

Reconductor 345 kV lines 1202 & 1227 Dresden to Mulberry

General Information

Proposing entity name	Company confidential and proprietary information.
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Company confidential and proprietary information.
Company proposal ID	Company confidential and proprietary information.
PJM Proposal ID	135
Project title	Reconductor 345 kV lines 1202 & 1227 Dresden to Mulberry
Project description	Reconductor 1.5 miles of 345 kV lines 1202 & 1227 from Dresden to Mulberry with two conductor bundled 1033.5 ACSS conductor. Modify and replace towers as necessary to accommodate the higher mechanical loads of the bundled conductor.
Email	Company confidential and proprietary information.
Project in-service date	06/2029
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	Company confidential and proprietary information.

Project Components

1. Reconductor 345 kV lines 1202 & 1227 from Dresden to Mulberry
2. Install 345 kV Circuit Breaker and upgrade Disconnects, and Associated Equipment at Dresden
3. Upgrade Mulberry Disconnects, and Associated Equipment

Transmission Line Upgrade Component

Component title	Reconductor 345 kV lines 1202 & 1227 from Dresden to Mulberry	
Project description	Company confidential and proprietary information.	
Impacted transmission line	1202 & 1227 Dresden to Mulberry	
Point A	Dresden	
Point B	Mulberry	
Point C		
Terrain description	The lines are on existing ComEd right-of-way over flat terrain.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR, 2156 kcmil ACSR	
Hardware plan description	Existing hardware will be replaced.	
Tower line characteristics	On 345 kV line 1202, 8 of 11 structures are 52 years old. On 345 kV line 1227, 4 of 11 structures are 52 years old. The structures are a combination of steel lattice and steel monopoles.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1961.000000	2112.000000
Winter (MVA)	2324.000000	2457.000000
Conductor size and type	Two conductor bundle of 1033.5 kcmil ACSS	
Shield wire size and type	Shield wire size will be determined during engineering	
Rebuild line length	1.5 miles	

Rebuild portion description	Approximately 1.5 miles between Dresden and Mulberry will be rebuilt with double circuit towers.
Right of way	The existing ComEd right-of-way will be utilized.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$12,330,404.45
Component cost (in-service year)	\$14,323,204.21
Substation Upgrade Component	
Component title	Install 345 kV Circuit Breaker and upgrade Disconnects, and Associated Equipment at Dresden
Project description	Company confidential and proprietary information.
Substation name	Dresden
Substation zone	ComEd

Substation upgrade scope	Install 3000A 345 kV 63 kA circuit breaker on line 1202. Replace circuit breaker bus tie 4-5, bus tie 3-4 and bus tie 13-14 disconnects with 3000A 345 kV disconnects or larger. Replace 2-1113 ACSR, 2156 ACSR and 2338 ACAR substation conductor on buses 3, 4, 5, 8,13, and 14 at Dresden to exceed new circuit breaker ratings 1961/2112 MVA (SN/SE) and 2324/2457 MVA (WN/WE).
Transformer Information	
None	
New equipment description	Install 3000A 345 kV 63 kA circuit breaker on line 1202. Replace circuit breaker bus tie 4-5, bus tie 3-4 and bus tie 13-14 disconnects with 3000A 345 kV disconnects or larger. Replace 2-1113 ACSR, 2156 ACSR and 2338 ACAR substation conductor on buses 3, 4, 5, 8,13, and 14 at Dresden to exceed new circuit breaker ratings 1961/2112 MVA (SN/SE) and 2324/2457 MVA (WN/WE).
Substation assumptions	All work will be in existing substation.
Real-estate description	
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$3,766,199.98
Component cost (in-service year)	\$4,374,881.12

Substation Upgrade Component

Component title	Upgrade Mulberry Disconnects, and Associated Equipment
Project description	Company confidential and proprietary information.
Substation name	Mulberry
Substation zone	ComEd
Substation upgrade scope	Replace 2156 ACSR substation conductor on line 1202 and line 1227 terminations in Mulberry substation.

Transformer Information

None	
New equipment description	Upgrade line 1202 and line 1227 substation conductor line terminations in Mulberry to exceed ratings 1961/2112 MVA (SN/SE) and 2324/2457 MVA (WN/WE).
Substation assumptions	All work will be in existing substation.
Real-estate description	
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.

Contingency

Company confidential and proprietary information.

Total component cost

\$169,511.13

Component cost (in-service year)

\$196,906.82

Congestion Drivers

None

Existing Flowgates

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-IPD-S115	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-32GD-W11	270825	MULBERRY ; R	270717	DRESDEN ; R	1	345	222	2032 Winter Gen Deliv	Included
2024W1-IPD-S116	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-32GD-W10	270825	MULBERRY ; R	270717	DRESDEN ; R	1	345	222	2032 Winter Gen Deliv	Included
2024W1-IPD-S113	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S114	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-W14	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W13	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W12	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W11	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W17	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W16	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W15	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S119	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S120	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S117	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S118	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-W10	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-GD-W4	270825	MULBERRY ; R	270717	DRESDEN ; R	1	345	222	Winter Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-GD-W2	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Winter Gen Deliv	Included
2024W1-IPD-W9	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-GD-W101	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Winter Gen Deliv	Included
2024W1-IPD-W8	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S121	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S122	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S123	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S126	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S127	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S124	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-GD-W105	270825	MULBERRY ; R	270717	DRESDEN ; R	1	345	222	Winter Gen Deliv	Included
2024W1-IPD-S125	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-32GD-W13	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	2032 Winter Gen Deliv	Included
2024W1-32GD-W12	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	2032 Winter Gen Deliv	Included
2024W1-IPD-W23	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W22	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S130	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S131	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S128	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-GD-S376	270825	MULBERRY ; R	270717	DRESDEN ; R	1	345	222	Summer Gen Deliv	Included
2024W1-N1-WT2	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345/345	222/222	Winter Thermal	Included
2024W1-IPD-S129	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-W21	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W20	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W19	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S132	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-GD-S307	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Summer Gen Deliv	Included
2024W1-IPD-W18	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-GD-S19	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Summer Gen Deliv	Included
2024W1-IPD-S138	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S139	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S136	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S137	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S142	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S140	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S141	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S134	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S135	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S133	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-N1-ST51	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345/345	222/222	Summer Thermal	Included
2024W1-N1-ST54	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345/345	222/222	Summer Thermal	Included
2024W1-IPD-W6	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W5	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S109	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-W4	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-W3	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S112	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S110	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-S143	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-IPD-W7	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-IPD-S111	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included

New Flowgates

None

Financial Information

Capital spend start date 01/2025

Construction start date 01/2027

Project Duration (In Months) 53

Additional Comments

None