Allen-Sorenson 345kV 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_C
PJM Proposal ID	996
Project title	Allen-Sorenson 345kV Line Rebuild
Project description	Rebuild the Allen-Sorenson 345kV line between structure 214 and Sorenson station (~21.2 miles)
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	This solution aligns with other rebuilds on the corridor between Sorenson and East Lima stations to address all the paper expanded conductor needs on this line.

Project Components

1. Allen-Sorenson 345kV Line

Transmission Line Upgrade Component

Component title	Allen-Sorenson 345kV Line
Project description	Rebuild Allen-Sorenson 345kV circuit, part of the East Lima-Sorenson 345kV Line Asset, from structure 214 to Sorenson station.

Impacted transmission line	Allen-Sorenson 345kV
Point A	Structure 214 of Allen-Sorenson 345kV Circuit
Point B	Sorenson Station
Point C	
Terrain description	Flat
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	1275 KCM ACSR/PE 54/19 originally installed in 1954.
Hardware plan description	All hardware assumed to be replaced under this proposal.
Tower line characteristics	Existing structures are double circuit lattice originally installed in 1954.
Proposed Line Characteristics	

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1188.000000	1539.000000
Winter (MVA)	1506.000000	1777.000000

Conductor size and type	Bundled (2) 1590 ACSR Falcon
Shield wire size and type	7#8 Alumoweld Shield Wire & OPGW
Rebuild line length	21.2
Rebuild portion description	The 21.2-mile portion between Sorenson and structure 214 part of the Sorenson-Allen 345kV line will be rebuilt under this proposal. The structures proposed are double circuit capable, however only one side of the structures will be strung with this proposal.

Right of way	Supplemental right of way will be acquired if/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	$70,644,239.00
Component cost (in-service year)	$70,644,239.00

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-W39	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included
2025W1-GD-W383	243232	05SORENS	243211	05ALLEN	1	345	205	Generation Deliverability	Included
2025W1-IPD-W9	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included
2025W1-GD-S470	243232	05SORENS	243211	05ALLEN	1	345	205	Generation Deliverability	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2025W1-IPD-W22	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included
2025W1-IPD-W38	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included
2025W1-IPD-W36	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included
2025W1-IPD-W37	243211	05ALLEN	243232	05SORENS	1	345	205	Individual Plant Deliverability	Included

New Flowgates

None

Financial Information

Capital spend start date	09/2025
Construction start date	01/2027
Project Duration (In Months)	55

Additional Comments

None