



Reporting Item

BOARD OF DIRECTORS

August 16, 2022

ITEM

Power with Purpose: Natural Gas Generation, Energy Delivery and Solar Updates

PURPOSE

Provide updates on Power with Purpose projects for August 2022.

TURTLE CREEK STATION & STANDING BEAR LAKE STATION FACTS

1. Engineering, procurement, and construction activities are in progress by Zachry Group, as the Engineer, Procure, and Construct (EPC) vendor for both the Turtle Creek and Standing Bear Lake Stations' generation facilities and substation infrastructure. Activities include grounding work in the substations, underground piping, foundation work at the sites, and preparations for major equipment deliveries.
2. Preliminary grading concluded at both Turtle Creek Station and Standing Bear Lake Station. This activity (in part) has caused delays at both sites that will push the expected in service dates out.
3. Shipment of major equipment from Siemens Energy and Wärtsilä has commenced.


ENERGY DELIVERY FACTS

1. Construction on both the transmission and substation work has remained on target with the 144th and Capehart Road Substation fully commissioned and energization scheduled for August 2022.

SOLAR FACTS

1. The 81-megawatt Platteview Solar facility in Saunders County continues to make progress. OPPD signed a power purchase agreement with Community Energy, which is now part of Applied Energy Services (AES). AES will lead the construction, and will be the long-term owner and operator of the facility. Construction is expected to begin at the site in the first quarter of 2023.
2. In addition to Platteview Solar, OPPD continues to pursue the remaining solar generation previously approved in the 2019 Power with Purpose resolution. Supply chain issues, generation interconnection study backlogs and the United States Department of Commerce's anti-circumvention investigation have caused national delays to solar projects across the country and have challenged OPPD's efforts to date.
3. OPPD staff continues to monitor federal policy, work with local officials on solar regulations and pursue future sites that help to mitigate project risks.

RECOMMENDED:

DocuSigned by:

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 Troy R. Via
 Chief Operating Officer & Vice President
 Utility Operations

APPROVED FOR REPORTING TO BOARD:

DocuSigned by:

 AC399EDCE82247E...
 L. Javier Fernandez
 President and Chief Executive Officer



Power with Purpose Update

Committee Meeting

August 16, 2022



Power with Purpose Update

Agenda

- Standing Bear Lake Station & Turtle Creek Station
- Transmission & Substation
- Solar
- Stakeholder Outreach & Communication

Standing Bear Lake Station & Turtle Creek Station



Power with Purpose Update

Standing Bear Lake Station

- Preliminary grading complete
- EPC full site control: June 24, 2024
- Wartsila equipment delivery: Q3 2022–Q1 2023
 - Engines to site September 2022
- Substation Completion: Q2 2023
- Site Completion: Early Q1 2024



(Wartsila Engines on vessel)

Information as of August 4, 2022

Power with Purpose Update

Turtle Creek Station

- Preliminary grading complete
- EPC full site control: June 24, 2024
- Siemens equipment delivery: Fall 2022
- Substation Completion: Q2 2023
- Site Completion: Early Q1 2024



(July 22 Site Tours with ELT Members)



(Site pipeline construction, Looking East)

Information as of August 4, 2022

Power with Purpose Update

SBLS/TCS Collaboration with Internal Stakeholders

Operations:

- Operations readiness planning: procedures, operating instructions, cold weather preps

Asset Management:

- Identify major maintenance schedules from Siemens & Wartsila

Training:

- Wartsila training (scope, schedule)
- Siemens training (scope, schedule)
- EPC training (scope, schedule)

Technology and Security

- Design transmittals and reviews
- Security

Maintenance

- Maintenance team members to observe major equipment assembly

Engineering

- Design transmittals and reviews

Operation Technology

- Coordination with Owner Furnished Equipment (OFE) Vendors and Engineer, Procure, Construct (EPC) Contractor
- Service agreements and cyber security

Project Management Office

- Project scheduling and metrics
- Project management standards and best practices

Transmission & Substation



Transmission and Substation

Transmission:

- 2 circuits (~4.5 miles) Construction Complete
- Energization: 8/8, 10/4

Remote End Substations:

- 144th and Capehart: Commissioned 7/29
- 180th and I-80: ~70% complete



(144th and Capehart Substation)

(Transmission Construction)



Solar



Updates to Platteview Solar

- OPPD is excited to partner with AES, which will be responsible for the construction of the facility, and will be the long-term owner and operator of Platteview Solar
 - OPPD executed a PPA with the solar developer, Community Energy, which was then acquired by AES



