# **Proposal D-Conastone-Doubs 500kV**

### **General Information**

Proposing entity name

Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?

Company proposal ID

PJM Proposal ID

Project title

Project description

Email

Project in-service date

Tie-line impact

Interregional project

Is the proposer offering a binding cap on capital costs?

Additional benefits

**Project Components** 

1. North Delta 500/230kV Upgrade

2. Northeast 230kV Upgrade

3. Peach Bottom 500kV Upgrade

4. Doubs 500/230kV Upgrade

5. Conastone 500/230kV Upgrade

6. Ox 500kV Upgrade

Competitive

Competitive

Competitive

637

Proposal D-Conastone-Doubs 500kV

Conastone-Doubs 500kV

Competitive

06/2027

Yes

No

Yes

Competitive

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- 7. North Delta-Northeast 230kV
- 8. Conastone-Doubs 500kV

## **Substation Upgrade Component**

Component title North Delta 500/230kV Upgrade

Project description Competitive

Substation name North Delta

Substation zone PECO

Substation upgrade scope

Expand the North Delta 230kV ring bus by adding one 230kV circuit breaker and its associated disconnect switches along with one 230kV line terminal and line disconnect switch for the new 230kV line to Northeast Substation. North Delta 500/230 transformers impedance updates Upgrade

(4) 500kV breakers to a higher rating of 80kA

#### Transformer Information

None

New equipment description

One (1) 230kV circuit breaker and associated disconnect switches

Substation assumptions

This proposal assumes that all necessary outages will be available; existing AC, DC, and telecom. systems will accommodate the new equipment; geotechnical data is available; the existing cable

existing yard station equipment does not need to be replaced except for the associated line relays and existing line interchange metering exists and does not need to be replaced.

trench has space for the new cables; the existing control house has space for the new relay panels;

Real-estate description No substation expansion is anticipated.

Construction responsibility Competitive

Benefits/Comments Competitive

Component Cost Details - In Current Year \$

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$8,440,072.00

Component cost (in-service year) \$9,178,308.00

## **Substation Upgrade Component**

Component title Northeast 230kV Upgrade

Project description Competitive

Substation name Northeast

Substation zone BGE

Substation upgrade scope

Rebuild the Northeast 230kV yard by constructing a seven-breaker 230kV ring bus along with replacing the existing XFMRs with two (2) 230/115kV 750MVA XFMRs. This project will also install

the new 230kV Northeast to North Delta line.

#### **Transformer Information**

None

New equipment description

Substation assumptions

Two (2) 230/115kV 750MVA XFMRs, two (2) 230kV XFMR disconnect switches, seven (7) 230kV circuit breakers, fourteen (14) 230kV circuit breaker disconnect switches, four (4) 230kV line terminals, four (4) 230kV line disconnect switches, and one (1) control building.

This proposal assumes that all necessary outages will be available; existing AC, DC, and telecom. systems will accommodate the new equipment; geotechnical data is available; ground grid upgrades will not be needed; the existing cable trench has space for the new cables; the existing control house has space for the new relay panels; existing yard station equipment does not need to be replaced except for the associated line relays and existing line interchange metering exists and does not need to be replaced.

Real-estate description No substation expansion is anticipated.

Construction responsibility Competitive

Benefits/Comments Competitive

**Component Cost Details - In Current Year \$** 

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$56,434,017.00

Component cost (in-service year) \$61,370,184.00

**Substation Upgrade Component** 

Component title Peach Bottom 500kV Upgrade

Project description Competitive

Substation name Peach Bottom

Substation zone PECO

Substation upgrade scope Upgrade four (4) 500kV breakers to a higher rating of 80kA

**Transformer Information** 

None

New equipment description Four (4) 500kV breakers

Substation assumptions

This proposal assumes that all necessary outages will be available; existing AC, DC, and telecom.

systems will accommodate the new equipment; geotechnical data is available; ground grid upgrades will not be needed; the existing cable trench has space for the new cables; the existing control house has space for the new relay panels; existing yard station equipment does not need to be replaced except for the associated line relays and existing line interchange metering exists and

does not need to be replaced.

