

Harrison-Obetz-Marion Rd 138kV Line Sag Study & Terminal Equipment Upgrades

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_P
PJM Proposal ID	662
Project title	Harrison-Obetz-Marion Rd 138kV Line Sag Study & Terminal Equipment Upgrades
Project description	Re-rate Harrison-Obetz-Marion Road 138kV Circuit to bring existing 636 ACSR 26/7 to MOT. Replace 795 KCM ACSR bus conductor at Obetz.
Email	jmperez@aep.com
Project in-service date	01/2029
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Harrison-Obetz-Marion 138kV Line
2. Obetz Station

Transmission Line Upgrade Component

Component title	Harrison-Obetz-Marion 138kV Line
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Project description	Replace structures from structure 1 on the Harrison Extension 138kV Line Asset to structure 21 of the Bixby-Marion 138kV Line Asset. Install tower extensions from structure 21 on the Bixby-Marion 138kV Line asset to Marion Road station.	
Impacted transmission line	Harrison-Obetz-Marion 138kV Circuit	
Point A	Structure 1 (outside of Harrison Station)	
Point B	Marion Road Station	
Point C		
Terrain description	Urban/flat	
Existing Line Physical Characteristics		
Operating voltage	138	
Conductor size and type	795 ACSR Drake	
Hardware plan description	Hardware will be reused as much as possible.	
Tower line characteristics	Wood H Frames originally installed in 1950, Steel H Frames and Double circuit lattice towers originally installed in 1976.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	223.000000	310.000000
Winter (MVA)	281.000000	349.000000
Conductor size and type	795 ACSR Drake	
Shield wire size and type	3#5 Copperweld EHS Shield Wire	
Rebuild line length	N/A	

Rebuild portion description	N/A
Right of way	Supplement/augment easements as needed
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	\$14,578,314.62
Component cost (in-service year)	\$14,578,314.62
Substation Upgrade Component	
Component title	Obetz Station
Project description	Remove existing 795 ACVASR jumpers on Harrison Line Switch and replace with 20' 1272 KCM AAC 61 Str jumpers.
Substation name	Obetz Station
Substation zone	205
Substation upgrade scope	Remove existing 795 ACSR jumpers on Harrison Line Switch and replace with 20' 1272 KCM AAC 61 Str jumpers.

Transformer Information

None

New equipment description	1272 ACSR Station Jumpers
Substation assumptions	Only replacing bus jumper/conductor will be necessary.
Real-estate description	No station expansion or fence expansion needed.
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	\$238,304.70
Component cost (in-service year)	\$238,304.70

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-GD-S190	243522	05HARRISON	243550	05OBETZ	1	138	205	Generation Deliverability	Included
2025W1-IPD-S187	243522	05HARRISON	243550	05OBETZ	1	138	205	Individual Plant Deliverability	Included
2025W1-GD-S229	243550	05OBETZ	243539	05MARION RD	1	138	205	Generation Deliverability	Included
2025W1-GD-S207	243550	05OBETZ	243539	05MARION RD	1	138	205	Generation Deliverability	Included
2025W1-GD-S183	243522	05HARRISON	243550	05OBETZ	1	138	205	Generation Deliverability	Included
2025W1-IPD-S169	243522	05HARRISON	243550	05OBETZ	1	138	205	Individual Plant Deliverability	Included
2025W1-GD-S406	243522	05HARRISON	243550	05OBETZ	1	138	205	Generation Deliverability	Included
2025W1-GD-S205	243522	05HARRISON	243550	05OBETZ	1	138	205	Generation Deliverability	Included

New Flowgates

None

Financial Information

Capital spend start date 04/2026

Construction start date 10/2028

Project Duration (In Months) 33

Additional Comments

None