

Carson Substation Equipment Upgrade

General Information

Proposing entity name	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	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	243
Project title	Carson Substation Equipment Upgrade
Project description	Replace equipment on the 500kV side of Carson substation with 5000A equipment.
Email	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Project in-service date	06/2032
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Project Components

1. Carson Substation 500 KV Equipment Upgrade - Alternative 1
2. Carson Substation 500 KV Equipment Upgrade - Alternative 2

Substation Upgrade Component

Component title	Carson Substation 500 KV Equipment Upgrade - Alternative 1
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Substation name	Carson
Substation zone	345
Substation upgrade scope	<p>Purchase & Install Substation Material: 1. Fifteen (15), 500kV, 5000A, Double End Break Switches. 2. Three (3), 500kV, 5000A, 63 KA SF6 Circuit Breaker. 3. Approximately 450 ft of 6 IN SCH 80 AL Bus. 4. Conductors, connectors, conduit, control cables, steel, foundation, and grounding as required per engineering standards. Remove Substation Material: 1. Fifteen (15), 500kV, 3000A, Double End Break Switches. 2. One (1), 500kV, 4000A , 40KA SF6 Live Tank Circuit Breaker w/ External CT's. 3. One (1), 500kV, 3000A, 50KA SF6 Circuit Breaker. 4. One (1), 500kV, 4000A, 50kA, SF6 Circuit Breaker w/ Metering CT's. 5. Approximately 450 ft of 5IN SCH 40 AL Bus. 6. Conductors, connectors, conduit, control cables, steel, foundation, and grounding as required per engineering standards. Purchase & Install Relay Material: 1. Two (3), 4526_D – C.B. w/ BCM Fiber Optic Makeup Box 2. One (1), 1510 – 24” Dual SEL-351 Transmission Breaker w/ Reclosing Panel 3. One (1),1515 – 24” Dual 500KV SEL-351 Transmission Breaker w/ Reclosing Panel 4. One (1), Panel Retirements Reuse Relay Material: 1. Three (3), 4510 – SEL-2411 Equipment Annunciator 2. Two (2), 1510 – 24” Dual SEL-351 Transmission Breaker w/ Reclosing Panel 3. Two (2),1515 – 24” Dual 500KV SEL-351 Transmission Breaker w/ Reclosing Panel 4. Three (3), 4535 or 4536 – 500kV Circuit Breaker Condition Monitor</p>
Transformer Information	
None	
New equipment description	<p>1. Fifteen (15), 500kV, 5000A, Double End Break Switches. 2. Three (3), 500kV, 5000A, 63 KA SF6 Circuit Breaker. 3. Two (3), 4526_D – C.B. w/ BCM Fiber Optic Makeup Box 4. One (1), 1510 – 24” Dual SEL-351 Transmission Breaker w/ Reclosing Panel 5. One (1),1515 – 24” Dual 500KV SEL-351 Transmission Breaker w/ Reclosing Panel</p>
Substation assumptions	<p>1. The scope of work depicted on the drawings assumes that there is no overlap with other designs and construction activities, except if mentioned in this Project Summary. 2. 4-hole pad connections must be replaced with 6-hole pad connections to maintain 5000A ratings. 3. Relay Settings and P&C design will be revised as part of the SPE Scope of Work. 4. It was determined that the GA would not need any additional equipment relocation thus it has been omitted from the submittal.</p>
Real-estate description	Substation is not being expanded.
Construction responsibility	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Benefits/Comments	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Component Cost Details - In Current Year \$	
Engineering & design	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Permitting / routing / siting	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
ROW / land acquisition	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Materials & equipment	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction & commissioning	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction management	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
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	\$12,439,396.40
Component cost (in-service year)	\$13,322,593.12
Substation Upgrade Component	
Component title	Carson Substation 500 KV Equipment Upgrade - Alternative 2
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Carson
Substation zone	345
Substation upgrade scope	Purchase & Install Substation Material: 1. Four (4), 500kV, 5000A, Double End Break Switches 2. Approximately 50 ft of 6 IN SCH 80 AL Bus 3. Conductors, connectors, steel, foundation, and grounding as required per engineering standards. Remove Substation Material: 1. Four (4), 500kV, 3000A, Double End Break Switches. 2. Approximately 50 ft of 5IN SCH 40 AL Bus 3. Conductors, connectors, steel, foundation, and grounding as required per engineering standards. Purchase & Install Relay Material: 1. No Relay material Required
Transformer Information	
None	
New equipment description	1. Four (4), 500kV, 5000A, Double End Break Switches

Substation assumptions	1. The scope of work depicted on the drawings assumes that there is no overlap with other designs and construction activities, except if mentioned in this Project Summary. 2. 4-hole pad connections must be replaced with 6-hole pad connections to maintain 5000A ratings. 3. Relay Settings and P&C design will be revised as part of the SPE Scope of Work. 4. It was determined that the GA would not need any additional equipment relocation thus it has been omitted from the submittal.
Real-estate description	Substation is not being expanded.
Construction responsibility	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Benefits/Comments	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Component Cost Details - In Current Year \$	
Engineering & design	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Permitting / routing / siting	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
ROW / land acquisition	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Materials & equipment	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction & commissioning	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction management	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
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	\$1,774,987.30
Component cost (in-service year)	\$1,901,011.08
Congestion Drivers	
None	
Existing Flowgates	
None	

New Flowgates

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

Financial Information

Capital spend start date	01/2026
Construction start date	06/2029
Project Duration (In Months)	77

Cost Containment Commitment

Cost cap (in current year)	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Cost cap (in-service year)	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Components covered by cost containment

1. Carson Substation 500 KV Equipment Upgrade - Alternative 1 - Dominion
2. Carson Substation 500 KV Equipment Upgrade - Alternative 2 - Dominion

Cost elements covered by cost containment

Engineering & design	Yes
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	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
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?	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Additional Comments	
None	