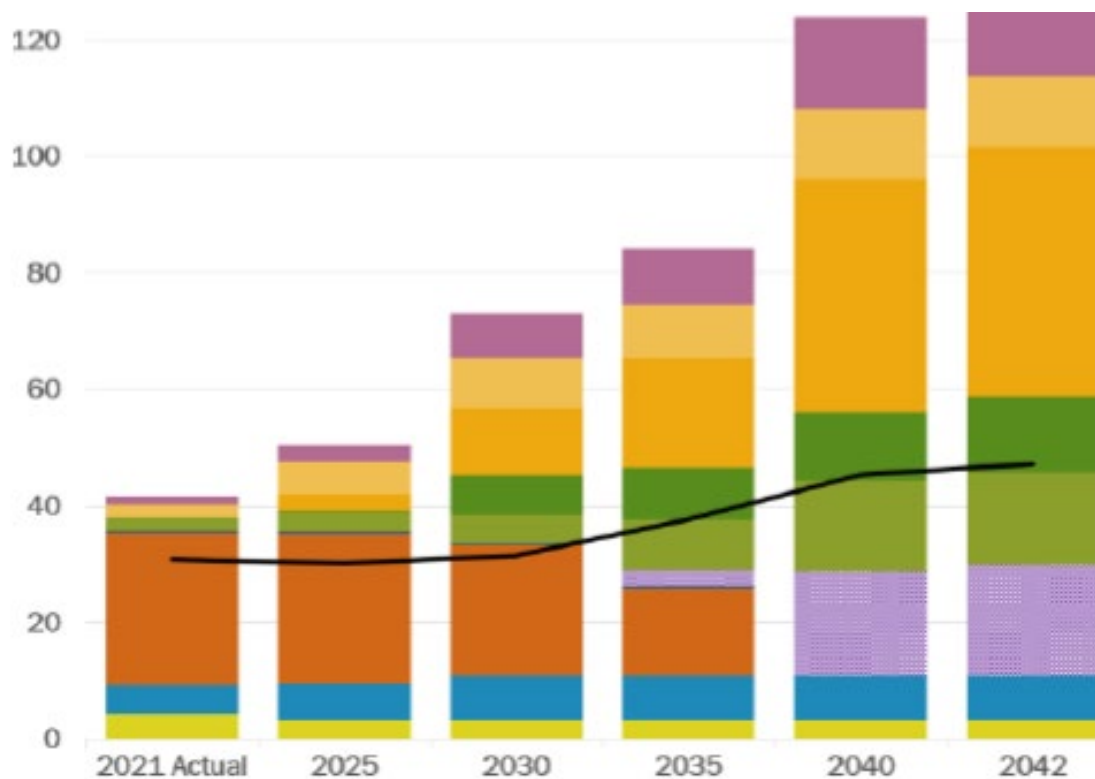
2023-2042 System & Resource Outlook, NYISO, July 2024