Rendering of future solar site south of Yutan, Nebraska

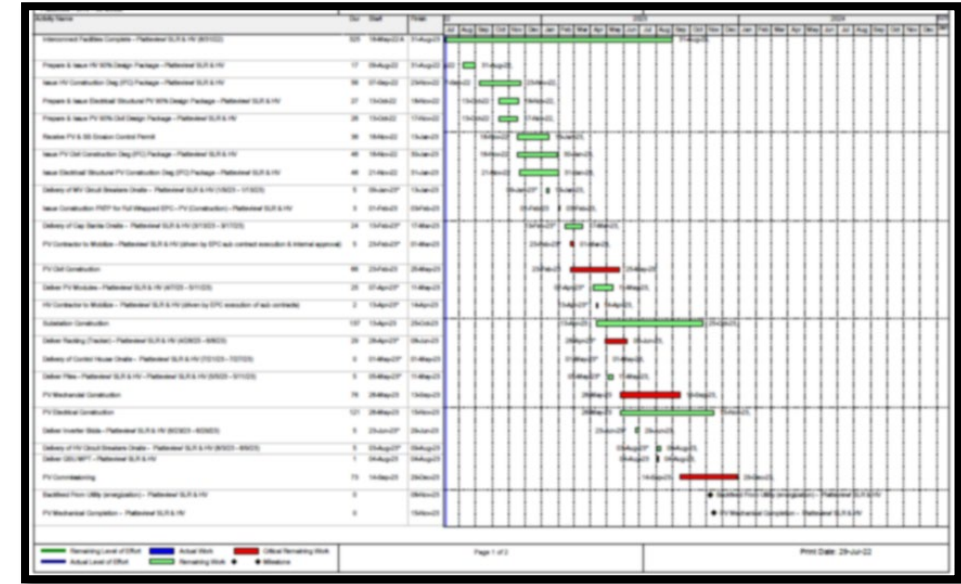
Platteview Solar Project

- **Size:** 81 MW_{AC}
- **Location:** Saunders County, NE
- **Planned operation date:** *Spring 2024*
- **OPPD Contract term:** 20 years

Design, Engineering & Construction Preparation

Currently ongoing through early 2023

- Updated schedule
 - New anticipated operation date is Spring 2024
 - Supply chain delays (equipment lead times) and impacts from federal solar policy pushed the schedule
 - Continues to progress through SPP's Generation Interconnection study backlog; has an executed Interim Generation Interconnection Agreement
- Activity at the site will begin early 2023
 - First visible activities will be site preparation and equipment deliveries
 - Allows time for 2022 harvest



