MRB Group

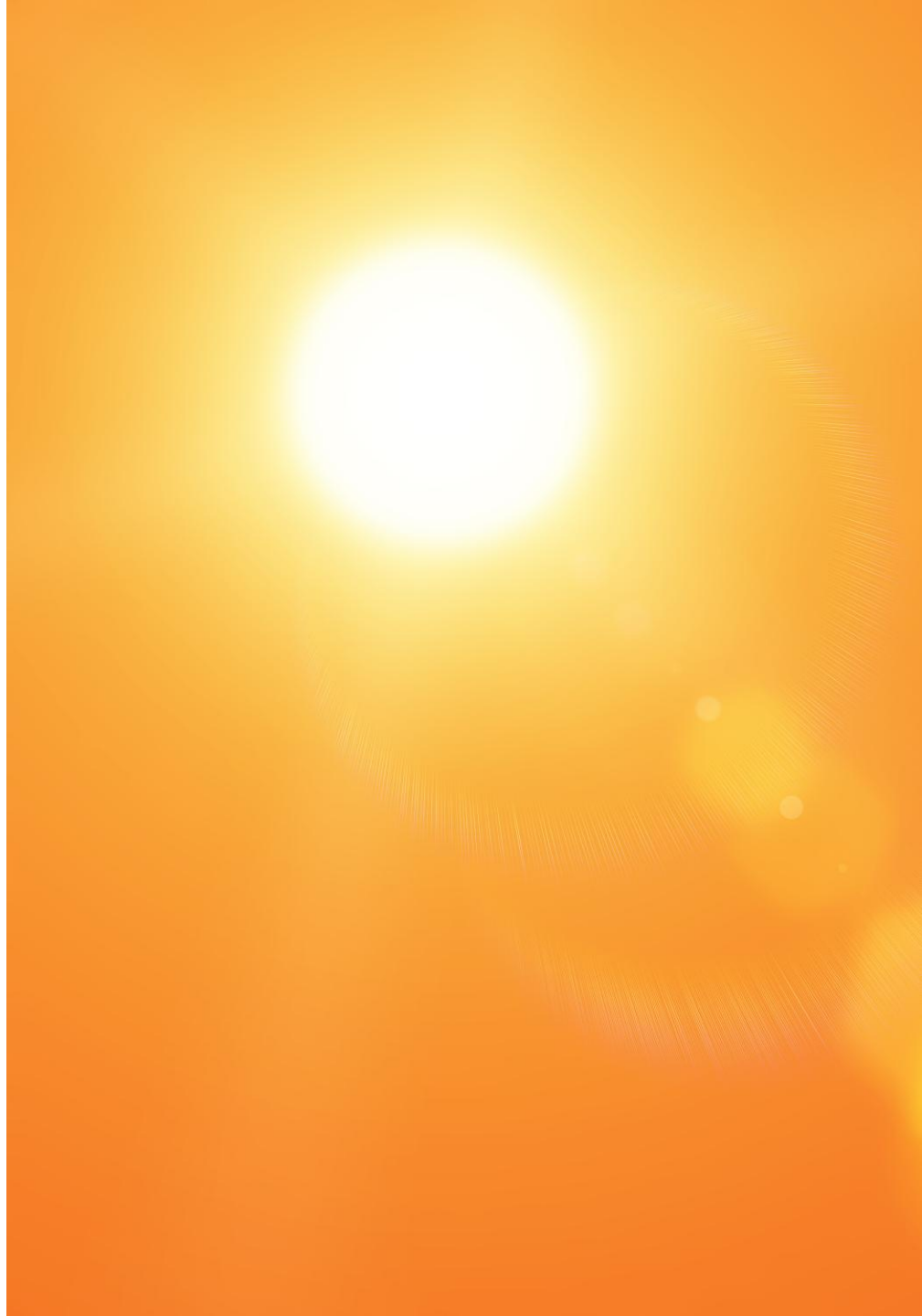
Municipal Best Practices & Policies for Solar Projects

Hosted by Tioga County Economic Development & Planning Office

June 25, 2025

Agenda

- Welcome & Introductions
- About the Report Update
- Solar Site Considerations
- Community Regulatory & Oversight Considerations
- Planning Approval Considerations
- Solar Project Financial Considerations



About the Solar Best Practices Report Update

Original report – 2022

Why update?

