

Upgrades for Oceanview 3000 MW Injection

General Information

Proposing entity name	NEETMH
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	1A-O30
PJM Proposal ID	331
Project title	Upgrades for Oceanview 3000 MW Injection
Project description	Upgrades for Oceanview 3000 MW Injection
Email	Johnbinh.Vu@nexteraenergy.com
Project in-service date	10/2025
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Build one new Atlantic - Smithburg 230 kV OH circuit utilizing existing...
2. Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 1
3. Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 2
4. Reconductor existing Atlantic - New Prospect 230 kV OH line
5. Reconductor existing New Prospect - Smithburg 230 kV OH line
6. Reconductor existing Windsor - Clarksville 230 kV OH line

7. Reconductor existing Raritan River - Kilmer 230 kV OH line
8. Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 1
9. Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 2
10. Eliminate conditions (contingencies such as as "JC-P1-2-JCC-230-018")...
11. Atlantic 230kV Substation Upgrade
12. Smithburg 230kV Substation Upgrade
13. Add 1x Phase Shifting Transformer (PST) at Raritan River substation for ...
14. Add 1x Phase Shifting Transformer (PST) at Raritan River substation for ...
15. Build one new Larrabee - Oceanview sub 230 kV OH circuit
16. Retire existing Larrabee - Atlantic 230 kV OH line

Transmission Line Upgrade Component

Component title	Build one new Atlantic - Smithburg 230 kV OH circuit utilizing existing rights of way and open positions on towers to extent practicable
Project description	Add one new circuit from Atlantic - Smithburg utilizing open tower positions or by reconfiguring or rebuilding existing single circuit lines to include a new double circuit in order to stay within the existing rights of way
Impacted transmission line	Atlantic to Smithburg 230 kV line
Point A	Atlantic
Point B	Smithburg
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated
Existing Line Physical Characteristics	
Operating voltage	230/138
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable

Tower line characteristics

Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	937.000000	1123.000000
Winter (MVA)	982.000000	1173.000000
Conductor size and type	1272 kcmil Bittern ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	23.58 miles	
Rebuild portion description	Proposing to add one new circuit from Atlantic - Smithburg utilizing open tower positions or by reconfiguring or rebuilding the existing lines to include the new circuit in order to stay within the existing ROW to achieve the specified rating.	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential competitive information	
Permitting / routing / siting	Confidential competitive information	
ROW / land acquisition	Confidential competitive information	
Materials & equipment	Confidential competitive information	
Construction & commissioning	Confidential competitive information	

Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$58,970,000.00
Component cost (in-service year)	\$63,810,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 1
Project description	Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 1
Impacted transmission line	Larrabee to Smithburg 230 kV line
Point A	Larrabee
Point B	Smithburg
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000

	Normal ratings	Emergency ratings
Summer (MVA)	937.000000	1123.000000
Winter (MVA)	982.000000	1173.000000
Conductor size and type	1272 kcmil Bittern ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	11.76 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential competitive information	
Permitting / routing / siting	Confidential competitive information	
ROW / land acquisition	Confidential competitive information	
Materials & equipment	Confidential competitive information	
Construction & commissioning	Confidential competitive information	
Construction management	Confidential competitive information	
Overheads & miscellaneous costs	Confidential competitive information	
Contingency	Confidential competitive information	
Total component cost	\$15,280,000.00	
Component cost (in-service year)	\$16,550,000.00	

Transmission Line Upgrade Component

Component title	Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 2
Project description	Reconductor existing Larrabee - Smithburg 230kV OH line Circuit 2
Impacted transmission line	Larrabee to Smithburg 230 kV line
Point A	Larrabee
Point B	Smithburg
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	937.000000	1123.000000
Winter (MVA)	982.000000	1173.000000
Conductor size and type	1272 kcmil Bittern ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	