Real-estate description No substation expansion is anticipated

Construction responsibility Competitive

Benefits/Comments Competitive

Component Cost Details - In Current Year \$

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$6,573,022.00

Component cost (in-service year) \$7,147,950.00

**Substation Upgrade Component** 

Component title Doubs 500/230kV Upgrade

Project description Competitive

Substation name	Doubs		
Substation zone	APS		
Substation upgrade scope	Upgrade 500/230kV transforme 500kV circuit to an existing pos	er #01 and #03 at Doubs. Connectition at Doubs 500kV	ct the new Conastone to Doubs
Transformer Information			
	Name	Capacity (MV	/A)
Transformer	01		
	High Side	Low Side	Tertiary
Voltage (kV)	500	230	
	Name	Capacity (MV	/A)
Transformer	03		
	High Side	Low Side	Tertiary
Voltage (kV)	500	230	
New equipment description	Upgrade 500/230kV transforme	ers #1 and #3	
Substation assumptions	systems will accommodate the upgrades will not be needed; the control house has space for the	new equipment; geotechnical da ne existing cable trench has space new relay panels; existing yard	ble; existing AC, DC, and telecom. ta is available; ground grid e for the new cables; the existing station equipment does not need to be interchange metering exists and
Real-estate description	No substation expansion is ant	icipated.	
Construction responsibility	Competitive		
Benefits/Comments	Competitive		

**Component Cost Details - In Current Year \$** 

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$25,202,609.00

Component cost (in-service year) \$27,407,029.00

**Substation Upgrade Component** 

Component title Conastone 500/230kV Upgrade

Project description Competitive

Substation name Conastone

Substation zone BGE

Substation upgrade scope Expand Conastone 500kV with (1) new breaker and relocate 5013 circuit and 500-2 trasformer and

upgrade two (2) 230kV breakers to a higher rating of 63kA. Upgrade terminal equipment.

**Transformer Information** 

None

New equipment description New 500kV breaker and upgrade two (2) 230kV breakers

Substation assumptions

This proposal assumes that all necessary outages will be available; existing AC, DC, and telecom. systems will accommodate the new equipment; geotechnical data is available; the existing cable trench has space for the new cables; the existing control house has space for the new relay panels; existing yard station equipment does not need to be replaced except for the associated line relays and existing line interchange metering exists and does not need to be replaced.

Real-estate description No substation expansion is anticipated.

Construction responsibility Competitive

Benefits/Comments Competitive

**Component Cost Details - In Current Year \$** 

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$8,138,278.00

Component cost (in-service year) \$8,850,115.00

**Substation Upgrade Component** 

Component title Ox 500kV Upgrade

Project description Competitive

Substation name Ox 500kV

Substation zone Dominion

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Substation upgrade scope

Upgrade one (1) 500kV breaker to a higher rating of 50kA

does not need to be replaced.

This proposal assumes that all necessary outages will be available; existing AC, DC, and telecom.

systems will accommodate the new equipment; geotechnical data is available; ground grid upgrades will not be needed; the existing cable trench has space for the new cables; the existing control house has space for the new relay panels; existing yard station equipment does not need to be replaced except for the associated line relays and existing line interchange metering exists and

#### **Transformer Information**

None

New equipment description Upgrade one (1) 500kV breaker

Substation assumptions

Real-estate description No substation expansion is anticipated

Construction responsibility Competitive

Benefits/Comments Competitive

**Component Cost Details - In Current Year \$** 

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$1,171,097.00

Component cost (in-service year) \$1,273,530.00

#### **Greenfield Transmission Line Component**

Component title North Delta-Northeast 230kV Project description Competitive Point A North Delta 230kV Point B Northeast 230kV Point C **Normal ratings Emergency ratings** Summer (MVA) 1886.000000 2160.000000 Winter (MVA) 1998.000000 2286.000000 Conductor size and type 230-kV AC single-circuit 1590 kcmil ACSS/AW "Falcon" Nominal voltage AC Nominal voltage 230 Overhead Line construction type Approximately 36.5 miles between 230kV North Delta Substation and the 230kV Northeast General route description Substation Terrain description North Delta-Northeast 230kV is mostly in rural areas to the north and urban to the south. Northern portion of the route is located in southern Pennsylvania with rural and farmed properties and as the route heads to the south, it ends to the northeast of Baltimore. Right-of-way width by segment The Project proposes to utilize a right-of-way width of 85 feet in residential areas and 100 feet in farmland. Existing transmission line crossing between #132 and #133, Existing transmission line crossing Electrical transmission infrastructure crossings

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between #136 and #137, Existing transmission line crossing between #141 and #142, Existing transmission line crossing between #145 and #146, Existing transmission line crossing between #148 and #149, Existing transmission line crossing between #151 and #152, Existing transmission line crossing between #177 and #178

Civil infrastructure/major waterway facility crossing plan

Environmental impacts

Tower characteristics

Construction responsibility

Benefits/Comments

**Component Cost Details - In Current Year \$** 

Engineering & design

Permitting / routing / siting

ROW / land acquisition

All civil infrastructure and major waterway crossings can be found in the attached crossing plan

