



# 2021 NJ OSW SAA Window Map Book

Posted to TEAC  
October 6, 2022

This Map Book provides summary level project information and a geographical map for each of the submitted proposals received in the 2021 SAA Proposal Window to Support NJ OSW. This map book provides supplemental details to the individual evaluation reports. The detailed proposal information can be found on the PJM Competitive Planning page.

In addition to the competitive proposals submitted in the window, this map book also include solutions that were provided to address new violations that were identified as a result of the reliability analysis and were not previously identified as part of the posted problem statement for the default points of injection. These solutions are identified as Incumbent TO Upgrade followed by the date of submission to PJM. The injection scenario(s) driving the need is identified for each of these TO Incumbent Upgrades.

In order for PJM to develop total cost for each injection scenario, it was necessary in some cases to select an upgrade among several options. This summary of information is not indicative of a final project selection by NJ BPU.



# Option 1a Upgrade Proposals

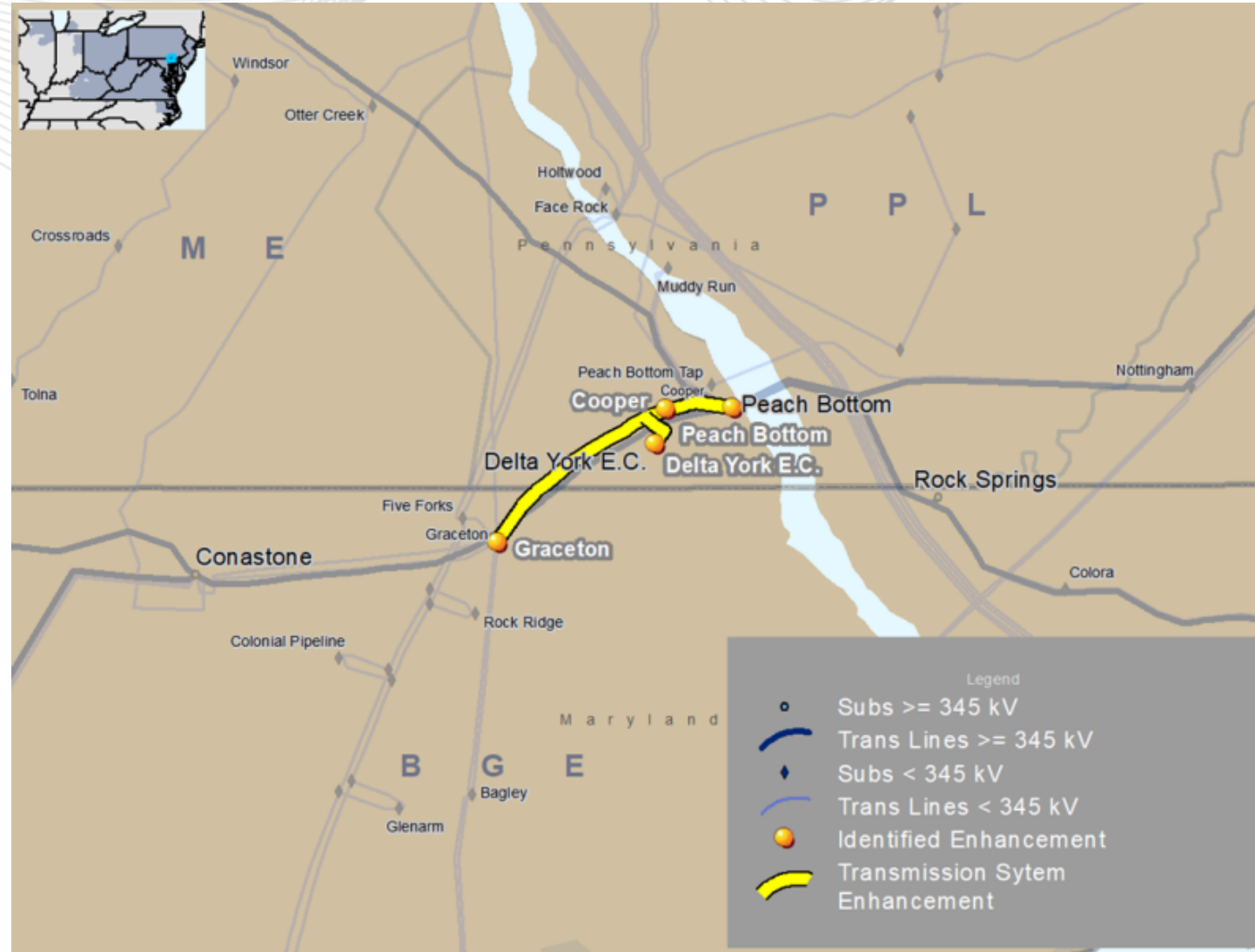
## Proposing Entity: Transource

### Proposal Description:

- New “North Delta” 500/230 kV substation with two transformers
- Loop in Peach Bottom-Delta Power Plant 500 kV and Cooper-Graceton 230 kV
- Build a new North Delta-Graceton 230 kV line by rebuilding existing Cooper-Graceton 230 kV line to double circuit

### Proposal Cost Estimate:

\$110 M





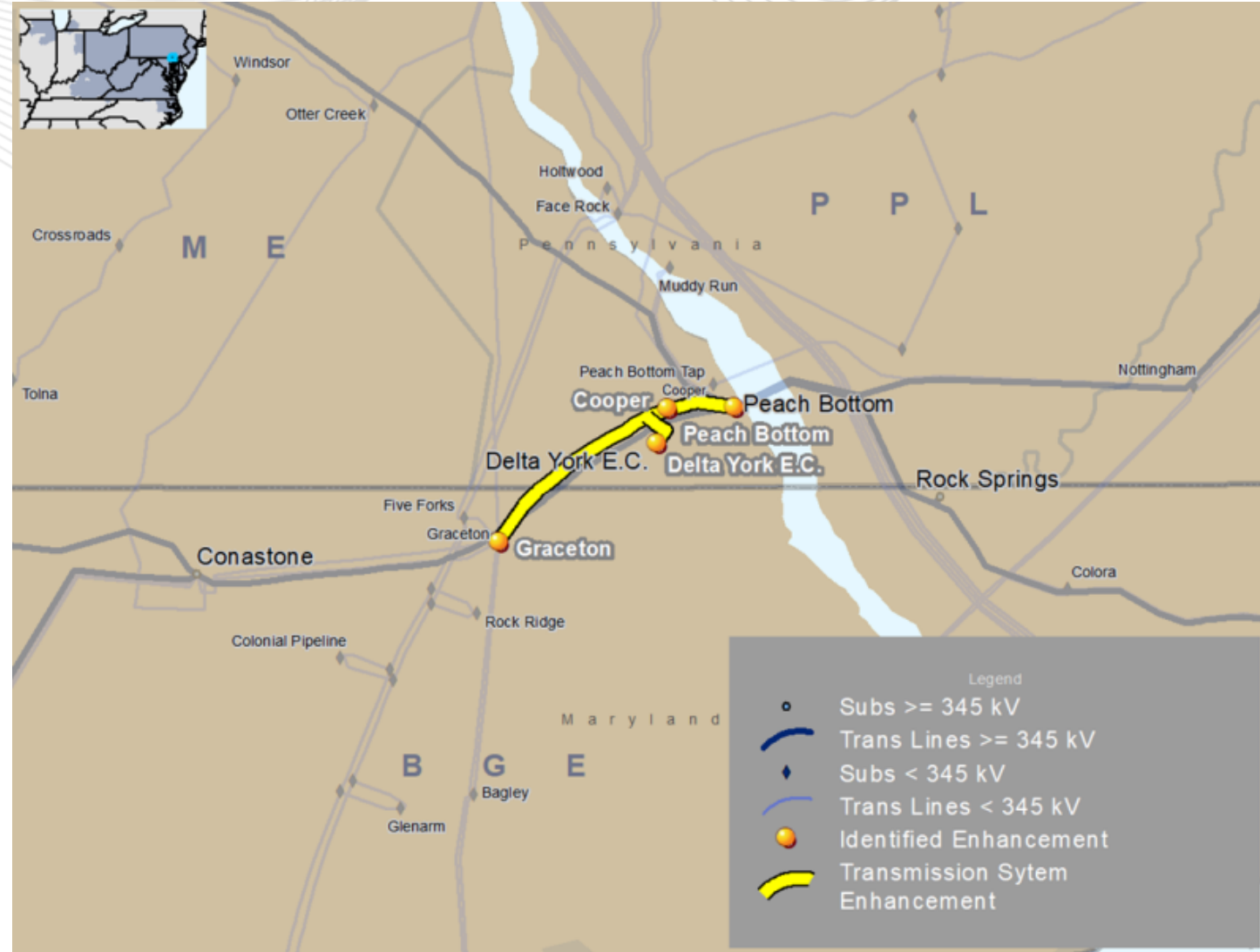
**Proposing Entity: Transource**

**Problem Statement:**

**Generator Deliverability (Winter Thermal Violations) –**

- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

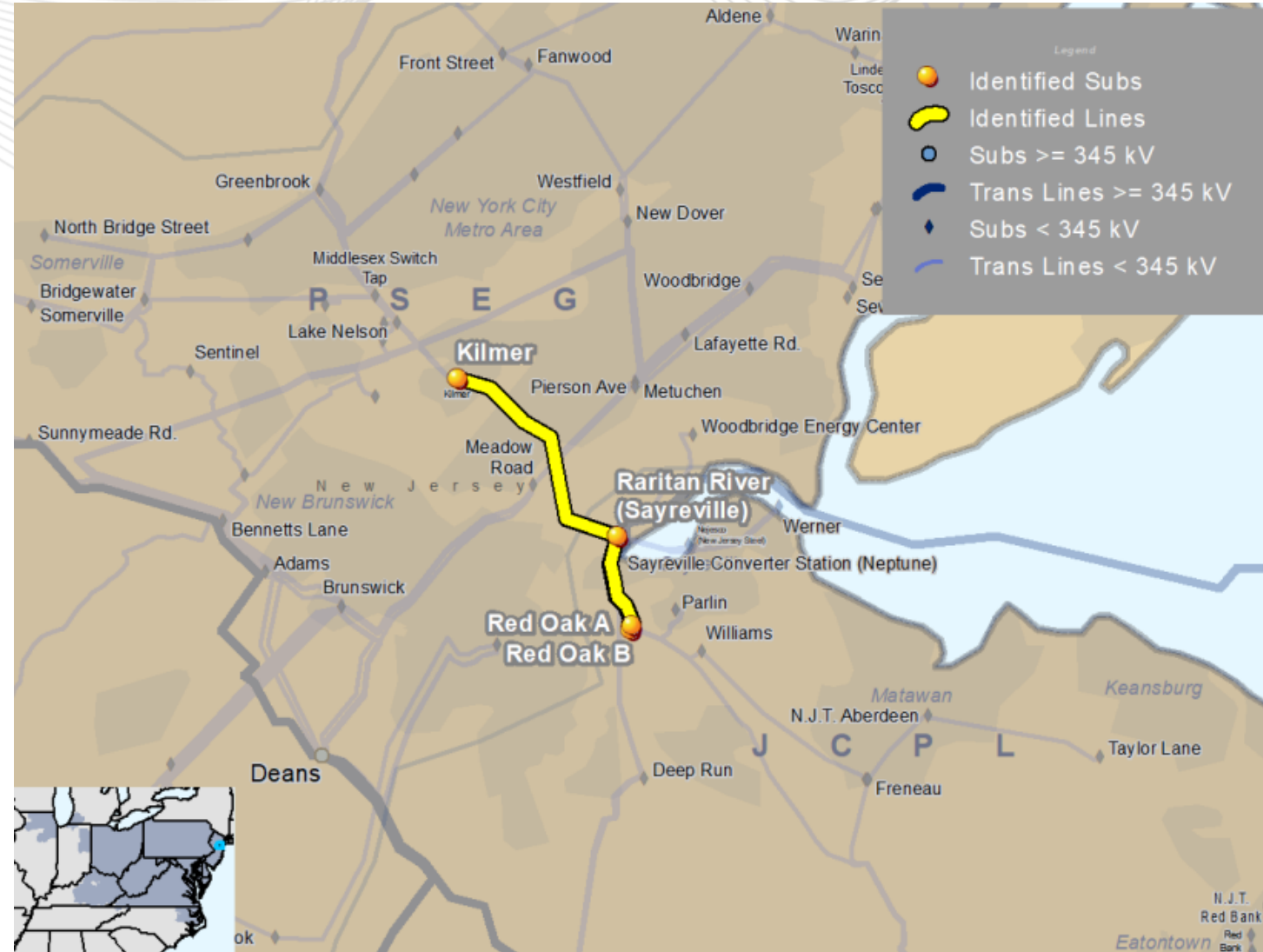
**Scenarios Addressed: All**



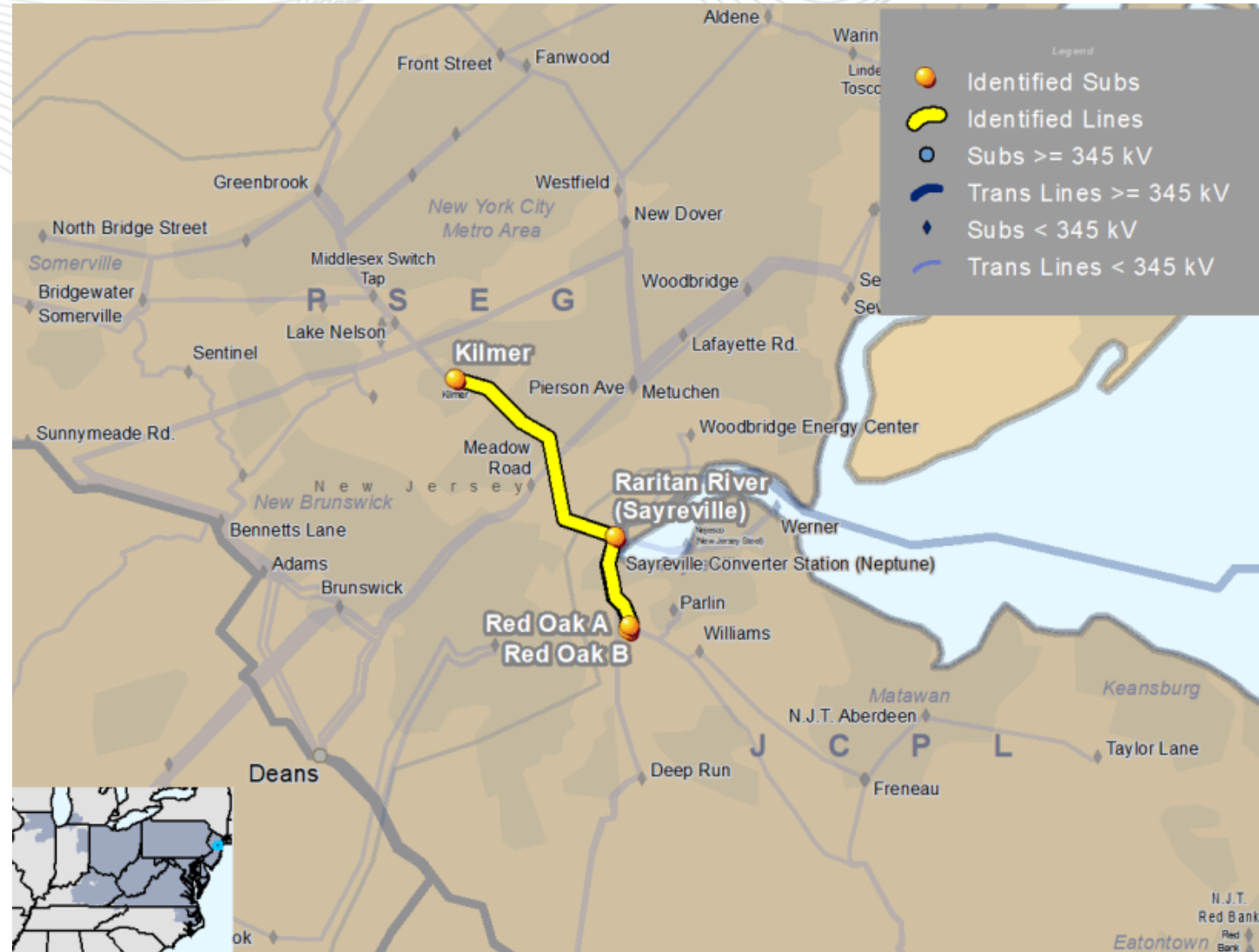
**Proposing Entity: JCPL**

**Proposal Description:**

- 1 Reconductor Red Oak A-Raritan River 230 kV
- 2 Reconductor Red Oak B-Raritan River 230 kV
- 3 Reconductor small section of Raritan River-Kilmer I 230 kV
- 4 Replace substation conductor at Kilmer & reconductor Raritan River-Kilmer W 230 k



Proposing Entity: JCPL		
Problem Statement: Generation Deliverability Summer & Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Red Oak A-Raritan River 230 kV</b> Scenarios: 2a/2c/4/4a/5/17/18/20/20a/20b	\$11.05
2	<b>Red Oak B-Raritan River 230 kV</b> Scenarios: 2a/2c/5/17/18/20/20a/20b	\$3.9
3	<b>Raritan River-Kilmer I 230 kV</b> Scenarios: 1.2/1.2a/1.2b/2a/2c/3/4/4a/5/14/18/20/ 20a/20b	\$0.2
4	<b>Raritan River-Kilmer W 230 kV</b> Scenarios: 2a/2c/3/4/4a/5/17/18/20/20a/20b	\$25.88



