

Renewables

# Liberty Power



Deerfield Wind II Energy Project, Huron Township



# Agenda

1. **Introduction** – Roberto Caputo
2. **Who we are** – Roberto Caputo
3. **Community Benefits** – Roberto Caputo
4. **Proposed Project Details and Area** – Roberto Caputo
5. **Anticipated Project Schedule** – Roberto Caputo
6. **Environmental Planning and Permitting** – Bourke Thomas
7. **Communication Interference** – Gaetan Mercier
8. **Sound Modeling** – Aren Nercessian



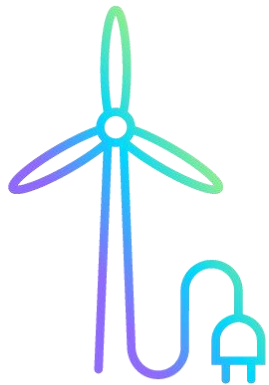
# 1. Introduction

## Algonquin Power (d/b/a Liberty Power) Representatives

- Roberto Caputo (Project Manager)
- Olivia Neter (Environmental Planner)
- Gaetan Mercier (Director, Planning and Permitting)
- Adam Greene (Site Manager, Wind)
- Brett Manzara (Senior Manager, Land & Stakeholders)

## Project Application Contributors

- Timothy Jones (Atwell)
- Bourke Thomas (Atwell)
- Aren Nercessian (DNV GL)
- Gabriel Constantin (DNV GL)
- Matt Zimmerman (Varnum LLP)
- TJ Elenbaum (Sr. Land Acquisition Consultant)



## 2. Who we are

We are Liberty originally founded as Algonquin Power & Utilities Corp. (APUC) was established in 1998 as a developer of small hydroelectric projects in Ontario.

APUC was publicly listed as a common share on the Toronto Stock Exchange in 1997 and in 2016, was publicly listed as a common share on the New York Stock Exchange.

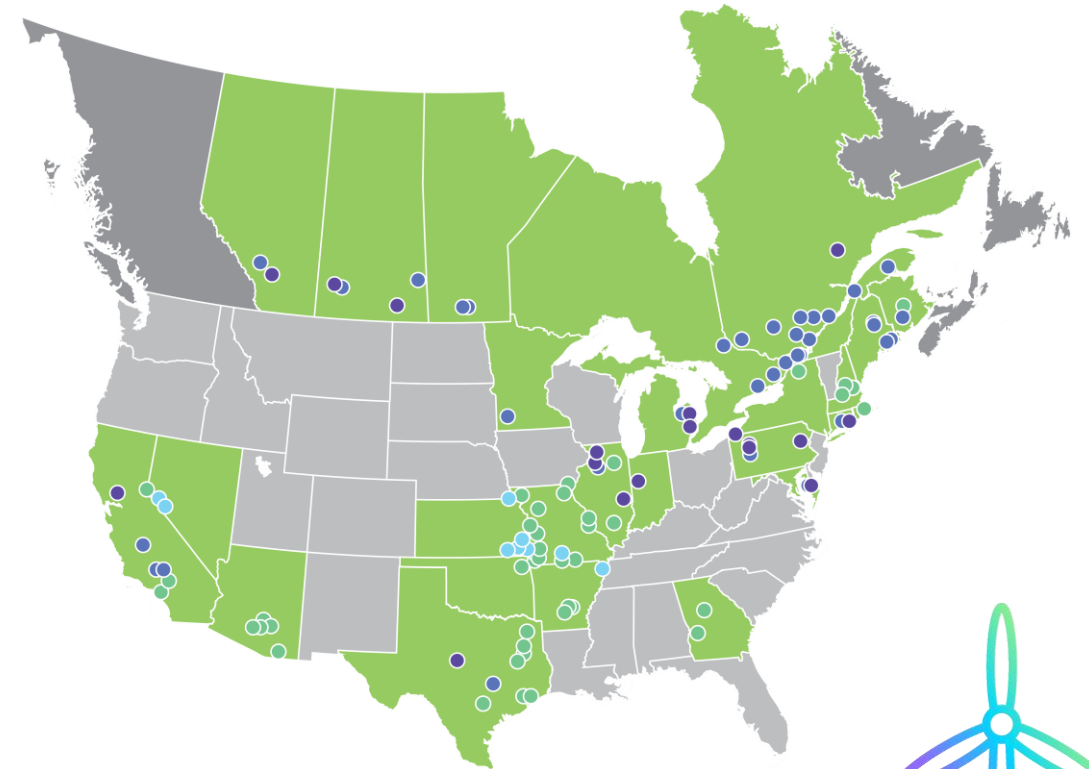
Since then, Algonquin has expanded into the utility business through Liberty Utilities, and has become a market leader in renewable generation through Liberty Power. APUC is located in 19 states and 6 provinces with approximately 2400 employees in total across the company



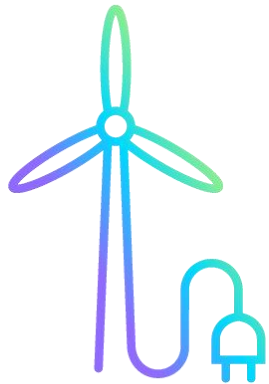
Liberty Utilities provides regulated water, natural gas, and electric utility services to over 800,000 customers through operations in 13 U.S. states.