The Team conducted an assessment of anticipated permits associated with the proposed route and have supported the evaluation of routing and development scenarios throughout the process. The assessments included a review of Federal, state, regional, and local regulatory requirements that could potentially impact each of the individual project scenarios. The circuits and associated stations are located in Pennsylvania and Maryland. A GIS analysis was performed to route away from known public lands and no public lands will be required for this project scope. Reviews were performed using publicly available GIS data from both MD and PA sources. Upon award a detailed field based analysis will be completed. No transmission towers are located in stream crossings which will minimize stream bed impacts. NWI wetlands data, FEMA floodplain layers, and state datasets were reviewed as part of the project analysis. Known wetlands areas were used for avoidance however field analysis will confirm total proposed temporary and permanent impacts. PSE&G has been able to largely avoid permanent impacts to wetlands for overhead transmission projects and will work to shift tower foundations wherever feasible in detailed design upon confirmation of field conditions. The proposed route will intersect FEMA mapped floodplains however only the tower foundations will have assumed impacts. Field based delineations and assessments will include the above mentioned wetlands and streams delineations, habitat surveys for species identified by the records review, and cultural resource studies will be completed for the entire project (including known construction only impacts). Following field studies, data will be incorporated into the engineering model so that tower locations and applicable station location are sited to maximize avoidance of sensitive resources. Towers will be placed outside of wetlands, streams, known threatened and endangered species habitat and cultural/historical areas and floodplains to the greatest extent possible. Construction timing will be scheduled in accordance with USFWS and state agency specifications to minimize impacts to threatened and endangered habitat locations. At a minimum, approvals and permits are anticipated to be acquired from the Maryland Public Service Commission, Pennsylvania Public Utility Commission, USACE, USFWS, MDE, PADEP, MD County Soil Conservation Districts and in accordance with the standards & specifications of applicable local ordinance

Monopole - single circuit

Competitive

Competitive

Competitive

Competitive

Competitive

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Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$187,982,319.00

Component cost (in-service year) \$204,424,743.00

## **Greenfield Transmission Line Component**

Component title Conastone-Doubs 500kV

Project description Competitive

Point A Conastone 500kV

Point B Doubs 500kV

Point C

Line construction type

	Normal ratings	Emergency ratings
Summer (MVA)	2940.000000	3733.000000
Winter (MVA)	3618.000000	4424.000000
Conductor size and type	500-kV AC single-circuit 954 kcmil ACSR "Card	inal"
Nominal voltage	AC	
Nominal voltage	500	

Overhead

General route description Approximately 40.1 miles between 500kV Conastone Substation and the 500kV Doubs Substation

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Terrain description

Right-of-way width by segment

Electrical transmission infrastructure crossings

Civil infrastructure/major waterway facility crossing plan

**Environmental impacts** 

Tower characteristics

Construction responsibility

Conastone-Doubs 500kV Route is mostly in rural areas. Northern portion of the route is located in Northern Maryland in close proximity to the Pennsylvania border with rural and farmed properties. and then the route heads to the west. The route is to the north and west of Westminster and then heads in a south-westerly direction to Doubs.

The Project proposes to utilize a right-of-way width of 150 feet

Existing transmission line crossing between #209 and #210, Existing transmission line crossing between #214 and #215, Existing transmission line crossing between #269 and #270, Existing transmission line crossing between #301 and #302

All civil infrastructure and major waterway crossings can be found in the attached crossing plan

The Team conducted an assessment of anticipated permits associated with the proposed route and have supported the evaluation of routing and development scenarios throughout the process. The permitting and environmental assessments have included a review of Federal, state, regional, and local regulatory requirements that could potentially impact each of the individual project scenarios. The circuits and associated stations are located in Maryland. A GIS analysis was performed to route away from known public lands and no public lands will be required for this project scope. Reviews were performed using publicly available GIS data from MD sources. Upon award a detailed field based analysis will be completed. No transmission towers are located in stream crossings which will minimize stream bed impacts. NWI wetlands data, FEMA floodplain layers, and state datasets were reviewed as part of the project analysis. Known wetlands areas were used for avoidance however field analysis will confirm total proposed temporary and permanent impacts. PSE&G has been able to largely avoid permanent impacts to wetlands for overhead transmission projects and will work to shift tower foundations wherever feasible in detailed design upon confirmation of field conditions. The proposed route will intersect FEMA mapped floodplains however only the tower foundations will have assumed impacts. Field based delineations and assessments will include the above mentioned wetlands and streams delineations, habitat surveys for species identified by the records review, and cultural resource studies will be completed for the entire project (including known construction only impacts). Following field studies, data will be incorporated into the engineering model so that tower locations and applicable station location are sited to maximize avoidance of sensitive resources. Towers will be placed outside of wetlands, streams, known threatened and endangered species habitat and cultural/historical areas and floodplains to the greatest extent possible. Construction timing will be scheduled in accordance with USFWS and state agency specifications to minimize impacts to threatened and endangered habitat locations. At a minimum, approvals and permits are anticipated to be acquired from the Maryland Public Service Commission, USACE, USFWS, MDE, MD County Soil Conservation Districts and in accordance with the standards and specifications of applicable local ordinances.