State Scenario Policy Case: Installed Capacity

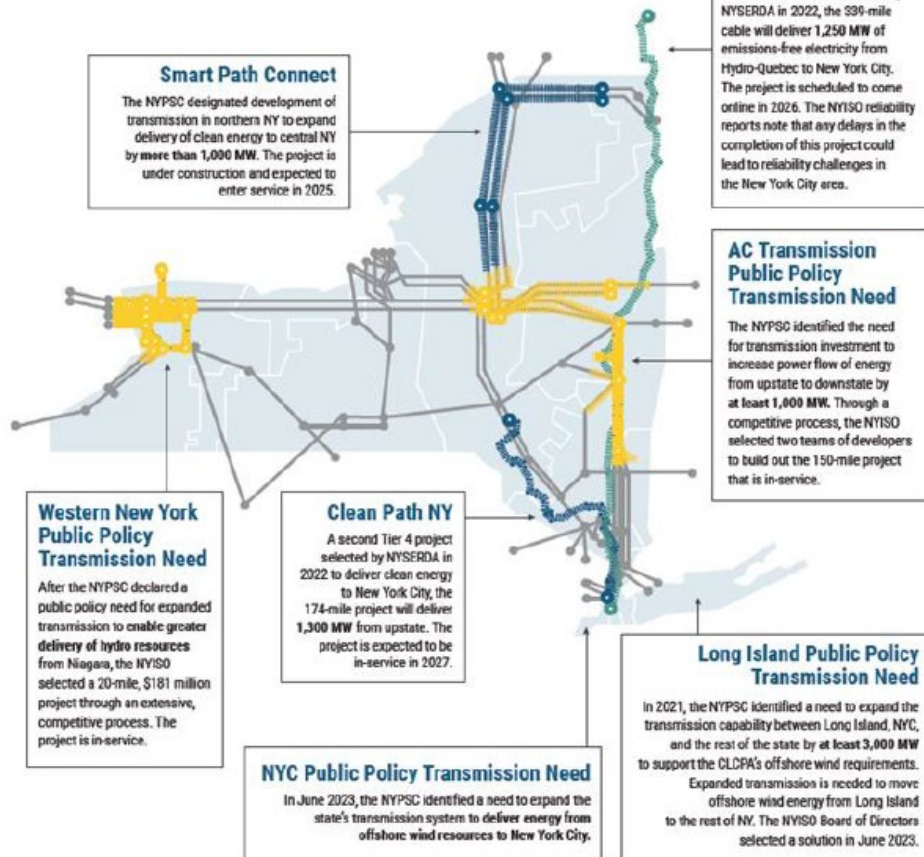
GW

■ Nuclear
 ■ Hydro
 ■ Fossil
 ■ Other
 ■ DEFR
 ■ LBW
 ■ OSW
 ■ UPV
 ■ BTM-PV
 ■ ESR
 — Load+Charge+Electrolysis



2023-2042 System & Resource Outlook, NYISO, July 2024

NEW TRANSMISSION PROJECTS IN NEW YORK STATE



<https://energy.usgs.gov/uswtodb/>

Zoom to Location

Champion

Denmark

Croghan

New Bremen

Lowville

Watson



Lat:43.9098 Long: -75.6624

5 km

© Mapbox © OpenStreetMap Improve this map © Maxar



U.S. Wind Turbine Database

Source: May, 2025 | Build: v8.1 | [LBNL](#), [USGS](#), [ACP](#)

The [USWTDB](#) provides both onshore & offshore wind turbine locations in the United States, related facility information, and turbine technical specifications. To learn more about the app, watch our [tutorial video](#) or reach out to the [USWTDB team](#).

