



New Generation & Transmission Update

Committee Meeting

April 16, 2024



New Generation & Transmission Update

Agenda

- Standing Bear Lake Station & Turtle Creek Station
- Solar
- Energy Storage
- New Generation Update & Next Steps
- North Omaha Station Refuel & Retire

Standing Bear Lake Station & Turtle Creek Station



New Generation & Transmission Update

Turtle Creek Station

- Site Progress: 84.2%
- Activities
 - Generation: Equipment assembly, wiring, and piping continue, OPPD staff trained on Facility Response Plan.
 - Commissioning: Component and sub-system commissioning has commenced.
 - Focus: Preparing to energize the generator step-up transformer #1.



Distributed Control System Cabinet



Facing South – Power Block Progress



Control Panel Terminations in Fuel Building



Water Treatment Building Laboratory

New Generation & Transmission Update

Standing Bear Lake Station

- Site Progress: 92.4%
- Activities
 - Generation: Wartsila completed last assembly phase. Finishing equipment assembly with an emphasis on wiring. MUD will complete final fuel gas piping install.
 - Commissioning: Preparing for component and sub-system commissioning.
 - Focus: Electrical work supporting commissioning preparations.



Sample Ports on Exhaust Run



Wartsila Cabinets in Control Room



Distributed Control System Panels/Room



13.8kV Cable Terminations

New Generation & Transmission Update



Facing Southeast – SBLS, March 2024



Facing Southeast – TCS, March 2024

Solar Update



Platteview Solar

- OPPD Substation Progress: 100% (tied to AES facility)
- AES (Blue Ridge Power - EPC) Construction Progress: 95%
 - All major equipment has arrived and been installed
- Ongoing Activities
 - Continuing discussions on educational and contractual obligations
 - Planning for ribbon-cutting event
 - Test Energy ongoing
 - Awaiting Capacity Test and Availability Test notification



Platteview Solar – Racking & Module Installation



OPPD Substation – Bus Extension to AES Collector Substation

Design & Engineering

Construction

Operation

Site Preparation

Commissioning

As of March 25, 2024

Platteview Solar



Aerial of North Parcel



Aerial of South Parcel

K Junction Solar

- Generation Interconnection Agreement between OPPD, NPPD, and SPP effective August 2023
- Project Team evaluating documentation and project schedule
- Continuing community engagement and communication
- Supporting York County and the Village of McCool Junction on the development of reasonable solar regulations
- Efforts ongoing with NPPD on the timeline of the associated transmission/facility upgrades



★ General solar facility location

Energy Storage Update



Energy Storage Update

- Near Term Generation Resource Plan
 - Approximately 125 MW of energy storage at 4-hours equivalent
- Benefits of Energy Storage
 - High resource adequacy for summer and winter
 - Energy market arbitrage
 - Transmission congestion relief
 - Frequency regulation
 - Voltage support
- Progress Update
 - Strategic Partner Energy Storage Team engaged to scope siting and feasibility study



New Generation Update and Next Steps



Ongoing Project Activities

- Nebraska Power Review Board approval received on March 15, 2024
- Request for qualifications (RFQ) sent to potential EPC vendors
- Scoping definition activities for Engineer, Procure, Construct (EPC) request for proposals in progress
- Geotechnical contract execution



**1 simple-cycle CT for 225 MW
Brownfield site with 450 MW capacity
South 168th & Fairview**



**3 simple-cycle CTs for 675 MW
Brownfield site with 324 MW capacity
35th & Mill Road**

Next Steps

Near term activities and timeline

Issue RFP Bid
Document
July '24

Negotiate EPC
contract
Sep '24

Award EPC
Q4 '24

North Omaha Station Refuel & Retirement



North Omaha Station Refuel/Retire Project

Design/Procurement:

- N05 burner replacement
- 316(b) intake travelling screens
- Electrical connections for the auxiliary boiler

Construction / In progress:

- N05 boiler and turbine outage
- Ash landfill closure
- Equipment relocation for N05 burners

Completed:

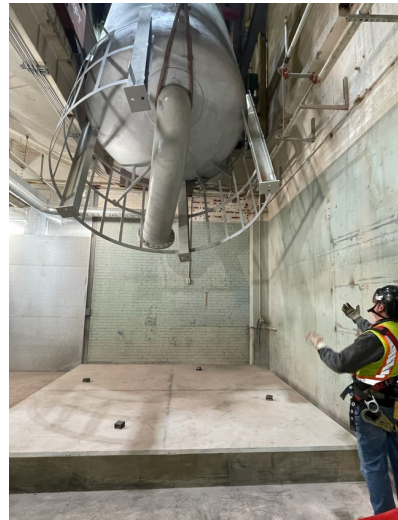
- Auxiliary boiler set in place



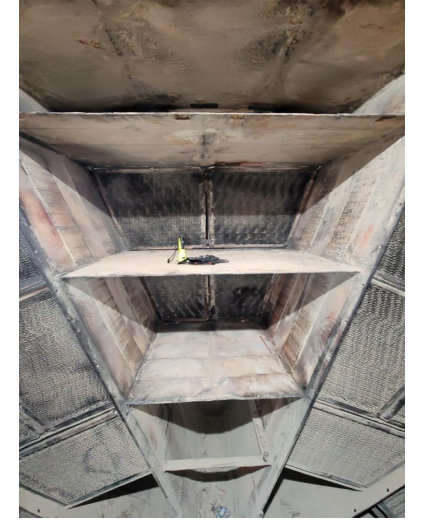
In progress equipment relocation for N05 burners – before and after



Auxiliary Boiler upending



Auxiliary Boiler set in place



Preheater basket replacement