

# Power with Purpose Open Session September 2022 Solar Update

September 20, 2022



# Power with Purpose Update

## Agenda

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

# Standing Bear Lake Station & Turtle Creek Station



# Power with Purpose Update

## Standing Bear Lake Station

- Site Completion: January 8, 2024
- Construction activities
  - Substation: grounding work and drilled piers
  - Generation: underground piping/duct banks, foundation work
  - Gas supply: gas pipeline installation
- Wartsila engine deliveries to site in progress



*West Facing – Seal Slab Engines 4-6*



*Engine being placed on trailer at ESC*



*Engine 1 leaving Elkhorn Service Center*

### Engine Dimensions

Length – 42'-0"

Width – 12'-3"

Height – 14'-7"

Weight – 462,750 lbs.

### Loaded Dimensions

Length – 247'-8"

Width – 14'-0"

Height – 18'-7"

Weight – 796,000 lbs.

*Information as of September 9, 2022*

# Power with Purpose Update

## Turtle Creek Station

- Site Completion: January 26, 2024
- Construction activities
  - Substation: grounding work and drilled piers
  - Generation: underground piping/duct banks, foundation work
  - Gas supply: installation of gas supply infrastructure & pipeline
- Siemens equipment delivery: late Fall 2022



*Facing Southwest – Unit 1 GTG Piping*



*Facing East – Install Conduit Duct Bank*

Information as of September 9, 2022

# Solar



# Solar Update

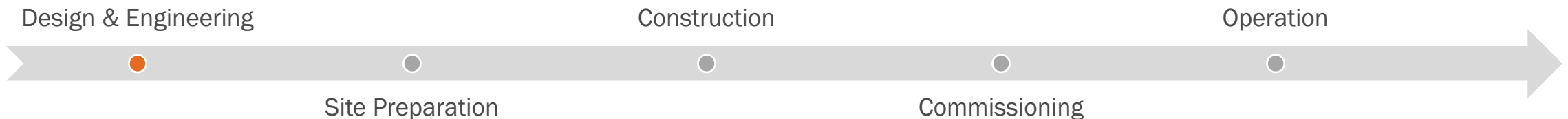
- Platteview Project
- Federal Policy
- Advocacy & Education
- Deploying Solar



# Platteview Solar

## September Project Status Update

- Completed Activities
  - Permit for Use of County Right of Way (Saunders County)
  - Road Use and Maintenance Permit (Saunders County)
- Ongoing Activities
  - Procurement of major equipment
  - 30% complete Civil and Electrical design packages
  - Develop ground cover plan (includes pollinator mix)
  - Develop OPPD substation design package
- Community Coordination
  - Outreach to Saunders County officials to update on OPPD and AES project progress
  - Project updates on OPPDCommunityConnect





# Federal Policy Updates



# Federal Policy Updates: Anti-circumvention Investigation

- Background
  - US Department of Commerce (DOC) investigation began in March 2022
  - Initial investigation severely impacted nearly 80% of US module supply
  - In June 2022, Biden issued executive order placing two-year pause on tariffs
  - Original timeline for preliminary determination was late August 2022
- Update
  - DOC pushed back preliminary determination timeline to November 28, 2022
  - Extension will push deadline for final determination likely to Spring 2023
- Impacts
  - Biden's executive order brought some relief to supply, however, there are still considerations of the forced labor protection act, which ensures components are not made with slave labor
  - Wood Mackenzie (industry research group) predicted a 6.3 Gigawatt reduction in 2022 installations due to uncertainty of anti-circumvention investigation

# Federal Policy Updates: Inflation Reduction Act

- Inflation Reduction Act (IRA) was signed into law in August 2022
- Initial review of IRA shows significant potential for public power and solar deployment, but requires additional review by OPPD and industry experts
  - Extends and expands investment and production tax credits
  - Direct pay allows tax credits to be directly eligible to public power entities
- Next steps
  - Most new programs and rules fall under Department of Treasury and IRS, who are trying to figure out their processes for implementation over the next several weeks
  - OPPD has engaged industry expertise to review and understand the IRA, these include legal, financial, industry groups (LPPC, APPA, SEPA), and solar suppliers

# Summary of the Inflation Reduction Act

## Highlights of the IRA

- **10 (plus)** years of full-value credits for onshore/offshore wind, solar, storage, and hydrogen.
- **PTC/ITC** (with solar PTC) through the end of 2024; tech-neutral credits from 2025-2032 (or later).
- **Full value credits** tied to prevailing wage and apprenticeship requirements.
- **Adders/bonuses available** for complying with domestic content requirements and investing in projects in certain energy and low-income communities.
- **Direct pay** available for hydrogen and advanced manufacturing PTC for the first 5 years; otherwise mostly limited to tax-exempt entities.
- New **transferability** program is available for entities unable to elect direct pay—allowing the selling of credits to unrelated parties.
- **Accelerated depreciation restored** for clean energy projects (clean energy tax credits already protected) in corporate minimum tax.
- **No transmission ITC**, but transmission eligible for nearly \$10 billion through various programs.
- **Offshore:** Trump offshore wind moratorium lifted; offshore wind leases tied to oil and gas leasing on federal waters/lands.
- **Funding for permitting resources** at DOE, FERC, DOI, NOAA and the Federal Permitting Improvement Steering Council.