Rebuild line length	11.76 miles
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating
Right of way	Use of existing ROW, no expansion anticipated
Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$15,280,000.00
Component cost (in-service year)	\$16,550,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing Atlantic - New Prospect 230 kV OH line
Project description	Reconductor existing Atlantic - New Prospect 230 kV OH line
Impacted transmission line	Atlantic to New Prospect 230 kV line
Point A	Atlantic
Point B	New Prospect

Point C
 Terrain description Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage 230
 Conductor size and type Same as existing
 Hardware plan description Utilize existing line hardware to extent practicable
 Tower line characteristics Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	937.000000	1123.000000
Winter (MVA)	982.000000	1173.000000
Conductor size and type	1272 kcmil Bittern ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	18.33 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	

Component Cost Details - In Current Year \$

Engineering & design Confidential competitive information

Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$23,830,000.00
Component cost (in-service year)	\$25,790,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing New Prospect - Smithburg 230 kV OH line
Project description	Reconductor existing New Prospect - Smithburg 230 kV OH line
Impacted transmission line	Smithburg to New Prospect 230 kV line
Point A	Smithburg
Point B	New Prospect
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	937.000000	1123.000000
Winter (MVA)	982.000000	1173.000000
Conductor size and type	1272 kcmil Bittern ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	6.58 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential competitive information	
Permitting / routing / siting	Confidential competitive information	
ROW / land acquisition	Confidential competitive information	
Materials & equipment	Confidential competitive information	
Construction & commissioning	Confidential competitive information	
Construction management	Confidential competitive information	
Overheads & miscellaneous costs	Confidential competitive information	

Contingency	Confidential competitive information
Total component cost	\$8,550,000.00
Component cost (in-service year)	\$9,260,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing Windsor - Clarksville 230 kV OH line
Project description	Reconductor existing Windsor - Clarksville 230 kV OH line
Impacted transmission line	Windsor to Clarksville Bus Section 1 230 kV line
Point A	Windsor
Point B	Clarksville Bus Section 1
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	812.000000	975.000000

Winter (MVA)	852.000000	1020.000000
Conductor size and type	1033.5 kcmil Snowbird ACSS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	7.75 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$10,090,000.00
Component cost (in-service year)	\$10,910,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing Raritan River - Kilmer 230 kV OH line
Project description	Reconductor existing Raritan River - Kilmer 230 kV OH line

Impacted transmission line	Raritan River to Kilmer I 230 kV line
Point A	Raritan River
Point B	Kilmer I
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	799.000000	963.000000
Winter (MVA)	837.000000	1008.000000
Conductor size and type	1033.5 kcmil Curlew ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	6.09 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	

Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process
Component Cost Details - In Current Year \$	
Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$7,910,000.00
Component cost (in-service year)	\$8,570,000.00
Transmission Line Upgrade Component	
Component title	Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 1
Project description	Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 1
Impacted transmission line	Windsor to E Windsor 230 kV line
Point A	Windsor
Point B	E. Windsor
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	799.000000	963.000000
Winter (MVA)	837.000000	1008.000000
Conductor size and type	1033.5 kcmil Curlew ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	2.64 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information

Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$3,430,000.00
Component cost (in-service year)	\$3,720,000.00

Transmission Line Upgrade Component

Component title	Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 2
Project description	Reconductor existing Windsor - E. Windsor 230 kV OH line Circuit 2
Impacted transmission line	Windsor to E Windsor 230 kV line
Point A	Windsor
Point B	E. Windsor
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

Designed	Operating
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Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	799.000000	963.000000
Winter (MVA)	837.000000	1008.000000
Conductor size and type	1033.5 kcmil Curlew ACSS HS: 1C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	2.64 miles	
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating	
Right of way	Use of existing ROW, no expansion anticipated	
Construction responsibility	JCPL	
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential competitive information	
Permitting / routing / siting	Confidential competitive information	
ROW / land acquisition	Confidential competitive information	
Materials & equipment	Confidential competitive information	
Construction & commissioning	Confidential competitive information	
Construction management	Confidential competitive information	
Overheads & miscellaneous costs	Confidential competitive information	
Contingency	Confidential competitive information	
Total component cost	\$3,430,000.00	
Component cost (in-service year)	\$3,720,000.00	