Illustrative Project Schedule

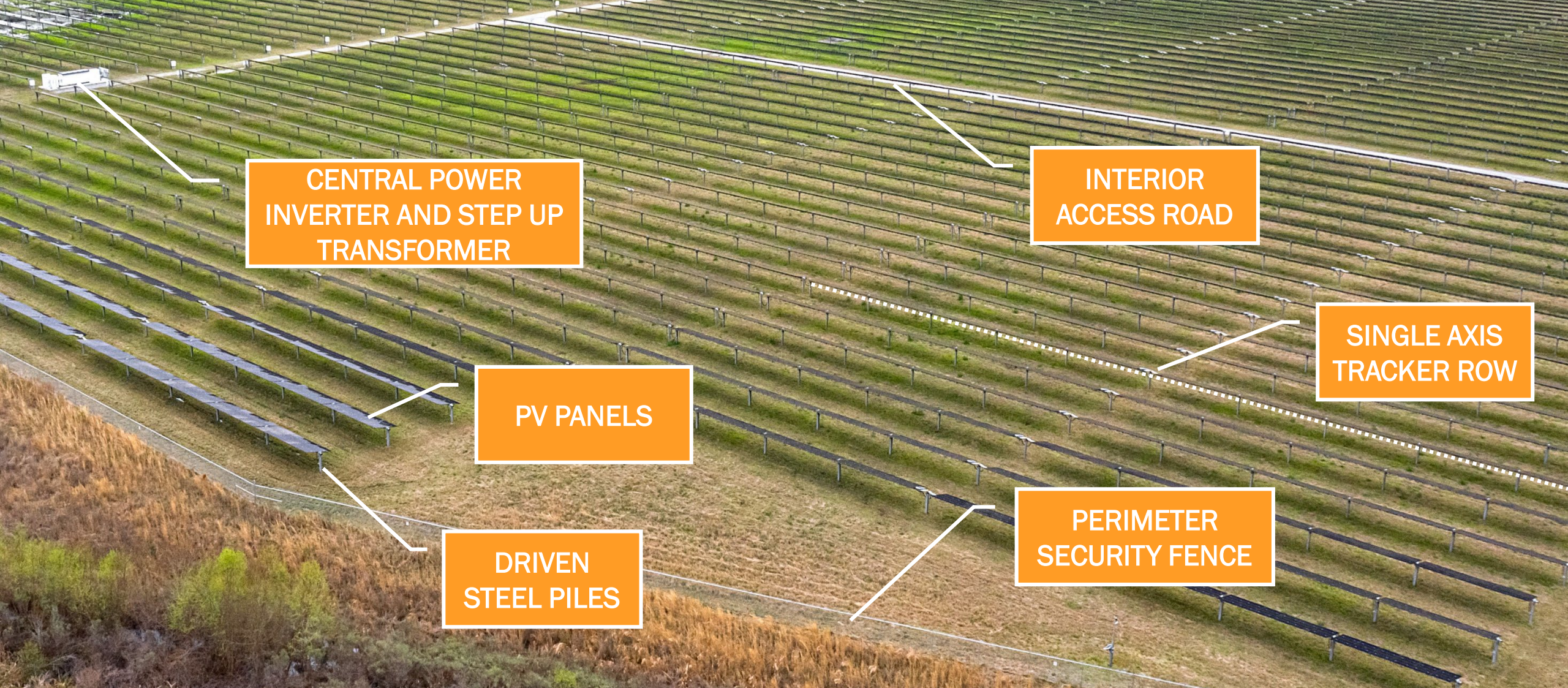
Design & Engineering

Construction

Operation

Site Preparation

Commissioning



CENTRAL POWER
INVERTER AND STEP UP
TRANSFORMER

INTERIOR
ACCESS ROAD

SINGLE AXIS
TRACKER ROW

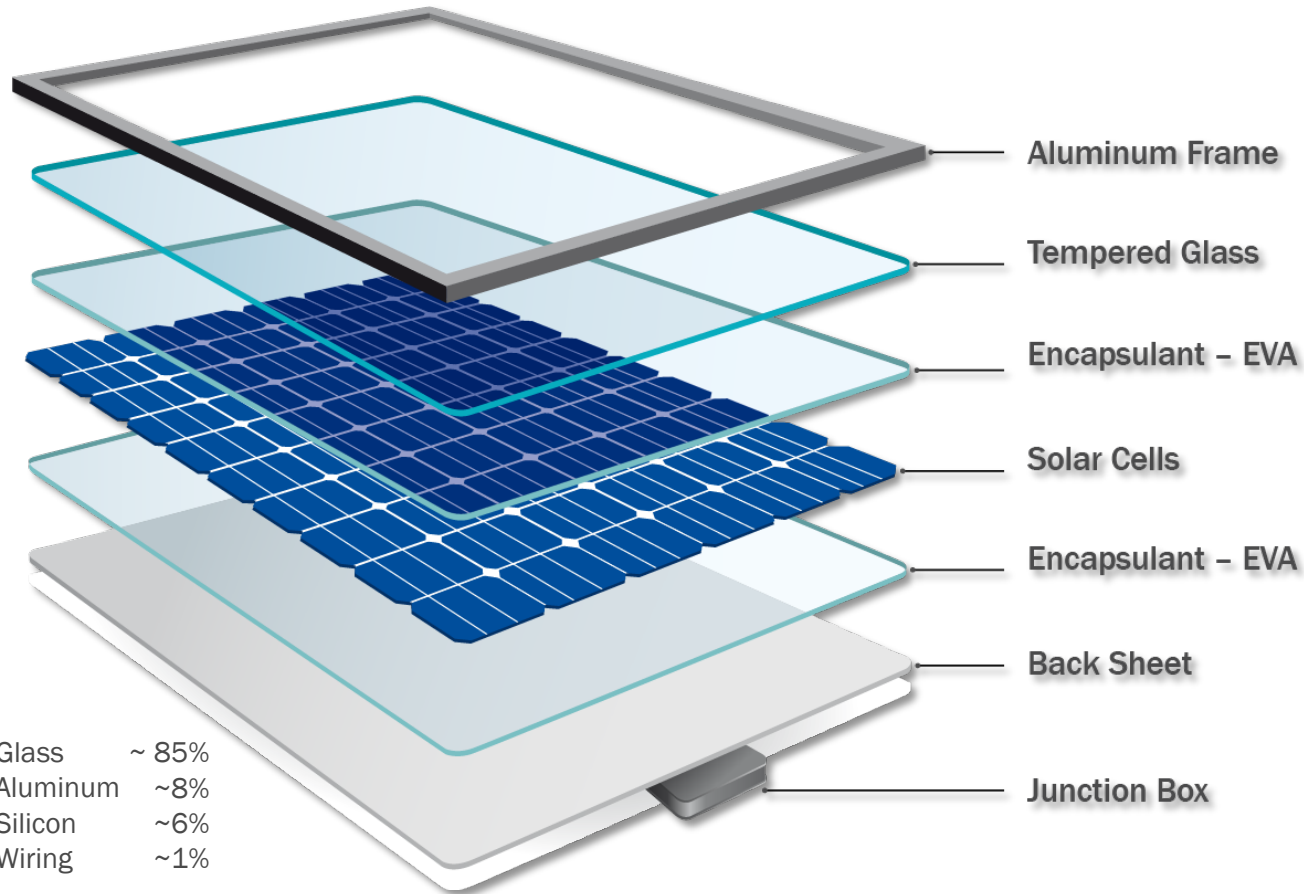
PV PANELS

DRIVEN
STEEL PILES

PERIMETER
SECURITY FENCE

Photovoltaic (PV) Solar Technology Components

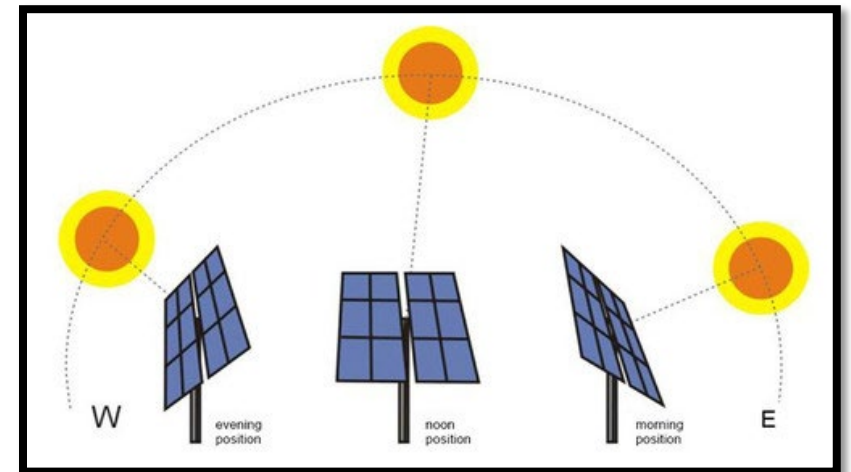
Major Equipment



Photovoltaic (PV) Solar Panel



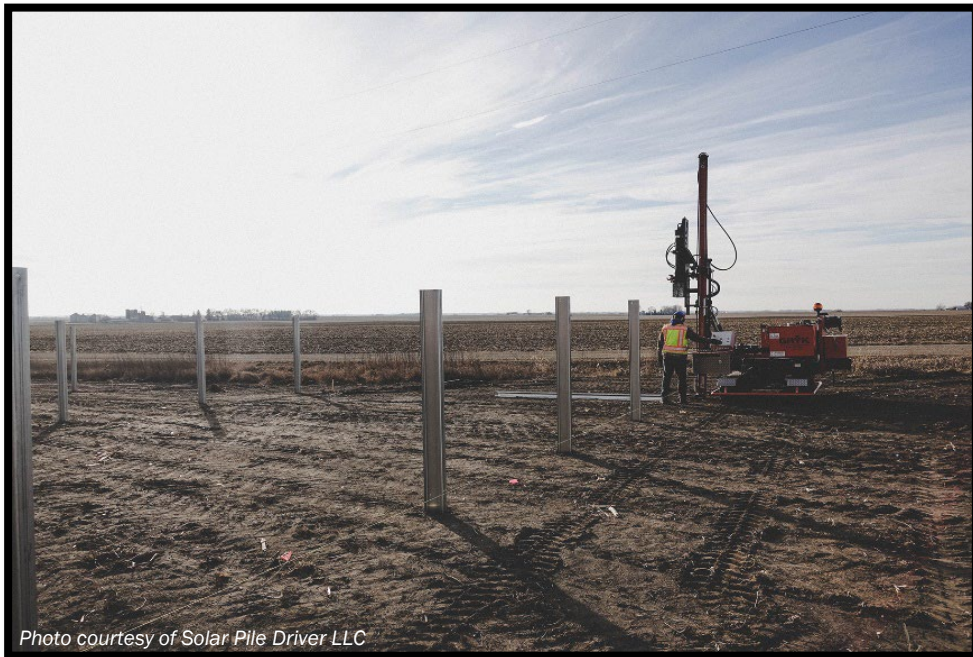
Piling



Single-Axis Tracking