Liberty Power Co. owns and has interests in a portfolio of North American renewable and clean energy power generating facilities representing over 1.5 GW of installed capacity.



LEGEND	
●	Transmission and Distribution Utility
●	Rate-based Generation
●	Operating Facility
●	Development Project





## 3. Community Benefits

1. **Green energy for equivalent capacity to power approx. 100,000 homes.**
2. **Support of State of Michigan Portfolio Standard of renewables to provide 35% of the State's energy needs by 2025.**
3. **Support of renewable energy helps to reduce carbon emission footprint**
4. **Community Support**
  - \$2,500 donation to the food bank (Elkton Lions club) on May 13th
  - Added revenue to Huron Township
  - Addition of high paying jobs
  - Community royalty benefits

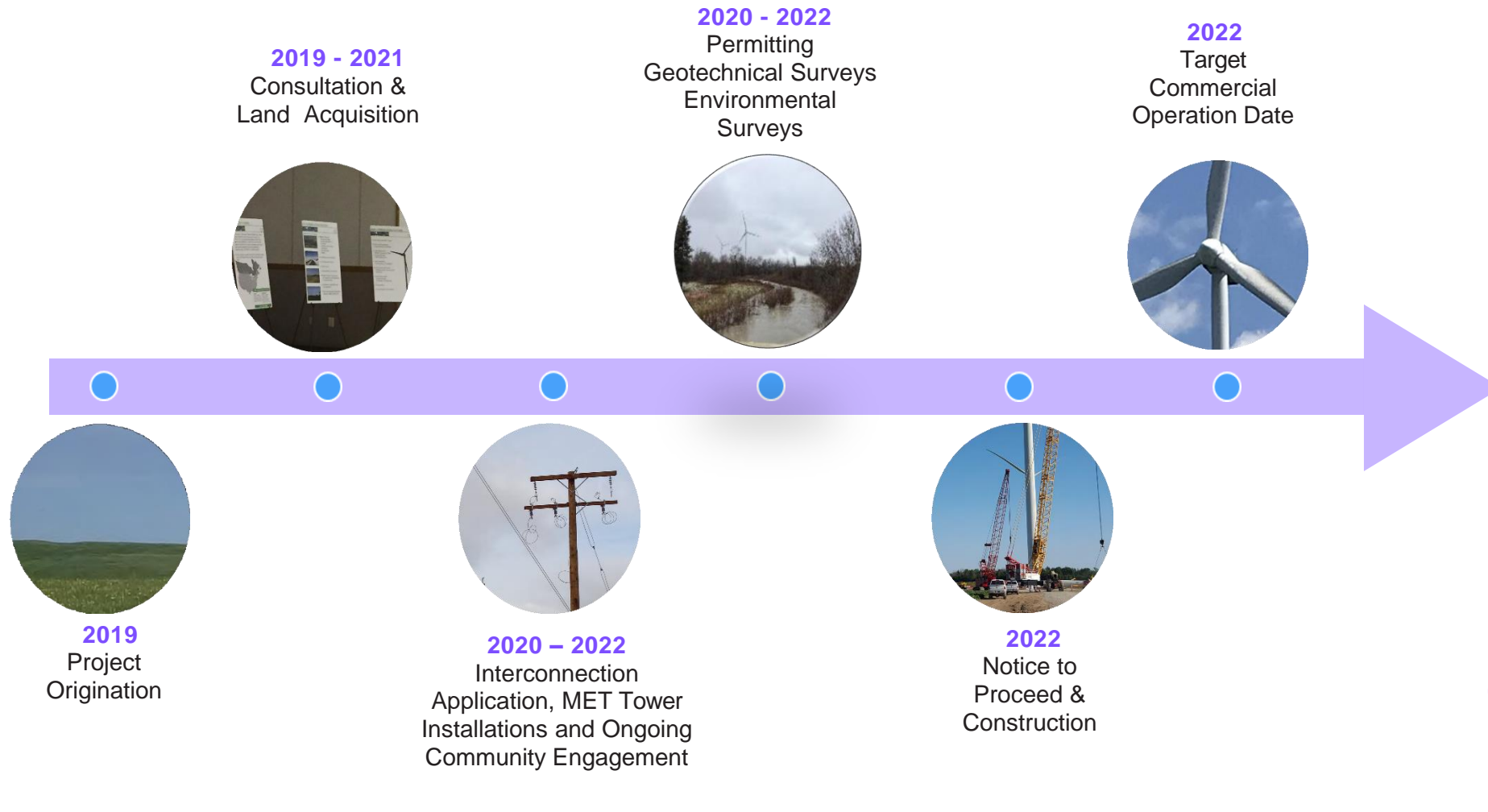


## 4. Proposed Project Details and Area

1. **Number of Turbines:** Planning up to 21 turbines within Huron Township.
2. **Turbine Capacity:** Turbine technology is continuously evolving, Project planning to install turbines with sizes between 2.65 MW and 6MW in size.
3. **Turbine Hub Height:** Proposed range between 263 – 390 feet.
