



Genesee Road Solar Energy Center

Virtual Open House Meeting

November 10th, 2020



Virtual Open House Agenda



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About EDF Renewables

Project Overview & Update

Permitting Update & Schedule

Frequently Asked Questions/Topics

Community Benefits

Question & Answer Session



About **EDF Renewables**

These principles reflect our promise to our host communities, landowners, and other stakeholders.

EDF Renewables is committed to:

- Honesty and transparency in all our development activities
- Engaging with all stakeholders and remaining open to taking input that will improve projects and mitigate impacts
- Being present and available in the community to ensure all voices are heard
- Treating landowners, host communities, and stakeholders fairly and equitably.



Our Commitment to **Ethical Development**



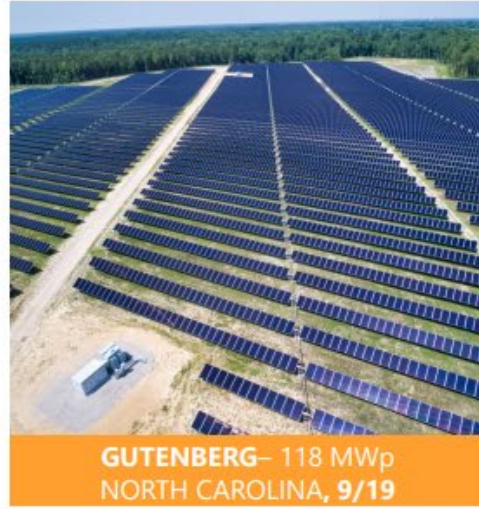
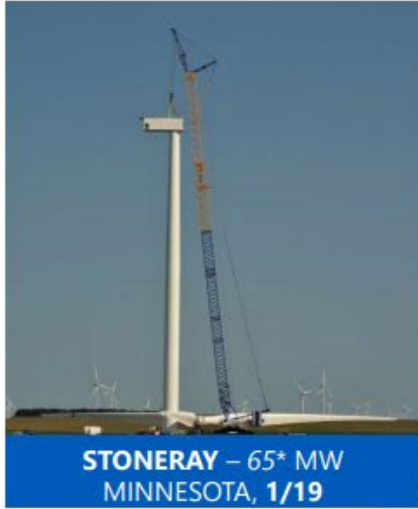


**Building trust in
communities for
34+ years**

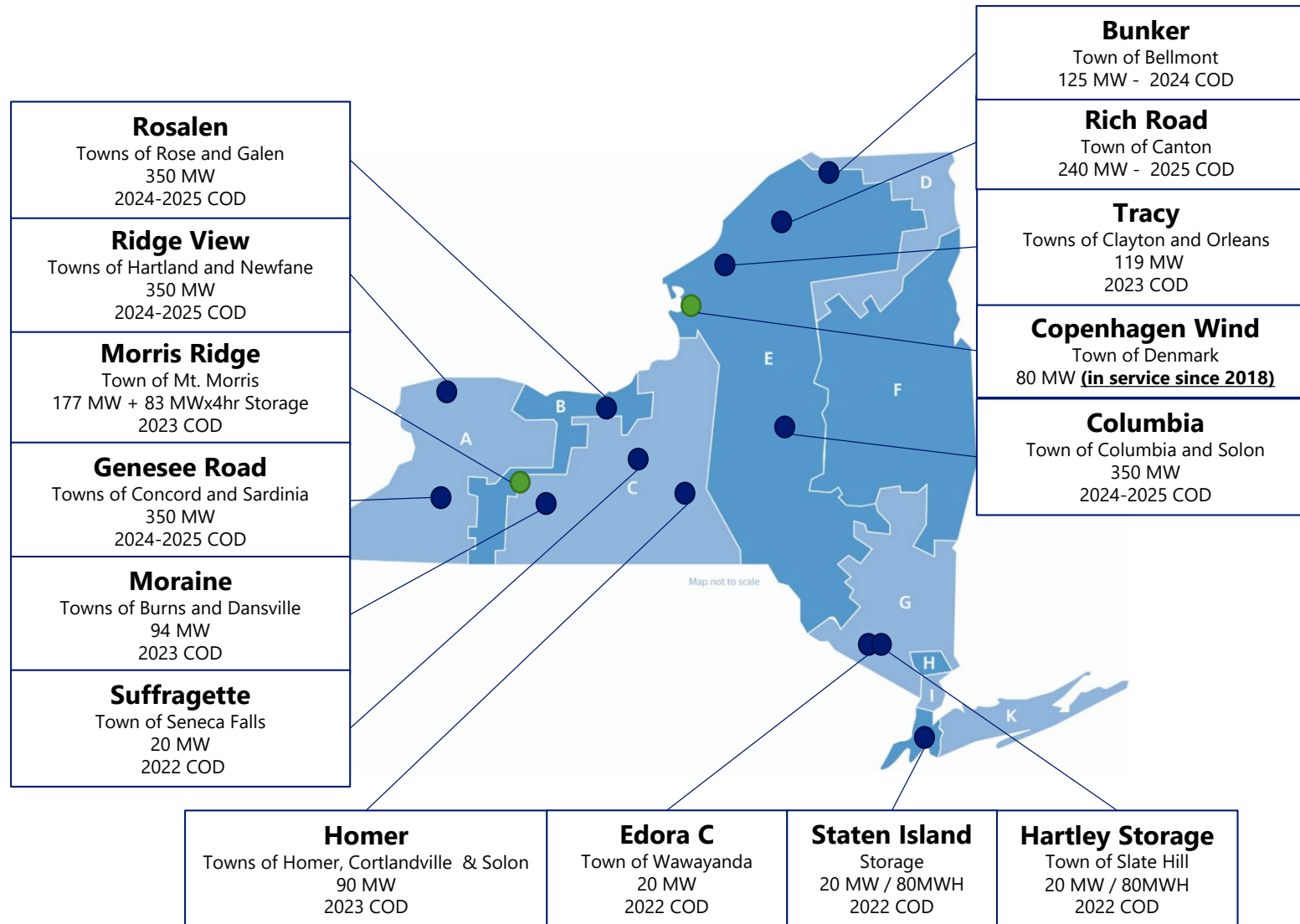
Why trust EDF Renewables?