Transmission Line Upgrade Component

Component title	Eliminate conditions (contingencies such as as "JC-P1-2-JCC-230-018") which derate short-term winter emergency ratings of Smithburg - E. Windsor 230 kV OH line
Project description	Eliminate conditions (contingencies such as as "JC-P1-2-JCC-230-018") which derate short-term winter emergency ratings of Smithburg - E. Windsor 230 kV OH line
Impacted transmission line	Smithburg to E Windsor 230 kV line
Point A	Smithburg
Point B	E. Windsor
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1245.000000	1394.000000
Winter (MVA)	1476.000000	1652.000000
Conductor size and type	Same as existing	

Shield wire size and type	Utilize existing shield wire to extent practicable
Rebuild line length	N/A
Rebuild portion description	Proposing to reconductor the entire line (or necessary portion) to achieve the specified rating
Right of way	Use of existing ROW, no expansion anticipated
Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process
Component Cost Details - In Current Year \$	
Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$5,000,000.00
Component cost (in-service year)	\$5,410,000.00
Substation Upgrade Component	
Component title	Atlantic 230kV Substation Upgrade
Project description	Add one 230 kV line termination at Atlantic, or reconfigure the existing substation to breaker and a half with 9 positions (10 existing CB + 4 new CB)
Substation name	Atlantic 230 kV

Substation zone	JCPL
Substation upgrade scope	Add one 230 kV line termination at Atlantic, or reconfigure the existing substation to breaker and a half with 9 positions (10 existing CB + 4 new CB)
Transformer Information	
None	
New equipment description	Add one 230 kV line termination at Atlantic, or reconfigure the existing substation to breaker and a half with 9 positions (10 existing CB + 4 new CB)
Substation assumptions	Use available space to rebuild the sub
Real-estate description	No expansion of substation fence anticipated
Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process
Component Cost Details - In Current Year \$	
Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$13,990,000.00
Component cost (in-service year)	\$15,140,000.00

Substation Upgrade Component

Component title	Smithburg 230kV Substation Upgrade
Project description	Add one new line position (2 CBs) at Smithburg substation to land the new Atlantic -Smithburg 230 kV OH circuit
Substation name	Smithburg
Substation zone	JCPL
Substation upgrade scope	Add one new line position (2 CBs) at Smithburg substation to land the new Atlantic -Smithburg 230 kV OH circuit

Transformer Information

None	
New equipment description	Add one new line position (2 CBs) at Smithburg substation to land the new Atlantic -Smithburg 230 kV OH circuit
Substation assumptions	Open positions available per TO provided one-lines
Real-estate description	No expansion of substation fence anticipated
Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information

Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$8,080,000.00
Component cost (in-service year)	\$8,740,000.00

Substation Upgrade Component

Component title	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 1
Project description	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 1
Substation name	Raritan River 230 kV
Substation zone	JCPL
Substation upgrade scope	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 1

Transformer Information

	Name	Capacity (MVA)	
Transformer	Raritan River 230 kV PST (Circuit 1)	7.65	
	High Side	Low Side	Tertiary
Voltage (kV)	230	230	
New equipment description	AC Substation : Phase Shifter		
Substation assumptions	Use available space in sub to add phase shifting transformer		
Real-estate description	No expansion of substation fence anticipated		
Construction responsibility	JCPL		
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process		

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$15,000,000.00
Component cost (in-service year)	\$16,240,000.00

Substation Upgrade Component

Component title	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 2
Project description	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 2
Substation name	Raritan River 230 kV
Substation zone	JCPL
Substation upgrade scope	Add 1x Phase Shifting Transformer (PST) at Raritan River substation for Raritan River- Red Oak 230 OH line Circuit 2

