



**SOLARSTONE**

**89 MW Osseo Solar Project**

**Mark Mauersberger**

**VP, SolarStone Partners**

**5-14-24**



**SOLARSTONE**

# Presentation Objectives

---

## Objectives

- *SolarStone Company Overview: Meet Our Team & Understand Our Capabilities*
- *Solar 101: Solar Development Process, Key Project Design Considerations, & Equipment*
- *Landowner & Community Highlights*
- *Project Area Snapshot*
- *Summary of Project Benefits*
- *Q&A*

## SolarStone Company Overview

---

- Solar development company based in Minneapolis, MN in business since 2012, with a leadership team of over 50 years of cumulative experience in the energy sector
- Longstanding experience developing large scale energy projects with principals developing over \$5B of operating projects in the utility and community solar sectors
- +4 GW pipeline of projects across the US



### **Kaya Tarhan – CEO**

- 30 years of experience developing energy projects in the U.S. and Internationally
- Developed over 1,200 MW of wind and solar projects in Minnesota and North Dakota while at Renewable Energy Systems (RES)
- 10 years of experience developing solar projects throughout Minnesota
- B.A. in International Relations from the U. of Minnesota, MBA in Energy Management from the University of Phoenix



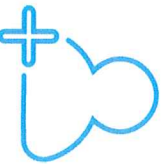
### **Matthew Keenan – Chief Commercial Officer**

- 12 years of experience in the energy/solar industry
- Drove renewables growth in the U.S. in both fortune 250 companies as well as start-ups
- Developed business for Clearway Energy Group which deployed over \$1 billion in capital across over 100 solar farms
- B.S. in Mathematical Economics from the University of Wisconsin – Madison



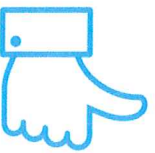
### **Mark Mauersberger – Vice President, Utility Development**

- 25+ years of experience in the land development & energy industries (renewable energy & O&G)
- Drove development of over 2,500 MW of renewable energy projects that are now operational across the US, including projects in WI (Wood County Solar & Bear Creek)
- BA from Ohio University



## Our Team of Experts

- Utility -scale solar power project development
- Utility -scale energy storage project development
- Land acquisition (real estate/title/mineral work)
- Energy storage integration
- Project acquisition and due diligence
- GIS and resource mapping systems
- Transmission interconnection and delivery
- Origination and energy marketing
- Project design and engineering
- Meteorology
- Permitting
- Environmental studies
- Financial Analysis



## Our Partners and Customers

- Commercial and industrials
- Investor -owned utilities
- Cooperatives
- Municipalities
- State and federal utilities
- Landowners
- Project host communities
- County leadership

## MARKET DRIVERS

### Fossil Fuels

Price uncertainty, volatile pricing, retirement of coal facilities, cleaner emission standards, carbon tax

### Declining Solar Costs

Quickly declining solar costs due to manufacturing efficiencies, increases in solar panel efficiencies, more experienced workforce

### Demand From Utility

Large commitment from utility for solar energy: 400 + MW

### Consumer Demand

Local economic development, price certainty (30 years), lower emissions, clean energy, innovative technologies, renewable