Showing **282** turbines, from **6** projects.

Total rated capacity of turbines here is **581** MW.

Apply Range Filter to Turbines by:

☒ None ☐ Height ☐ Capacity ☐ Year

Filter by project name, state (e.g. NC), or id

Name ▲

Year

Capacity

Count



Showing 6 Projects Here

Copenhagen Project, NY

40 Turbines (mapped) | Year(s) Online: 2018

Project Total Rated Capacity: 80.0 MW (derived)

Date of source imagery when turbines digitized: 07/2020

2.0 MW

Maple Ridge Project, NY

112 Turbines (mapped) | Year(s) Online: 2006

Project Total Rated Capacity: 184.8 MW (derived)

Date of source imagery when turbines digitized: NaN/NaN

1.6 MW

Maple Ridge (Lowville) Project, NY

82 Turbines (mapped) | Year(s) Online: 2005

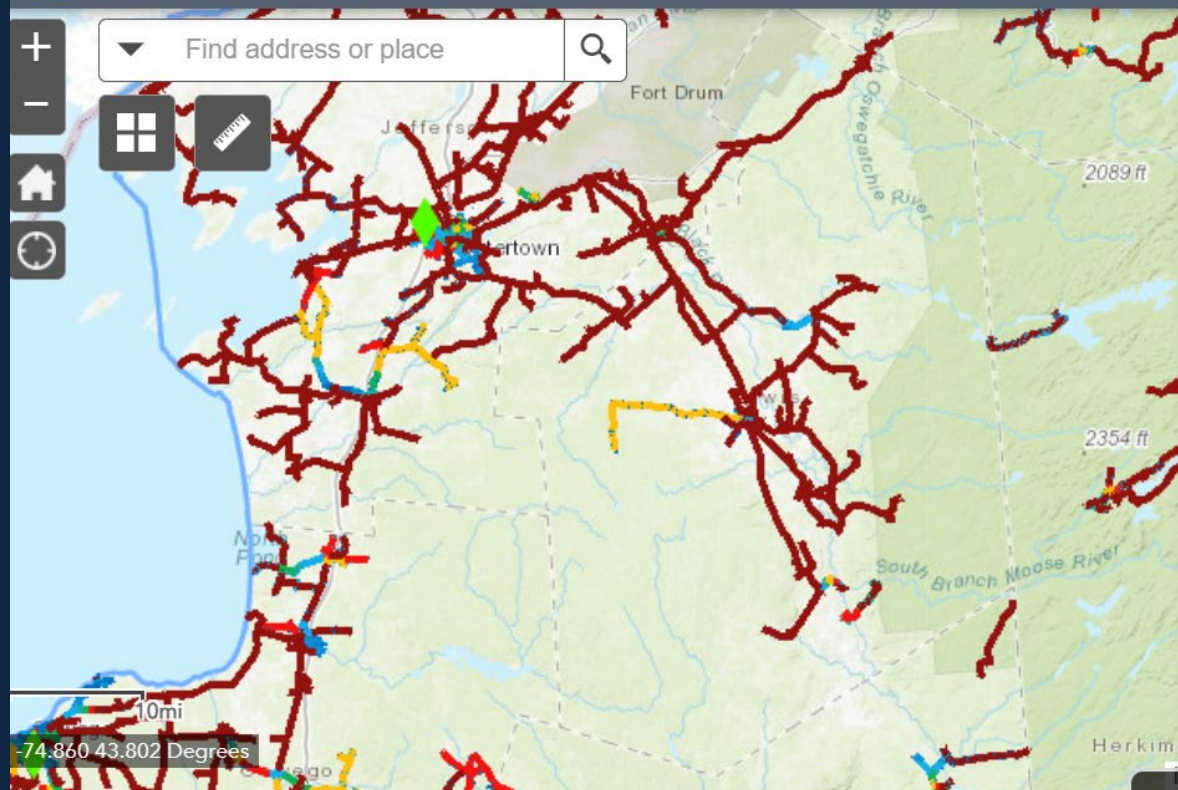
Project Total Rated Capacity: 185.0 MW (derived)