- Shifting policy landscape
- New questions about managing projects

Solar Site Considerations

Soil Testing

- Establish a soil sampling program to benchmark soil conditions
  - Test for soil health in addition to pollution
  - Multiple testing sites inside and outside fenced boundary, GPS coordinates
  - Test before construction, a year after construction, every 5 years thereafter, and after decommissioning
- Ag & Markets recommends Cornell University's soil testing guidelines for solar projects
  - Cornell Soil Health Testing plus heavy metals testing option is recommended
- Developer should shoulder this cost and enlist a third-party soil testing firm
- Municipalities can contract with SWCD to monitor and test soils. SWCD would need to be trained first from the Cornell Soils Health Lab

Landscape Buffering

- Consider requiring a landscaping plan from developers
- Landscape professional should be consulted to ensure the plan is sustainable
- Periodic monitoring (annually or bi-annually)
  - Require that any diseased/dying landscaping be replaced within 90 days
- Consider stipulating that vegetation be planted in growing seasons to limit needed replacements/encourage rooting and plant survival

Mature Trees: 10-14 feet tall at time of planting	
Pros	**Cons**
• Provides screening and visual impact mitigation in year one • Acts as a better sound buffer • More adequately screens panels that range in 15-20’ in height	• Hard and expensive to procure locally • Higher mortality rate than immature trees • Need greater spacing at time of planting • Susceptible to wind damage

Immature Trees: 6-8 feet tall at time of planting	
Pros	**Cons**
• Higher survivability rate • Easier and cheaper to procure locally • Easier to replace if they die or suffer disease/pests	• Limited screening at time of planting • Slow growth rates (generally 12” per year) • Less buffer for noise and glare

Wellheads

- Stormwater management and drainage design
- Vegetation management
- Infiltration practices
- Wellhead protection measures
- Setback distances
  - 200 ft is standard practice for residential use, can be increased or decreased

Community Regulatory & Oversight Considerations

Solar Application Review Process – 5MW to 20MW

Site Plan Review	SEQR	County Referral	Special Use Permit
Town/Village Board or Planning Board	Community Solar is a Type 1 Action 30-day coordinated review required	239-m referral process County Planning Board looks at intermunicipal and County-wide impacts	Requires a Public Hearing Can place reasonable conditions on SUP

Planning Approval Considerations

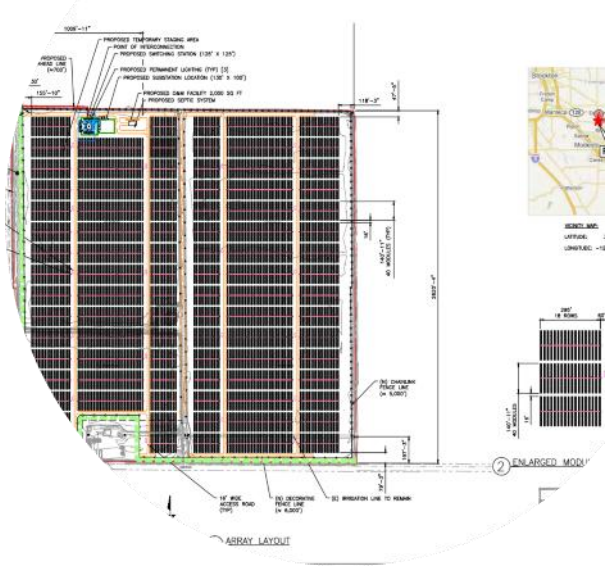
Local Government Role & Regulatory Framework

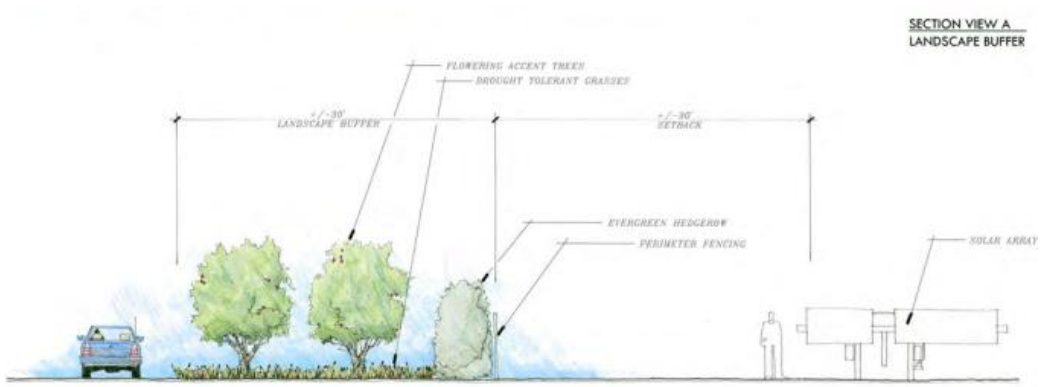
Local governments play an important role in regulating land use and development of solar energy systems.