4. **Zoning Ordinance:** Layout complies with all applicable zoning ordinance requirements.
5. **Shadow Flicker:** Completed Modelling Study.
6. **Huron Township Land:** more than 80 participating landowners ( approx. 8,500 acres), turbines to occupy less than 10 acres of land.



# 5. Anticipated Project Schedule



# 6. Environmental Planning and Permitting

- **Desktop Review and Preliminary Site Evaluation**
- **Site Characterization Study was completed**
- **Environmental field surveys:**
  - Wetland delineation – summer and fall of 2020
  - Watercourse assessment – summer and fall of 2020
  - Threatened and Endangered species habitat assessment – summer and fall of 2020
  - Pre-construction Avian Studies – started in 2019 and will continue into early 2021
  - Bat acoustic surveys – summer and fall of 2020
  - Cultural and pedestrian survey – summer and fall of 2020
- **EGLE, MDNR, and USFWS coordination is ongoing**

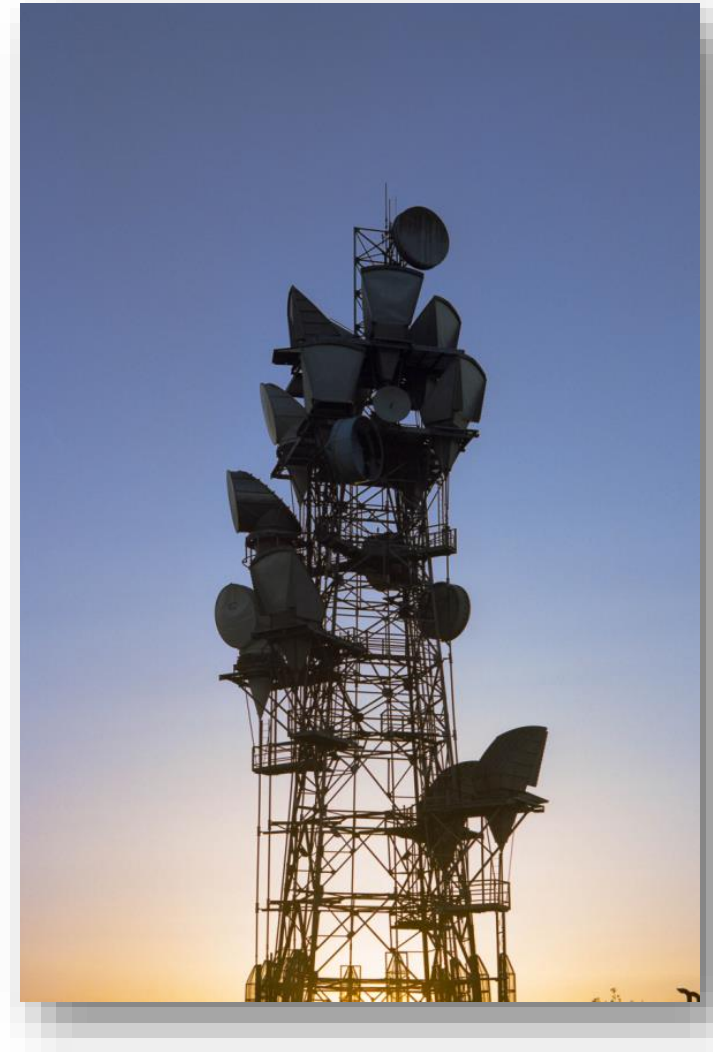
As part of the planning and permitting process we will be abiding by all applicable federal, state and local requirements and laws.