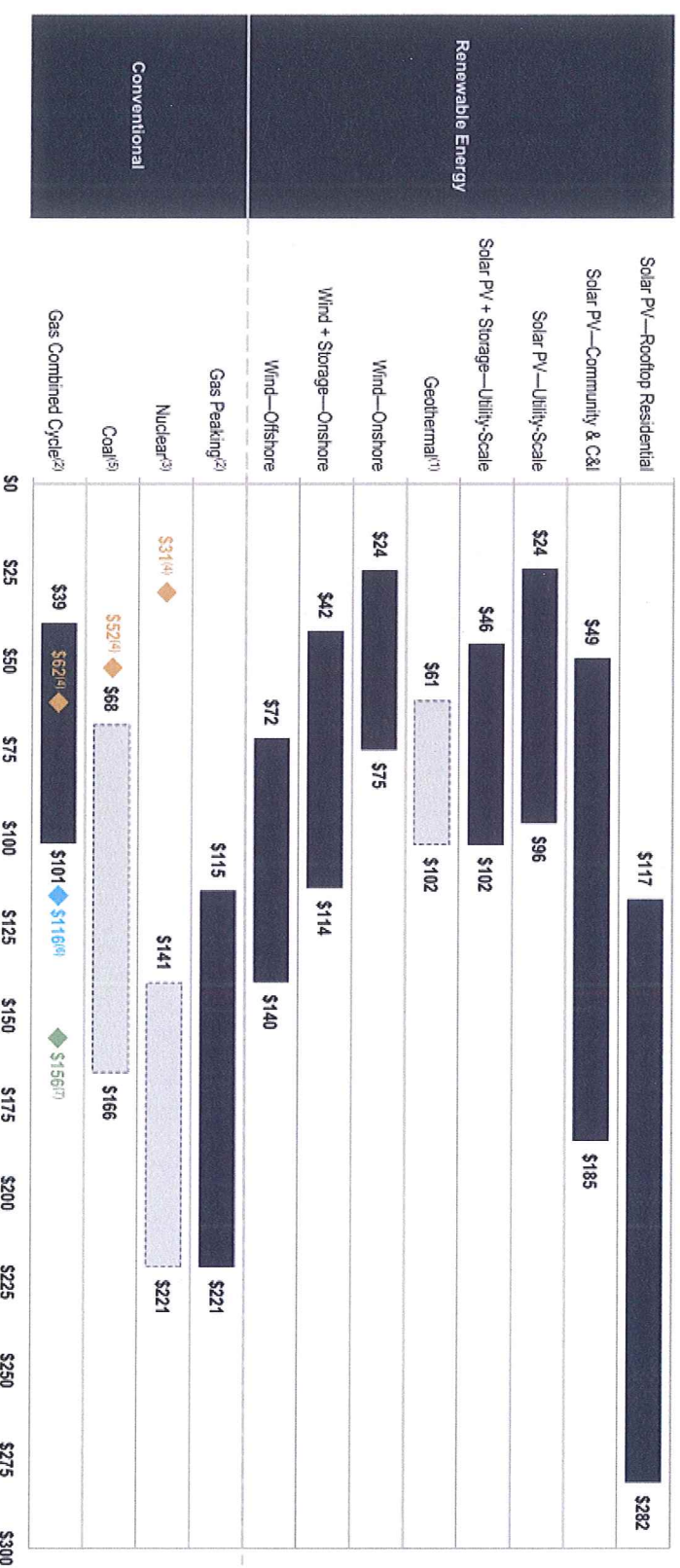
# Levelized Cost of Energy-All Forms



LAZARD'S LEVELIZED COST OF ENERGY ANALYSIS - VERSION 16.0

## Levelized Cost of Energy Comparison—Unsubsidized Analysis

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances



## Landowner Benefits

---

- Significant revenue increase over current farm/land income
- Stable and predictable long-term income that provides diversification, or a hedge, against volatility in agricultural commodity markets
- Ability to maintain family legacy by continuing to own the land to pass along to the next generation, as well as ensuring solar lease income can be passed along to the next generation as well
- Vegetative management plan ensures the land remains in a dormant state allowing the preservation/replenishment of farmland for continued use at the end of the project life cycle
- Project will use materially less herbicides, pesticides, and fertilizer typically required by today's farming practices