- ✓ Adoption and administration of local zoning ordinances
  - ✓ Legislative Body
  - ✓ Code Enforcement Officer
  - ✓ Zoning Board of Appeals
  - ✓ Planning Boards
  - ✓ Town Attorney & Municipal Engineer
  - ✓ County Planning Board
- ✓ SUP & Site Plan Review Process
- ✓ Administration of the New York Uniform Fire Prevention and Building Code
- ✓ New York State Environmental Quality Review Act (SEQRA)

Application requirements for solar energy systems should include:

- ✓ Special Use Permit
- ✓ Site Plan Set
- ✓ Pre-development Site Conditions
- ✓ Construction Schedule
- ✓ Wetland Mitigation
- ✓ Drainage Mitigation Plan/ SWPPP
- ✓ Equipment Specification Sheets
- ✓ **Abandonment & Decommissioning Plan/Agreement**
- ✓ **Property Operation & Maintenance Plan**
- ✓ CESIR – Coordinated Electric System Interconnection Review
- ✓ Viewshed/Line Analysis
- ✓ Noise Study/ Glare Study
- ✓ Host Community Agreement/ PILOT Program
- ✓ Road Use Agreement
- ✓ Additional Environmental Reports





SOLAR PROJECT PLANNING RUBRIC

Project Considerations	Site Details	Point Value	SCORE
Another Available Site	No	1	0
	Yes	0	
Site Reuse	Brownfield	4	0
	Industrial	4	
	Rooftop	4	
	None/New Open Space Land	0	
Active Agricultural Land	0-5%	4	3
	6-25%	3	
	26-50%	2	
	51-75%	1	
	76-100%	0	
Viewshed	Not viewable from any road	4	2
	Viewable from Town Road	3	
	Viewable from County Road	2	
	Viewable from State Road	1	
Slope of Site	15-20%	4	
	8-15%	3	
	3-8%	2	
	0-3%	1	
Position within Site Acreage	Along one side with ready access	4	4
	Along the back of the property with no ready access	3	
	Along roadside	2	
	In the middle with no ready access	1	
Unique Land (and/or) Land of Statewide Importance	No	1	1
	Yes	0	
Tree Clearing on Site	0-5%	4	3
	6-25%	3	
	26-50%	2	
	51-75%	1	
	76-100%	0	
Alignment with Municipal Comprehensive Plan	Yes	1	1
	No	0	
Compliance with Municipal Solar or Site Plan Review Law	Completely	2	2
	Requires changes to comply	1	
	Not compliant	0	
SCORE			16

Point Value	Approval Status
22-28	APPROVAL
10-21	APPROVAL WITH MODIFICATION(S)
0-10	DISAPPROVAL

Guidance Tool for Planning Boards

- Visualization and consistent review of key community considerations
- Cleanly depicts areas of concern

Operation & Maintenance Plan

Operations & Maintenance Plan

COMPONENTS:

- ✓ Staffing Levels
- ✓ 24-Hour Staffing
- ✓ Outside Hiring
- ✓ Warranty/Contingency Plan
- ✓ Annual/ Routine Scheduled Maintenance & Equipment Testing Plan
- ✓ Unscheduled Maintenance
- ✓ Security Plan
- ✓ Safety Protocols
- ✓ Emergency Procedures & Contacts/ Plan
- ✓ Local Authorities
- ✓ Stakeholders
- ✓ Project/Site Specific Plan
- ✓ Agricultural Management Plan

Decommissioning plans & agreements

Decommissioning Plans & Agreements

- Decommissioning and Site Reclamation Plan (Decommissioning Plan) describes the Applicant's decommissioning and site reclamation strategy for the Project area after the solar generating facility permanently ceases operation.

- Permanent closure would typically occur as a result of facility age, damage beyond repair to the facility, economic conditions, abandonment or other reasons as specified within the adopted solar law.