- Operating for more than 34 years across the country
- More than 1,000 employees, is one of the largest renewable energy companies in North America
- Committed to building long standing trustworthy relationships in your community
- Largest operations and maintenance team in North America – we strive to be in your community for the long haul
- Committed to Health, Safety and the Environment through training, community communication and collaboration, and committed employees

2019 Placed in Service



Statewide Development Pipeline





Project Overview & Update



OVERVIEW

Project Name: Genesee Road Solar

Project Owner: EDF Renewables

Project Partner: Storke Renewables

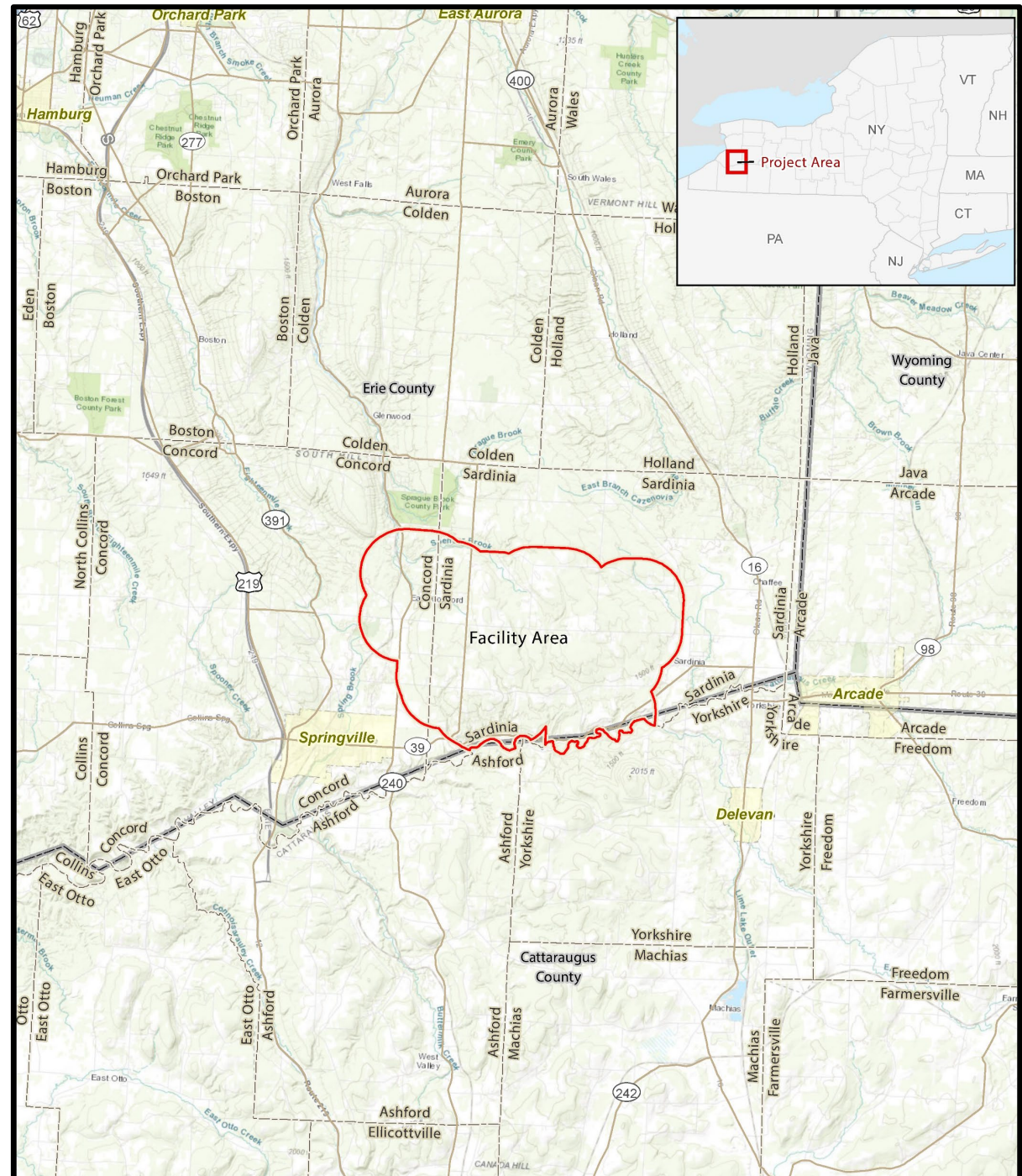
Host Municipality: Sardinia & Concord

Renewable Source: Solar

Proposed Capacity: 350 MWac

Proposed Land Use: ~ 2,000 acres

Connection Point: 345 kV transmission line bisecting the area; a new substation will be built to connect the project to the State's electric grid



WHY DID WE CHOOSE THIS LOCATION?

SUPPORTIVE COMMUNITIES:

- Both towns support the development of solar projects

AVAILABLE LANDS:

- Project sited on mostly cleared lands, limiting environmental disturbance, facilitating project permitting

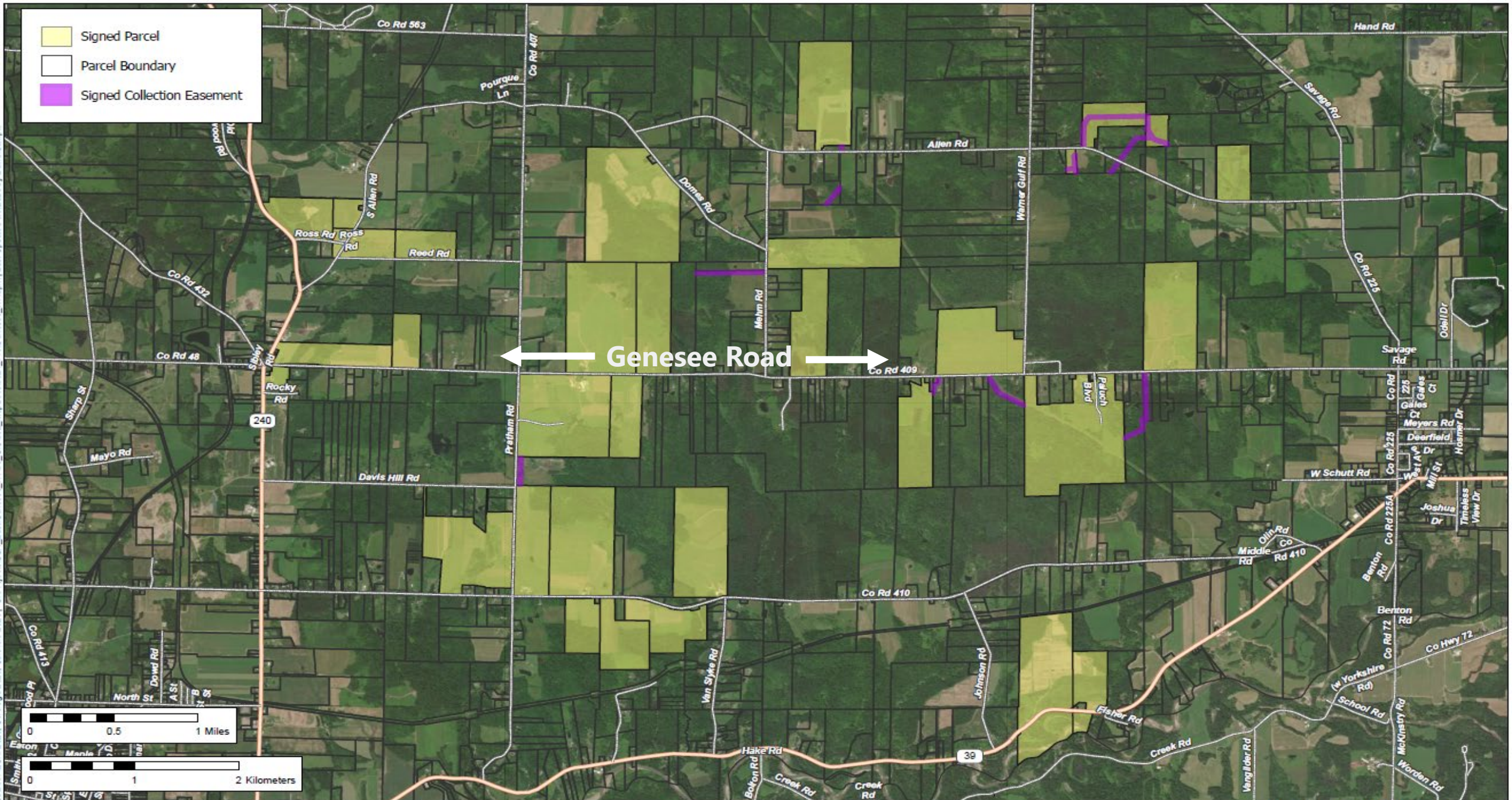
PROXIMITY TO TRANSMISSION LINE:

- Located adjacent to NYSEG "Southwest to Stolle Road" 345kV line with adequate capacity

Land **Development**

- **2319** acres under lease
- About 1/3 not ideal for construction due to wetlands, topography, and dense forest.
- Need to maintain excess lands to have the flexibility to reduce environmental and neighborhood impact. Ex: buffer zones, lower amount of tree clearing, visual mitigation.
- Due to increased solar module efficiency, around 1800-2000 acres will ultimately be used (down ~10-15% from initial estimates)
- **14** easements signed. This represents about 50% of required routes.
- Looking at options for moving substation as this was a community concern in public comments

- Signed Parcel
- Parcel Boundary
- Signed Collection Easement



← Genesee Road →

Covid 19 Update

- Some delay attributable to covid on overall schedule
- Difficulty reaching landowners and doing signings due to travel restrictions in spring/early summer
- Limitation on public meetings
 - Continuing
- For all field work occurring today, EDFR following NYS approved work plans and high safety standards
- Webinars for public interaction – **let us know if we should continue!**



Permitting Update & Schedule

Article 10

- PSS stage completed
- Public comments received & responded
- Helped us understand the concerns of the community
- Initial round of intervenor funds distributed
- A new State permitting process is replacing Article 10 called "94C" overseen by a new office called the Office of Renewable Energy Siting.
- Plan to officially "exit" Article 10 around the end of 2020.

New 94C Permitting Process

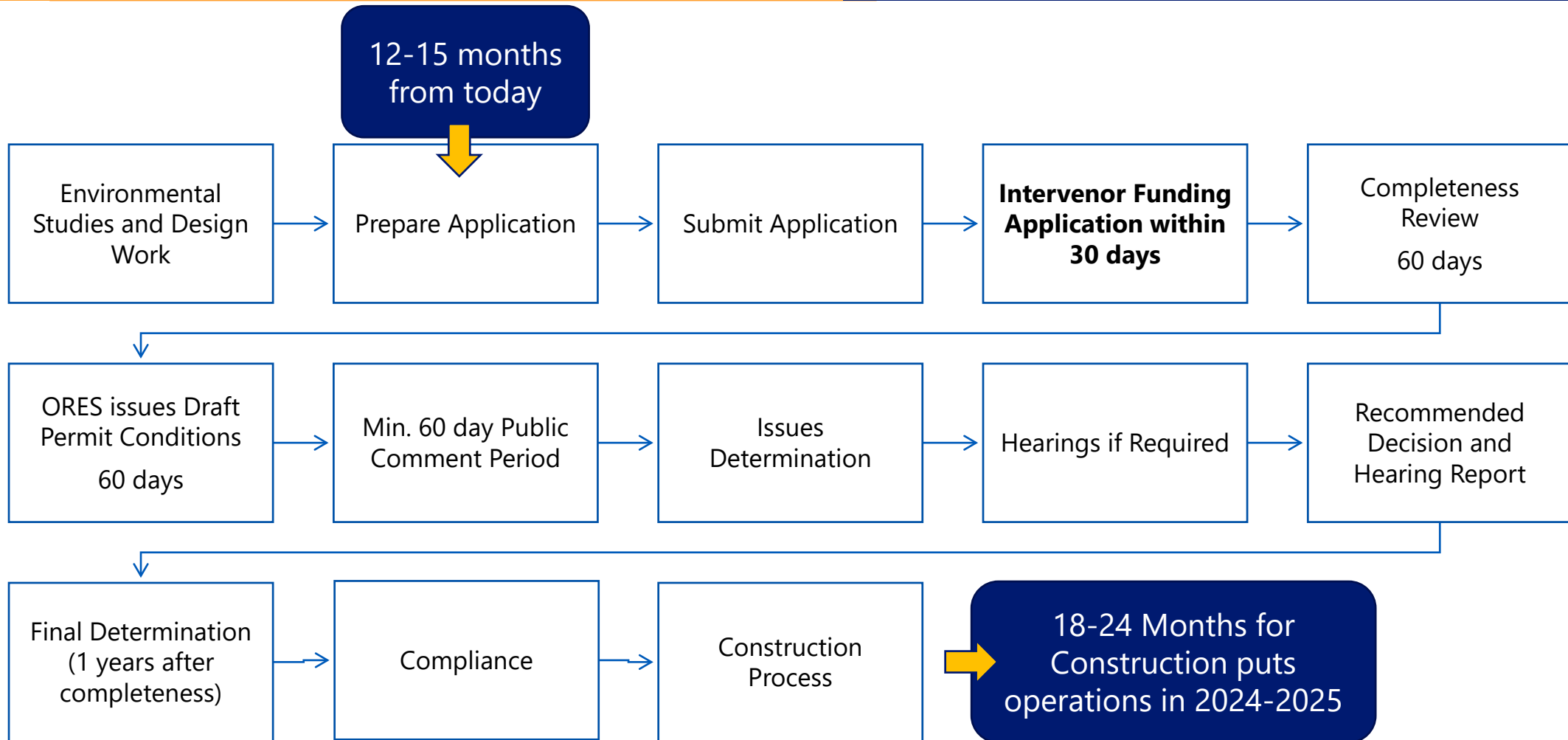
And the creation of new
'Office of Renewable Energy Siting'