Transformer Information

	Name	Capacity (MVA)
Transformer	Raritan River 230 kV PST (Circuit 2)	7.5

	High Side	Low Side	Tertiary
Voltage (kV)	230	230	
New equipment description	AC Substation : Phase Shifter		
Substation assumptions	Use available space in sub to add phase shifting transformer		
Real-estate description	No expansion of substation fence anticipated		
Construction responsibility	JCPL		
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process		
Component Cost Details - In Current Year \$			
Engineering & design	Confidential competitive information		
Permitting / routing / siting	Confidential competitive information		
ROW / land acquisition	Confidential competitive information		
Materials & equipment	Confidential competitive information		
Construction & commissioning	Confidential competitive information		
Construction management	Confidential competitive information		
Overheads & miscellaneous costs	Confidential competitive information		
Contingency	Confidential competitive information		
Total component cost	\$15,000,000.00		
Component cost (in-service year)	\$16,240,000.00		
Transmission Line Upgrade Component			
Component title	Build one new Larrabee - Oceanview sub 230 kV OH circuit		
Project description	Build one new Oceanview to Larrabee 230 kV OH circuit using the open position on existing Oceanview - Larrabee 230 kV tower		

Impacted transmission line	Larrabee to Oceanview 230 kV line
Point A	Larrabee
Point B	Oceanview
Point C	
Terrain description	Expect to utilize existing easements/utility owned property, no expansion anticipated

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	Utilize existing line hardware to extent practicable
Tower line characteristics	Utilize existing towers to extent practicable

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1337.000000	1642.000000
Winter (MVA)	1403.000000	1720.000000
Conductor size and type	795 kcmil Drake ACSS/TW HS: 2C Bundle	
Shield wire size and type	Utilize existing shield wire to extent practicable	
Rebuild line length	16.6 miles	
Rebuild portion description	Proposing to add one new circuit from Larrabee to Oceanview utilizing open tower positions or by reconfiguring or rebuilding the existing lines to include the new circuit in order to stay within the existing ROW to achieve the specified rating.	

Right of way	Use of existing ROW, no expansion anticipated
Construction responsibility	JCPL
Benefits/Comments	Resolves reliability issues identified per PJM's Gen. Deliv. Process

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information
Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$58,970,000.00
Component cost (in-service year)	\$63,810,000.00

Transmission Line Upgrade Component

Component title	Retire existing Larrabee - Atlantic 230 kV OH line
Project description	Retire existing Larrabee - Atlantic 230 kV OH line
Impacted transmission line	Larrabee - Atlantic 230 kV OH line
Point A	Larrabee
Point B	Atlantic
Point C	
Terrain description	Existing easements/utility owned property

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	Same as existing
Hardware plan description	N/A
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	0.000000	0.000000
	Normal ratings	Emergency ratings
Summer (MVA)	0.000000	0.000000
Winter (MVA)	0.000000	0.000000
Conductor size and type	N/A	
Shield wire size and type	N/A	
Rebuild line length	N/A	
Rebuild portion description	N/A	
Right of way	N/A	
Construction responsibility	JCPL	
Benefits/Comments	N/A	

Component Cost Details - In Current Year \$

Engineering & design	Confidential competitive information
Permitting / routing / siting	Confidential competitive information
ROW / land acquisition	Confidential competitive information

Materials & equipment	Confidential competitive information
Construction & commissioning	Confidential competitive information
Construction management	Confidential competitive information
Overheads & miscellaneous costs	Confidential competitive information
Contingency	Confidential competitive information
Total component cost	\$3,000,000.00
Component cost (in-service year)	\$3,250,000.00

Congestion Drivers

None

Existing Flowgates

None

New Flowgates

None

Financial Information

Capital spend start date	12/2022
Construction start date	12/2022
Project Duration (In Months)	34

Additional Comments

None