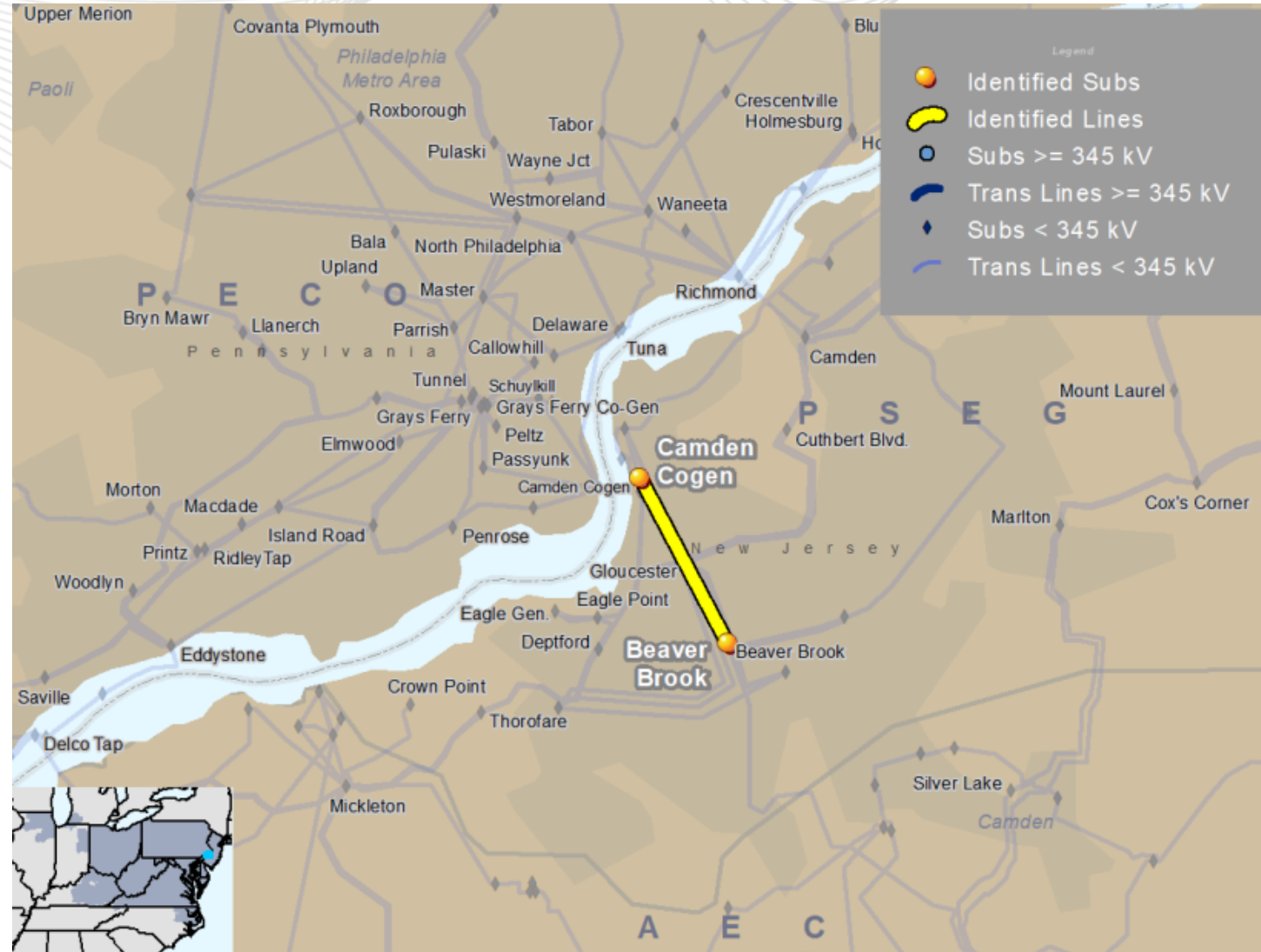
**Proposing Entity: PSEG**

**Problem Statement:**  
**Generator Deliverability (Summer Thermal Violations)** – Gloucester-Cuthbert Boulevard 230 kV

**Proposal Description:**  
 Build a new ~10 mile 230 kV UG line from Beaver Brook-Camden

**Scenarios Addressed: 2a/16**

**Proposal Cost Estimate:**  
 \$186 M





**Proposing Entity: JCPL**

**Problem Statement:**

**Generator Deliverability (Winter Thermal Violations)** – Lake Nelson I-Middlesex 230 kV

**Proposal Description:**

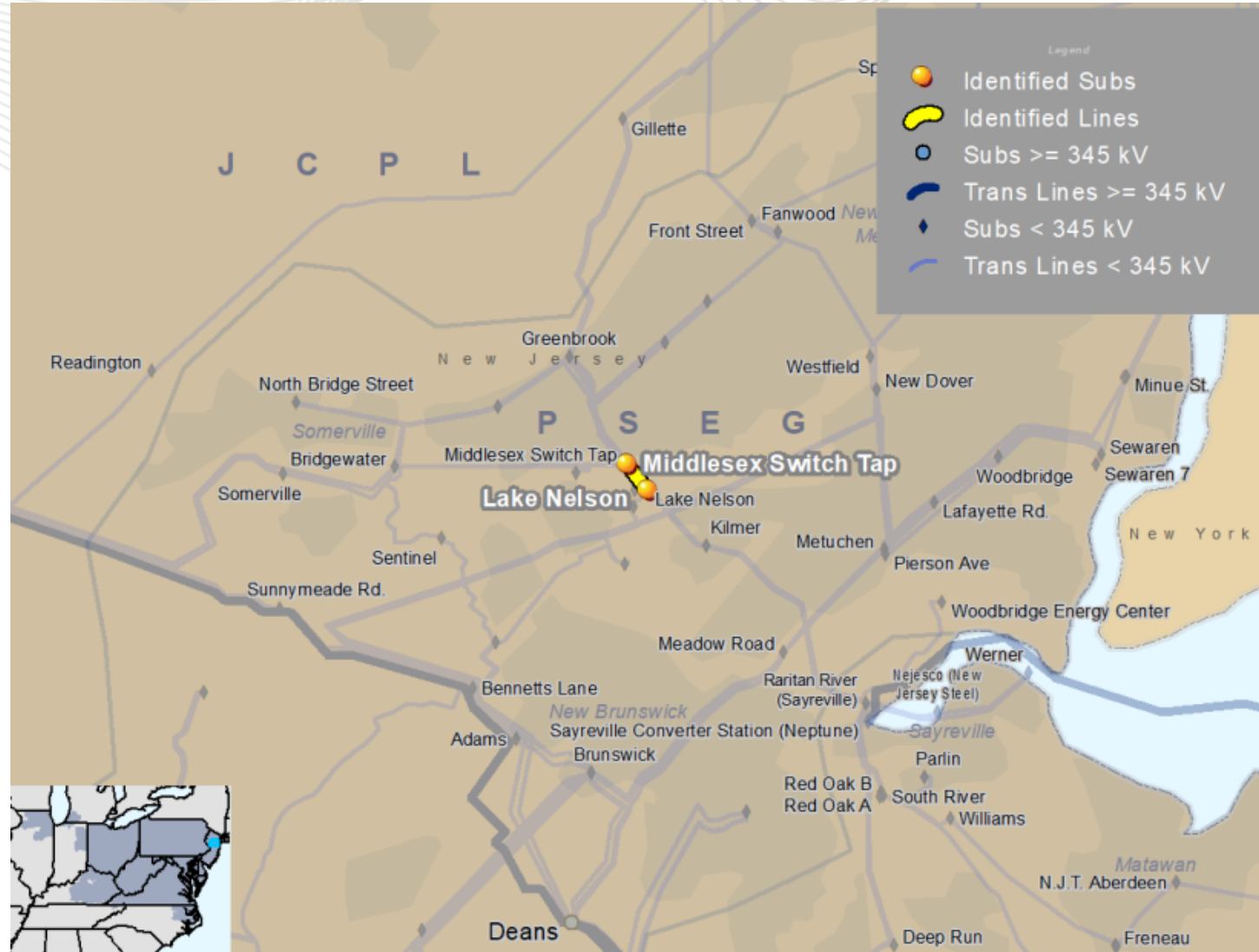
Additional reconductoring required for Lake Nelson I-Middlesex 230 kV

**Scenarios Addressed:**

2a/2c/4/5/17/18/20/20a/20b

**Proposal Cost Estimate:**

\$3.3 M



**Proposing Entity: JCPL**

**Problem Statement:**  
**Generator Deliverability (Summer & Winter Thermal Violations) – Larrabee-Smithburg #1**  
 230 kV

**Proposal Description:**  
 Rebuild Larrabee-Smithburg #1 230 kV

**Scenarios Addressed:**  
 2a/2c/3/5/14/17/18/20/20a/20b

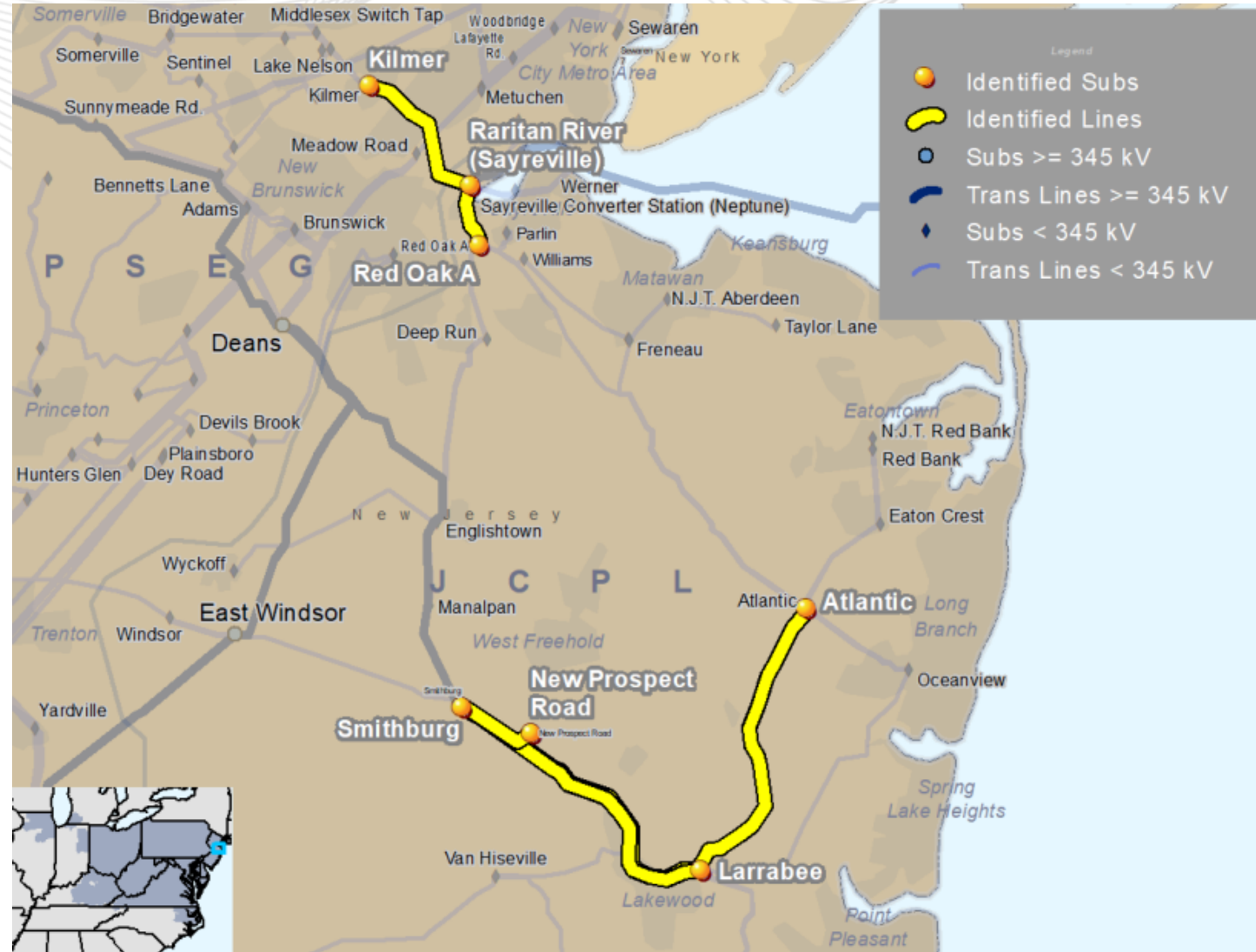
**Proposal Cost Estimate:**  
 \$52 M



**Proposing Entity: JCPL**

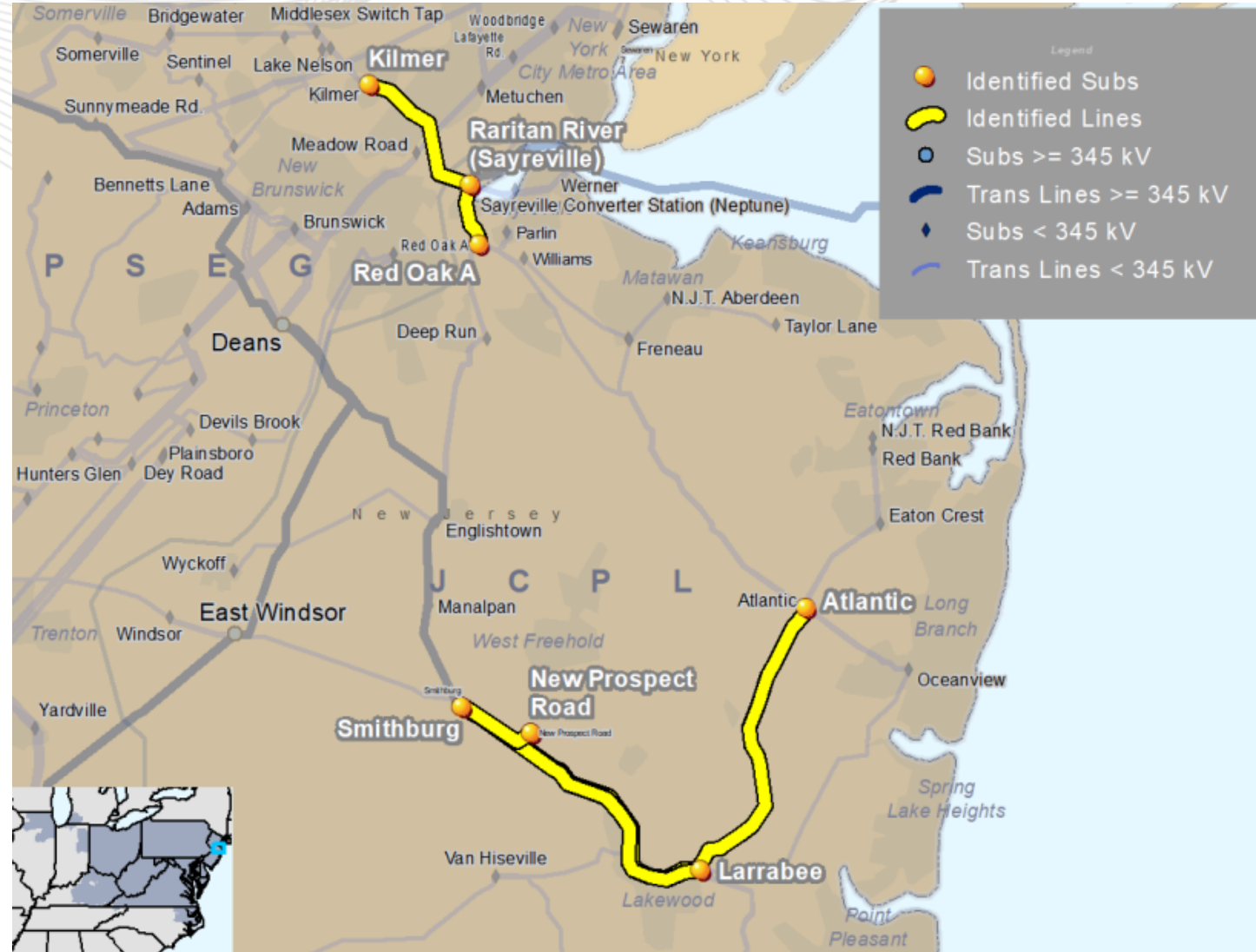
**Proposal Description:**

- 1 Reconductor/Rebuild Atlantic-New Prospect 230 kV
- 2 Reconductor/Rebuild Larrabee-Smithburg 230 kV ckt 2
- 3 Rebuild Raritan River-Kilmer I 230 kV
- 4 Reconductor/Rebuild New Prospect-Smithburg 230 kV
- 5 Reconductor/Rebuild S River-Red Oak A 230 kV





Proposing Entity: JCPL		
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Atlantic City-New Prospect Road 230 kV</b> Scenarios: 17/20/20a/20b	\$92
2	<b>Larrabee-Smithburg 230 kV</b> Scenarios: 17/20/20a/20b	\$88
3	<b>Raritan River-Kilmer 230 kV</b> Scenarios: 17	\$69
4	<b>New Prospect Road-Smithburg 230 kV</b> Scenarios: 17	\$32
5	<b>Raritan River-Red Oak A 230 kV</b> Scenarios: 17	\$6



## Proposing Entity: PSEG

### Proposal Description:

- 1 Reconductor Sewaren-Minue Street R-Linden 230 kV
- 2 Reconductor Metuchen-New Dover-Fanwood 230 kV
- 3 Reconductor the Fanwood-Front Street 230 kV
- 4 Uprate the Metuchen-Pierson Ave-Meadow Rd-Brunswick 230 kV line to carry two conductors per phase



Proposing Entity: PSEG		
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Sewaren-Minue Street R-Linden</b> 230 kV	\$19.4
	Scenarios: 10/11	
2	<b>Metuchen-New Dover H-Fanwood</b> 230 kV	\$22.8
	Scenarios: 10/11	
3	<b>Fanwood-Front Street 230kV</b>	\$3.1
	Scenarios: 10	
4	<b>Metuchen-Pierson Ave Z-Meadow Road Z-Brunswick 230 kV</b>	\$35.2
	Scenarios: 10/11	





**Proposing Entity: Exelon**

**Proposal Description:**

- 1 Reconductor Cardiff-New Freedom 230 kV
- 2 Two Cardiff transformer replacements
- 3 One Cardiff transformer replacement
- 4 Rebuild Cardiff-Lewis #1 138 kV
- 5 Reconductor Cardiff-Lewis #2 138 kV



Proposing Entity: Exelon		
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Cardiff-New Freedom 230 kV</b> Scenarios: 2a/2c	\$40
2	<b>Cardiff 230/138 kV transformers</b> Scenarios: 2a/2c	\$8
3	<b>Cardiff 230/138 kV transformer</b> Scenarios: 16	\$4
4	<b>Cardiff-Lewis #1 138 kV</b> Scenarios: 2a/2c	\$20
5	<b>Cardiff-Lewis #2 138 kV</b> Scenarios: 2a/2c/16	\$7