- The Decommissioning Plan addresses dismantling, and removal of project components and reclamation of areas disturbed over the life of the Project. Reclamation would primarily be accomplished through revegetation.

- A Decommissioning Agreement is part of the local legislative approval process or as a condition of approval of a site plan and/or SUP. This requires an owner, lessee, or developer of real property subject to this section to enter into a written agreement to decommission solar energy equipment, facilities, or devices and restore the property back to original conditions.

Decommissioning Plans & Agreements

- **Decommissioning Plan Requirements**
- Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no operation for 12 months, Abandonment, prior written notice to facility owner, etc.).
- The party responsible for decommissioning.
- A detailed schedule for removal of all utility equipment, conduit, structures, fencing, roads, and foundations.
- A detailed schedule for restoration of property to condition prior to solar development.
- Timeframe for completion of decommissioning activities including restoration.
- **Description of any agreement (e.g., lease) with landowner regarding decommissioning.**
- Plans for updating the decommissioning plan.
- Decommissioning Cost Estimate

Pre-construction Meetings

Appendix D	
Critical Milestone Schedule	
Lake RD Solar	
Rev. 02/02/2024	+8 Weeks
Owner	**Rev. 1 Date**
Earliest Contractor Project Site Access	05/27/24
Contractor	**Dates**
Milestones	
LNTP	
Building Permit Submission (Namaste)	02/15/24
Building Permit Approval	04/17/24
Full NTP	05/27/24
Interconnection Submittals Submitted	02/26/24
Interconnection Submittals Approved	07/27/24
Engineering IFC Packages Complete	04/26/24
Long Lead Procurement Complete (Contractor Items)	05/20/24
Construction Permits Submitted	02/26/24
Construction Permits Received	05/20/24
Mobilization	05/27/24
Surveying & SWPPP BMP Installation Complete	06/05/24
Access Roads and Laydown Area Complete	06/15/24
Site Grading Completed	06/15/24
POI Equipment Foundation, Collection Conduit, and Conductor Installation Complete	07/27/24
Equipment Pads and Inverter Install (not wired) Complete	07/27/24
Foundation Installation Complete (BOS Equipment/Racking)*	07/29/24
Solar Racking Installation Complete*	08/05/24
Solar Module Installation Complete*	08/12/24
DC Wiring / Terminations & CAB Complete 100%	08/26/24
AC Wiring / Terminations Complete	09/26/24
Commissioing Start	09/26/24
Interconnection - Ready for Backfeed	
Mechanical Completion With Inspections	10/27/24
Guaranteed Provisional Acceptance Date	11/10/24
Guaranteed Final Acceptance Date	12/27/24

Pre-Construction Meeting Checklist

- Project Contacts
- Approvals & Agreements
  - DEC/ACOE Wetland Permits
  - Decom Agreement/Bond or Surety
  - Final site plan signed
  - 5-acre waiver
  - Ag & Markets Prelim/Final NOI, SHPO, USFW
  - Road Maintenance Agreement/Bond
- CESIR
- PILOT
- Easement filing (if applicable)
- Permits: Driveway, grading, building (as applicable)
- Project Schedule
- Utilities
- Change Orders
- Safety
- Observation/testing/Inspections
- Cleanup and Closeout

Solar Project Financial Considerations

Solar Assessment Tool

- Recently ruled unconstitutional
  - Appeal in process
- Led to lower assessments when used
- Assessment was prone to annual tool updates
- Some developers shifted away from PILOTs as abatements didn't sufficiently outweigh costs

2024 Solar and Wind Appraisal Model — Blue cells require user input

March 27, 2024

Inputs for All Project Revenue Types		
Project Revenue Type	VDER - Value of Distributed Energy Resources	
Plant Type	Solar - Tracking	
System Size	5,000	kW AC
Start Date of Plant Operation	1/1/2023	
Taxable Status Year	2024	
System Age at Taxable Status Date	1	Year(s)
Before Tax Discount Rate - Real WACC	6.68%	
Tax Load	3.00%	
Loaded Real Discount Rate	9.88%	
Annual Ground Lease Payment (if applicable)	$5,000	
Annual Ground Lease Escalator (if applicable)	2.00%	