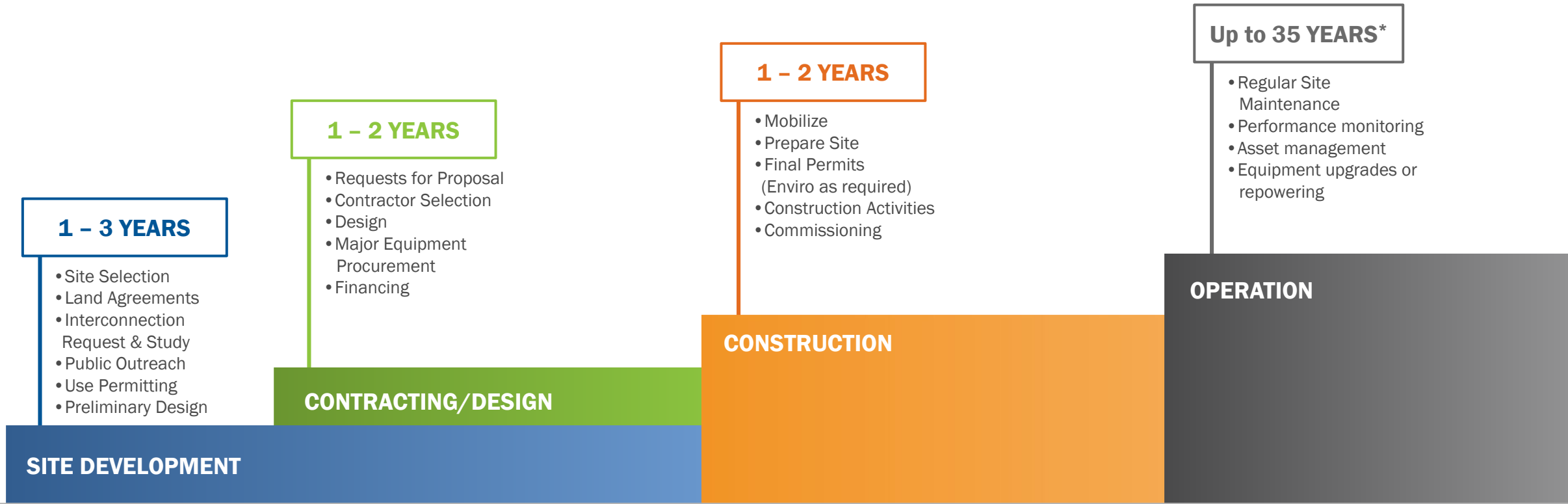
# Local Advocacy & Education



# Local Advocacy & Education

- Ongoing support of regulations for City/County jurisdictions
  - Cass County Planning Commission is currently reviewing all regulations, which also includes review of solar in the Transitional Agriculture zone
  - Active review of solar regulations in Sarpy County
  - Ongoing discussions and support in other jurisdictions
- Development of education materials
  - “Solar 101” includes technology overview, utility-scale solar development process steps and timelines, and what to expect at end of life
  - OPPD staff developing additional topics, such as battery and other technologies
- Ongoing delivery of solar education materials
  - Cass County in August; also scheduled for September

# TYPICAL TIMELINE UTILITY-SCALE SOLAR



*\*Utility-scale PV Solar facilities are designed to operate 25 – 35 years with regular equipment maintenance throughout the life of the plant*

# TYPICAL TIMELINE UTILITY-SCALE SOLAR



## Up to 35 YEARS\*

- Regular Site Maintenance
- Performance monitoring
- Asset management
- Equipment upgrades or repowering