## Solar Development Process

---

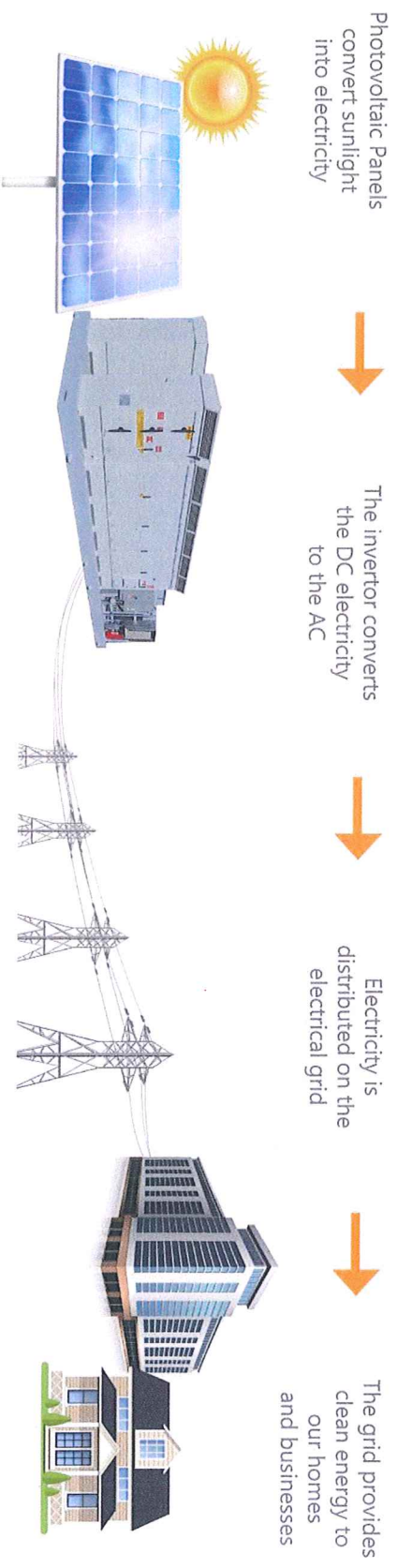


SolarStone's Farmington, MN Project



# HOW SOLAR ENERGY WORKS

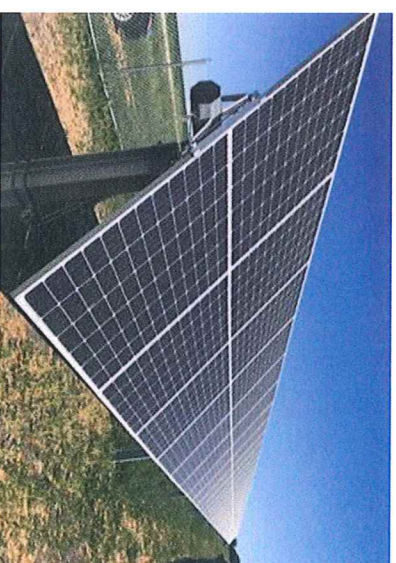
---



## Typical Solar Equipment

---

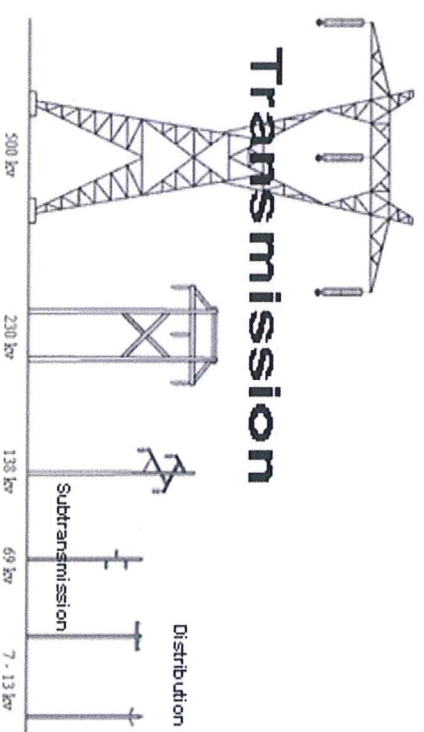
- Solar Panels – 4'x6' made of mostly:
  - Aluminum framing
  - Tempered glass casing
  - Silicon solar cells
  - Standard copper wiring
- Single axis tracking rack mounts which follow the sun throughout the day
  - Height 8 to 10 ft (depending on land grade). Bifacial panels could be a bit taller.
  - Rack/panel row spacing 18 to 25 ft
  - Can build on land grades up to ~12%
- Inverters to convert power from DC to AC
  - Centrally located throughout the project area



## Land Use Summary

---

- Interested landowners with relatively open, contiguous parcels near utility infrastructure
- Minimal (if any) impacts to wetlands, flood plains, culturally sensitive areas, or threatened and endangered species
- Projects require ~6-7 acres of useable land per MW
- Ex: a 100 MW requires ~600-700 acres of useable land
- Plan around other existing easements on the property such pipelines, utilities, adjacent landowner easements, etc.