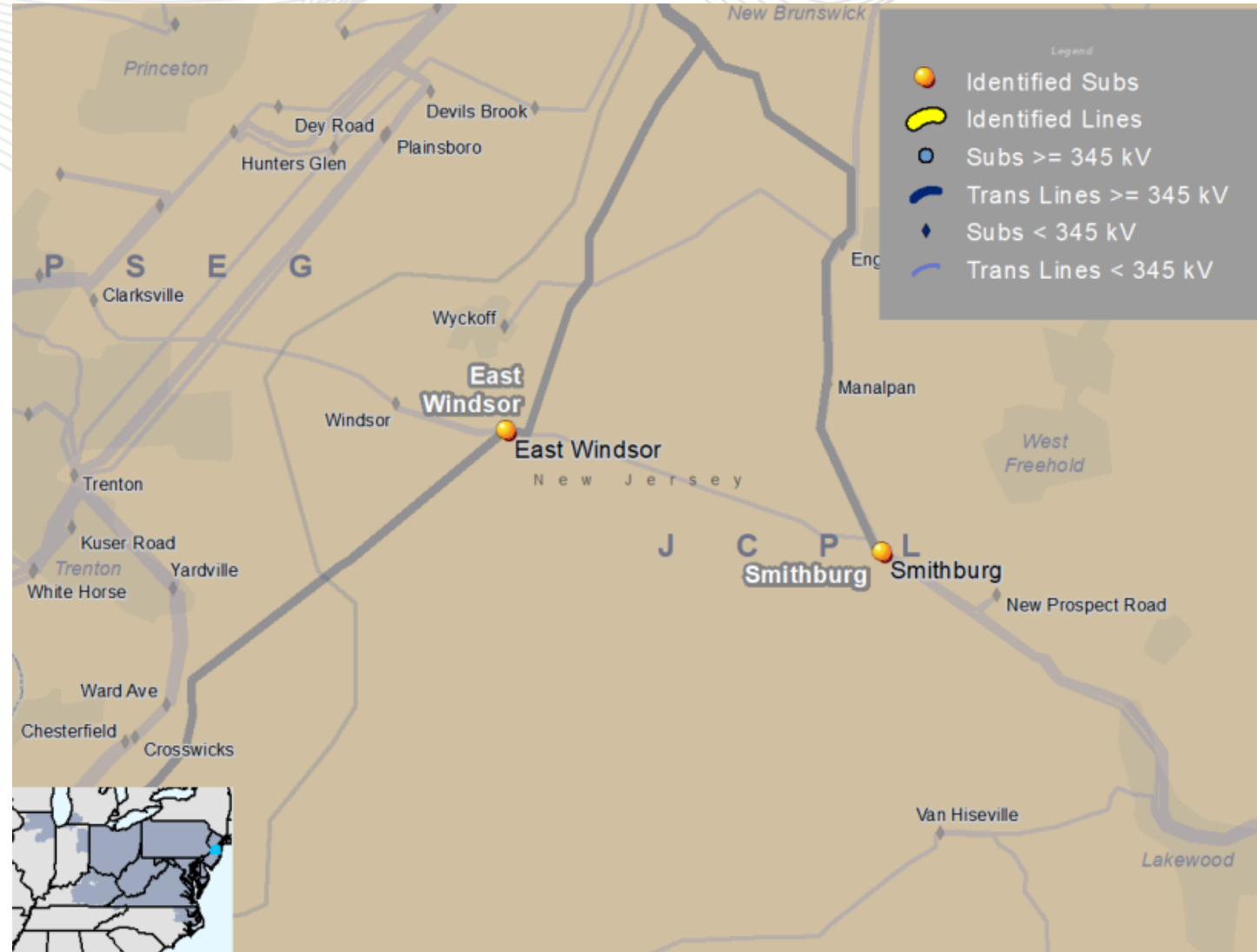
**Proposing Entity: JCPL**

**Problem Statement:**  
**Generator Deliverability (Winter Thermal Violations) – Smithburg-East Windsor 230 kV**

**Proposal Description:**  
Rebuild Smithburg and East Windsor 230 kV substations

**Scenarios Addressed: 17**

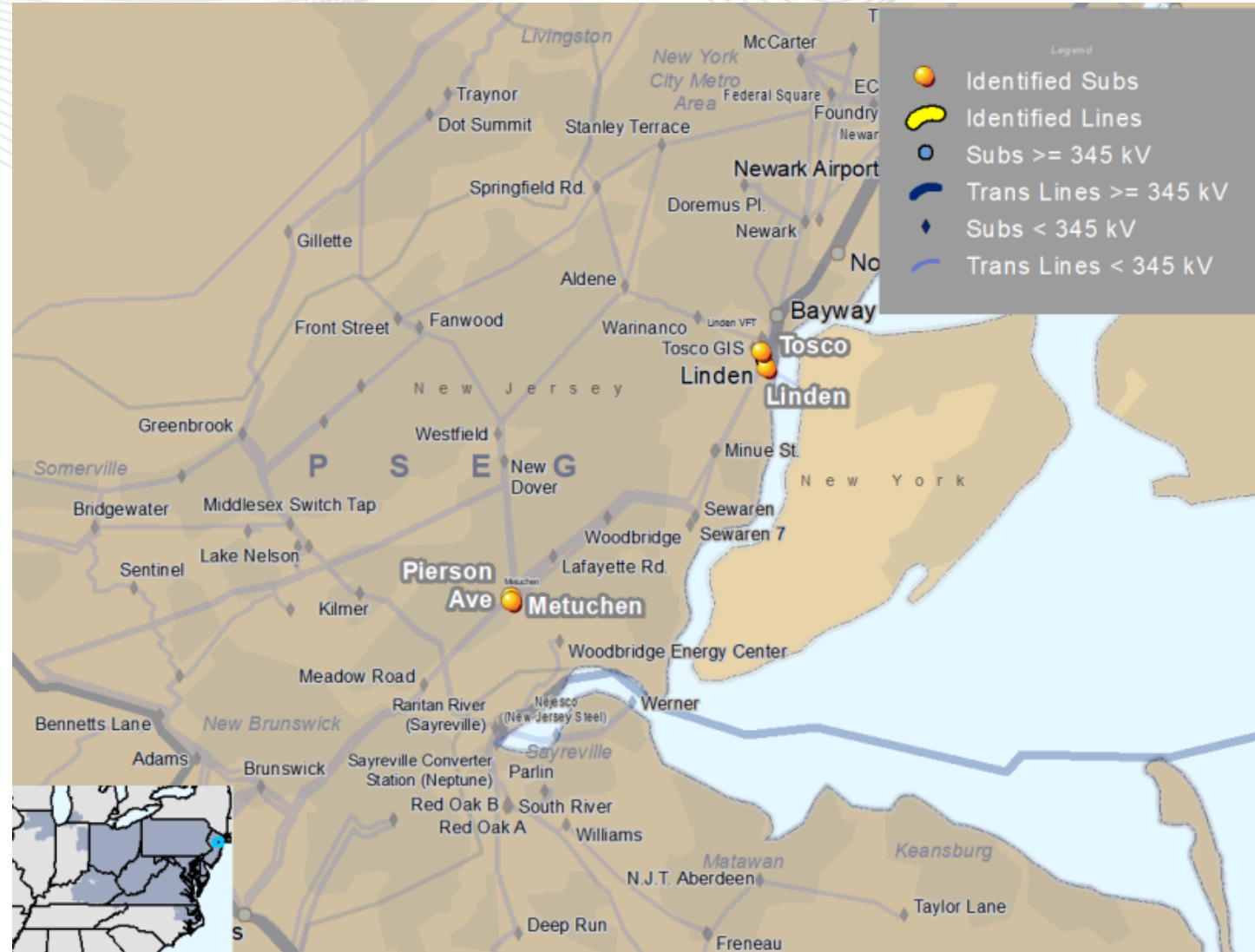
**Proposal Cost Estimate:**  
**\$75 M**



**Proposing Entity: PSEG**

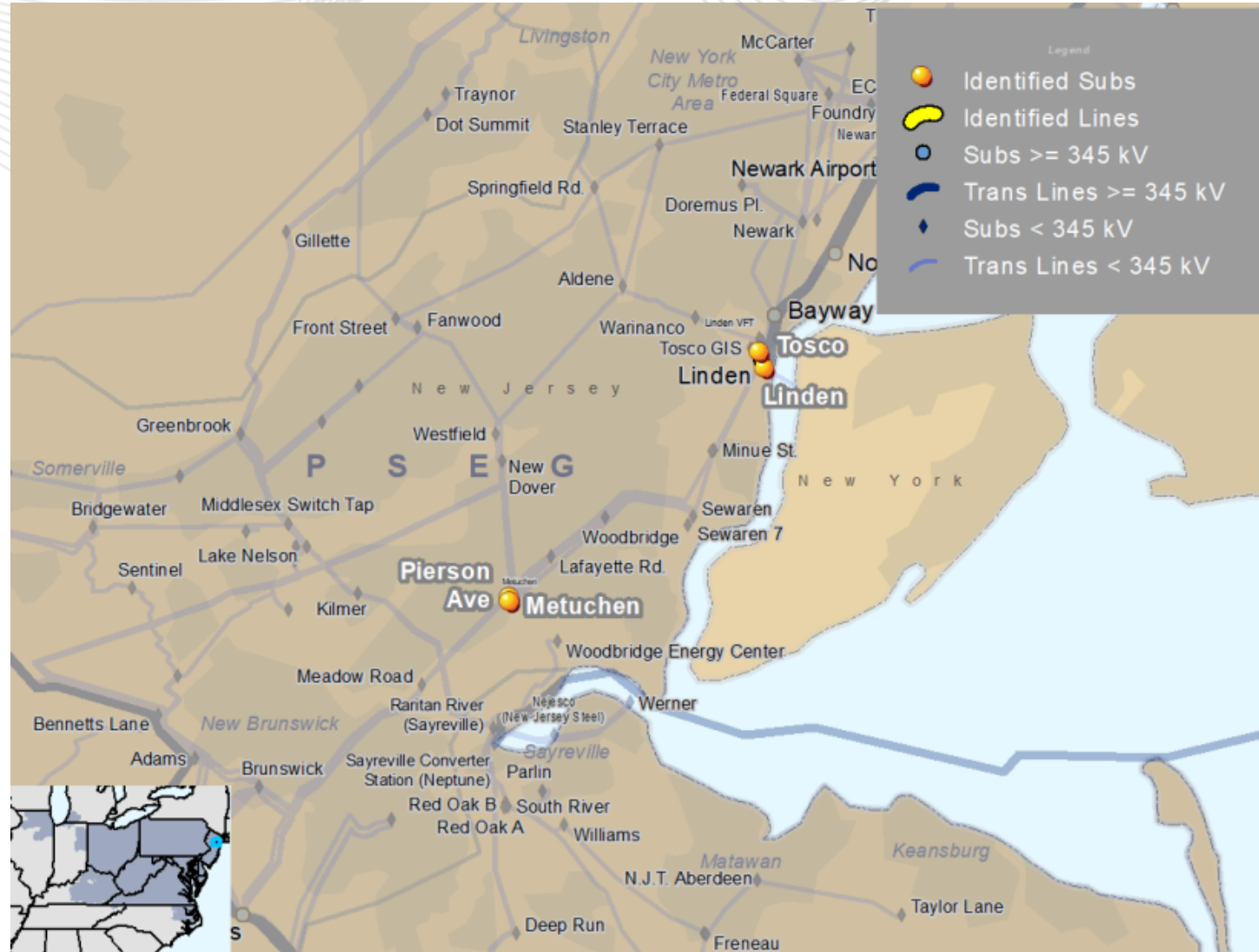
**Proposal Description:**

- 1 Reconductor Metuchen-Pierson Ave S 230 kV (approximately 0.38 miles in length)
- 2 Upgrade the overhead line connecting the Linden 345/230 kV transformer with the Linden 230 kV yard (approximately 0.31 miles in length)





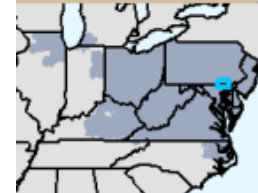
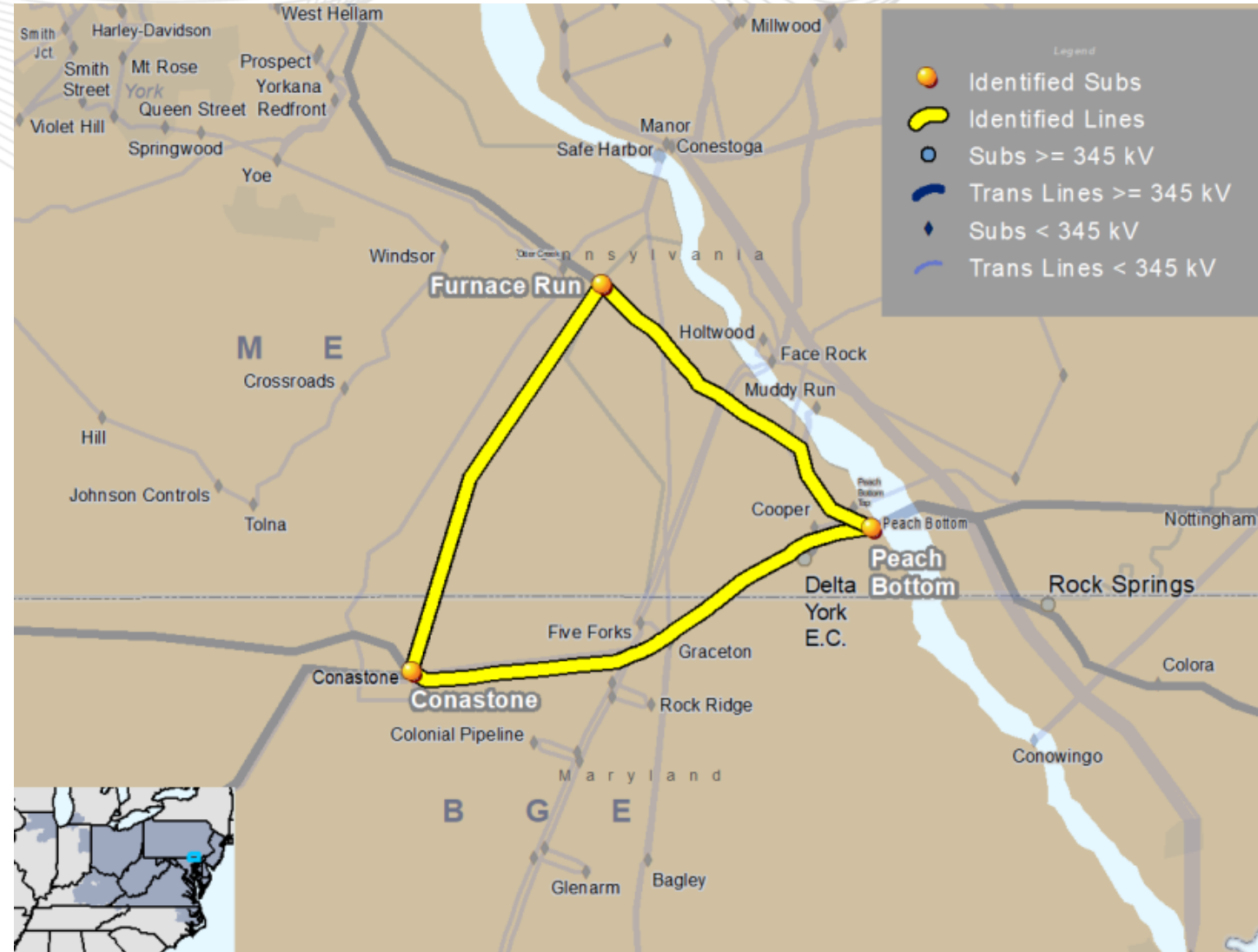
Proposing Entity: JCPL		
Problem Statement: Generation Deliverability (Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	Metuchen-Pierson Ave S 230 kV Scenarios: 10	\$0.9
2	Linden 345/230 kV transformer Scenarios: 10/11	\$3.2



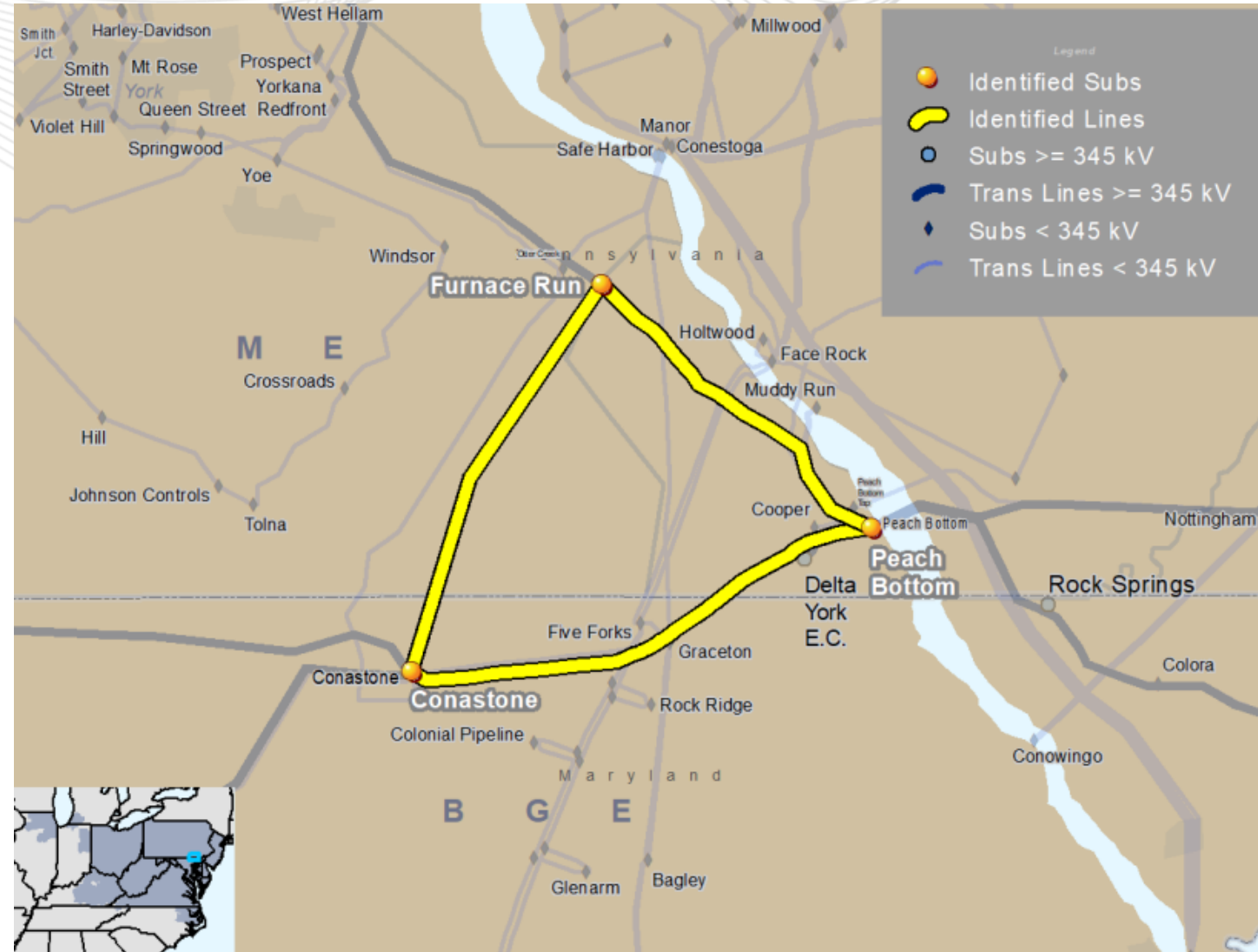
**Proposing Entity: AE/BGE/Transource**

## Proposal Description:

- 1 Reconductor Peach Bottom-Conastone 500 kV
- 2 Reconductor Peach Bottom-Furnace Run 500 kV
- 3 Replace Furnace Run 500/230 kV Transformers 1 & 2
- 4 Reconductor Furnace Run-Conastone 230 kV 1 & 2



Proposing Entity: AE/BGE/Transource		
Problem Statement: Generation Deliverability (Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Peach Bottom-Conastone 500 kV</b> Scenarios: None	\$87.97
2	<b>Peach Bottom-Furnace Run 500 kV</b> Scenarios: None	\$23
3	<b>Furnace Run 500/230 kV 1 &amp; 2</b> Scenarios: None	\$50
4	<b>Furnace Run-Conastone 230 kV 1 &amp; 2</b> Scenarios: None	\$40



**Proposing Entity: JCPL/PSEG/PJM**

**Proposal Description:**

- 1 Reconductor 2 miles of Kilmer W-Lake Nelson W 230 kV (2-24-2022)
- 2 Upgrade Lake Nelson W 230 kV (2-4-2022)
- 3 Upgrade Lake Nelson I 230 kV (3-11-2022)
- 4 Rebuild Kilmer-Lake Nelson I 230 kV\*

\* Reflects per mile type cost estimate and will be updated with Transmission Owner estimates once available. Per mile estimates came from Eastern Interconnection Planning Collaborative (EIPC) and are used in PJM renewable integration studies to estimate transmission costs.