- Draft regulations issued in September; public comment period until December. Final regulations expected early in 2021.
- Standardized conditions for solar projects to meet
- Level of environmental studies, design, engineering, largely unchanged, however, more detailed design drawings required.
- Early coordination on environmental impacts & reports required
- Adherence to local zoning laws still required but a waiver is available like Article 10.
- PIP and PSS phases not included. **We are committed to continuing the public engagement as outlined in the PIP.**
- One-year timeline for approval following a completeness determination (roughly 60 days following an application)
 - Still at least 1 year of work to prep an application
- \$1,000/MW fund for intervenors & towns

Environmental Studies Progressing

- Winter raptors bird studies
 - NYSDEC approved survey plan
 - The 2 state listed species in the area we were primarily looking for were Short Eared Owl and Northern Harrier.
 - Around 80 hours of survey time. **No observations**
- Geotechnical testing
 - Tested six (6) properties for a preliminary geotechnical guide
- Winter Sound
 - Background sound monitoring
- Winter Visual
 - Leaf-off photos for visual simulations

Permitting TIMELINE





Frequently Asked Questions & Topics

Electricity without emissions & pollution

Safe and non-toxic materials

The modules are comprised of silicon, copper, and aluminum between glass and plastic with an aluminum frame.

These types of solar modules cannot release any toxic materials

No risk for the environment

Inverters and Transformers used to condition power for use on the grid do not contain heavy metals or toxins. Even during a malfunction or when damaged, no environmental risk is present.

Promoting Native Plant Species & Pollinators

Native vegetation to support wildlife & pollinator species in the area.

No pesticides or herbicides are used in solar array areas unless mandated by environmental agencies

- For example if invasive plant species were to develop in the area
- Within substation, herbicides are required by code to ensure plants do not grow into electrical equipment & cause a fire.



Solar -
**Emissions
Free Power**

Solar Facility Operations – 24/7/365



- EDF Renewables will have a local team of operations personnel to monitor and maintain the system to the highest of standards.
- Emergency Preparedness and Response Plan will be written with feedback from the first responder community.
- Training of Local First Responders prior to installation and annually thereafter.
- The facility **will be monitored** 24/7 365 days per year from operations control center in San Diego California.
- Maintain electronic cyber and physical security perimeter requirements.
- Disaster Recovery plan in place to mitigate remote monitoring impacts, including redundant co-location servers, backup power to support 48-72 hours of power should there be a local utility outage and network connectivity redundancy.



EDF Renewables' 24/7 NERC-compliant operations control center located in San Diego, CA, where remote monitoring, diagnostics, troubleshooting, and cybersecurity measures are implemented for all wind and solar power farms under operation