H-Frame - single circuit

Competitive

Benefits/Comments Competitive

**Component Cost Details - In Current Year \$** 

Engineering & design Competitive

Permitting / routing / siting Competitive

ROW / land acquisition Competitive

Materials & equipment Competitive

Construction & commissioning Competitive

Construction management Competitive

Overheads & miscellaneous costs Competitive

Contingency Competitive

Total component cost \$390,275,805.00

Component cost (in-service year) \$424,412,422.00

# **Congestion Drivers**

None

# **Existing Flowgates**

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-W12	23204544	27LINCOLN	204538	27STRABAN	1	115	227	Winter Gen Deliv	Included
2022W3-GD-S17	7 <b>2</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-W38	3 213869	РСНВТМТР	214087	COOPER2	1	230	230	Winter Gen Deliv	Included
2022W3-GD-S28	0235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-GD-S17	7208047	PPL-BGE TIE	220963	CONASTON	1	230	229/232	Summer Gen Deliv	Included
2022W3-GD-S11	9213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer Gen Deliv	Included
2022W3-GD-S20	3 <b>2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-W41	204544	27LINCOLN	204538	27STRABAN	1	115	227	Winter Gen Deliv	Included
2022W3-GD-S28	1200065	PCHBTM2S	200064	PCHBTM1S	Z1	500	230	Summer Gen Deliv	Included
2022W3-GD-W12	26200532	26ROXBURY	235188	01GREENE	1	138	226/201	Winter Gen Deliv	Included
2022W3-GD-S12	5204529	27GERMANTN	204530	27GERMANTN	1	115/138	227	Summer Gen Deliv	Included
2022W3-GD-S16	9 <b>2</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-GD-W12	22200512	26LEWISTWN	200519	26REED TAP	1	115	226	Winter Gen Deliv	Included
2022W3-GD-S77	9200512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-N1-ST2	I <b>@</b> 04544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST2	1 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST2	12235105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Summer N-1 Thermal	Included
2022W3-GD-W13	82300004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-S16	5 <b>2</b> 13846	NOTTREAC	213869	PCHBTMTP	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W29	235463	01TANEY	235450	01CARROL	1	138	201	Winter Gen Deliv	Included
2022W3-GD-S82	8235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-N1-ST20	) <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-N1-ST2	1 <b>5210</b> 14544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1	Included
2022W3-GD-S27	6204514	27TMI	204502	27JACKSON	1	230	227	Summer Gen Deliv	Included
2022W3-GD-S17	6 <b>2</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-N1-ST2	1 <b>2</b> 35105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Summer N-1 Thermal	Included
2022W3-N1-ST2	1208069	PPL-BGE TIE	220964	GRACETON	1	230/230	229/232	Summer N-1 Thermal	Included
2022W3-N1-ST2	1 <b>2</b> 21090	GLENARM2	221089	WINDYED1	1	115/115	232/232	Summer N-1 Thermal	Included
2022W3-GD-W81	4204544	27LINCOLN	204538	27STRABAN	1	115	227	Winter Gen Deliv	Included
2022W3-GD-S13	5213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer Gen Deliv	Included
2022W3-GD-S17	7 <b>8</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S29	9235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-GD-W94	9213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Winter Gen Deliv	Included
2022W3-GD-S30	0235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-GD-W50	200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD_L33	1235105	01DOUBS	235459	01DOUBS	1	500/230	201/201	Light Load Gen Deliv	Included
2022W3-GD-S84	213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W9	5235105	01DOUBS	235459	01DOUBS	3	500/230	201	Winter Gen Deliv	Included
2022W3-GD-S85	213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Summer Gen Deliv	Included
2022W3-GD-S13	9208071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-W1	32200065	PCHBTM2S	200064	PCHBTM1S	Z2	500	230	Winter Gen Deliv	Included
2022W3-GD-S17	7 <b>2</b> 08048	OTCR	208047	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-S12	7208069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Summer Gen Deliv	Included
2022W3-GD-S78	0200512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-S16	9 <b>2</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-N1-ST2	2 <b>0</b> 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S16	6 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S16	6 <b>2</b> 00064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S17	8 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-W83	31213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Winter Gen Deliv	Included
2022W3-GD-S14	7213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W83	32213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Winter Gen Deliv	Included
2022W3-GD-S17	0 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S32	6208048	OTCR	208047	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-S15	2200512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-S15	5208069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Summer Gen Deliv	Included
2022W3-GD-S95	213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W58	3 204538	27STRABAN	204529	27GERMANTN	1	115	227	Winter Gen Deliv	Included
2022W3-GD-S20	3 <b>8</b> 21092	FIVE.FOR	221096	ROCKRGE1	1	115	232	Summer Gen Deliv	Included
2022W3-GD-S96	213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Summer Gen Deliv	Included
2022W3-N1-ST2	4 <b>0</b> 200512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-GD-S31	2208047	PPL-BGE TIE	220963	CONASTON	1	230	229/232	Summer Gen Deliv	Included
2022W3-N1-ST1	0 <b>9</b> 21092	FIVE.FOR	221096	ROCKRGE1	1	115/115	232/232	Summer N-1 Thermal	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-S1	70200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S1	66 <b>2</b> 13869	PCHBTMTP	214087	COOPER2	1	230	230	Summer Gen Deliv	Included
2022W3-N1-ST	23 <b>0</b> 35105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Summer N-1 Thermal	Included
2022W3-N1-ST	23200064	PCHBTM1S	200004	CNASTONE	1	500/500	230/232	Summer N-1 Thermal	Included
2022W3-N1-ST	23 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST	23 <b>3</b> 204544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST	234208071	SAHA34TP	208069	PPL-BGE TIE	1	230/230	229/229	Summer N-1 Thermal	Included
