Cut 345 kV L8014 Pontiac to Dresden into 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	447
Project title	Cut 345 kV L8014 Pontiac to Dresden into Mulberry
Project description	Cut 345 kV L8014 Pontiac to Dresden into Mulberry
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. L8014 ROW to Mulberry
2. Add two 345 kV Circuit Breakers at Mulberry substation
3. Add 345 kV Line Circuit Breaker for L8014

Greenfield Transmission Line Component

Component title	L8014 ROW to Mulberry

Project description	Company confidential and proprietary information.	
Point A	Pontiac	
Point B	Mulberry	
Point C	Dresden	
	Normal ratings	Emergency ratings
Summer (MVA)	1679.000000	2058.000000
Winter (MVA)	2016.000000	2321.000000
Conductor size and type	2-1033.5 ACSS/TW per phase. Static/Shield wire to be 7#6 Alumoweld or 668 kcmil OPGW, depending on communication needs.	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	Route is approximately 0.56 miles in length between L8014 and TSS 939 Mulberry. The route will tap off L8014 on two single circuit 345kV structures and continue to TSS 939 Mulberry on double circuit 345kV structures.	
Terrain description	Relatively flat prairie terrain with some ponds and trees.	
Right-of-way width by segment	The double circuit 345kV RoW will be new and approximately 120-130 feet in width. The portion near L8014 will need to be approximately 210-220 feet in width. This portion will be on Illinois Department of Natural Resource land. Approximate RoW length 0.46 miles.	
Electrical transmission infrastructure crossings	Relatively flat prairie terrain with some ponds and trees.	
Civil infrastructure/major waterway facility crossing plan	This route will not cross any civil infrastructure or major waterways.	
Environmental impacts	Existing RoW is near a wetland. Environmental research will be required for the entire project area, and line will comply with all necessary environmental regulations. Installation of bird diverters will most likely be necessary in this area. New RoW will be on Illinois Department of Natural Resource land.	

Tower characteristics	Steel Monopole structures will be utilized for the proposed project. Structures will be engineered and have baseplates. They will sit on drilled shaft foundations, consisting of concrete, anchor bolts, and a steel reinforcing (rebar) cage. The majority of the line will be double circuit 345kV, with four equal-length arms on each side of the structure in a vertical configuration. The top arm will support the static/shield wire, and the three arms below it each supporting a conductor/phase. Standard I-String suspension assemblies will be used for tangent structures. The tap structure will be single circuit horizontal 345kV, with two arms on each side of the structure. The top arms will support the static/shield wire, and arms below it each supporting a conductor/phase. Dead end assemblies will be used for the tap structures.
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	$5,110,011.68
Component cost (in-service year)	$5,935,875.69

Substation Upgrade Component

Component title	Add two 345 kV Circuit Breakers at Mulberry substation
Project description	Company confidential and proprietary information.
Substation name	Mulberry

Substation zone	ComEd
Substation upgrade scope	Two new 345 kV 3000A 63 kA circuit breakers will be added to the substation. The circuit breakers will not impact any existing line or transformer ratings.

Transformer Information

None

New equipment description	The new circuit breakers will be installed in locations already planned for future circuit breakers.
Substation assumptions	The new circuit breakers will be installed in locations already planned for future circuit breakers.
Real-estate description	Will be contingent on substation expansion on land owned by CPV Three Rivers, LLC.
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	$14,715,837.34
Component cost (in-service year)	$17,094,163.21

Substation Upgrade Component

Component title	Add 345 kV Line Circuit Breaker for L8014
Project description	Company confidential and proprietary information.
Substation name	Dresden
Substation zone	ComEd
Substation upgrade scope	New 345 kV 3000A 63 kA circuit breaker for Line 8014 will be added to the substation

Transformer Information

None

New equipment description	New 345 kV 3000A 63 kA circuit breaker for Line 8014 will be added to the substation
Substation assumptions	The project will fit in the existing substation footprint.
Real-estate description	The project will fit in the existing substation footprint
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

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
2024W1-IPD-W9	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-GD-W2	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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-IPD-S121	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-GD-W101	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Winter Gen Deliv	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-IPD-S129	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Summer IPD	Included
2024W1-N1-WT2	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345/345	222/222	Winter Thermal	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-IPD-W18	270716	DRESDEN ; B	270824	MULBERRY ; B	1	345	222	Winter IPD	Included
2024W1-GD-S307	270824	MULBERRY ; B	270716	DRESDEN ; B	1	345	222	Summer Gen Deliv	Included
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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
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