1.6 MW

National Grid New York System Data Portal

[Introduction](#)[Company Reports](#)[Distribution Assets Overview](#)[PV Hosting Capacity](#)[Electrification Capacity](#)[ESS H](#)

PV Hosting Capacity



Legend

Substation Solutions



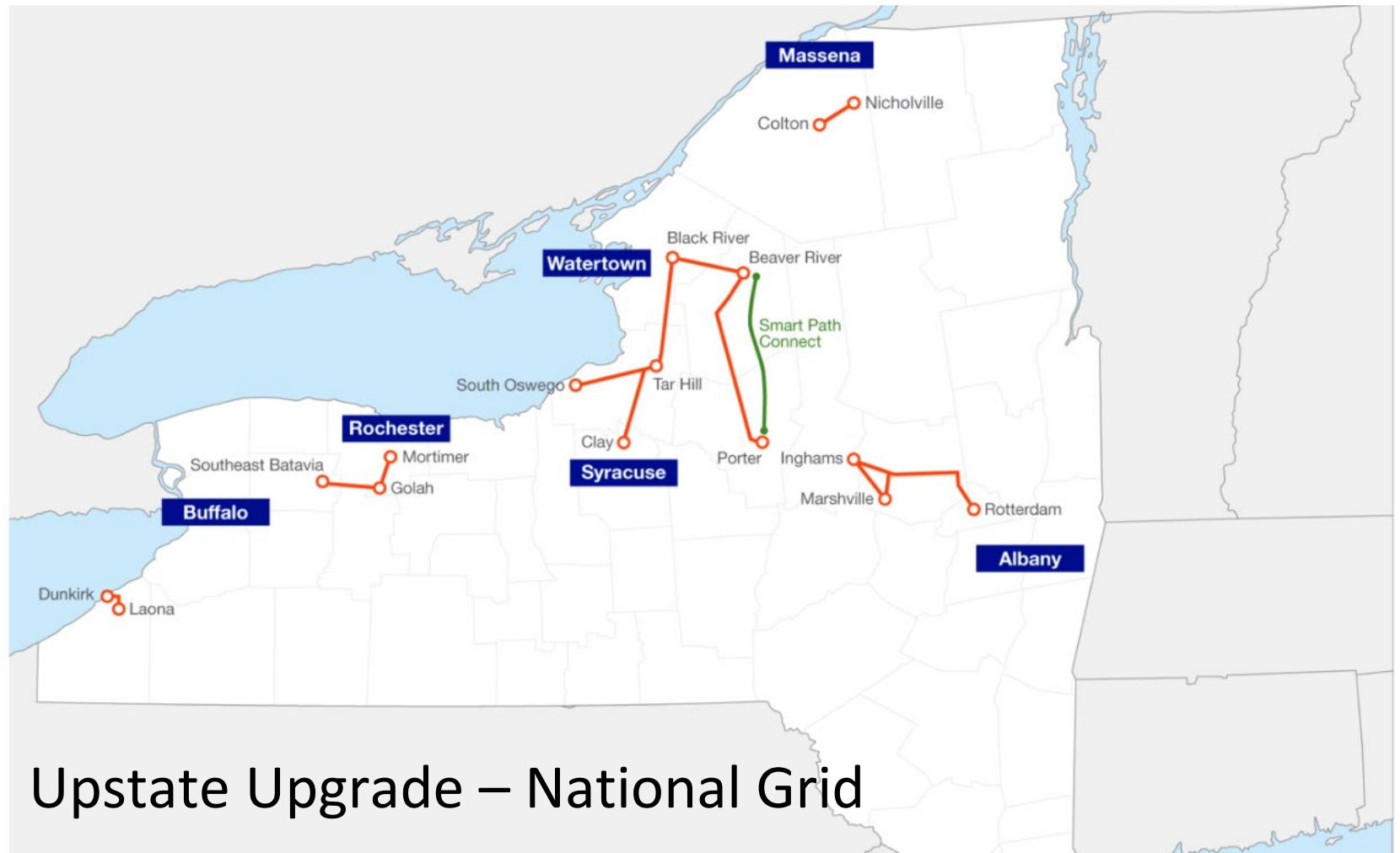
Hosting_Capacity_Data

Primary Level Hosting Capacity

- > 5.0 MW
- 3.0 - 4.99 MW
- 2.0 - 2.99 MW
- 1.50 - 1.99 MW
- 1.0 - 1.49 MW
- 0.50 - 0.99 MW
- 0.30 - 0.49 MW
- 0.0 - 0.29 MW