2022W3-N1-ST	23 <b>@</b> 08069	PPL-BGE TIE	220964	GRACETON	1	230/230	229/232	Summer N-1 Thermal	Included
2022W3-N1-ST	23 <b>7</b> 208069	PPL-BGE TIE	220964	GRACETON	1	230/230	229/232	Summer N-1 Thermal	Included
2022W3-GD-S1	79 <b>3</b> 21092	FIVE.FOR	221096	ROCKRGE1	1	115	232	Summer Gen Deliv	Included
2022W3-GD-W	12 <b>120</b> 0532	26ROXBURY	235188	01GREENE	1	138	226/201	Winter Gen Deliv	Included
2022W3-GD-S1	64208071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-S1	79 <b>2</b> 20962	NWEST311	220972	GRANITE1	1	230	232	Summer Gen Deliv	Included
2022W3-GD-S1	71200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-S1	712200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-W8	849204538	27STRABAN	204529	27GERMANTN	1	115	227	Winter Gen Deliv	Included
2022W3-N1-ST	12 <b>9</b> 21092	FIVE.FOR	221096	ROCKRGE1	1	115/115	232/232	Summer N-1 Thermal	Included
2022W3-N1-ST	9 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	71 <b>8</b> 08071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-S1	71200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-W8	841213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Winter Gen Deliv	Included
2022W3-GD-W	1 12/00532	26ROXBURY	235188	01GREENE	1	138	226/201	Winter Gen Deliv	Included
2022W3-GD-W8	842213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Winter Gen Deliv	Included
2022W3-GD-W	1282000512	26LEWISTWN	200519	26REED TAP	1	115	226	Winter Gen Deliv	Included
2022W3-GD-S1	79204515	27YORKANA	208048	OTCR	1	230	227/229	Summer Gen Deliv	Included
2022W3-N1-ST	7 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST	12 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	70 <b>8</b> 08069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Summer Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-N1-ST2	4200512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-GD-W1	<b>5210</b> 0004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-S16	7 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S16	7 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S10	3200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-N1-ST3	235105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Summer N-1 Thermal	Included
2022W3-GD-S10	4213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Summer Gen Deliv	Included
2022W3-N1-ST4	235105	01DOUBS	235459	01DOUBS	1	500/230	201/201	Summer N-1 Thermal	Included
2022W3-GD-S20	4 <b>2</b> 21092	FIVE.FOR	221096	ROCKRGE1	1	115	232	Summer Gen Deliv	Included
2022W3-GD-S34	10204515	27YORKANA	208048	OTCR	1	230	227/229	Summer Gen Deliv	Included
2022W3-GD-S18	30 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-W1	<b>423</b> 5463	01TANEY	235450	01CARROL	1	138	201	Winter Gen Deliv	Included
2022W3-GD-S18	30 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-S20	5 <b>2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-W1	<b>22/3</b> 5463	01TANEY	235450	01CARROL	1	138	201	Winter Gen Deliv	Included
2022W3-GD-S17	72 <b>2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-S17	72 <b>0</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-S17	71 <b>2</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-GD-S17	71 <b>8</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-N1-WT	142100512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Winter N-1 Thermal	Included
2022W3-GD-S17	72 <b>8</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-GD-S18	30 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-GD-S17	72 <b>8</b> 00064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S17	72 <b>2</b> 00064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S20	5 <b>2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD_L3	11235105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Light Load Gen Deliv	Included
2022W3-GD-S17	72 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S34	16200065	PCHBTM2S	200066	PCHBTM1N	2	500	230	Summer Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-S1	72 <b>3</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-N1-ST2	4 204544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST2	25 204544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	73200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S20	1200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-S20	2200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-N1-ST3	9 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	72 <b>9</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-N1-ST3	5 235463	01TANEY	235450	01CARROL	1	138/138	201/201	Summer N-1 Thermal	Included
2022W3-N1-ST1	5 <b>@</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST3	7 235463	01TANEY	235450	01CARROL	1	138/138	201/201	Summer N-1 Thermal	Included
2022W3-N1-LLT	4235105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Light Load N-1	Included
2022W3-N1-ST5	0 204538	27STRABAN	204529	27GERMANTN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST5	1 204538	27STRABAN	204529	27GERMANTN	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-LLT	235105	01DOUBS	235459	01DOUBS	1	500/230	201/201	Light Load N-1	Included
2022W3-N1-WT	2235463	01TANEY	235450	01CARROL	1	138/138	201/201	Winter N-1 Thermal	Included
2022W3-N1-ST5	3 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	73 <b>2</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-N1-WT	53204544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-N1-ST1	6204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-WT	8204544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-N1-WT	0235463	01TANEY	235450	01CARROL	1	138/138	201/201	Winter N-1 Thermal	Included
2022W3-LD-ST1	1 200004	CNASTONE	200064	PCHBTM1S	1	500/500	232/230	Load Deliverability	Included
2022W3-LD-ST1	3 200064	PCHBTM1S	200004	CNASTONE	1	500/500	230/232	Load Deliverability	Included
2022W3-N1-ST5	9 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-LD-ST1	2 200064	PCHBTM1S	200004	CNASTONE	1	500/500	230/232	Load Deliverability	Included
2022W3-GD-W8	50213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Winter Gen Deliv	Included
2022W3-N1-ST6	3 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included