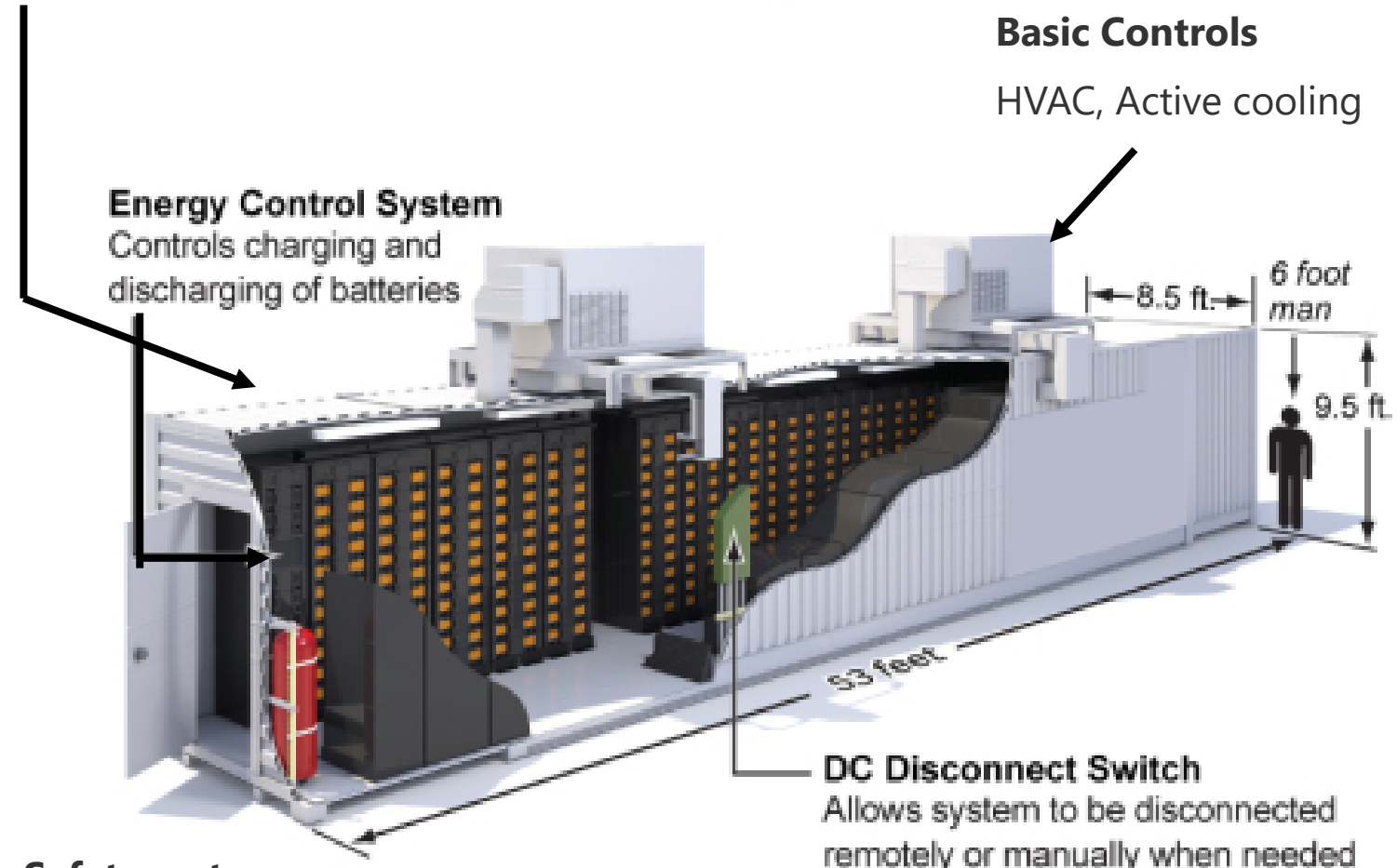


ENERGY STORAGE

- Project may include energy storage in addition to solar.
- Designed to store electricity until more suitable to inject onto power grid
- In 2019, an Energy Storage System Supplement was added to the New York State Uniform Fire Prevention and Building code
- New York now has some of the strictest design & safety standards for energy storage in the nation.