Additional Required Inputs for VDER Projects		
NYISO Zone	A - West	
Utility Company	NYSEG	
DRV Rate	$0.0890	$/kWh
Default Maximum MTC/CC	$0.0314	$/kWh
Additional Optional Inputs for VDER Projects		
Actual Market Transition or Community Credit		$/kWh
or Community Adder/ICSA		$

Note: The model assumes that VDER projects receive the maximum possible Market Transition Credit (MTC) by default, but allows a lower MTC or Community Credit (CC) or a Community Adder (CA) to be entered to override the default assumption.
VDER projects may receive either a MTC, a CC or a CA. No VDER project can receive more than one of these credits, and some VDER projects receive none of them. VDER projects may also receive the Inclusive Community Solar Adder (ICSA). If applicable, the ICSA should be added to the CA (if any) and the combined CA and ICSA value should be entered into cell C23.

Agricultural Land Tax Liability

- Only the case for parcels that received an agricultural assessment in last 5 years within agricultural districts or during the last 8 years outside of agricultural districts.
- Recapture payment = 5x taxes saved in most recent year from agricultural assessment, plus interest
- Interest = 6% of recapture payment, compounded annually for each year land received an ag. exemption, for up to five years
- Levied in addition to property taxes
- Can lead to tax foreclosure if not paid

Sales Tax Exemptions

- NYS exempts equipment and machinery used in the production of energy from State sales tax
- The IDA sales tax exemptions can also provide leverage for IDAs to seek higher PILOT amounts by reducing the upfront costs of the development

PILOTs for Solar Projects

About

- Many provide a predictable property tax schedule
  - Per MW charge with annual escalator
- Typically full taxes are paid on land value, then PILOT applies to solar facility
- Does not cover special district taxes, those are paid in full
- PILOT negotiations and decisions should focus on the financial aspects of the project, not components addressed by local law or SEQR

Municipal vs. IDA

- Municipal
  - Can have lower upfront administrative fees
  - Set at 15 years
  - All taxing jurisdictions involved
- IDA
  - Flexible timeline
  - Other tax incentives available (sales tax)
  - Negotiating with single entity

Example PILOT Structures

- IDAs – per MW annual charge with escalator
  - Standard payment
  - Case-by-Case
- Municipal – varied structures
  - PILOT vs. HCA vs. Combo
  - Annual vs. upfront

- If IDA does PILOT, municipality can still seek an HCA

IDA PER-MW PAYMENT OVERVIEW		
	Payment Range (per MW per year)	Method
Cortland County IDA	$1,500-$5,500	Case-by-case determination
Wayne County IDA	$6,000	Standard payment for all solar projects
Chemung County IDA	$8,000	Standard payment for all solar projects, set by UTEP
Schuyler County IDA	$4,500-$10,000	Case-by-case determination, aided by scoring rubric

MUNICIPAL PER-MW PAYMENT OVERVIEW		
	Payment Range	Method
Town of Union	$22,000 per MW (one time)	Upfront HCA payment stipulated by solar policy, no PILOT
Town of Mt. Morris	~$1,500 per MW (annual)	Case-by-case PILOT determination for smaller projects (around 5MW)
Town of Mt. Morris	$240,000 HCA flat fee and $2,700 per MW PILOT (annual)	Example for a larger project. Both HCA and PILOT are paid out over 20-year term, escalated at 1-2% annually.
Town of Avon	$25,000-$35,000 per MW (one time)	Case-by-case determination, upfront HCA
Town of Avon	$60,000 HCA flat fee (one time) and $750 per MW PILOT (annual)	Upfront HCA payment, 15-year PILOT with 3% annual escalation.

Host Community Agreements for Solar Projects

- Negotiated between individual municipality and developer
- Payment(s) made directly and specifically to municipality in addition to property tax
- Upfront payment or annual payments over a set period
- Do not impact tax cap formulas
- Payments usually based on dollar per MW basis
- Can be used alone or alongside PILOT

PILOT Recommendations

- Centralize the negotiation process
- Continue to aim for ~$8,000 per MW - based on surrounding communities
  - Given accounts of developer push back, perhaps incorporate an HCA into this amount, so the PILOT plus the HCA is $8,000 per year
  - If HCA is an upfront payment, calculate the net present value
- If developer pushes back, put onus of proof on them to verify that they cannot afford the amount
  - Engage a third party to do a test of reasonableness, developer pays for that

MRB Group

THANK YOU

Questions?