

Install 178.2 MVAR capacitor bank at Reston substation

General Information

Proposing entity name	The redacted information is proprietary to the Company, therefore it is privileged and confidential.
Company proposal ID	The redacted information is proprietary to the Company, therefore it is privileged and confidential.
PJM Proposal ID	102
Project title	Install 178.2 MVAR capacitor bank at Reston substation
Project description	Proposal 10 is to install 178.2 MVAR capacitor bank at Reston 230 kV substation.
Project in-service date	12/2022
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	The redacted information is proprietary to the Company, therefore it is privileged and confidential.

Project Components

1. Reston Substation – Install 230kV, 178.2 MVAR Capacitor Bank

Substation Upgrade Component

Component title	Reston Substation – Install 230kV, 178.2 MVAR Capacitor Bank
Substation name	Reston
Substation zone	182
Substation upgrade scope	Proposal 10 provides for the installation of one (1), 230 kV, 178.2 MVAR Capacitor Bank at Reston Substation.

Transformer Information

None

New equipment description

Purchase and install substation material: 1. One (1), 230 kV, 178.2 MVAR, Capacitor Bank (Three Ø). 2. One (1), 230 kV, 3000A, 50kA, Sync-Close, SF6 Circuit Breaker. 3. One (1), 230 kV, 3000A, 3-Phase Center-Break Switches. 4. Three (3), 180kV, 144 kV, MCOV Surge Arresters 5. Foundations and steel support structures as required per current engineering standards. 6. Conductors, connectors, conduit, control cable, and grounding materials as per current engineering standards. Purchase and install relay material: 1. One (1), 4521 – Synchronous Breaker Monitor 2. One (1), 4510 - SEL-2411 Breaker Annunciator 3. One (1), 1518 – 28” SEL-351 Cap. Bank Breaker w/ Sync. Close Panel 4. One (1), 1558 – 28” SEL-487V Transmission Cap. Bank Panel 5. Two (2), 4518 – Cap. Bank Mid-Point Potential M.U. Box

Substation assumptions

Capacitor bank will fit within the station's existing footprint.

Real-estate description

The substation footprint will not be expanded to accommodate the new equipment.

Construction responsibility

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Additional comments

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Component Cost Details - In Current Year \$

Engineering & design

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Permitting / routing / siting

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ROW / land acquisition

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Materials & equipment

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Construction & commissioning

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Construction management

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Overheads & miscellaneous costs

The redacted information is proprietary to the Company, therefore it is privileged and confidential.

Contingency

The redacted information is proprietary to the Company, therefore it is privileged and confidential.

Total component cost

\$1,767,544.00

Component cost (in-service year)

\$1,893,040.00

Congestion Drivers

CD #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type
ME-3	235479	01JUNCTN	235467	01FRNCHM	1	138	201	Market Efficiency
ME-7	207950	CUMB TR2	208004	JUNI BU1	1	230	229	Market Efficiency

Existing Flowgates

None

New Flowgates

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Financial Information

Capital spend start date 01/2022

Construction start date 09/2022

Project Duration (In Months) 11

Additional comments

None