Proposing Entity: JCPL/PSEG/PJM		
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Kilmer-Lake Nelson W 230 kV</b>	\$5.53
	Scenarios: 2a/2c/3/4/4a/14/17/20/20a/20b	
2	<b>Kilmer-Lake Nelson W 230 kV</b>	\$0.16
	Scenarios: 1.2/1.2a/1.2b/2a/2c/3/4/4a/5/14/17/18/20/20a/20b	
3	<b>Kilmer-Lake Nelson I 230 kV</b>	\$3.8
	Scenarios: 2a/2c/3/4/4a/5/14/17/18/20/20a/20b	
4	<b>Kilmer-Lake Nelson I 230 kV</b>	\$6.53
	Scenarios: 17	



**Proposing Entity: JCPL/NEET**

**Problem Statement:**  
**Generator Deliverability (Winter Thermal Violations) – Fresh Pond-Deans 500 kV**

**Proposal Description:**  
 Deans-Smithburg 500 kV terminal upgrade (17.7)

**Scenarios Addressed: 4/4a/20**

**Proposal Cost Estimate:**  
**\$8.24 M\***

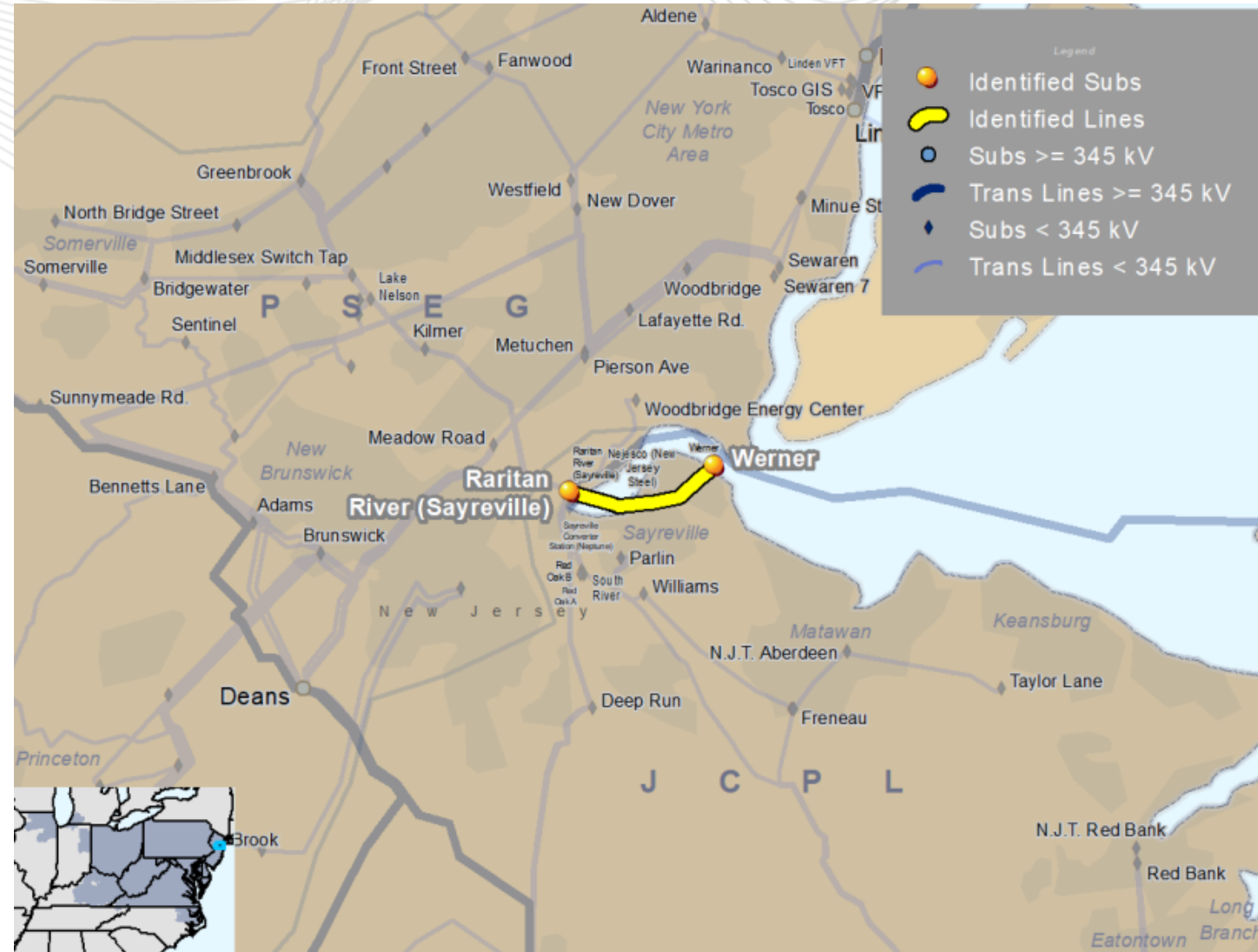
\*The JCPL proposal component 17.7 is \$13.24 M, however the \$5M cost reduction reflects the removal of the embedded cost for upgrade work that is not needed in the specific scenarios.



**Proposing Entity: PJM**

**Proposal Description:**

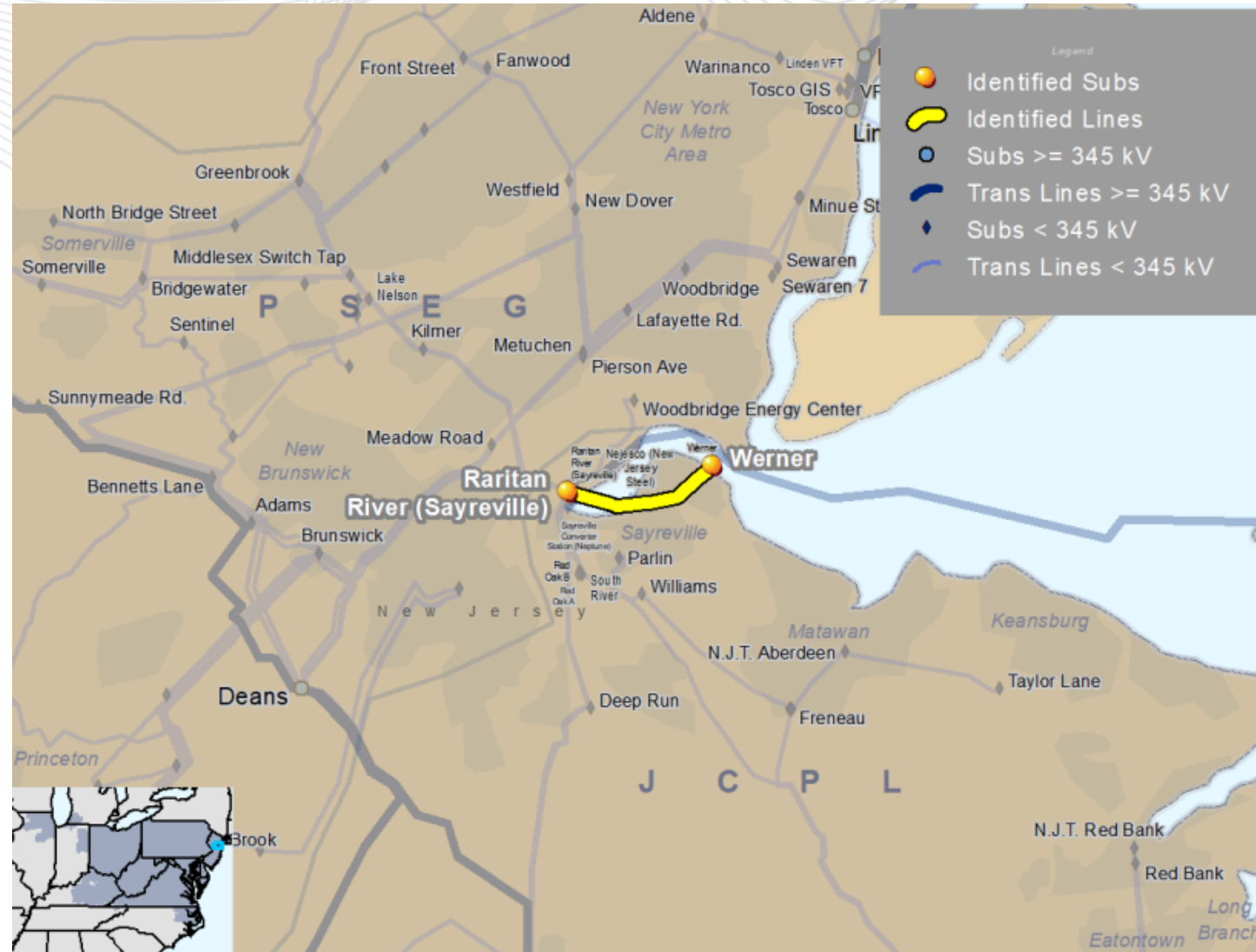
- 1 Reconductor Werner-Raritan River 115 kV
- 2 Rebuild Werner-Raritan River 115 kV
- 3 Replace Werner No. 13 230/115 kV transformer





Proposing Entity: PJM		
Problem Statement: Generational Deliverability (Light Load Thermal Violations)		Proposal Cost Estimate (\$M)
1	<b>Werner-Raritan River 115 kV</b> Scenarios: 3	\$4.4
2	<b>Werner-Raritan River 115 kV</b> Scenarios: 14	\$7.15
3	<b>Werner No. 13 230/115 kV transformer</b> Scenarios: 14	\$7.8

Note: Reflects per mile type cost estimate and will be updated with Transmission Owner estimates once available. Per mile estimates came from Eastern Interconnection Planning Collaborative (EIPC) and are used in PJM renewable integration studies to estimate transmission costs.

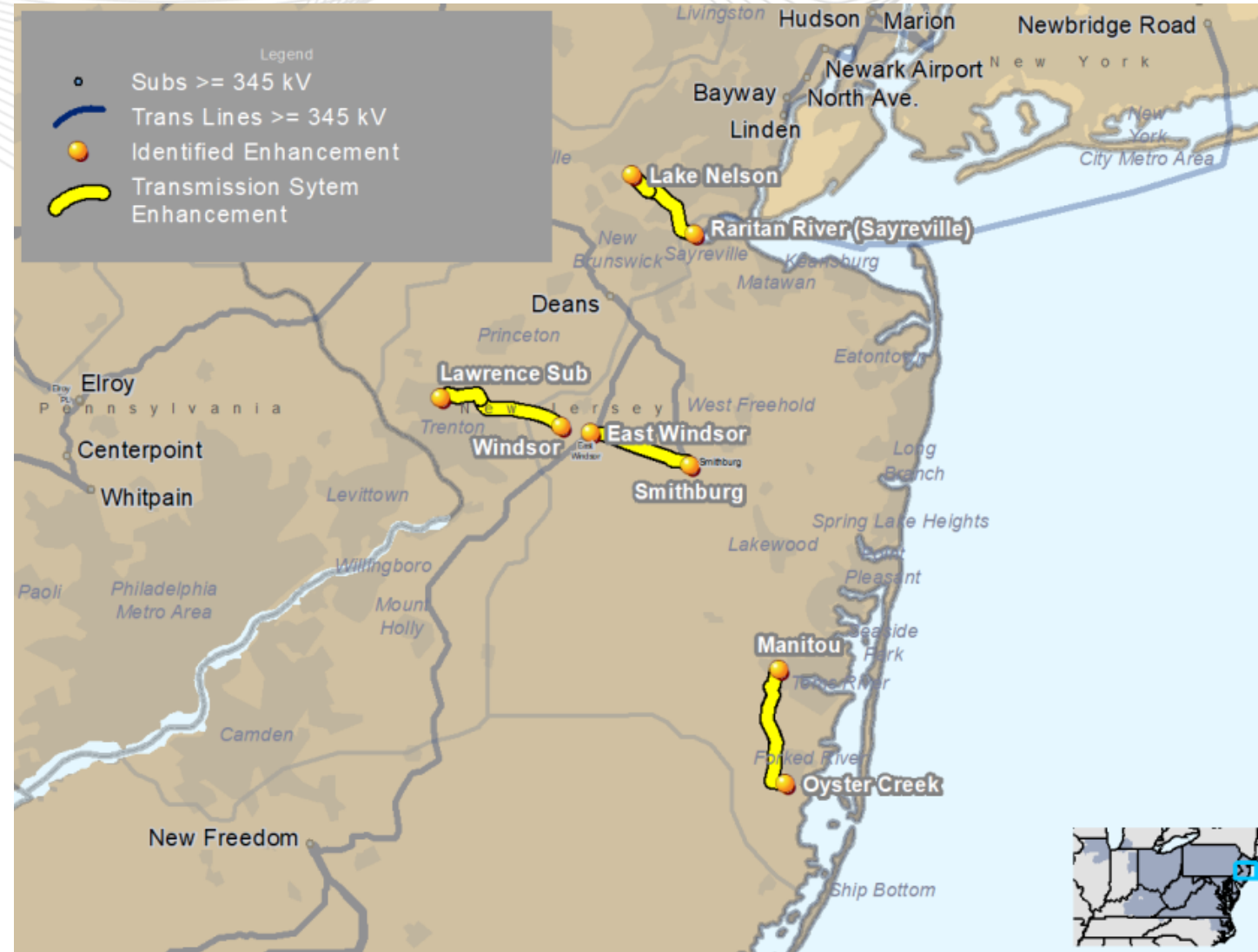


## Proposing Entity: JCPL

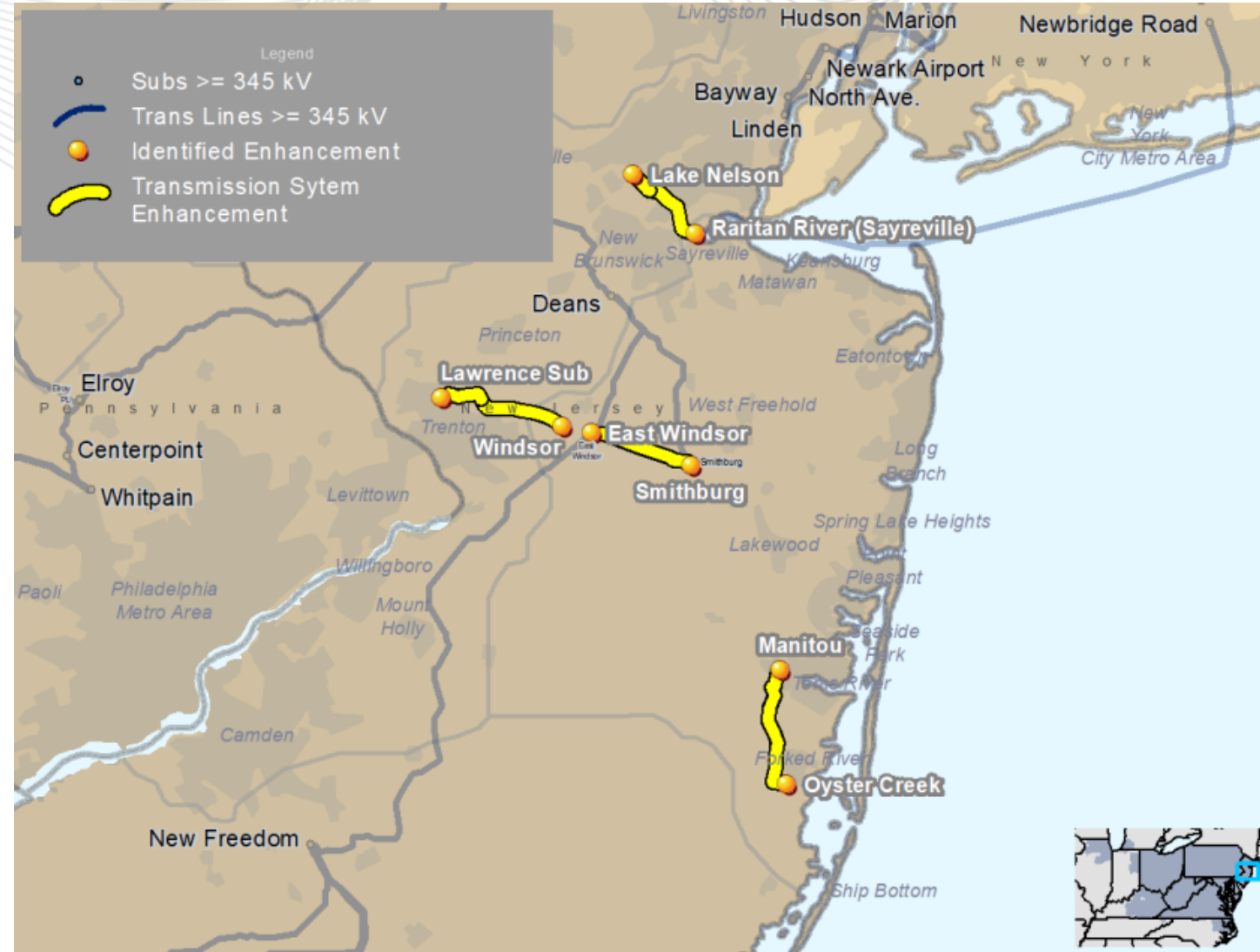
### Proposal Description:

1	Upgrade Lake Nelson I-Middlesex 230 kV (17.20)
2	Upgrade Oyster Creek-Manitou 230 kV 1 & 2* (17.1, 17.2, 17.3, 17.12, 17.13, 17.21)
3	Reconductor Clarksville-Lawrence 230 kV (17.16)
4	Reconductor Kilmer I-Lake Nelson I 230 kV (17.19)

\*Note: The upgrade will be required to remedy the set rating adjustments (pre/post contingency de-rating of the line), and it is assumed that the cost to remove the set rating adjustments is minimal compared to overall cost.