Feeder Level Hosting Capacity for PV

- > 5.0 MW
- 3.0 - 4.99 MW



Upstate Upgrade – National Grid

Large Solar Energy Projects

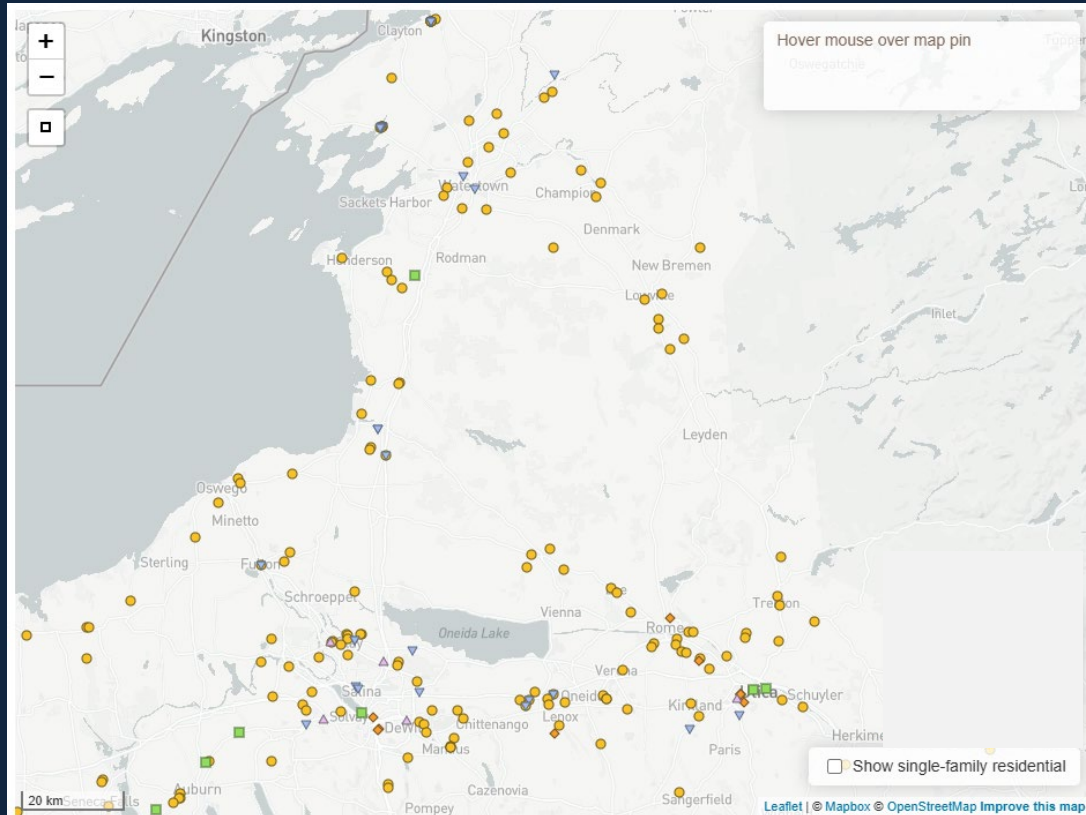
**Most impact
on agricultural
lands?**



**Most control by
local governments?**

Distributed Solar

der.nyserda.ny.gov/map/



Typically 3 - 5 MW

15 - 40 acres

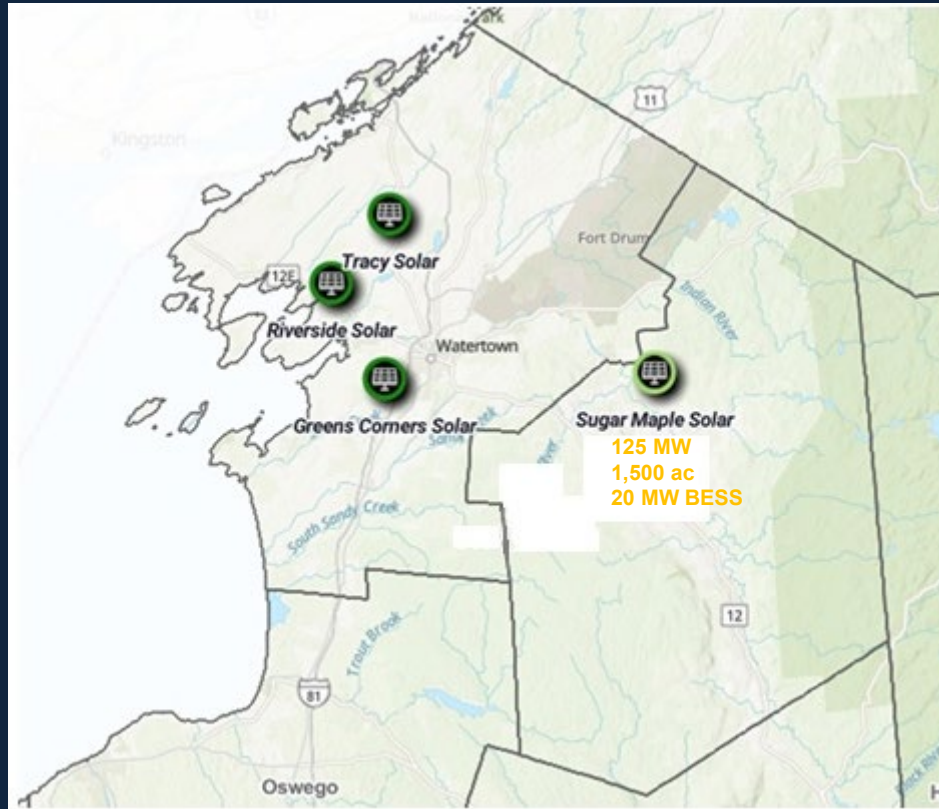
**Generate energy on
behalf of multiple
customers**

Local review

Utility Scale Solar

Application Status

- Notice Of Intent
- Application
- Permitted
- Under Construction
- Operational



Typically 100 - 240 MW

1,500 – 1,700 acres

Supply wholesale energy to the grid

ORES review

Google: renewable energy permit status map nyseda

Characteristics of Large Solar

How big? – 5 acres per MW

Where located? – flat, dry, cleared land...

Proximity to transmission lines...