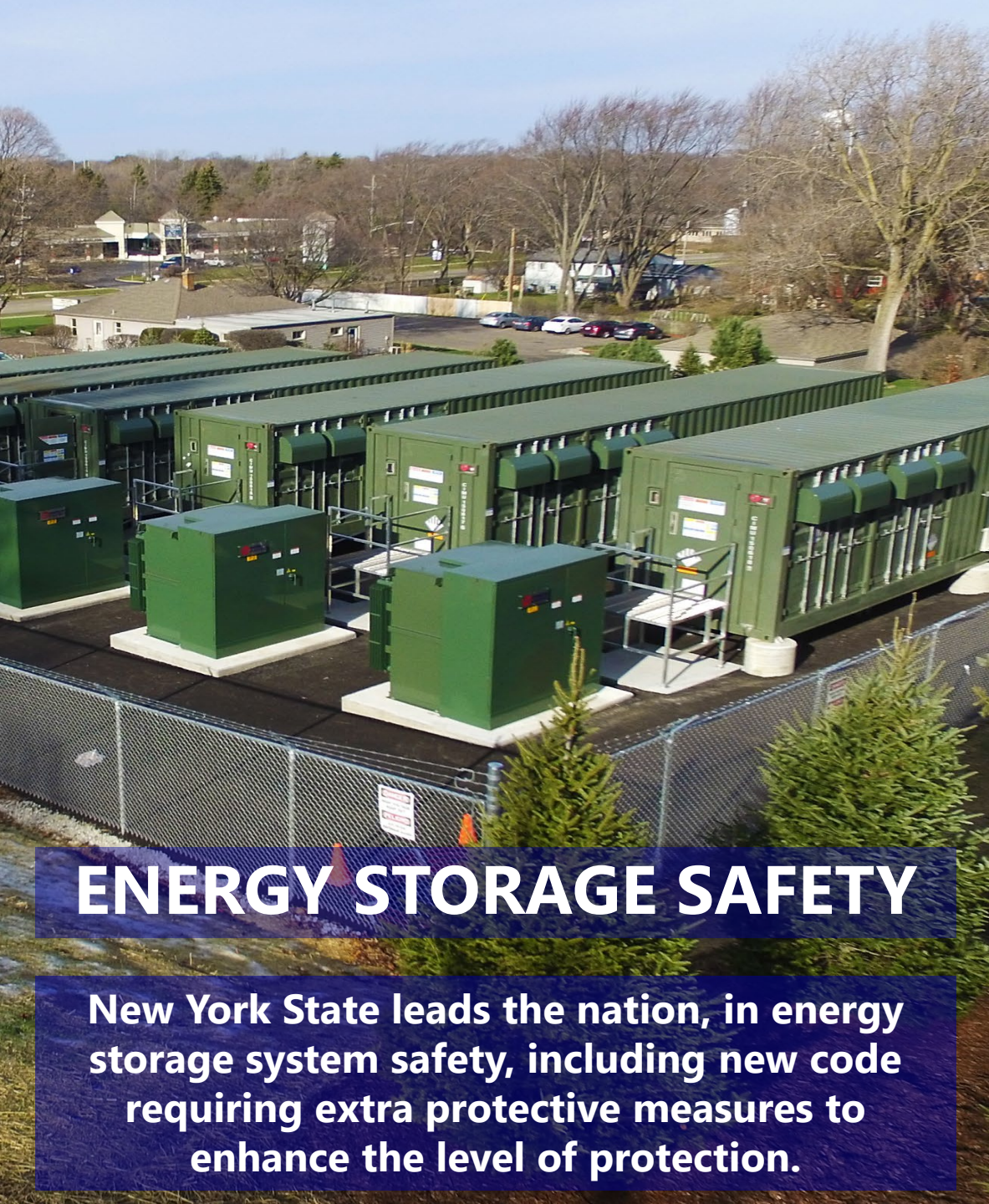
Battery cells

Combine to create modules, and are stored on racks



Safety systems

System is constantly monitored and can automatically isolate parts or whole system



ENERGY STORAGE SAFETY

New York State leads the nation, in energy storage system safety, including new code requiring extra protective measures to enhance the level of protection.

- Technology has been in place for years
- New York leads the nation in safety
- Becoming common for integration in renewable energy projects across the U.S.
- Li-ion batteries similar to those found in everyday electronics
- Often co-located in cities and residential neighborhoods (e.g. NYC)
- Local team of operations personnel to monitor and maintain the system to the highest of standards.
- An Emergency Preparedness and Response Plan will be prepared with feedback from the first responder community.
- Training of Local First Responders prior to installation and annually thereafter

Adjacent Land Impacts



- Impact to adjacent properties studied in 94C permitting process.
- Sensitive visual areas such as residences near the project area to be protected from view impacts with vegetative screening such as evergreen plantings.
- No increase in noise impacts during operations and limited noise impact during construction.
- Construction work limited to daytime operations.
- Delivery routes planned in advance to reduce impact
- Existing tree buffers to remain to the extent feasible or be replaced
- Setbacks from adjacent properties
- Seven-foot-tall fencing
- Substation placed as far from road & visual receptors as possible.

Visual Buffering

- EDF Renewables integrates projects into the local community through thorough community engagement.
- Stakeholders have the opportunity to communicate their interests for integration into the project design.
- Most of the land beneath and around solar panels remains unused and can accommodate vegetation in the form of grasses, clover or cultural meadows.

Visual buffering, as demonstrated here, can be integrated to reduce the project view from neighboring homes and roads. Original view without visual buffer on the left. Note: trees usually 2-4 ft high at planting and will grow to heights indicated above in 5-10 years.



Solar Grazing

Arnprior Solar Project added a number of biodiversity and environmental features.

They include the integration of monarch butterfly conservation, bees and honey production and sheep grazing.