Proposing Entity: JCPL	
Problem Statement: Generation Deliverability (Summer, Winter & Light Load Thermal Violations)	Proposal Cost Estimate (\$M)
1	<b>Lake Nelson I-Middlesex I 230 kV</b> \$0.67 Scenarios: 1.1/1.2/1.2a/1.2b/3/4a/11/14
2	<b>Oyster Creek-Manitou 1 &amp; 2 230 kV</b> \$52 Scenarios: 1.1/1.2/1.2a/1.2b/2a/2c/3/4/4a/6/7/10/ 11/12/13/14/15/16/16a/19/20/20a/20b
3	<b>Clarksville-Lawrence 230 kV</b> \$19 Scenarios: 1.2/1.2a/1.2b/2a/2c/3/5/17/18/20/20a/20b
4	<b>Kilmer I-Lake Nelson I 230 kV</b> \$4.42 Scenarios: 2a/2c/3/4/4a/5/14/18/20/20a/20b

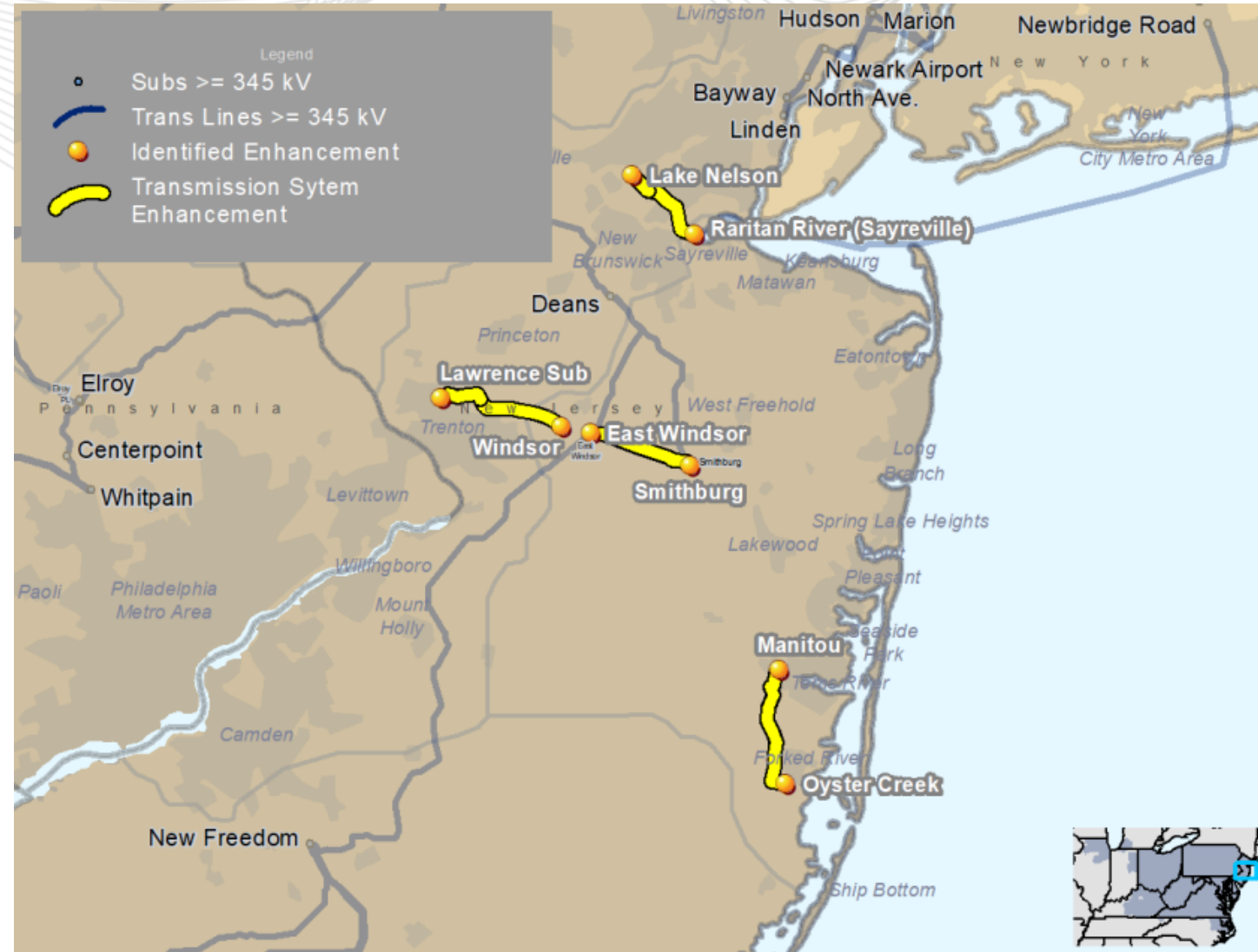




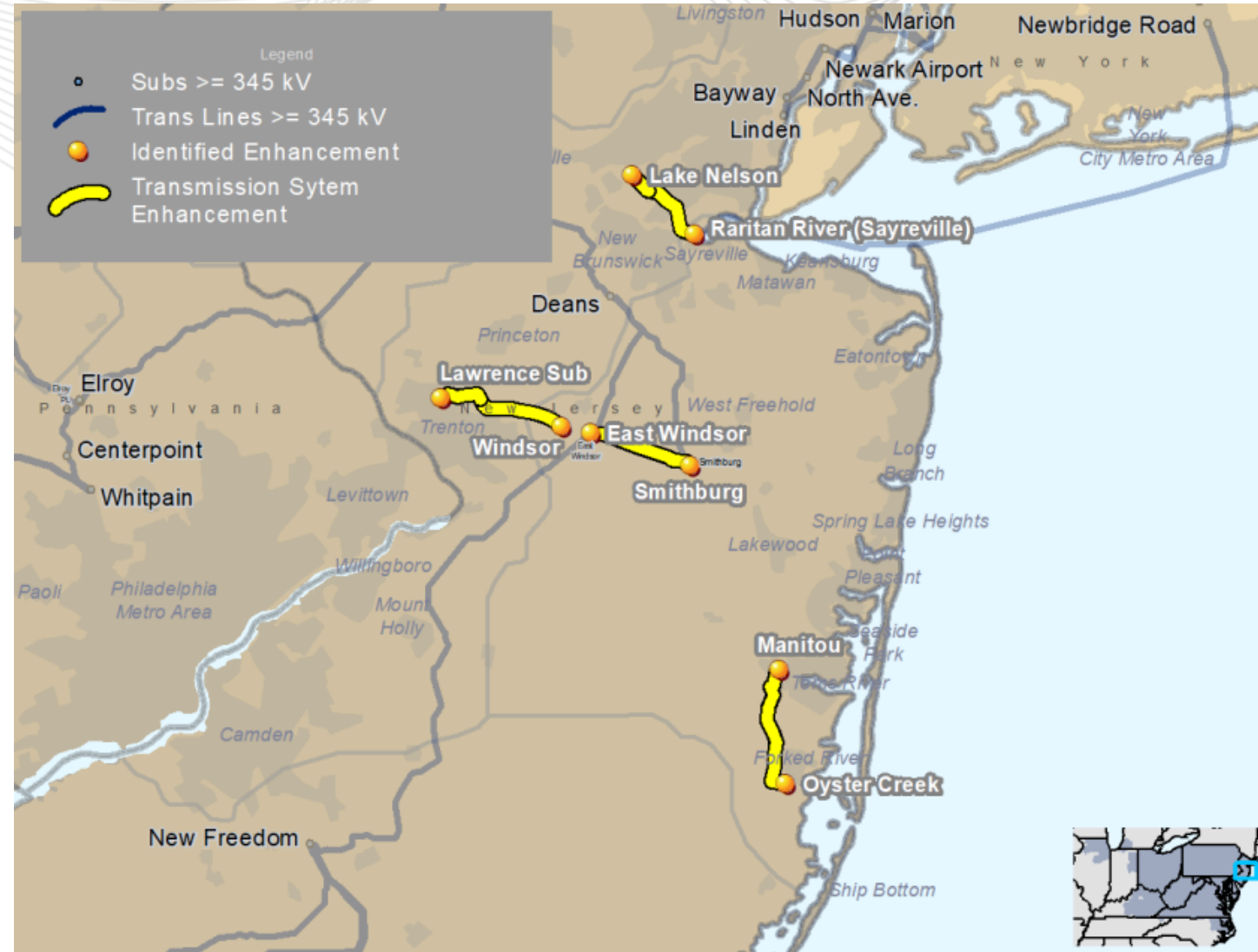
**Proposing Entity: JCPL**

**Proposal Description:**

5	Convert the six-wired East Windsor-Smithburg E2005 230 kV line (9.0 mi.) to two circuits. One a 500 kV line and the other a 230 kV line (17.4-17.11)
6	Add third Smithburg 500/230 kV (17.18)
7	Upgrade Smithburg-Deans 500 kV (17.7)
8	Upgrade Windsor-Clarksville 230 kV (17.14, 17.15)



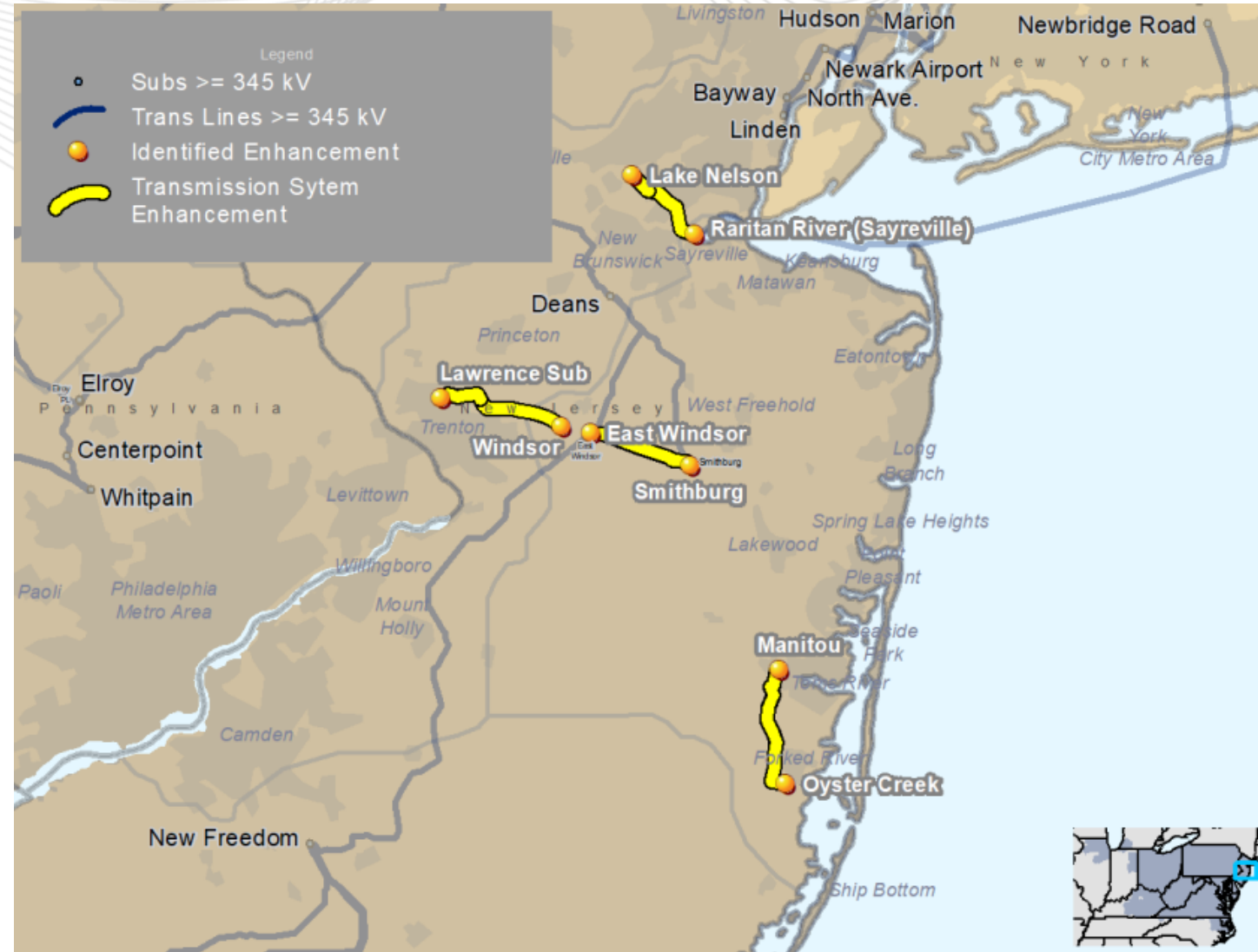
Proposing Entity: JCPL	
Problem Statement: Generation Deliverability (Summer, Winter & Light Load Thermal Violations)	Proposal Cost Estimate (\$M)
5	<b>Smithburg-Windsor 230 kV/Smithburg 500/230 kV #2 transformer/Smithburg- Deans 500 kV</b> \$206.5  Scenarios: 5/18
6	<b>Smithburg 500/230 kV #1 transformer</b> \$13.4  Scenarios: 1.2/1.2a/1.2b/5/14/18/19
7	<b>Smithburg-Deans 500 kV</b> \$13.24  Scenarios: 7/13
8	<b>Windsor-Clarksville 230 kV</b> \$4  Scenarios: None



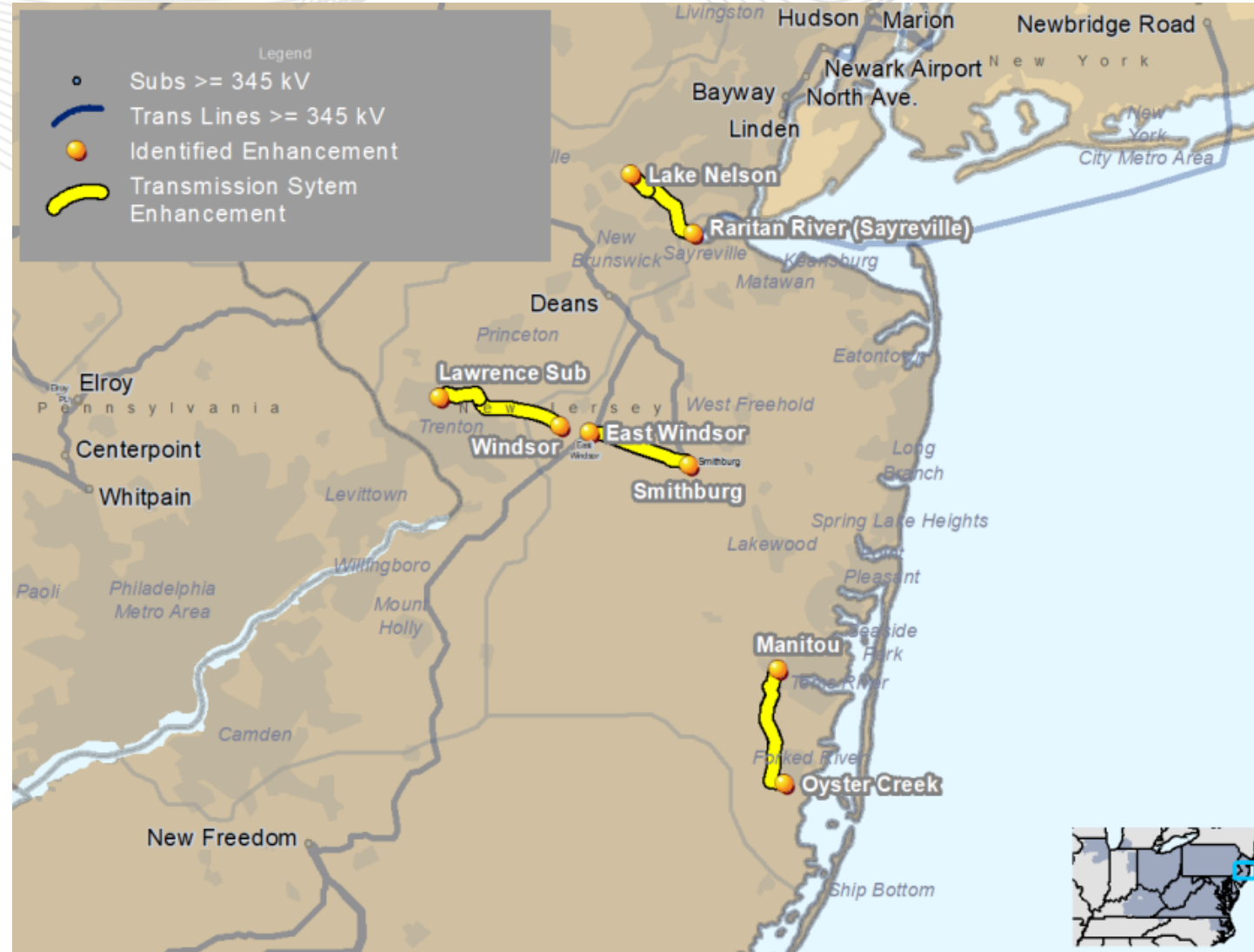
**Proposing Entity: JCPL**

**Proposal Description:**

<b>9</b>	Upgrade Hopewell-Lawrence 230 kV (17.17)
<b>10</b>	New Smithburg-East Windsor 500 kV line (17.4, 17.5, 17.6)



Proposing Entity: JCPL		
Problem Statement: Generation Deliverability (Summer, Winter & Light Load Thermal Violations)		Proposal Cost Estimate (\$M)
9	<b>Hopewell-Lawrence 230 kV</b>	\$3.13
	Scenarios: None	
10	<b>Smithburg-East Windsor 230 kV</b>	\$237
	Scenarios: None	





**Proposing Entity: CNTLM**

**Problem Statement:**

**Generator Deliverability (Winter Thermal Violations) –**

- Hope Creek-LS Power Cable East 230 kV 1 & 2
- LS Power Cable East-LS Power Silver Run 230 kV

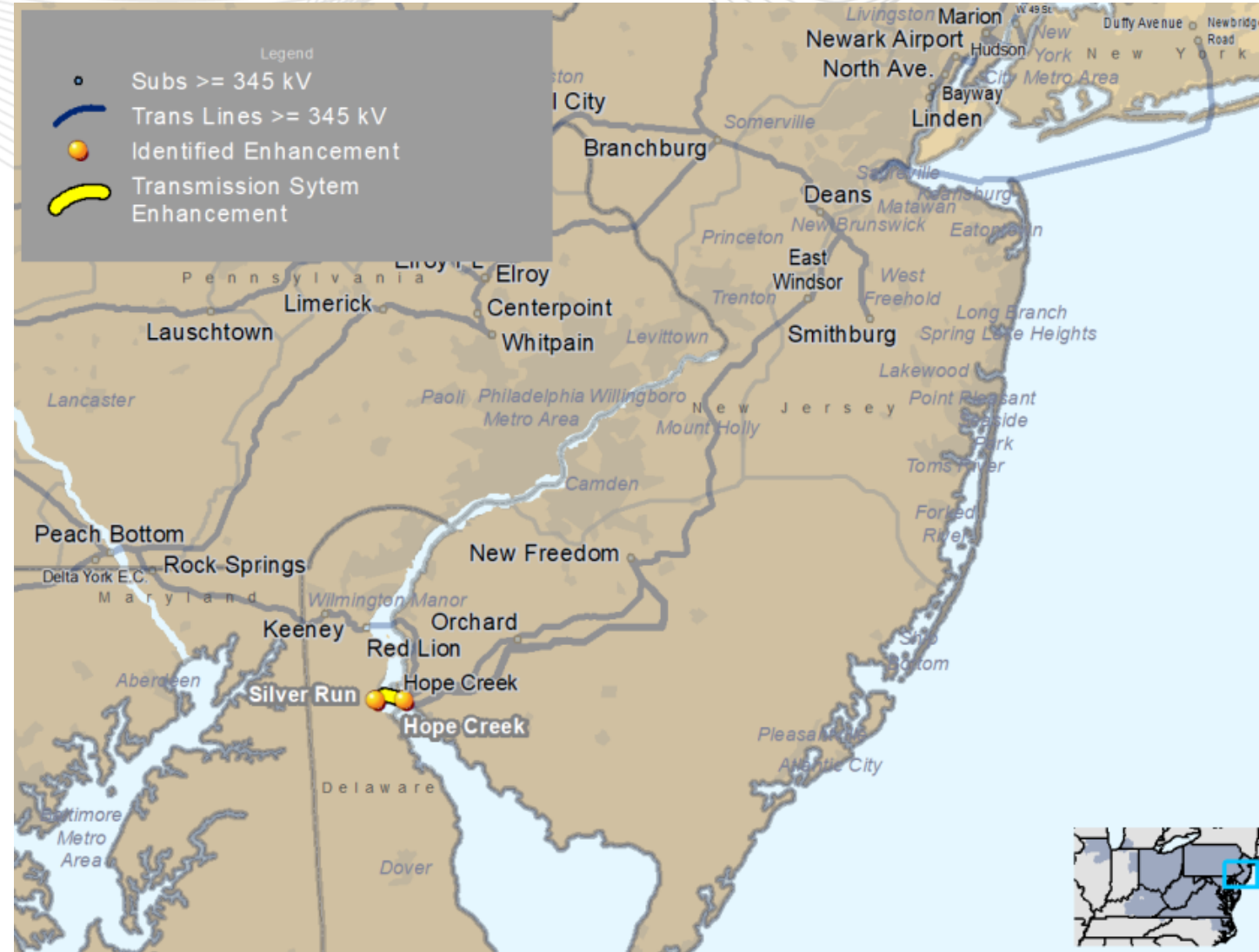
**Proposal Description:**

One additional Hope Creek-Silver Run 230 kV submarine cables and rerate plus upgrade line

