



Reporting Item

BOARD OF DIRECTORS

December 14, 2021

ITEM

Update for the Battery Research Innovation Guided by High-Potential Technologies (BRIGHT) battery project.

PURPOSE

Contract award update for the battery asset for the BRIGHT project.

FACTS

- a. On March 18, 2021, the OPPD Board of Directors approved Resolution No. 6425 authorizing Management to negotiate and enter into a contract or contracts for services, material and labor to engineer, procure, and construct the battery energy storage facility in support of the BRIGHT battery project.
- b. A Request for Proposals (RFP) for an Engineer, Procure, and Construct (EPC) contract was released in May 2021, resulting in four competitive proposals.
- c. OPPD Management evaluated the proposals, entered negotiations, and executed a contract.
- d. In December 2021, OPPD executed an EPC contract with WEG Electric Corp, a subsidiary of WEG S.A.

RECOMMENDED:

DocuSigned by:
Brad Underwood

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Brad R. Underwood
Senior Director – Systems Transformation

APPROVED FOR REPORTING TO BOARD:

DocuSigned by:
L. Javier Fernandez

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L. Javier Fernandez
President and Chief Executive Officer

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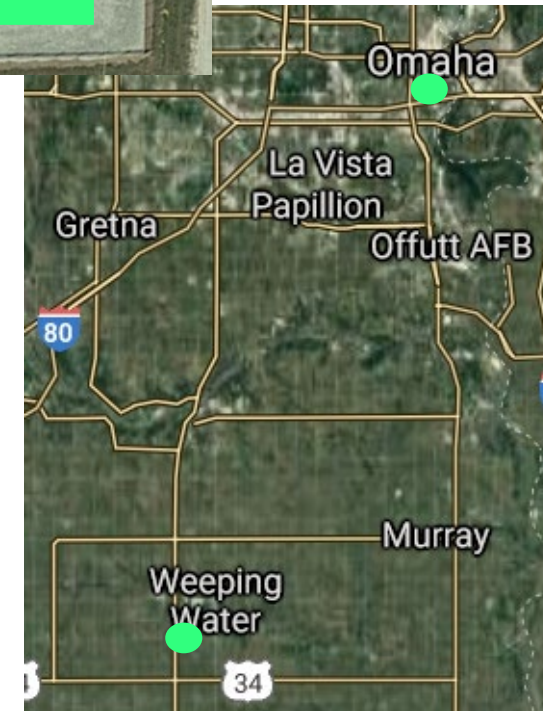
BRIGHT Battery Update

Battery Research Innovation Guided by High-Potential Technologies (BRIGHT)

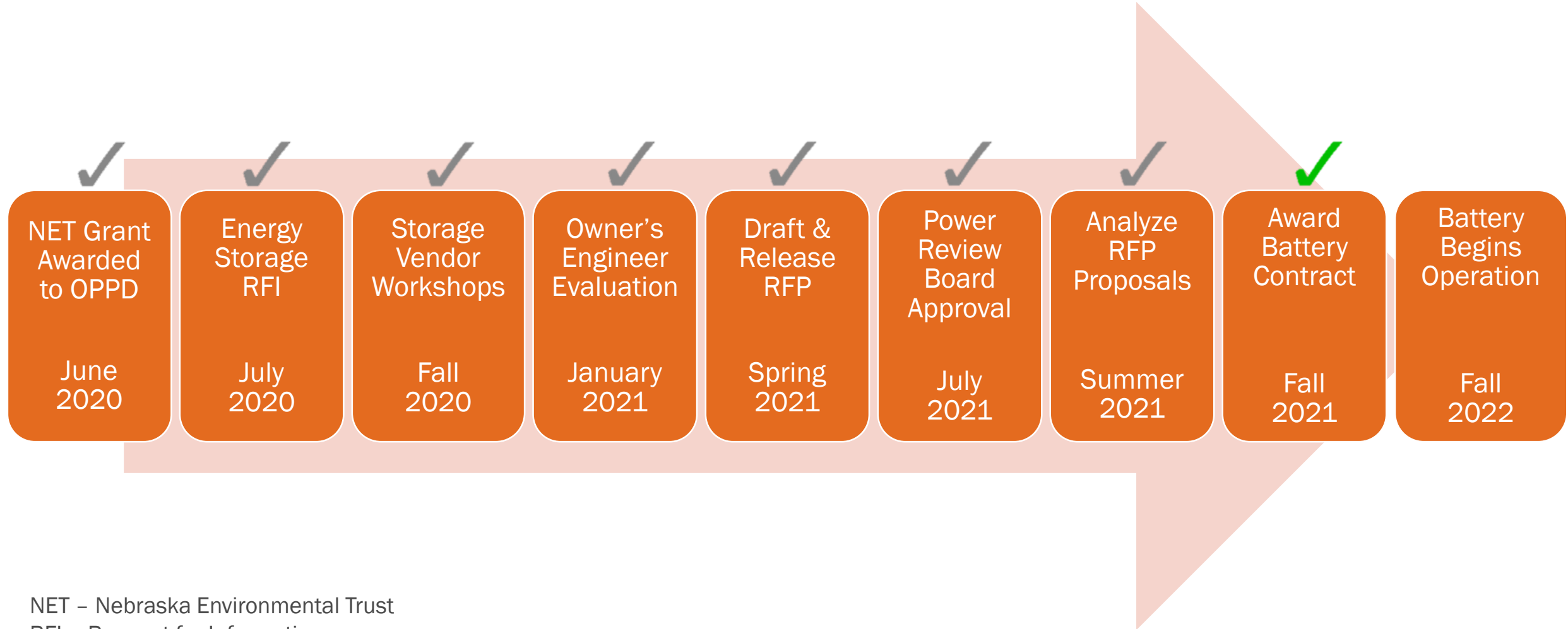
Board of Directors
All Committee Meeting
December 14, 2021

BRIGHT Project Overview

- Nebraska Environmental Trust (NET) grant
 - NET approved funds in June 2020
 - Grant project funding: \$600,000
- Project location: Cass County, NE
 - OPPD's substation near Weeping Water
 - Distribution interconnection
- Standalone battery storage project on OPPD's system will enhance operations and enable operational learning



Project Milestones



NET – Nebraska Environmental Trust
RFI – Request for Information
RFP – Request for Proposals

Battery Contract Milestone

- OPPD executed an Engineer, Procure, Construct (EPC) contract with WEG Electric Corp, a subsidiary of WEG S.A.
 - WEG will manufacture the transformers to be included with this project
- BYD (Build Your Dreams) will provide the battery container and cells
- Indie Energy will provide the battery Energy Management System (EMS)
- Interconnection Systems Incorporated (ISI) will perform civil and electrical
 - ISI is based out of Central City, NE



Battery Characteristics



Example of BYD CubePro

- BYD CubePro battery container and BYD Lithium Iron Phosphate, LiFePO_4 (LFP) battery cells
 - CubePro battery containers use a liquid cooling system to regulate the battery packs and include multiple levels of integrated fire protection
- 1 MW capacity with a 2.4 hour duration
- 20-year battery life
 - Beginning-of-life overbuild ensures greater than 80% capacity for the life

Next Steps: Communication & Outreach

OPPD Publications:

- OPPD the Wire Story – December 20th
- January Outlets bill update

Outreach:

- Community Connect updates
- Ongoing outreach to stakeholders and public officials