100 pregnant
ewes brought to
site in mid-May

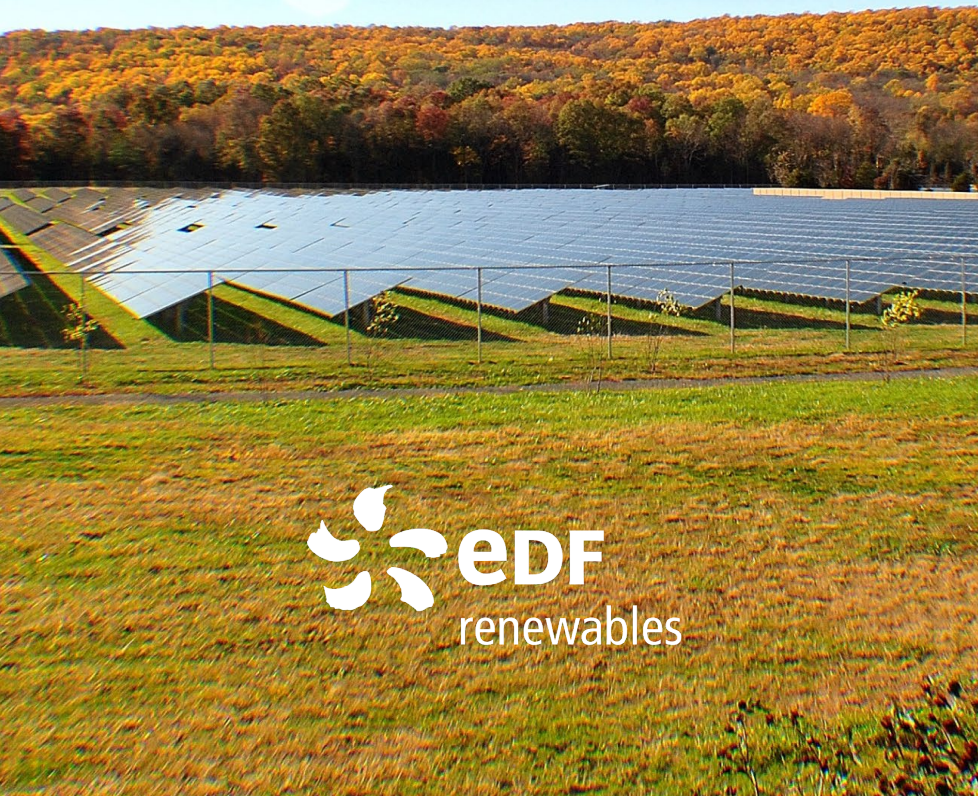
About **10**
lambs born
every day

By end of
June, **~300**
sheep on-site

For the first time,
farmer will be able
to sell **grass fed,**
free range lamb

Partnership with
Arnprior Solar offers
opportunity to grow
farmer's business
while reducing site
mechanical mowing
– **a true win-win!**

Hunting Around Solar Facilities



- We trust hunters to act in a safe and responsible manner as they would on any property.
- As such, no setback required from facilities for hunting.
- Use common sense and best practices to prevent stray bullets or accidental firing onto the facilities
- Communication is key
 - Numbers will be posted at visible areas around the facility fence to reach out to our operations team at any time
 - 24 hours per day / 7 days a week and speak to a live voice



Decommissioning & Restoration

Decommissioning is the process of removing equipment (solar panels, inverters, transformers) and improvements (roads and fences) and returning the land to original condition.

- Decommissioning of the project is planned from the start, expected in year ~35-40 of the project's life
- Article 10 and local laws require a security, typically in the form of a letter of credit, to be posted to cover the cost to decommission the facility, prior to the start of operation
 - The Host Communities and the State will have access to this letter of credit
 - The amount will be adjusted based on inflation over time
- Where the land was previously used for agriculture, any topsoil that was removed or disturbed during the construction, operation or decommissioning of the solar facility is replaced, aerated, and the land can be returned to farming



Community Benefits

Many Layers of **Economic Impacts**



LEASE PAYMENTS

Annual \geq \$2M and increasing over time



PILOT & Other Taxes

Benefits county, towns, schools, and special districts like Fire Dept.

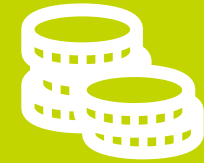
Starting at \$1M per year and increasing over the term of agreement



JOBS

Up to 300 construction and 4-5 permanent jobs

Local Spending from employment boost (hotels, restaurants, service providers)



LOCAL IMPACTS

Subcontractors, equipment suppliers, local vendors, skilled trades, high paying jobs

THE OPPORTUNITY OF RENEWABLE ENERGY

- In 2018, the solar industry generated **a \$17 billion investment in the American economy.**
- Average annual growth rate of 50% over the last 10 years
- **Solar Installer is #2 fastest growing job** in 2019-2020 from Bureau of Labor Statistics
- Generates enough electricity to power more than 12.3 million homes
- Solar generation offsets more than 73 million metric tons of CO2 emissions each year, equivalent to taking 15.6 million vehicles off the road
- **Solar employment grew about six times faster** than the overall U.S. economy from 2013-2019

Clean Energy Wages

Clean energy workers enjoyed **wage premiums of 12%–32%** for entry-level and mid-range skill levels as compared to other industries. About **70%** of clean energy employees **received healthcare, retirement, and paid vacation.**

New Revenues for the Community

Long Term PILOT and Host Community Agreements

- Split between Towns, County and Schools
- Covers value of the project's equipment
- Plan to propose \$2,500/MW, equal to \$875,000/year
- **Increase in local revenues with no additional municipal costs**

Increased Tax Revenues on Land

- As agricultural exemption is removed, a 5-year tax payment equal to the amount of the exemption is paid
- Going forward, land is assessed at full value, resulting in a boost to the tax base.
- More than \$50,000/year

Special District Taxes

- Large contributions by the project so special district tax rolls, ex: Fire Departments, Light Districts, etc. as applicable to the project lands.
- Additional \$60-\$75,000/year

Community Benefit Fund

- \$20,000 per year for the initial 10 years of the project
- Run by members of the community with the help of the local project team
- Donations chosen by local community representatives
- Distribute funds to local civic groups, nonprofits, projects, or other beneficial community programs in the Towns of Sardinia and Concord



Question & Answer



Thank You!

Please feel free to type questions in the zoom chat.

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This is Lyla, one of two sheep dogs on site at EDFR's Arnprior Solar Energy Center helping manage over 300 sheep on site.