**Scenarios Addressed: All**

**Proposal Cost Estimate:**

\$61.2 M



**Proposing Entity: AE**

**Problem Statement:**

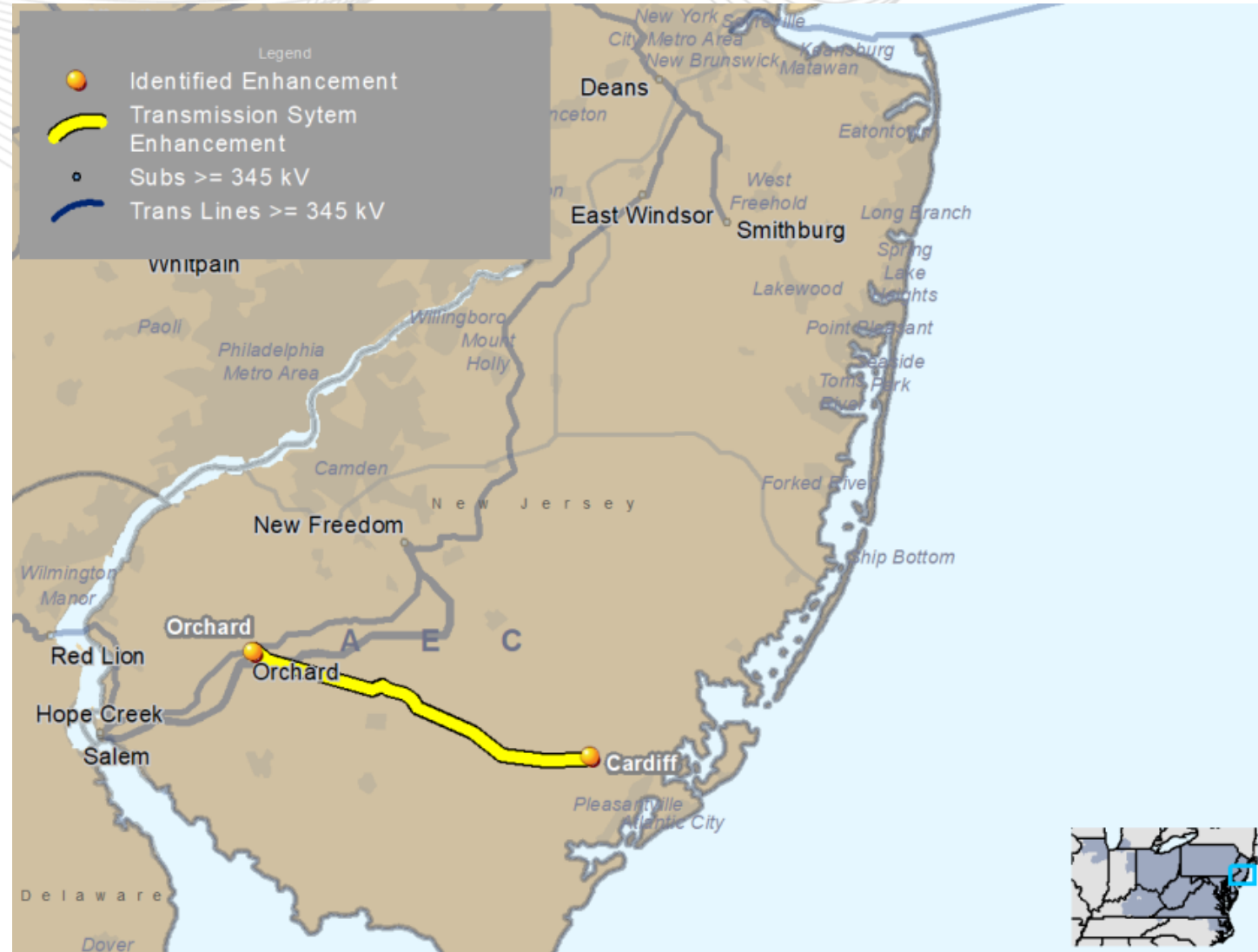
**Generator Deliverability – Cardiff-Orchard**  
230 kV

**Proposal Description:**

Second Cardiff-Orchard 230 kV and second Orchard 500/230 kV transformer (929.10, 929.12)

**Scenarios Addressed: 2a/2c**

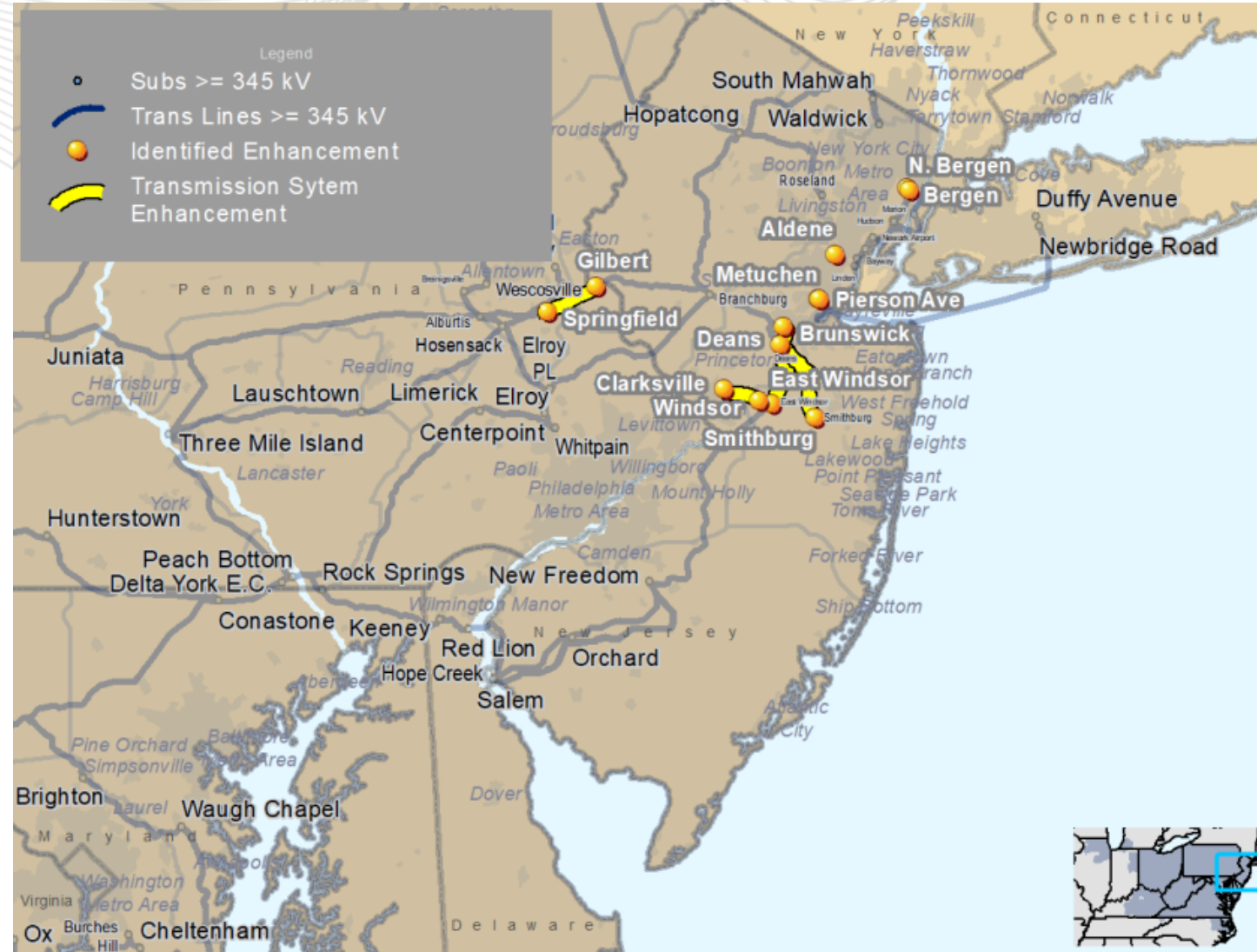
**Proposal Cost Estimate:**  
\$197.52 M



**Proposing Entity: NEETMH**

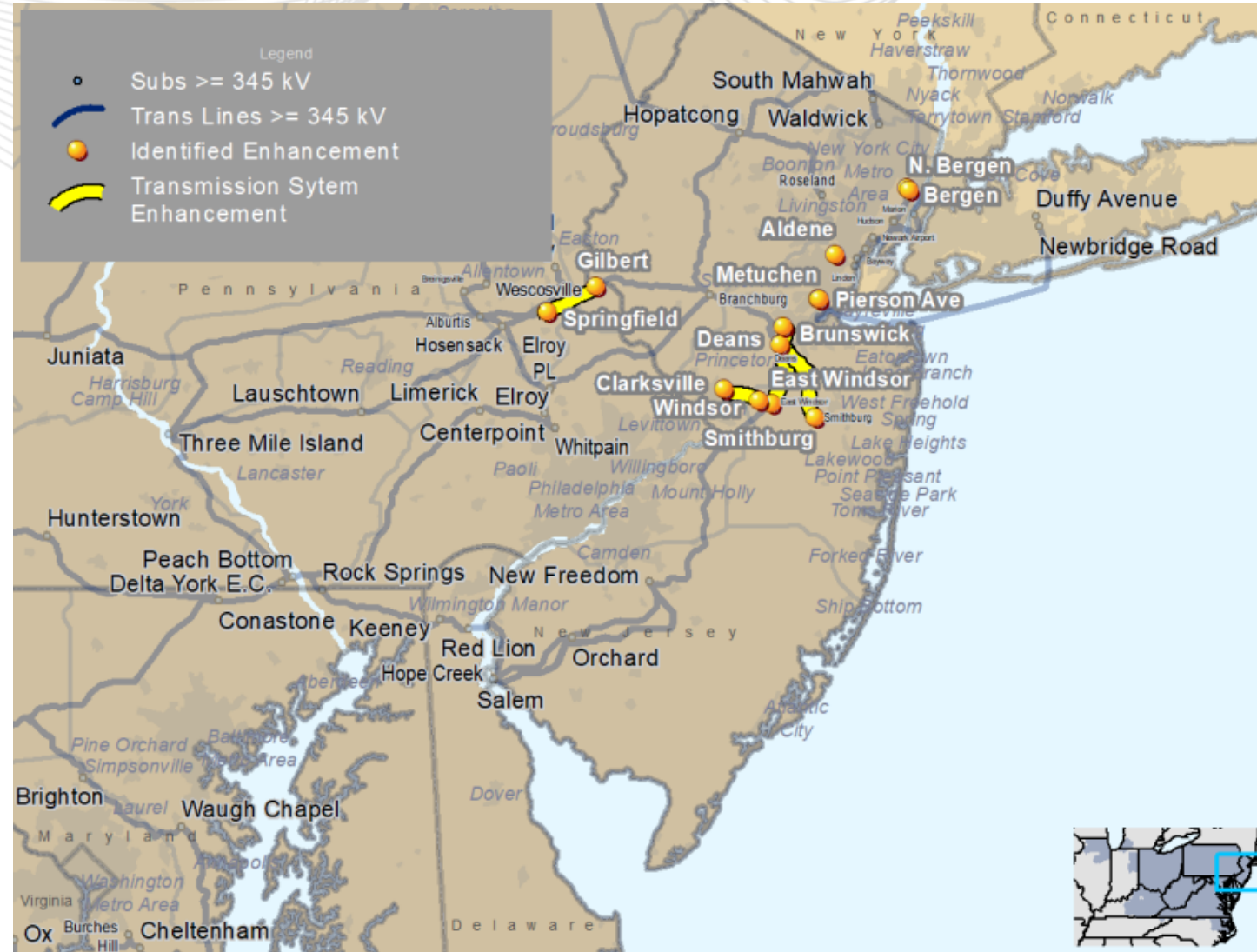
**Proposal Description:**

- 1 Reconductor Pierson Ave H-Metuchen 230 kV (651.4)
- 2 Increase Deans 500/230 kV #3 rating (651.5)
- 3 Put Smithburg 500/230 kV spare transformer in service (651.6)





Proposing Entity: NEETHM		
Problem Statement: Generational Deliverability		Proposal Cost Estimate (\$M)
1	<b>Pierson Ave H-Metuchen 230 kV</b>	\$1
	Scenarios: None	
2	<b>Deans 500/230 kV #3</b>	\$8.36
	Scenarios: None	
3	<b>Smithburg 500/230 kV 1 &amp; 2</b>	\$11.51
	Scenarios: None	

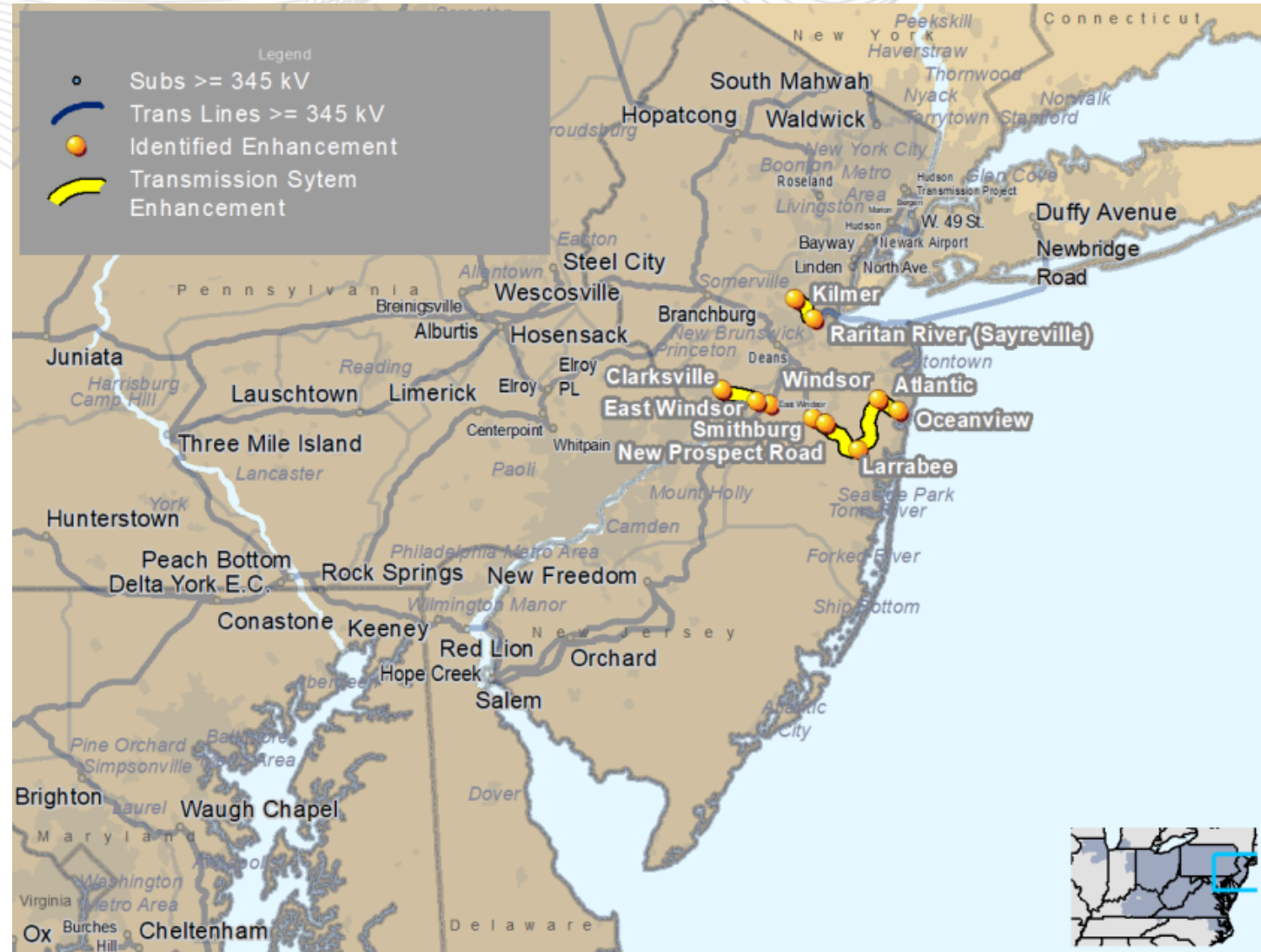




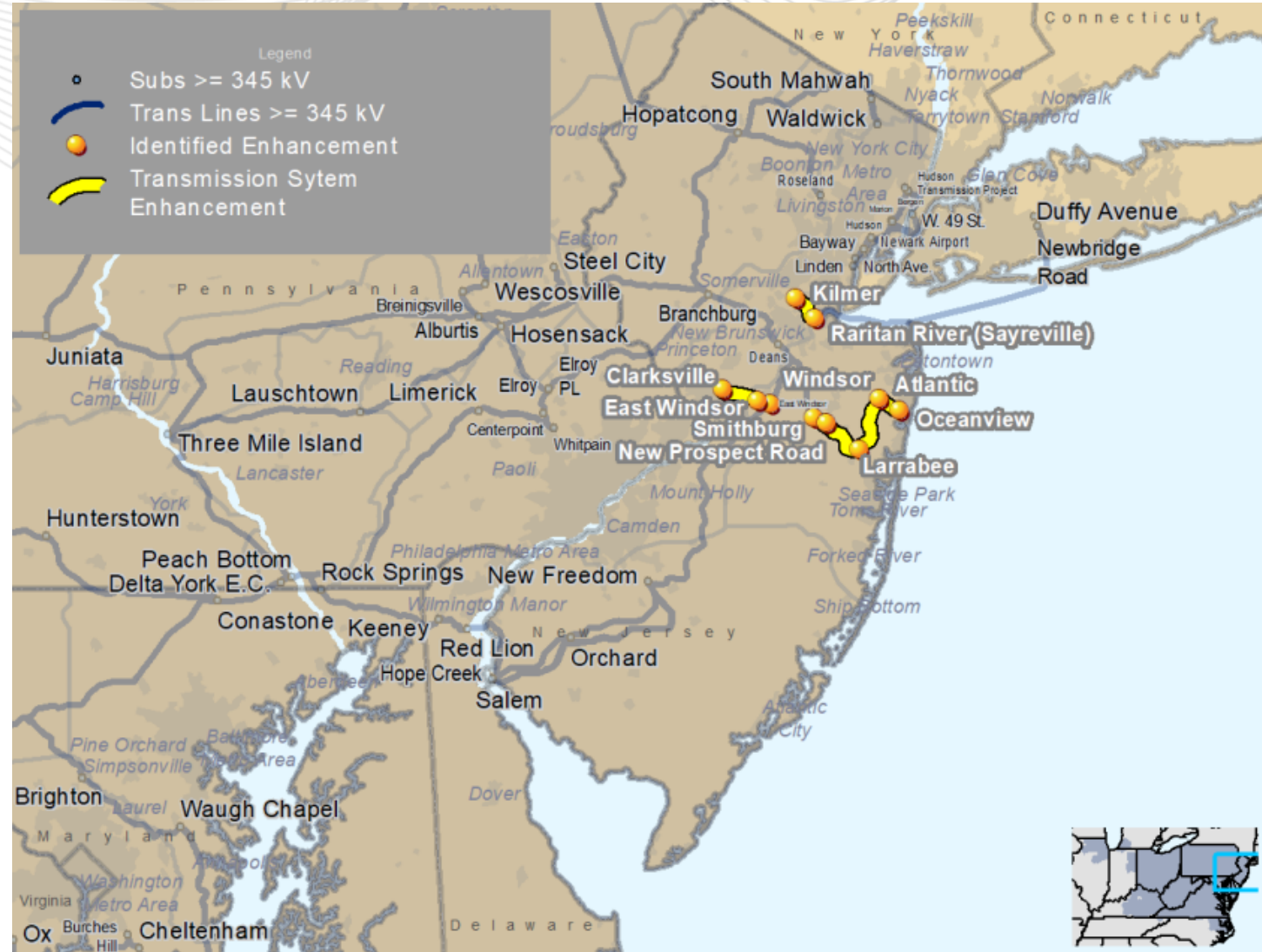
**Proposing Entity: NEETMH**

**Proposal Description:**

- 1 Reconductor Raritan River-Kilmer 230 kV (331.7)
- 2 Reconductor Windsor-East Windsor 230 kV 1 & 2 (331.8, 331.9)
- 3 Reconductor Smithburg-East Windsor 230 kV (331.10)
- 4 Build new Atlantic-Smithburg 230 kV (331.1, 331.11, 331.12)
- 5 Reconductor Atlantic-Smithburg 230 kV (331.4, 331.5)



