

# Mound Street-St Clair 138kV Underground Line Rebuild

## General Information

Proposing entity name	AEPSCT
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	AEP_R
PJM Proposal ID	195
Project title	Mound Street-St Clair 138kV Underground Line Rebuild
Project description	Rebuild 2.3 miles of UG line between Mound Street and Saint Clair 138kV stations with XLPE.
Email	jmperez@aep.com
Project in-service date	04/2030
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	Addresses aging oil pipe type cable which is obsolete and lack spare parts/vendor support.

## Project Components

### 1. Mound Street-St Clair Avenue 138kV UG Line Rebuild

#### Transmission Line Upgrade Component

Component title	Mound Street-St Clair Avenue 138kV UG Line Rebuild
Project description	Rebuild 2.3 miles of the Mound Street-St Clair Avenue 138kV UG line with 5000 KCM XLPE cable.
Impacted transmission line	Mound Street-St Clair Avenue

Point A	Mound Street Station	
Point B	St Clair Avenue Station	
Point C		
Terrain description	Flat/urban. Line is UG.	
Existing Line Physical Characteristics		
Operating voltage	138	
Conductor size and type	600 MCM CU Oil Pipe Type Cable	
Hardware plan description	Hardware will be replaced.	
Tower line characteristics	This an underground line built using oil pipe type cable originally built in 1956.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	290.000000	320.000000
Winter (MVA)	310.000000	340.000000
Conductor size and type	5000 KCM XLPE	
Shield wire size and type	N/A	
Rebuild line length	2.3 miles	
Rebuild portion description	2.3 miles of the existing UG line between Mound Street and St Clair Avenue 138kV stations will be rebuilt.	
Right of way	It is assumed Right of way and vaults are completely in road right of way. No encroachments currently. ROW width is 50' which would be adequate for this project.	

Construction responsibility

AEP

Benefits/Comments

Component Cost Details - In Current Year \$

Engineering & design

Detailed cost breakdown

Permitting / routing / siting

Detailed cost breakdown

ROW / land acquisition

Detailed cost breakdown

Materials & equipment

Detailed cost breakdown

Construction & commissioning

Detailed cost breakdown

Construction management

Detailed cost breakdown

Overheads & miscellaneous costs

Detailed cost breakdown

Contingency

Detailed cost breakdown

Total component cost

\$41,586,074.04

Component cost (in-service year)

\$41,586,074.04

## 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
2025W1-IPD-S118	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S97	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S176	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S177	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S121	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2025W1-IPD-S178	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N11-WT49	243548	05MOUND ST	243876	05ST.CXX	1	138	205	N-1-1 Thermal	Included
2025W1-GD-S178	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-IPD-S114	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S137	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S93	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S115	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S73	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S117	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N11-WT45	243548	05MOUND ST	243876	05ST.CXX	1	138	205	N-1-1 Thermal	Included
2025W1-IPD-S155	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S134	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S113	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S136	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S153	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-GD-S196	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-GD-S405	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-IPD-S183	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-GD-S167	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-GD-S194	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-IPD-S179	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S107	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S189	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S171	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N11-WT53	243548	05MOUND ST	243876	05ST.CXX	1	138	205	N-1-1 Thermal	Included
2025W1-IPD-S172	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S127	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S150	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2025W1-IPD-S173	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S184	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S168	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-IPD-S166	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N1-ST96	243548	05MOUND ST	243876	05ST.CXX	1	138/138	205/205	N-1 Thermal	Included
2025W1-GD-S467	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-N1-ST101	243548	05MOUND ST	243876	05ST.CXX	1	138/138	205/205	N-1 Thermal	Included
2025W1-IPD-S190	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N1-ST100	243548	05MOUND ST	243876	05ST.CXX	1	138/138	205/205	N-1 Thermal	Included
2025W1-IPD-S191	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included
2025W1-N1-ST98	243548	05MOUND ST	243876	05ST.CXX	1	138/138	205/205	N-1 Thermal	Included
2025W1-GD-S173	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-GD-S468	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-GD-S484	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Generation Deliverability	Included
2025W1-IPD-S60	243548	05MOUND ST	243876	05ST.CXX	1	138	205	Individual Plant Deliverability	Included

## New Flowgates

None

## Financial Information

Capital spend start date 03/2026

Construction start date 06/2028

Project Duration (In Months) 49

## Additional Comments

None