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2022W3-GD-W8	1213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Winter Gen Deliv	Included
2022W3-GD-W9	7204515	27YORKANA	208048	OTCR	1	230	227/229	Winter Gen Deliv	Included
2022W3-N1-ST1	<b>72</b> 08069	PPL-BGE TIE	220964	GRACETON	1	230/230	229/232	Summer N-1 Thermal	Included
2022W3-N1-ST5	3 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST7	1 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-W10	02108047	PPL-BGE TIE	220963	CONASTON	1	230	229/232	Winter Gen Deliv	Included
2022W3-N1-ST7	2204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-W7	3 200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-W7	1 200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-N1-ST7	1204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-W98	37200065	PCHBTM2S	200064	PCHBTM1S	Z2	500	230	Winter Gen Deliv	Included
2022W3-GD-W6	3 204514	27TMI	204502	27JACKSON	1	230	227	Winter Gen Deliv	Included
2022W3-GD-W64	204539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Winter Gen Deliv	Included
2022W3-GD-W6	5 200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-GD-W68	3 200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-W99	5200065	PCHBTM2S	200064	PCHBTM1S	Z1	500	230	Winter Gen Deliv	Included
2022W3-GD-W6	7 200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-W78	3 200512	26LEWISTWN	200519	26REED TAP	1	115	226	Winter Gen Deliv	Included
2022W3-GD-W10	12408048	OTCR	208047	PPL-BGE TIE	1	230	229	Winter Gen Deliv	Included
2022W3-GD-S18	1 <b>2</b> 35596	01VASC T	235173	01EDGEWT	1	138	201	Summer Gen Deliv	Included
2022W3-GD-S36	1235105	01DOUBS	235459	01DOUBS	1	500/230	201	Summer Gen Deliv	Included
2022W3-N1-WT8	6204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-N1-WT8	8204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-N1-WT1	02204538	27STRABAN	204529	27GERMANTN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-GD-W86	3 208071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Winter Gen Deliv	Included
2022W3-GD-S18	1 <b>8</b> 35105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-N1-WT1	02804538	27STRABAN	204529	27GERMANTN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-GD-W8	37213869	PCHBTMTP	214087	COOPER2	1	230	230	Winter Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-W8	200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-GD-W83	3 204515	27YORKANA	208048	OTCR	1	230	227/229	Winter Gen Deliv	Included
2022W3-GD-W88	32208071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Winter Gen Deliv	Included
2022W3-GD-W85	200512	26LEWISTWN	200519	26REED TAP	1	115	226	Winter Gen Deliv	Included
2022W3-GD-S18	1 <b>9</b> 35105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-GD-W93	3 208069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Winter Gen Deliv	Included
2022W3-N1-WT1	8 <b>23\</b> 5463	01TANEY	235450	01CARROL	1	138/138	201/201	Winter N-1 Thermal	Included
2022W3-GD-S20	6 <b>0</b> 21090	GLENARM2	221089	WINDYED1	1	115	232	Summer Gen Deliv	Included
2022W3-GD-S17	4 <b>2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-W95	200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-GD-W13	382100004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-W89	1208071	SAHA34TP	208069	PPL-BGE TIE	1	230	229	Winter Gen Deliv	Included
2022W3-GD-W89	2208069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Winter Gen Deliv	Included
2022W3-GD-W12	2 <b>420</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Winter Gen Deliv	Included