Farm leases - \$700 - \$2,000/acre

PILOT agreements with municipalities

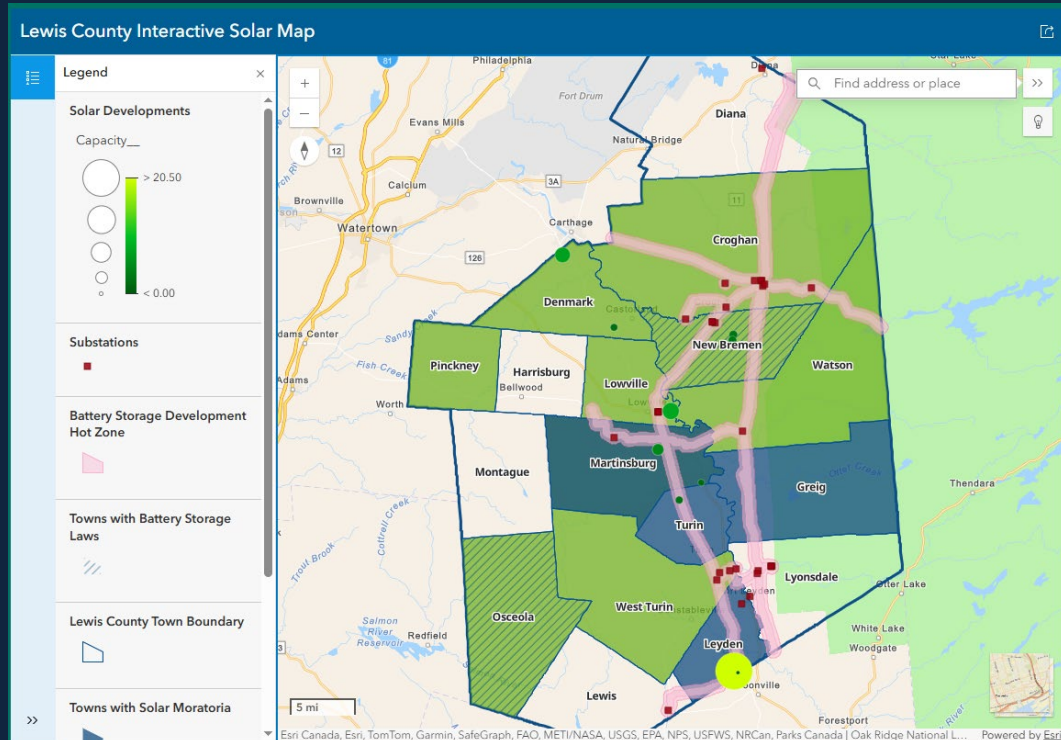


What Can Municipalities Do To Mitigate?

(projects under 25 MW permitted locally)

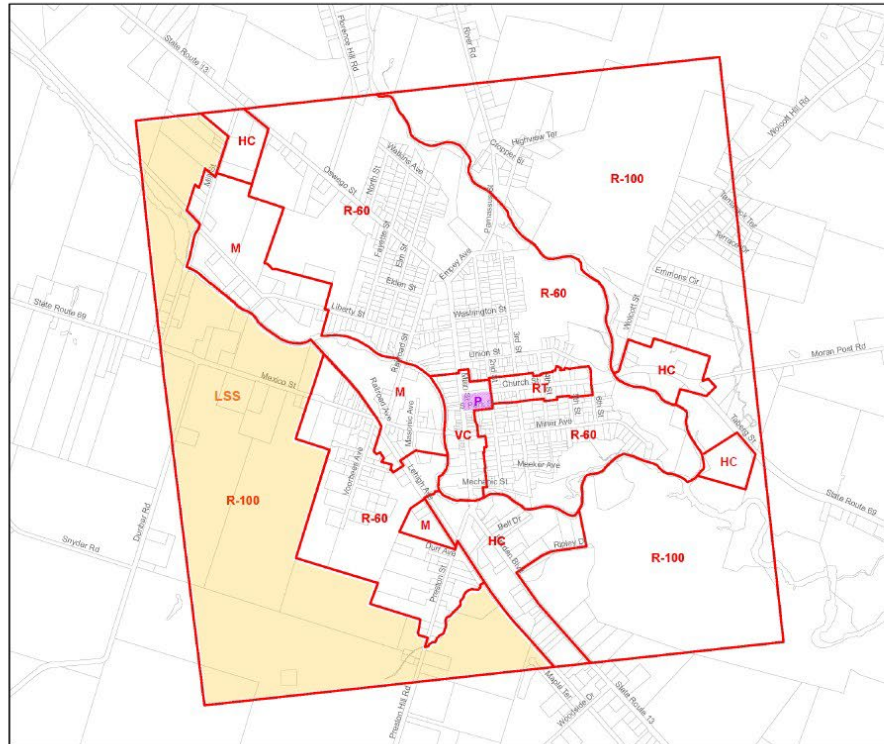
- **MORATORIA**
- **COMPREHENSIVE PLANS**
- **ZONING**
 - **Site plan review**
 - **Special use permit review**

