

Replace a portion of Croydon-Burlington line conductor

General Information

Proposing entity name	PE
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	01
PJM Proposal ID	88
Project title	Replace a portion of Croydon-Burlington line conductor
Project description	Replace a 0.76 mile length of the Croydon-Burlington 230 kV line conductor
Email	michael.donnelly@peco-energy.com
Project in-service date	06/2023
Tie-line impact	Yes
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Replace a 0.76 mile length of the Croydon-Burlington 230 kV line conductor

Transmission Line Upgrade Component

Component title	Replace a 0.76 mile length of the Croydon-Burlington 230 kV line conductor
Project description	Replace a 0.76 mile length of the Croydon-Burlington 230 kV line conductor. The portion of the line conductor that will be replaced is from Croydon substation to tower 1-9. The existing conductor is 1590 kcmil ACSR and the new conductor will be 1622 kcmil ACSS/TW.

Impacted transmission line 220-30 Croydon-Burlington 230 kV

Point A Croydon

Point B Burlington

Point C

Terrain description Relatively flat

Existing Line Physical Characteristics

Operating voltage 230

Conductor size and type 1590 kcmil ACSR

Hardware plan description Hardware will be replaced.

Tower line characteristics The existing structures are 47 years old. There are no known condition problems.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	851.000000	995.000000
Winter (MVA)	892.000000	1020.000000
Conductor size and type	1622 kcmil ACSS/TW	
Shield wire size and type	9/16 7 #5 Alumoweld	
Rebuild line length	0.76 miles (reconductor)	
Rebuild portion description	A 0.76 mile portion of the line will be reconducted. The existing pole type towers will be reused.	
Right of way	New ROW will not be required.	

Construction responsibility

PECO

Benefits/Comments

Component Cost Details - In Current Year \$

Engineering & design

detailed estimate

Permitting / routing / siting

detailed estimate

ROW / land acquisition

\$.00

Materials & equipment

detailed estimate

Construction & commissioning

detailed estimate

Construction management

detailed estimate

Overheads & miscellaneous costs

detailed estimate

Contingency

\$.00

Total component cost

\$794,186.00

Component cost (in-service year)

\$818,576.00

Congestion Drivers

None

Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
GD-S485	213543	CROYDON30	219102	BURLING	1	230	230/231	Summer Gen Deliv	Included
GD-S674	213543	CROYDON30	219102	BURLING	1	230	230/231	Summer Gen Deliv	Included
GD-S486	213543	CROYDON30	219102	BURLING	1	230	230/231	Summer Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 06/2022

Construction start date 06/2022

Project Duration (In Months) 12

Additional Comments

None