2022W3-LD-ST1	5200064	PCHBTM1S	200004	CNASTONE	1	500/500	230/232	Load Deliverability	Included
2022W3-LD-ST1	1200064	PCHBTM1S	200004	CNASTONE	1	500/500	230/232	Load Deliverability	Included
2022W3-LD-ST1	7200004	CNASTONE	200003	BRIGHTON	1	500/500	232/233	Load Deliverability	Included
2022W3-GD-S24	0235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-LD-ST1	3200004	CNASTONE	200003	BRIGHTON	1	500/500	232/233	Load Deliverability	Included
2022W3-N1-ST1	3 <b>4</b> 208071	SAHA34TP	208069	PPL-BGE TIE	1	230/230	229/229	Summer N-1 Thermal	Included
2022W3-GD-S16	4 <b>2</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-GD-S17	235105	01DOUBS	235459	01DOUBS	1	500/230	201	Summer Gen Deliv	Included
2022W3-GD-W96	200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-N1-WT1	9 <b>201</b> 4544	27LINCOLN	204538	27STRABAN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-GD-W90	0213869	PCHBTMTP	214087	COOPER2	1	230	230	Winter Gen Deliv	Included
2022W3-N1-WT1	9 <b>20\</b> 4539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-GD-W97	200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-S10	235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-S13	235484	01MESSCK	235490	01MORGAN	1	138	201	Summer Gen Deliv	Included
2022W3-N1-WT1	9 <b>240\</b> 4538	27STRABAN	204529	27GERMANTN	1	115/115	227/227	Winter N-1 Thermal	Included
2022W3-GD-S14	235484	01MESSCK	235490	01MORGAN	1	138	201	Summer Gen Deliv	Included
2022W3-GD-S17	5 <b>2</b> 04529	27GERMANTN	204530	27GERMANTN	1	115/138	227	Summer Gen Deliv	Included
2022W3-GD-S16	4 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S15	204539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S17	5 <b>2</b> 08395	FARO FF	208393	FARO DC TIE	2	69/115	229	Summer Gen Deliv	Included
2022W3-GD-W10	<b>)2</b> 00004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-S24	7208047	PPL-BGE TIE	220963	CONASTON	1	230	229/232	Summer Gen Deliv	Included
2022W3-GD-S10	5213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W15	213844	NOTTNGHM	213846	NOTTREAC	1	230	230	Winter Gen Deliv	Included
2022W3-GD-W16	213846	NOTTREAC	213869	PCHBTMTP	1	230	230	Winter Gen Deliv	Included
2022W3-GD-W91	<b>©</b> 13869	РСНВТМТР	214087	COOPER2	1	230	230	Winter Gen Deliv	Included
2022W3-GD-S16	7 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S26	0208048	OTCR	208047	PPL-BGE TIE	1	230	229	Summer Gen Deliv	Included
2022W3-GD-W77	<b>′5</b> 235105	01DOUBS	235459	01DOUBS	1	500/230	201	Winter Gen Deliv	Included
2022W3-N1-ST1	94200512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-N1-ST19	9 <b>@</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST1	9 <b>7</b> 235105	01DOUBS	235459	01DOUBS	3	500/230	201/201	Summer N-1 Thermal	Included
2022W3-LD-ST19	9200004	CNASTONE	200003	BRIGHTON	1	500/500	232/233	Load Deliverability	Included
2022W3-GD-S20	6 <b>3</b> 21090	GLENARM2	221089	WINDYED1	1	115	232	Summer Gen Deliv	Included
2022W3-GD-W90	<b>12</b> 08069	PPL-BGE TIE	220964	GRACETON	1	230	229/232	Winter Gen Deliv	Included
2022W3-LD-ST18	3 200004	CNASTONE	200003	BRIGHTON	1	500/500	232/233	Load Deliverability	Included
2022W3-GD-S17	5 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115	226	Summer Gen Deliv	Included
2022W3-LD-ST2	1 200003	BRIGHTON	200004	CNASTONE	1	500/500	233/232	Load Deliverability	Included
2022W3-GD-S23	204544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S17	5 <b>8</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-LD-ST20	208047	PPL-BGE TIE	220963	CONASTON	1	230/230	229/232	Load Deliverability	Included