Construction Phase: Civil, Mechanical & Electrical

Expected to begin early 2023 (after equipment deliveries to the site) through Fall 2023



Driving Pile



Installing Racking



Installing Panels

Design & Engineering

Construction

Operation

Site Preparation

Commissioning

OPPD Substation & Interconnection

Expected to begin in the Spring of 2023



In parallel to construction activity at the solar site, OPPD teams will work on interconnection facilities required to connect to OPPD's 69 kV system

Design & Engineering

Construction

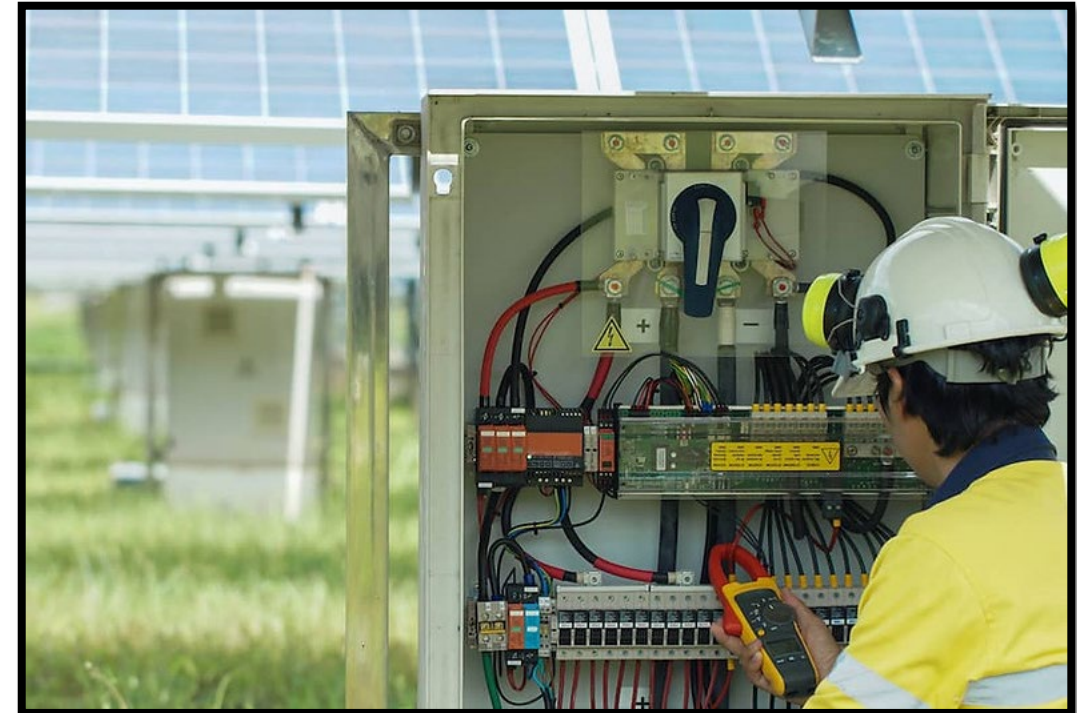
Operation

Site Preparation

Commissioning

Commissioning & Energization

Fall – Winter 2023



Design & Engineering

Construction

Operation

Site Preparation

Commissioning

Commercial Operation

Expected Spring 2024



Pollinator and native habitat is planned and will take a couple of years to establish at the site

Design & Engineering

Construction

Operation

Site Preparation

Commissioning

Platteview Solar is powering economic activity in Saunders County

\$75M

Local spend during project construction

150+ local jobs

Use local contractors (electrical, site work, landscaping)

