

# Outerbridge Renewable Connector Project - Additional Offer C - BESS Proposal

## General Information

|   |  |
|---|--|
| Proposing entity name   | Commercially sensitive and propriety Outerbridge NJ information.   |
| Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project? | Commercially sensitive and propriety Outerbridge NJ information.   |
| Joint proposal ID   | Commercially sensitive and propriety Outerbridge NJ information.   |
| Company proposal ID   | Commercially sensitive and propriety Outerbridge NJ information.   |
| PJM Proposal ID   | 21   |
| Project title   | Outerbridge Renewable Connector Project - Additional Offer C - BESS Proposal   |
| Project description   | A 91MW/ 364MWh Battery Energy Storage System (BESS) on property adjacent to Werner substation. The proposed BESS facility will be interconnected at 230kV. |
| Email   | Commercially sensitive and propriety Outerbridge NJ information.   |
| Project in-service date   | 01/2028  |
| Tie-line impact   | No   |
| Interregional project   | No   |
| Is the proposer offering a binding cap on capital costs?  | Yes  |
| Additional benefits   | Commercially sensitive and propriety Outerbridge NJ information.   |

## Project Components

1. Additional Offer C - Werner Substation BESS

### Greenfield Transmission Line Component

|                 |   |
|-----------------|---|
| Component title | Additional Offer C - Werner Substation BESS |
|-----------------|---|

Project description Commercially sensitive and propriety Outerbridge NJ information.

Point A Werner BESS Site

Point B Werner Substation

Point C

**Normal ratings**

**Emergency ratings**

Summer (MVA) 524.600000 524.600000

Winter (MVA) 645.700000 645.700000

Conductor size and type 1 - 1590 kcmil ACSR 54/19 Falcon per phase

Nominal voltage AC

Nominal voltage 230KV

Line construction type Overhead

General route description The BESS site is situated on approximately 4 acres on land abutting the Werner substation. This parcel is classified as Class 1, vacant land.

Terrain description The project is limited to an approximately 4 acre parcel. The site will be leveled to 27 feet sloping to 19 ft, well above the Base Flood Elevation of 14 feet based on the use of "Best Available Data" by NJDEP and City of South Amboy. Cut is 20,000 Cuyd., Fill 23,000 Cuyd, with a net of 3,000 Cuyd (numbers to be refined during detailed design).

Right-of-way width by segment Not applicable.

Electrical transmission infrastructure crossings None

|  |  |
|--|--|
| Civil infrastructure/major waterway facility crossing plan | The civil infrastructure plan was developed to account for a base flood elevation of 14-ft mean sea level (msl) along with being above the Hurricane Sandy flood elevation (~15-ft. msl) for an average site elevation of 19-ft msl. The grading plan coincided with the existing topography of the high point in the west to drain to the east which flows to catch basins in the two site watershed in the north and south basis then outlet into the existing drainage way to Raritan Bay. The site grading was developed to have approximately 20,000 cubic yards of cut material and 23,000 cubic yards of fill material (numbers to be refined during detailed design) for the layout of the site to provide a uniform grade of the Battery Storage Units. The civil infrastructure would include concrete pads for the battery storage units, internal roadway development for construction and operation and maintenance, and the catch basins for stormwater drainage. Additional civil site development for the site will be finalized in the detail design process. |
| Environmental impacts                                      | The BESS site is adjacent to the 26-acre Werner Substation in South Amboy, NJ, for which an Environmental Protection Plan was submitted. There are no additional Environmental Impacts to consider for the BESS site.  |
| Tower characteristics                                      | Not applicable.  |
| Construction responsibility                                | Commercially sensitive and propriety Outerbridge NJ information.   |
| Benefits/Comments  | Commercially sensitive and propriety Outerbridge NJ information.   |
| <b>Component Cost Details - In Current Year \$</b>         |  |
| Engineering & design                                       | Commercially sensitive and propriety Outerbridge NJ information.   |
| Permitting / routing / siting                              | Commercially sensitive and propriety Outerbridge NJ information.   |
| ROW / land acquisition                                     | Commercially sensitive and propriety Outerbridge NJ information.   |
| Materials & equipment                                      | Commercially sensitive and propriety Outerbridge NJ information.   |
| Construction & commissioning                               | Commercially sensitive and propriety Outerbridge NJ information.   |
| Construction management                                    | Commercially sensitive and propriety Outerbridge NJ information.   |
| Overheads & miscellaneous costs                            | Commercially sensitive and propriety Outerbridge NJ information.   |
| Contingency  | Commercially sensitive and propriety Outerbridge NJ information.   |
| Total component cost                                       | \$167,935,434.37   |
| Component cost (in-service year)                           | \$190,168,434.37   |

## Congestion Drivers

None

## Existing Flowgates

| FG #      | From Bus No. | From Bus Name | To Bus No. | To Bus Name | CKT | Voltage | TO Zone | Analysis type          | Status   |
|-----------|--------------|---------------|------------|-------------|-----|---------|---------|------------------------|----------|
| 28-GD-L14 | 218306       | DEANS         | 218304     | BRUNSWCK    | 1   | 230     | 231     | Light Load - Gen Deliv | Included |
| 35-GD-L14 | 218306       | DEANS         | 218304     | BRUNSWCK    | 1   | 230     | 231     | Light Load - Gen Deliv | Included |

## New Flowgates

Commercially sensitive and propriety Outerbridge NJ information.

## Financial Information

Capital spend start date 01/2023

Construction start date 01/2025

Project Duration (In Months) 60

## Cost Containment Commitment

Cost cap (in current year) Commercially sensitive and propriety Outerbridge NJ information.

Cost cap (in-service year) Commercially sensitive and propriety Outerbridge NJ information.

## Components covered by cost containment

1. Additional Offer C - Werner Substation BESS - Proposer

## Cost elements covered by cost containment

Engineering & design No

Permitting / routing / siting No

|   |  |
|---|--|
| ROW / land acquisition  | No   |
| Materials & equipment   | No   |
| Construction & commissioning  | No   |
| Construction management   | No   |
| Overheads & miscellaneous costs   | No   |
| Taxes   | No   |
| AFUDC   | No   |
| Escalation  | No   |
| Additional Information  | Commercially sensitive and propriety Outerbridge NJ information. |
| Is the proposer offering a binding cap on ROE?  | Yes  |
| Would this ROE cap apply to the determination of AFUDC?   | Yes  |
| Would the proposer seek to increase the proposed ROE if FERC finds that a higher ROE would not be unreasonable? | No   |
| Is the proposer offering a Debt to Equity Ratio cap?  | Commercially sensitive and propriety Outerbridge NJ information. |
| Additional cost containment measures not covered above  | Commercially sensitive and propriety Outerbridge NJ information. |

## **Additional Comments**

All attachments contain commercially sensitive, proprietary and confidential Outerbridge NJ market information and should not be publicly disclosed.