FG#	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2022W3-GD-S1	75 <b>2</b> 00532	26ROXBURY	235188	01GREENE	1	138	226/201	Summer Gen Deliv	Included
2022W3-GD-S1	64 <b>8</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S1	76 <b>2</b> 08395	FARO FF	208393	FARO DC TIE	1	69/115	229	Summer Gen Deliv	Included
2022W3-LD-ST2	22 208048	OTCR	208047	PPL-BGE TIE	1	230/230	229/229	Load Deliverability	Included
2022W3-GD-W9	2200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Winter Gen Deliv	Included
2022W3-GD-S8	1N200004	CNASTONE	200003	BRIGHTON	1	500	233/232	Summer Gen Deliv	Included
2022W3-GD-S8	27235105	01DOUBS	235459	01DOUBS	3	500/230	201	Summer Gen Deliv	Included
2022W3-GD-S1	18 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S1	23 <b>2</b> 35463	01TANEY	235450	01CARROL	1	138	201	Summer Gen Deliv	Included
2022W3-GD-W9	2200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-N1-ST2	24 <b>4210</b> 14539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1	Included
2022W3-GD-S1	65 <b>8</b> 13844	NOTTNGHM	213846	NOTTREAC	1	230	230	Summer Gen Deliv	Included
2022W3-GD-W1	4200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Winter Gen Deliv	Included
2022W3-N1-ST2	20 <b>5</b> 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-N1-ST8	34 204539	27HUNTRSTN	205912	AD1-020 TAP	1	115/115	227/227	Summer N-1 Thermal	Included
2022W3-GD-S1	65 <b>2</b> 04539	27HUNTRSTN	205912	AD1-020 TAP	1	115	227	Summer Gen Deliv	Included
2022W3-GD-W8	30 <b>625018</b> 047	PPL-BGE TIE	220963	CONASTON	1	230	229/232	Winter Gen Deliv	Included
2022W3-GD-S1	68 <b>2</b> 04514	27TMI	204502	27JACKSON	1	230	227	Summer Gen Deliv	Included
2022W3-GD-S4	7 204538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S7	6N200064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-GD-S2	62235180	01FAYETT	235271	01WWAYNE	1	138	201	Summer Gen Deliv	Included
2022W3-N1-ST	19 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-N1-ST2	20 <b>2</b> 00512	26LEWISTWN	200519	26REED TAP	1	115/115	226/226	Summer N-1 Thermal	Included
2022W3-GD-S1	68 <b>2</b> 04544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S1	65 <b>2</b> 04538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W3-GD-S1	65 <b>2</b> 00064	PCHBTM1S	200004	CNASTONE	1	500	232/230	Summer Gen Deliv	Included
2022W3-N1-ST2	20 <b>2</b> 13846	NOTTREAC	213869	PCHBTMTP	1	230/230	230/230	Summer N-1 Thermal	Included
2022W3-N1-ST2	20 <b>3</b> 213844	NOTTNGHM	213846	NOTTREAC	1	230/230	230/230	Summer N-1 Thermal	Included

## **New Flowgates**

Competitive

## **Financial Information**

Capital spend start date 01/2024

Construction start date 11/2025

Project Duration (In Months) 41

## **Cost Containment Commitment**

Cost cap (in current year) Competitive

Cost cap (in-service year) Competitive

## Components covered by cost containment

1. North Delta-Northeast 230kV - PSEG

2. Conastone-Doubs 500kV - PSEG

## Cost elements covered by cost containment

Engineering & design Yes

Permitting / routing / siting Yes

ROW / land acquisition Yes

Materials & equipment Yes

Construction & commissioning Yes

Construction management Yes

Overheads & miscellaneous costs Yes

Taxes

AFUDC No

Escalation Yes

Additional Information Competitive

Is the proposer offering a binding cap on ROE?

Would this ROE cap apply to the determination of AFUDC?

Yes

Would the proposer seek to increase the proposed ROE if FERC

finds that a higher ROE would not be unreasonable?

Is the proposer offering a Debt to Equity Ratio cap?

Competitive

No

Additional cost containment measures not covered above Competitive

## **Additional Comments**

None