## OPERATION

## 1 - 2 YEARS

- Decommissioning
- Material Recycling & Disposal
- Site Restoration

## DECOMMISSIONING

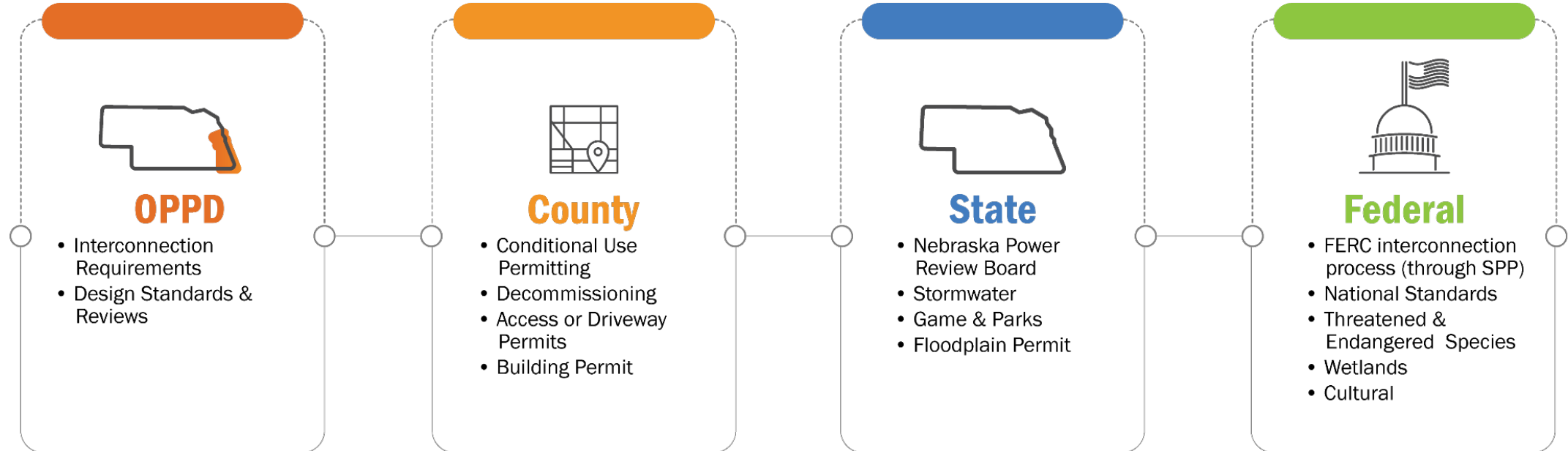
*\*Utility-scale PV Solar facilities are designed to operate 25 – 35 years with regular equipment maintenance throughout the life of the plant*



# Regulatory Involvement for Solar Projects



## SOLAR PROJECT REGULATORY APPROVALS



# Deploying Solar



# Ongoing Efforts to Deploy Solar

- 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
- Significant engagement with suppliers to:
  - Maintain key relationships with developers and equipment suppliers for upcoming sourcing activities
  - Understand volatile solar market
  - Further understand how the Inflation Reduction Act will impact project pricing and timelines
  - Keep updated on development milestones for active projects in OPPD territory/Nebraska
- OPPD submitted an application to the Nebraska Environmental Trust (NET) annual grant process in early September 2022
  - Application is to study the feasibility of solar on the closed landfill in Douglas County
  - NET will announce recipients in Spring 2023
  - If recommended, OPPD and Douglas County would collaborate on potential next steps

# Stakeholder Outreach & Communication



# Stakeholder Outreach and Communication SBLS/TCS

- OPPDCommunityConnect continued project page updates
  - Standing Bear Lake project page
  - Turtle Creek Station project page
  - Sarpy Southwest Transmission Project
- Use of social media to share project milestones
- 1:1 touchpoints with M.U.D., HOAs, neighbors and stakeholders as needed

 **Omaha Public Power District**  
Just now

Take a peek at these photos captured from the first of nine big engine moves to Standing Bear Lake Station, one of OPPD's two new natural gas plants.



NEWS FEED

QUESTIONS

## September 2022 Update

06 Sep 2022



Beginning Sept. 6 and over the next couple of weeks, OPPD will be working with contractors to transport nine Wärtsilä reciprocating internal combustion engines to the Standing Bear Lake Station, near 114th & Military Rd. One engine will be moved at a time, with activity occurring later in the evening and going into the overnight hours.

Specialized large equipment movers will be utilized for this effort. Loaded on a trailer, the equipment measures approximately 248' long by 14' wide and 19' tall. The trailer and engine combined will weigh in at 796,000 pounds. These engines were shipped from Italy and then shipped by rail to Nebraska.

# 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](http://OPPDCommunityConnect.com)

The screenshot shows the top navigation bar with links for Home, OPPD.com, About this Site, a search bar, and Sign in/ Register. The main header features the slogan "Power with Purpose" in large white text on an orange background, accompanied by a solar panel icon and the word "SOLAR". Below the header, the page title "Power with Purpose: Solar" is displayed, followed by social media icons and a brief introductory paragraph. A section titled "Platteview Solar" provides details about the 81-megawatt solar array project in eastern Saunders County, Nebraska, and mentions a power purchase agreement with AES. A "FAQs" section is also visible at the bottom of the page.