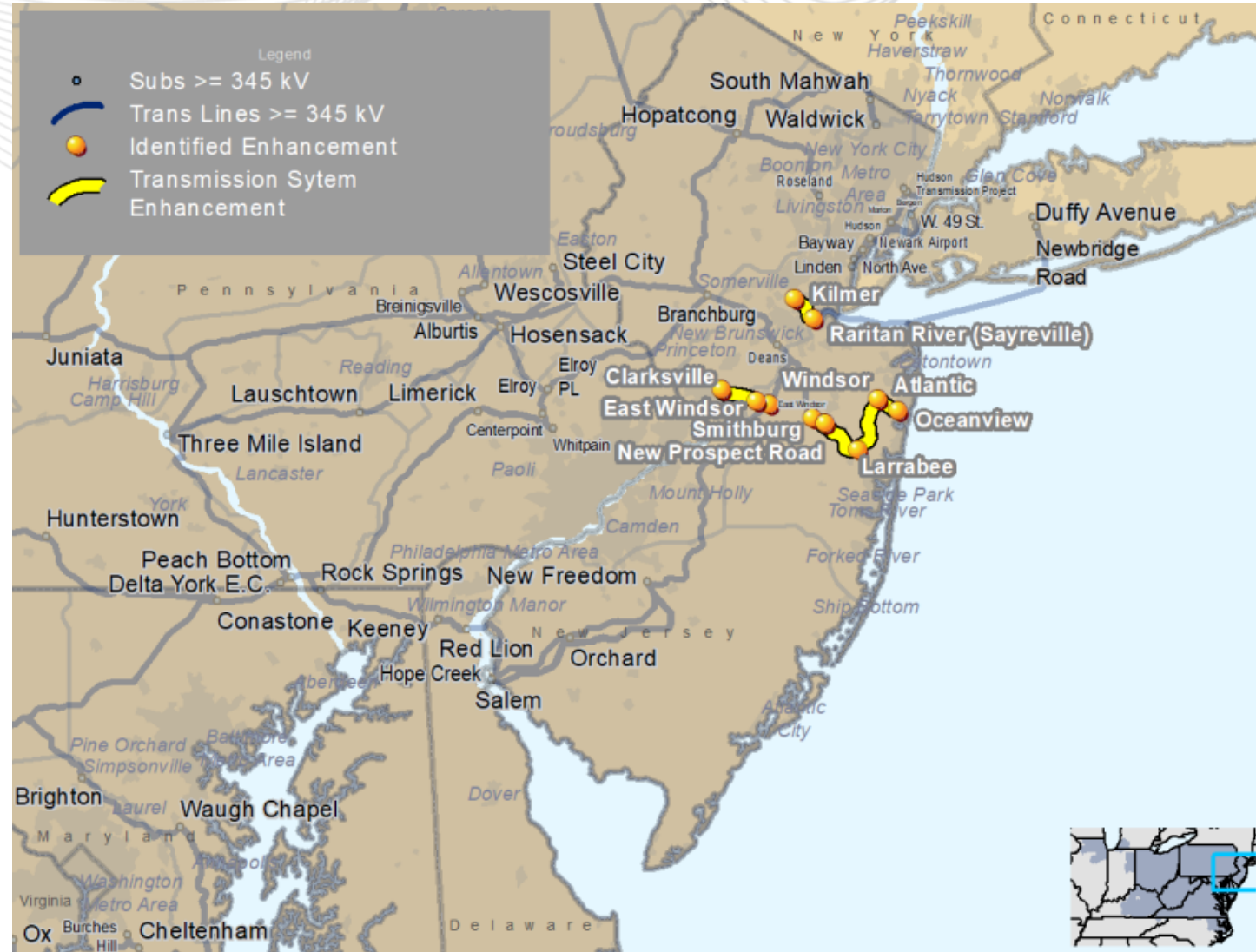
Proposing Entity: NEETMH		
Problem Statement: Generation Deliverability		Proposal Cost Estimate (\$M)
1	<b>Raritan River-Kilmer 230 kV</b> Scenarios: None	\$7.91
2	<b>Windsor-East Windsor 230 kV 1 &amp; 2</b> Scenarios: None	\$6.86
3	<b>Smithburg-East Windsor 230 kV</b> Scenarios: None	\$5
4	<b>Atlantic-Smithburg 230 kV</b> Scenarios: None	\$81.04
5	<b>Atlantic-Smithburg 230 kV</b> Scenarios: None	\$32.38



**Proposing Entity: NEETMH**

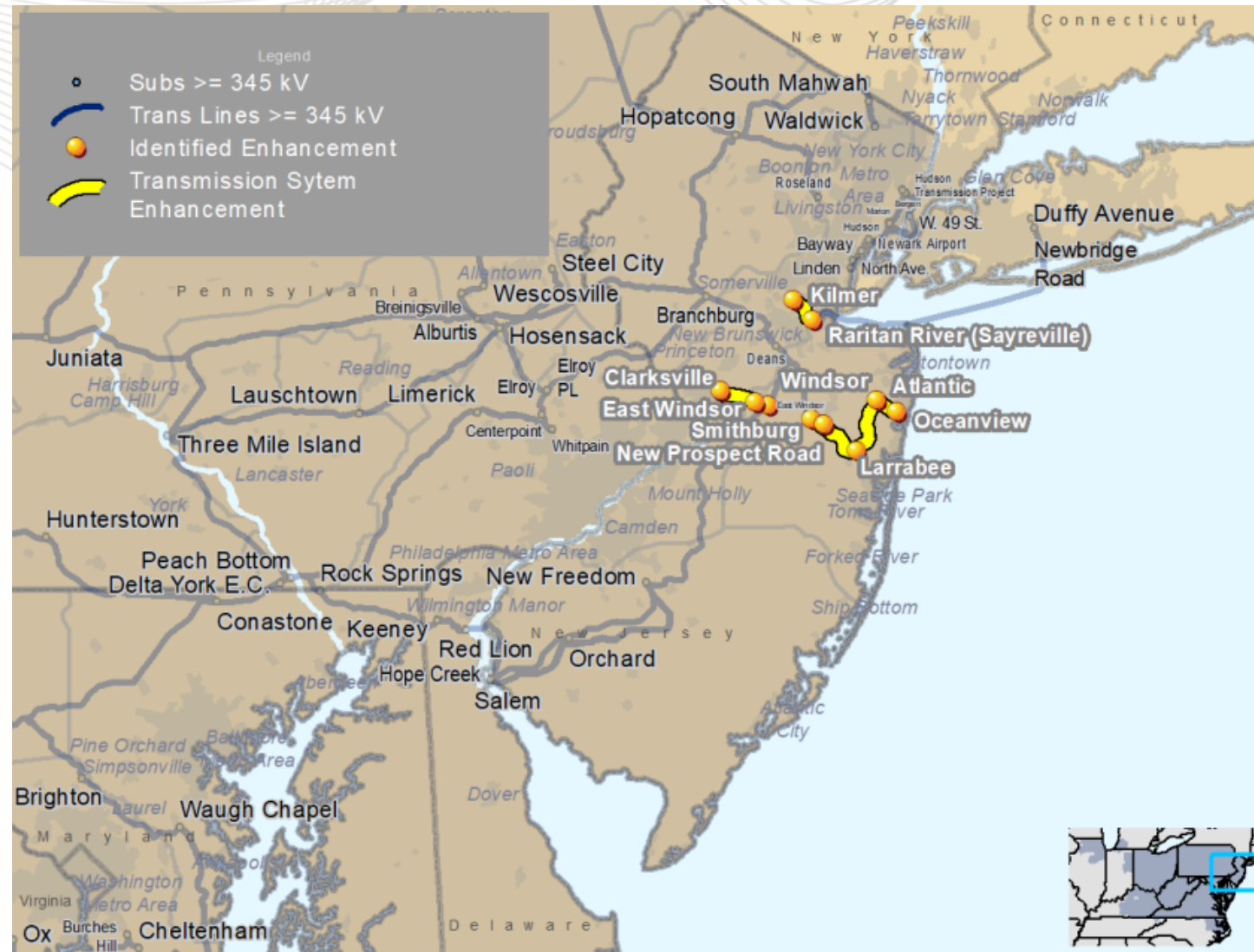
**Proposal Description:**

- 6** Reconductor Larrabee-Smithburg 230 kV 1 & 2 (331.2, 331.3)
- 7** New Larrabee-Oceanview 230 kV (331.15, 331.16)
- 8** Add PAR Red Oak-Raritan River 230 kV 1 & 2 (331.13, 331.14)
- 9** Reconductor Windsor-Clarksville 230 kV (331.6)





Proposing Entity: NEETMH		
Problem Statement: Generation Deliverability		Proposal Cost Estimate (\$M)
6	Larrabee-Smithburg 230 kV 1 & 2	\$30.56
	Scenarios: None	
7	Larrabee-Oceanview 230 kV	\$61.97
	Scenarios: 17	
8	South River-Red Oak A 230 kV/ Red Oak A-Raritan River 230 kV/ Red Oak B-Raritan River 230 kV/ Raritan River-Kilmer-Lake Nelson-Middlesex I & W 230 kV/Middlesex I-Bridegwater 230 kV/ Middlesex W-Greenbrook 230 kV	\$30
	Scenarios: None	
9	Atlantic-Smithburg 230 kV	\$10.09
	Scenarios: None	

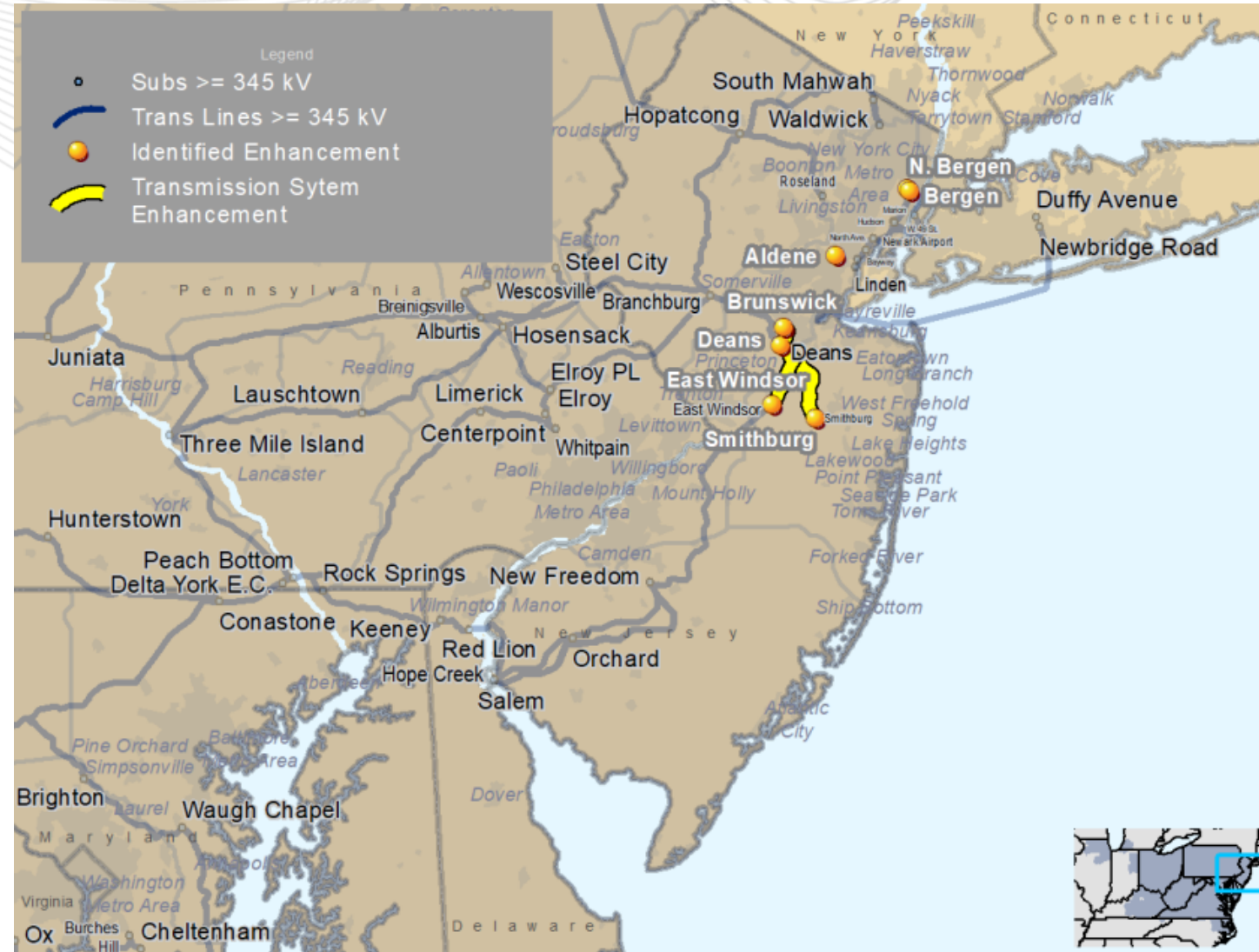




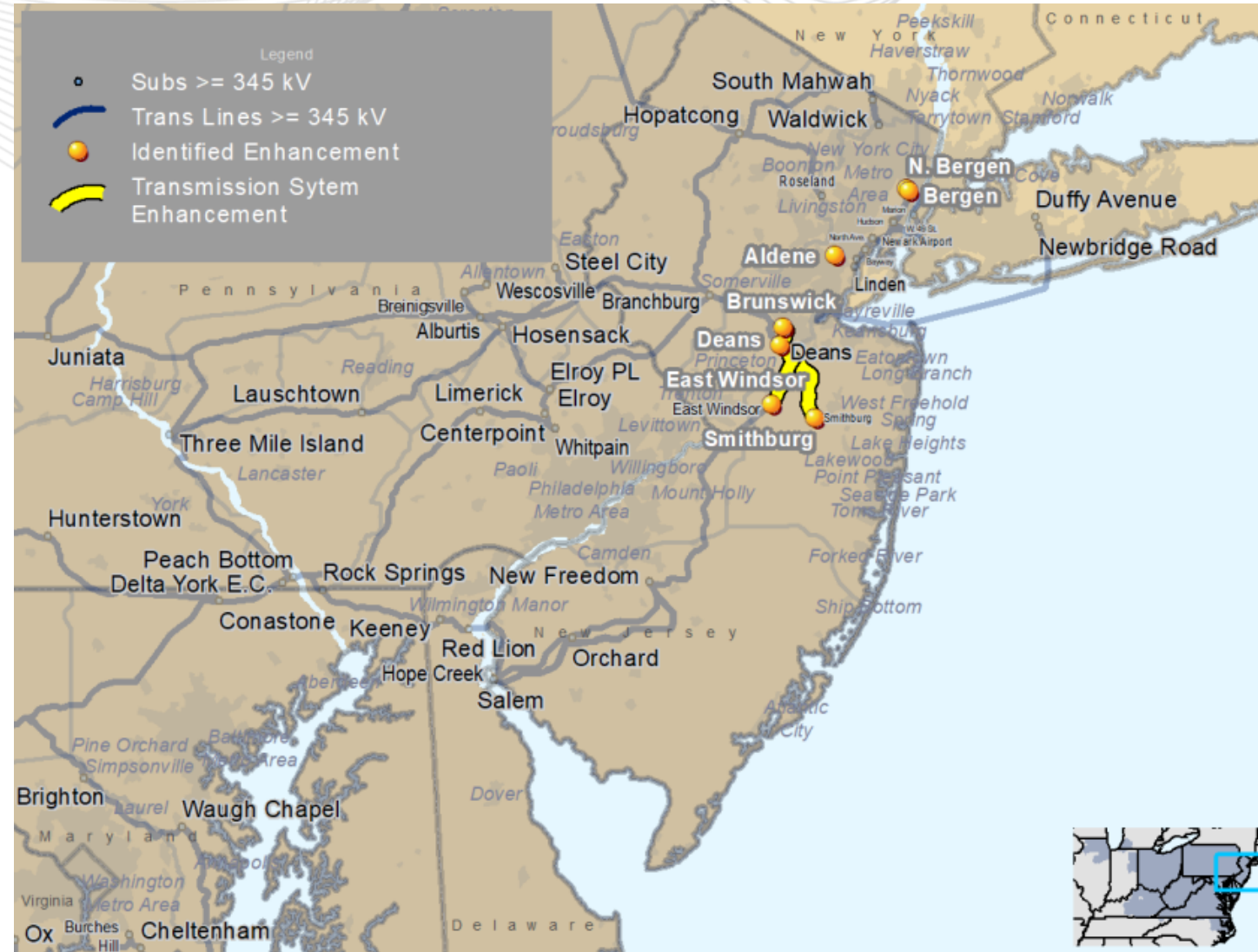
**Proposing Entity: NEETMH**

**Proposal Description:**

- 1 Reconductor Deans-Brunswick 230 kV (44.1)
- 2 New Aldene PAR, upgrade Bergen 138 kV bus section (44.2, 44.3)



<b>Proposing Entity: NEETMH</b>		
<b>Problem Statement:</b> Generation Deliverability		<b>Proposal Cost Estimate (\$M)</b>
<b>1</b>	<b>Deans-Brunswick 230 kV</b>	<b>\$4.68</b>
	Scenarios: None	
<b>2</b>	<b>Linden-Tosco 230 kV/ Tosco-Linden VFT 230 kV/Aldene-Springfield Rd 230 kV/ Aldene-Stanley Terrace 230 kV</b>	<b>\$18</b>
	Scenarios: None	