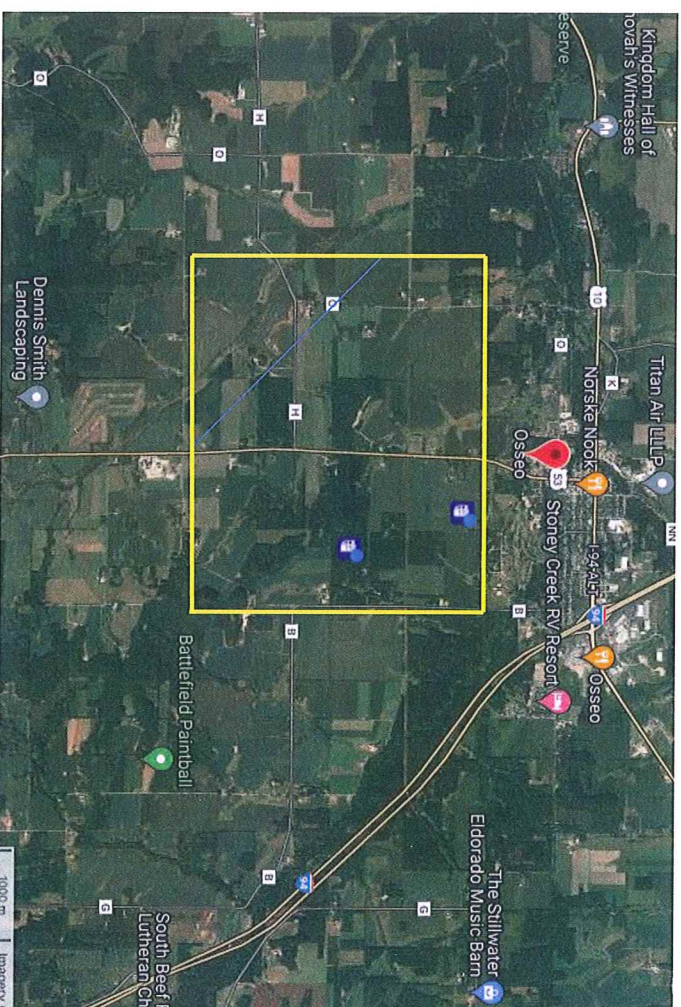
# Osseo Solar: General Project Area



SOLARSTONE

## Osseo Solar Project

- Est. 89 MW solar project on approximately 800 acres in Summer township
- Project will be permitted through Trempealeau County
- Interconnection application was filed with Midcontinent Independent System Operator (MISO)
- Construction expected to begin in 2026



## LOCAL ECONOMIC IMPACT – UTILITY AID PAYMENTS

- Wisconsin Statute 76.28 imposes a license fee on all “light, heat and power companies” in place of property tax payments
- The State in turn makes annual Utility Aid Payments to local municipalities and counties
- There are 7 components of Utility Aid Payments for which a project can qualify
- Figures in table exclude additional positive economic impact like job creation for example

### Component 4: MW-based payment

	County	Town	Total Local
Total payment rate (\$/MW)	\$2,000	\$2,000	
x Allocation percentage	67%	33%	
= Allotted payment rate (\$/MW)	\$1,333	\$667	

- 89MW X \$2,000 Per MW: **\$178,000 Per Yr. Utility Payment**
- 2/3 Payment=\$119,260
  - 1/3 Payment=\$58,740



## Summary of Key Community Benefits

---

- W1 Utility Aid Payment revenue
- Clean, safe and renewable energy that will power thousands of homes
- Energy resilience & security for the W1 power grid
- Solar is a silent, revenue generating neighbor
- Project will use materially less herbicides, pesticides, and fertilizer typically required by today's farming practices
- Low traffic, water, and local infrastructure impacts (i.e. schools, services, etc.)
- Local labor for long-term maintenance of the facility plus educational opportunities
- **SolarStone will fund a decommissioning bond for the life of the facility and will commit to providing and updating it as part of the county permit process**