Local spend for hotels, restaurants, entertainment

\$100M+

capital investment in Saunders County

\$2.5M

local economic impact annually

\$300K+

Estimated annual new property tax revenue

\$200K+

to local schools

\$14K

to local volunteer fire department

\$50K

to Saunders County



Impact data from: UNL Impact Study (IMPLAN), Baird Holm and Community Energy

Beyond Platteview Solar

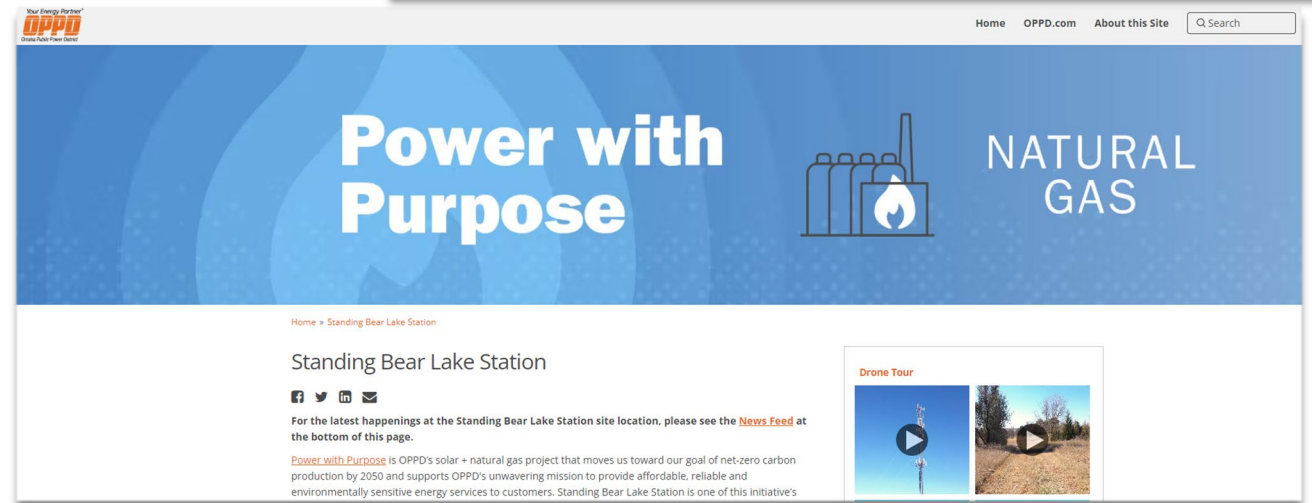
- OPPD is still pursuing up to 600 MW of solar. This is needed to serve its customers with both accredited capacity and on-peak energy for its growing load
- The portfolio has experienced delays that are being experienced nationally
 - Generation Interconnection backlog is impacting ALL new generation to the transmission grid
 - Development and implementation of local solar zoning regulations
 - Supply chain challenges
 - Federal policy changes and focus on solar imports
- Engaged in local, state, and federal policies for impacts to solar projects
 - US Department of Commerce to announce anti-circumvention investigation decision in late August
 - Monitoring potential outcomes from the Inflation Reduction Act of 2022
 - Engaged with local jurisdictions to support regulation development
- Continuing to study sites and develop risk mitigation strategies for solar deployment
 - Progress on sourcing and specific sites will be announced in the coming months

Stakeholder Outreach & Communication



Stakeholder Outreach and Communication SBLS/TCS

- OPPDCommunityConnect additional signage at each location
- OPPDCommunityConnect continued project page updates
 - Standing Bear Lake project page
 - Turtle Creek Station project page
 - Sarpy Southwest Transmission Project
- 1:1 touchpoints with M.U.D., HOAs, neighbors and stakeholders as needed



Solar Community Outreach – Ongoing

- OPPD continues advocacy and education to community leaders, customers and stakeholders across the service territory and on a statewide level
- Further development of outreach materials and education including a new video on our YouTube page
- These ongoing, coordinated efforts ensure OPPD is the best source of information
- Follow our journey at OPPDCommunityConnect.com



Home / Solar + Natural Gas / Power with Purpose: Solar

The page you are trying to access is private. Please sign in to access it.

Power with Purpose: Solar



What is Power with Purpose?

Power with Purpose is OPPD's solar + natural gas project that moves us toward our goal of net-zero carbon production by 2050 and supports OPPD's unwavering mission to provide affordable, reliable and environmentally sensitive energy services to customers. OPPD is siting and developing up to 600 megawatts of utility-scale solar generation, and up to 600 megawatts of backup natural gas. The project will be one of the largest renewable energy investments of its kind in the Midwest.

Community Energy - Platteview Solar



[here](#) to learn more about Platteview Solar. To read Community Energy's FAQs about the project, [click](#)