Lewis County Mapper



lewiscountyny.gov/departments/planning-and-community-development/solar/

Where Can They Go? – Districts and Overlays



Village of Camden ZONING MAP



0 250 500 1,000
Feet

R-100 - Residential 100

R-60 - Residential 60

RT - Residential Transition

VC - Village Center

HC - Highway Commercial

M - Manufacturing

P - Park Overlay

LSS – Large Scale Solar Overlay

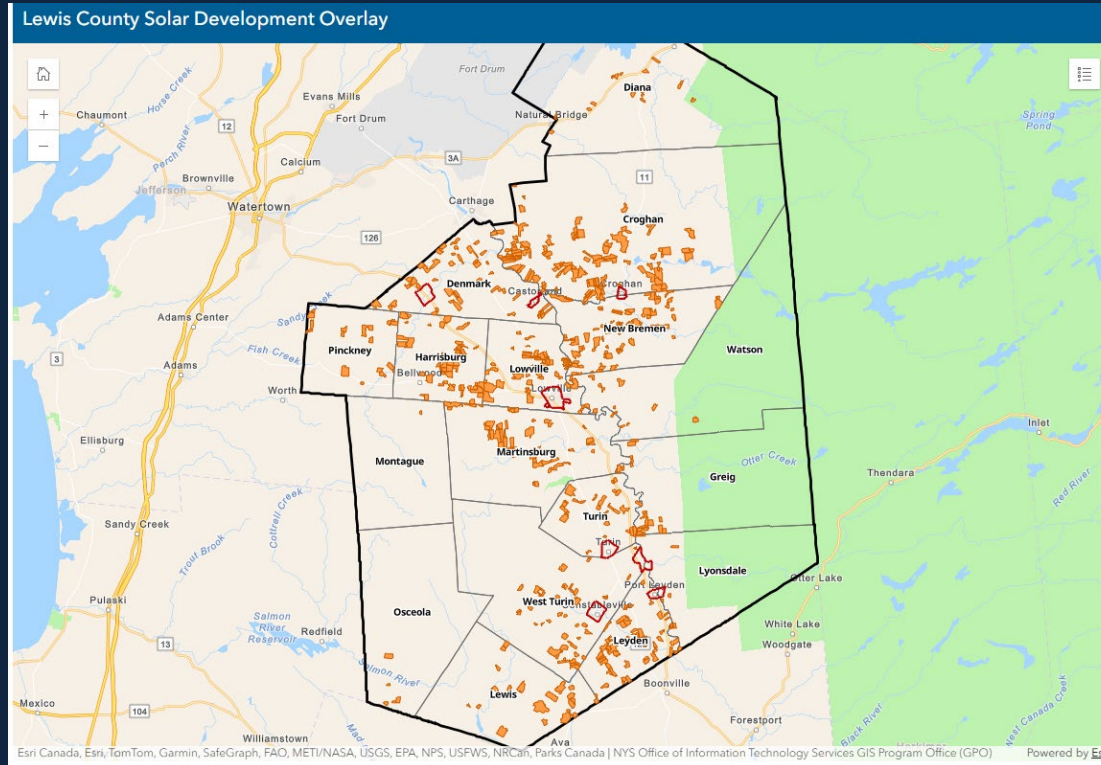
I CERTIFY THAT THIS IS THE OFFICIALLY ADOPTED
ZONING MAP OF THE VILLAGE OF CAMDEN

VILLAGE CLERK

DATE

This information was compiled for planning purposes
and is NOT a survey product. It may not be reproduced
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Tug Hill Commission. NYS Tug Hill Commission makes no claims as to the
accuracy or completeness of the data contained herein.

Where Can They Go? – Districts and Overlays





Special Use Permit Review by Planning Boards

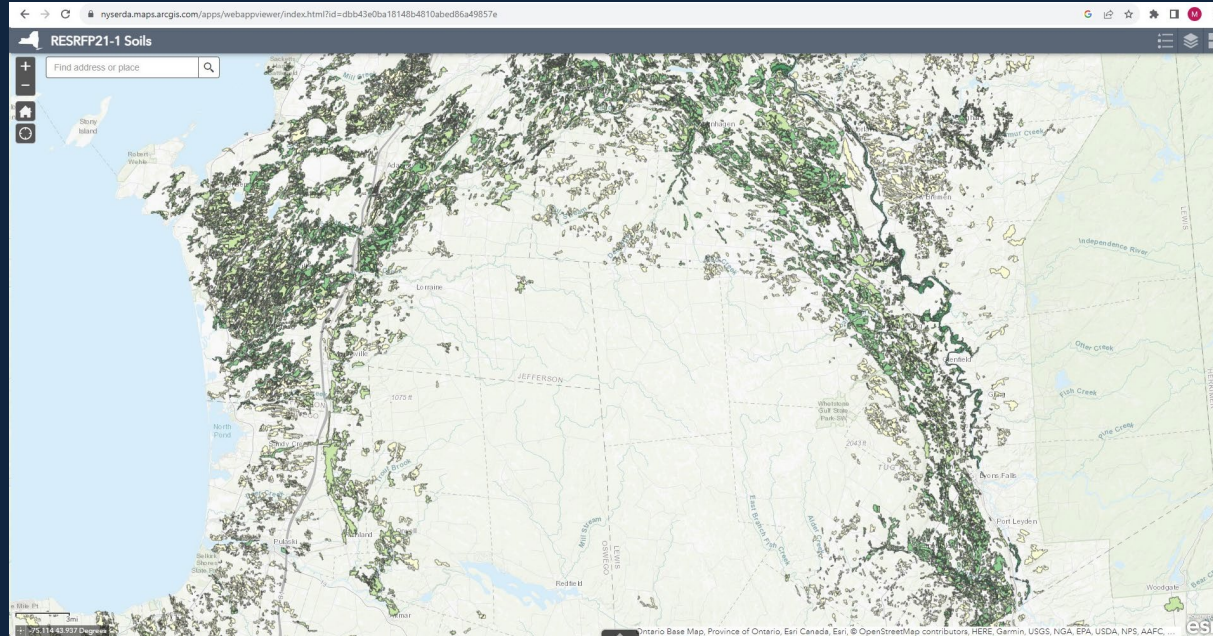
- **Required setback and height restrictions**
- **Landscaping and screening requirements**
- **Safety requirements**
- **Visual assessment**
- **Decommissioning plan and site restoration requirements**
- **Cash, bond, or other form of security**
- **Recycling??**