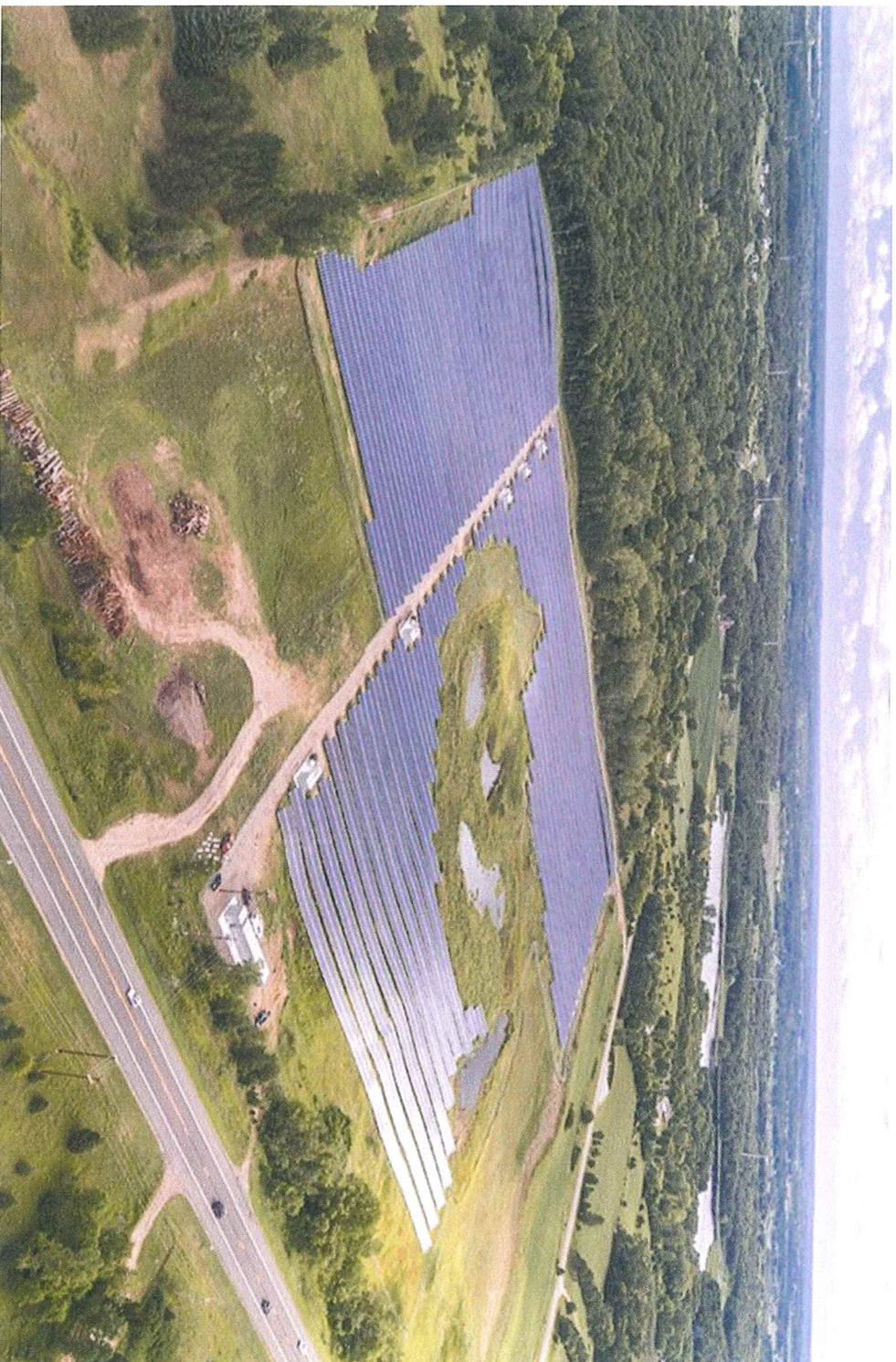


## Additional Questions?



**Mark Mauersberger: SolarStone Partners 612-834-2680 [SOLARSTONE  
mark.Mauersberger@solarstonepartners.com](mailto:mark.Mauersberger@solarstonepartners.com)**

---



SolarStone's Forrest Lake, MN Project

- Matrix
- Visual impact
- High voltage line - need access
- Chapter 21 - written into plan