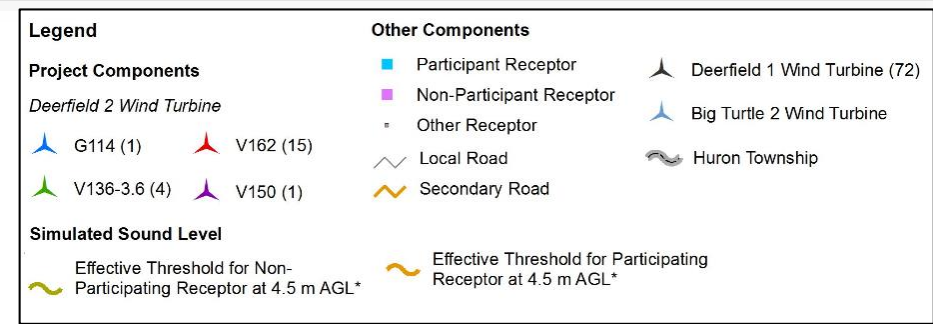
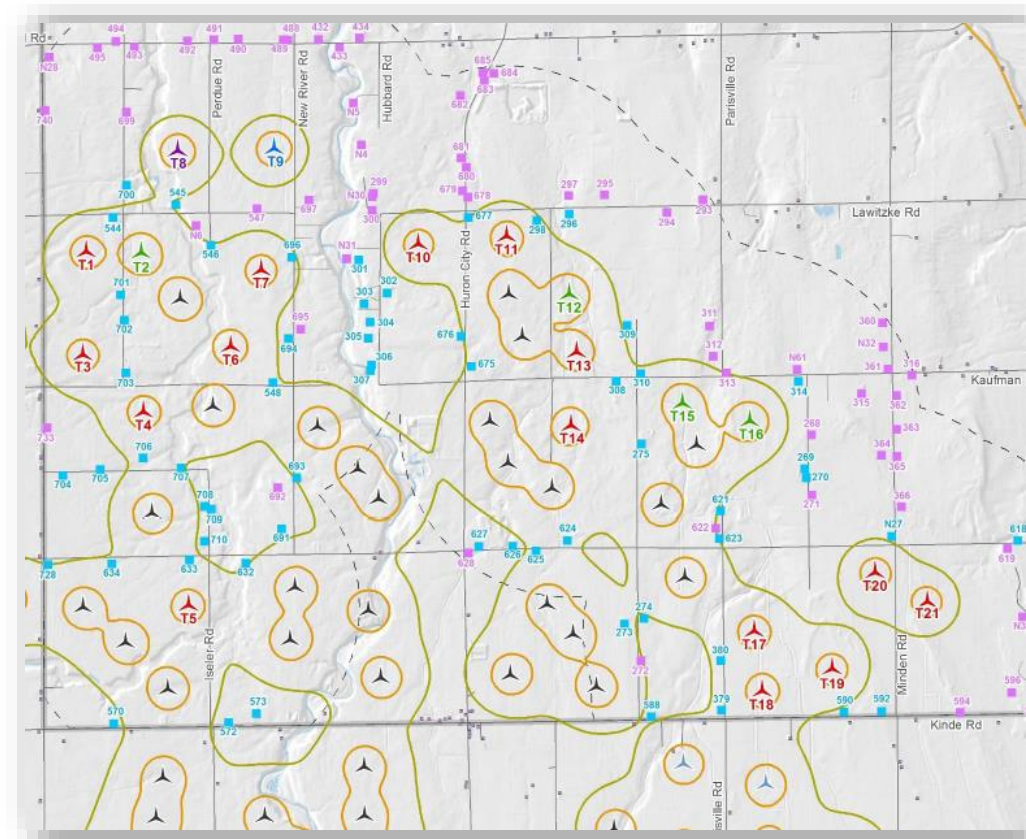
## 7. Communication Interference

- **Deerfield Wind II hired an independent subject matter expert (ComSearch) to complete assessments.**
- **ComSearch confirmed the Project will not cause impacts to microwave beam paths, off-air television reception, Land Mobile and Emergency Services, Mobile Phone or AM/FM radio broadcast.**
- **If any disruption to a signal is encountered, individuals should report the loss in signal via the Complaint Resolution Process. The Deerfield team will investigate the cause and provide a solution.**



# 8. Sound Modeling

- **Wind turbines produce sound in several ways**
  - “Whoosh” sound from aerodynamic effects of air passing over rotor blade
  - Sound from wind turbine nacelle where mechanical components of the turbine are housed and operating
- **For the Deerfield II layout**
  - Sound modeling demonstrates conformance to the township zoning ordinance guidelines at all participant and non-participant receptors within Huron Township.







# Thank You

<https://deerfieldwindenergy2.com>  
[Deerfield2Wind@AlgonquinPower.com](mailto:Deerfield2Wind@AlgonquinPower.com)