Protections For Ag Resources

- Solar Energy Systems **shall occupy no more than [50] % of the area of MSG 1-4 soils** within the Facility Area
- Solar Energy Systems may exceed 50% of MSG 1-4 soils **if land can still be used as Farm Operation**
- To the maximum extent practicable, Solar Energy Systems located on MSG 1-4 soils shall be constructed in accordance with the **construction requirements of the New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands**

Mineral Soils Groups 1 - 4



Google: nys dept of agriculture and markets soil groups

Also see: <https://websoilsurvey.sc.egov.usda.gov/>

Prime Soils Mapper





Other Levels of Review

- County Planning Boards – 239m review
- NYS Ag & Markets – consultation for projects in Agricultural Districts



Public Service Law Article 8

Office of Renewable Energy Siting

Projects 25 MW or larger go through a review process overseen by the Office of Renewable Energy Siting (ORES)

Local laws are taken into consideration, but requirements can be waived if found to be unreasonably burdensome to the project



Examples of Zoning Waivers Granted by ORES

- Decommissioning bonds that have an annual inflation escalator built in
- Some noise limits
- Some requirements for permeable access roads (i.e. no pavement)
- **Prohibition of siting on any amount of prime farmland**
- Requirements that components below 4 feet be removed
- Large setbacks from wetlands
- 500-foot setbacks from property lines
- 40% maximum lot coverage
- 15% of lot maximum vegetation clearing



Other Policies/Initiatives to Preserve Ag Land

Smart Solar Siting Scorecard – used to evaluate utility scale projects for avoidance and mitigation of ag and forest land

Lewis County IDA PILOT structure:

- Incentivizing solar development on land that is not active farmland.
- In cases where solar is proposed on active farmland, incentivizing the development on land which is not “prime” farmland, or “Prime – If drained” farmland.

BUILD READY PROGRAM



NYSERDA Build Ready Program

Sites typically 50+ acres located in areas where the existing electrical grid has capacity for a new project.

Build-Ready gives priority to:

- **Former industrial or commercial sites**
- **Closed landfills**
- **Brownfield sites**
- **Dormant electric generating sites**
- **Underutilized, abandoned, and vacant sites**
- **Other previously developed sites**



This image depicts the location of a constructed 2.9 MW solar project in the town of Hounsfield. The project was sited in an 'Industrial' zoning district adjacent to a mining operation and a manufacturing operation.



Left: Screening of the Burrville solar project in Jefferson County as seen from the road, shows how panels can be hidden from view.



Right: A view from the side shows how older existing growth was retained to provide screening and a row of younger trees were planted offset to further shield the view of the panels from the road.

Agrivoltaics

- Tug Hill Commission and American Farmland Trust did four roundtables and a wrap up presentation earlier this year
- Still in its infancy
- Local example – ClearPath Energy in New Bremen, 50 acres, 4.5 MW, allows haying for beef cattle operation; 64 foot spacing, 8 feet to racking, single axis tracker system



Battery Energy Storage Systems (BESS)



Electricity is stored and held until it's needed, such as during peak usage times, grid disturbances, or outages.

Local governments can review through zoning and require safety elements and training (if not associated with ORES review).

Sugar Maple project in Lewis County has 20 MW of storage planned.

ISSUE PAPER SERIES

Planning for Solar Energy Projects

August 2025



NEW YORK STATE TUG HILL COMMISSION

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IN COLLABORATION WITH:

Cornell Cooperative Extensions of Jefferson, Lewis, Oneida and Oswego Counties
Development Authority of the North Country
Jefferson, Lewis, Oneida, Oswego and St. Lawrence County Planning Departments
Jefferson County Industrial Development Agency and Naturally Lewis
Jefferson, Lewis and Oswego County Soil & Water Conservation Districts
Mohawk Valley EDGE

The Tug Hill Commission Technical and Issue Paper Series are designed to help local officials and citizens in the Tug Hill region and other rural parts of New York State. The Technical Paper Series provides guidance on procedures based on questions frequently received by the Commission. The Issue Paper Series provides background on key issues facing the region without taking advocacy positions. Other papers in each series are available from the Tug Hill Commission. Please call us or visit our website for more information.



Questions?

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