**Proposing Entity: CNTLM**

**Problem Statement:**

**Generator Deliverability –**

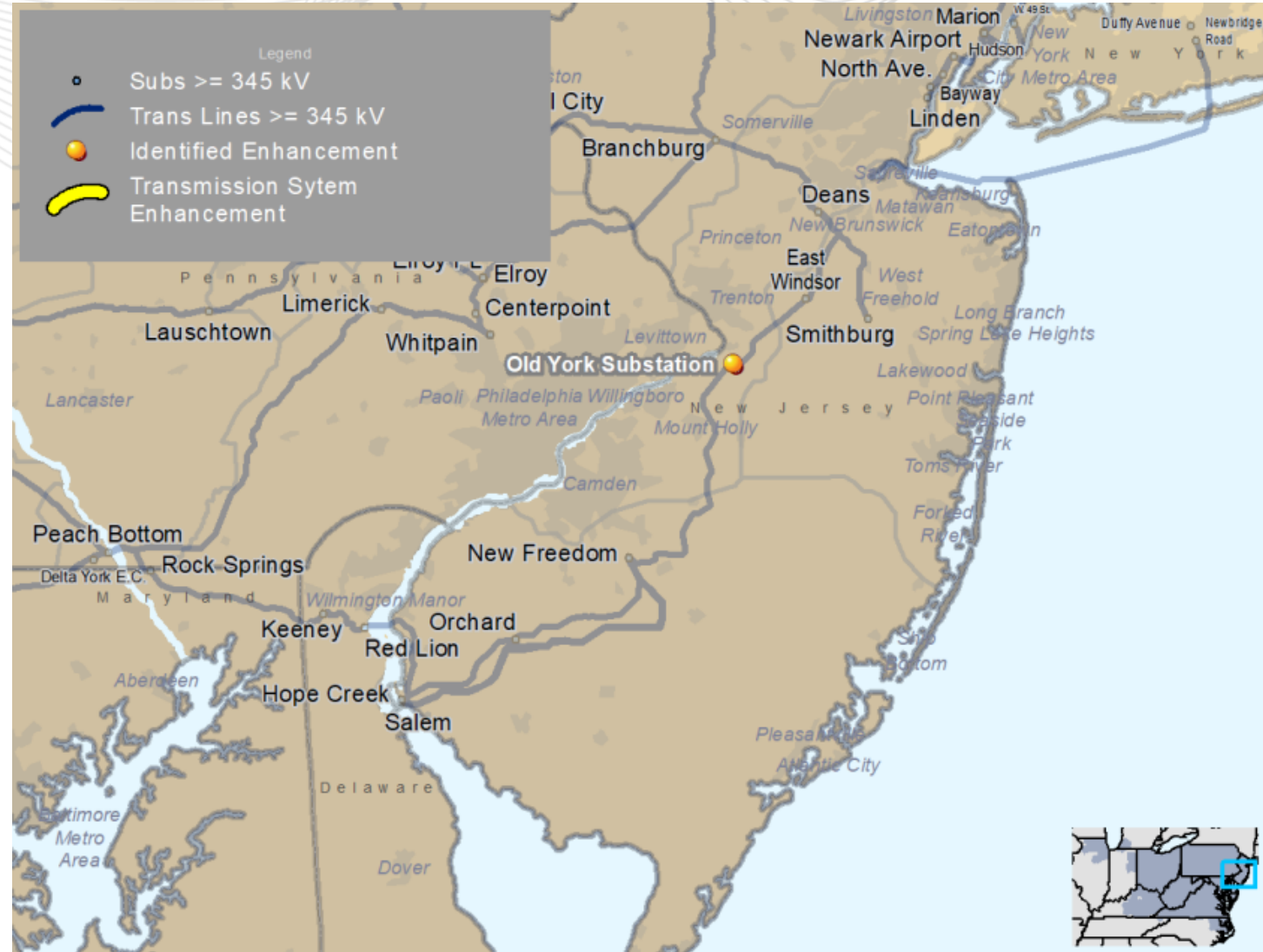
- Deans-Brunswick 230 kV
- Windsor-Clarksville 230 kV
- Clarksville-Lawrence 230 kV

**Proposal Description:**

New Old York 500/230 kV substation

**Scenarios Addressed:** None

**Proposal Cost Estimate:**  
\$75.6 M





**Proposing Entity: NEETMH**

**Problem Statement:**

**Generator Deliverability – Smithburg-East Windsor 230 kV**

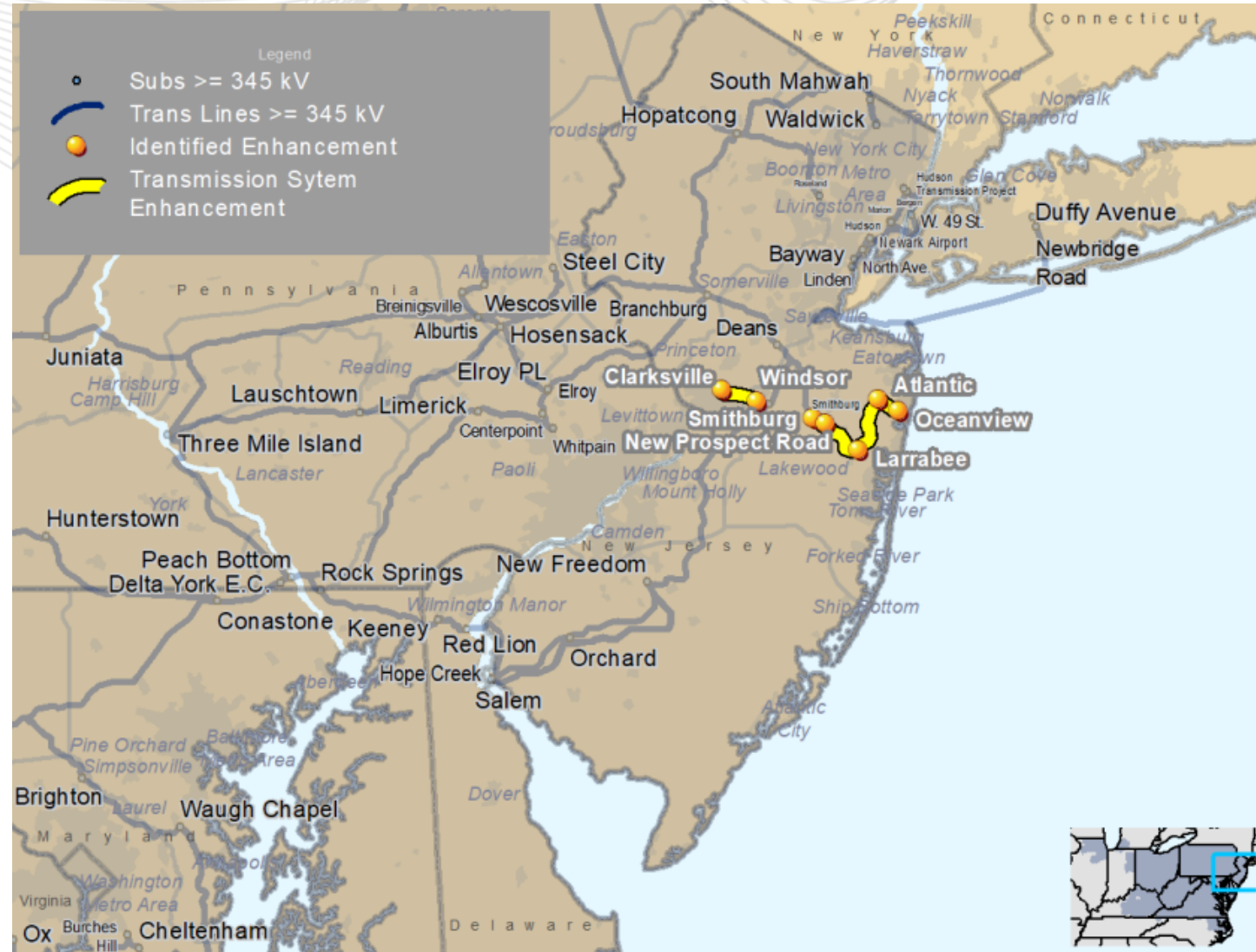
**Proposal Description:**

Eliminate contingencies that derate Smithburg-East Windsor 230 kV winter rating (878.7)

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

\$5 M





**Proposing Entity: NEETMH**

**Problem Statement:**

**Generator Deliverability – Atlantic-Oceanview 230 kV**

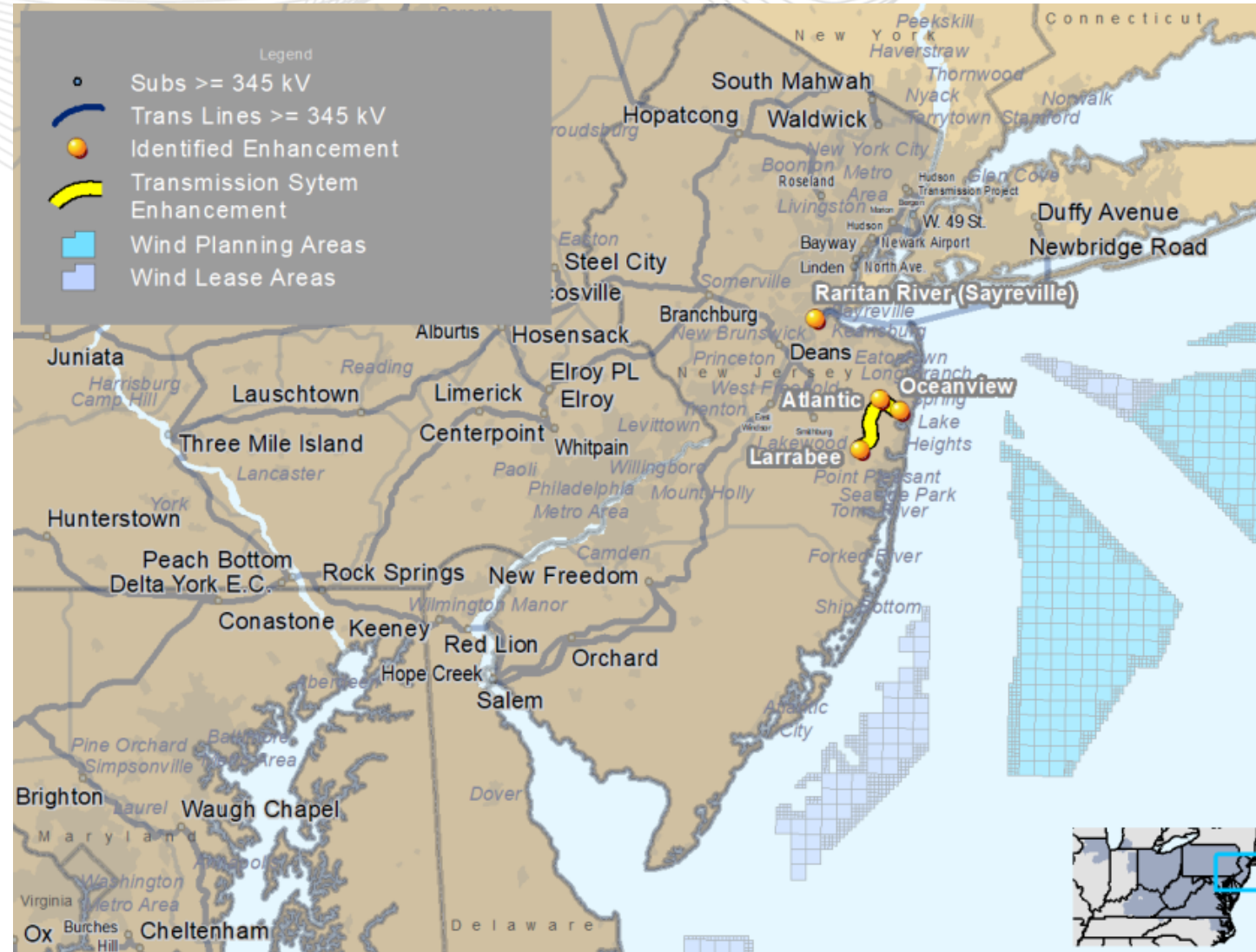
**Proposal Description:**

New Atlantic-Oceanview 230 kV; loop in existing Larrabee-Oceanview 230 kV into Atlantic 230 kV (520.1, 520.4, 520.5)

**Scenarios Addressed: None**

**Proposal Cost Estimate:**

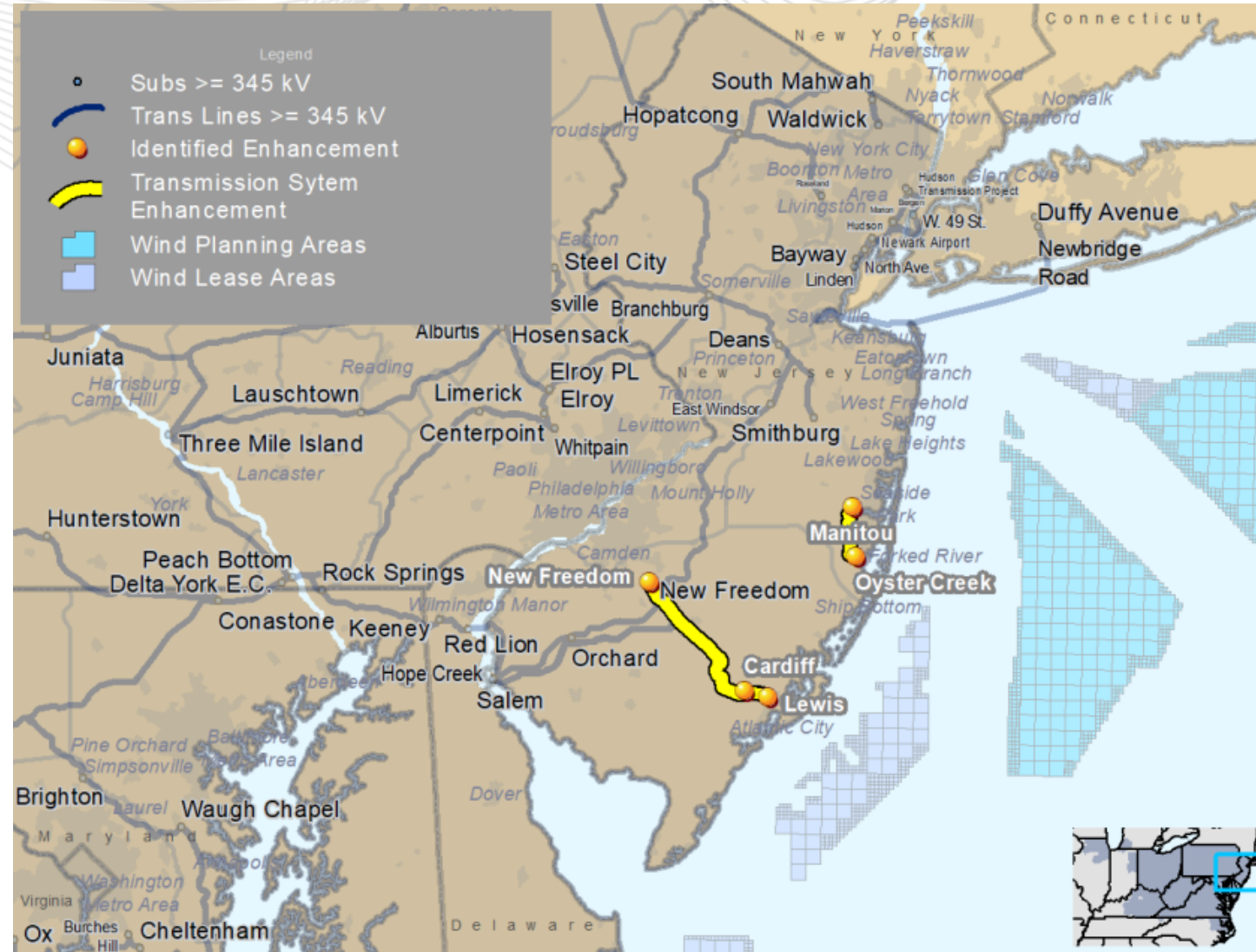
**\$21.98 M**



**Proposing Entity: NEETMH**

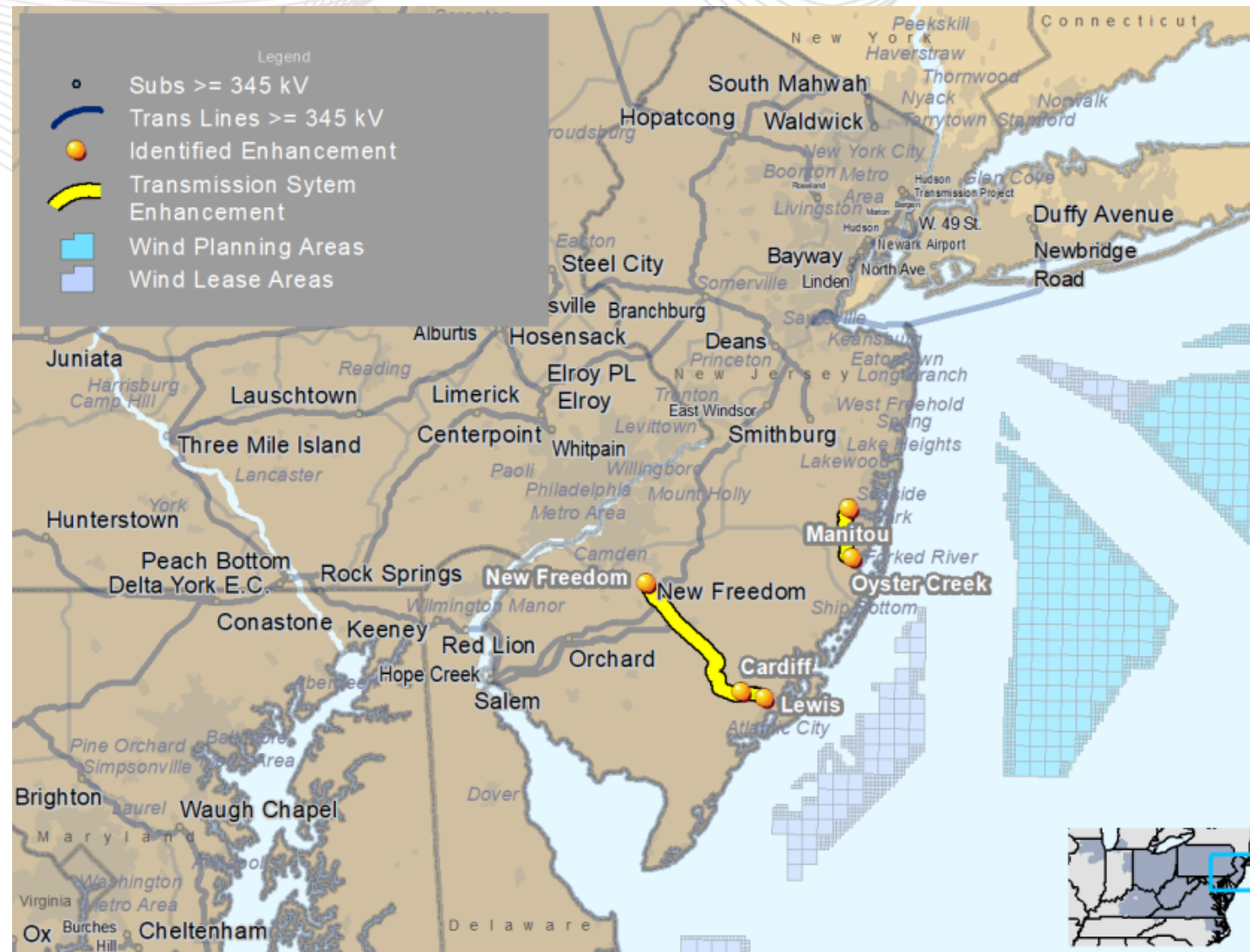
**Proposal Description:**

- 1 Replace Cardiff 230/138 kV (793.8)
- 2 Replace Cardiff 230/69 kV (793.9)
- 3 Upgrade Oyster Creek-Manitou 230 kV 1 & 2 (793.3, 793.4)
- 4 Reconductor Cardiff-Lewis 138 kV 1 & 2 (793.1, 793.2)
- 5 Add PAR on Cardiff-Cedar 230 kV at Cardiff (793.7, 793.10)
- 6 Add PAR on New Freedom-Hilltop 230 kV at New Freedom (793.5, 793.6)





Proposing Entity: NEETMH		
Problem Statement: Generation Deliverability		Proposal Cost Estimate (\$M)
1	<b>Cardiff 230/138 kV</b> Scenarios: None	\$10
2	<b>Cardiff 230/138 kV</b> Scenarios: None	\$10
3	<b>Oyster Creek-Manitou 230 kV 1 &amp; 2</b> Scenarios: None	\$10
4	<b>Cardiff-Lewis 138 kV</b> Scenarios: None	\$10.27
5	<b>Cardiff-Cedar 230 kV</b> Scenarios: None	\$19.03
6	<b>New Freedom-Hilltop 230 kV</b> Scenarios: None	\$25



## Proposing Entity: PSEG

### Problem Statement:

#### Generator Deliverability –

- Hope Creek-LS Power Cable East 230 kV 1 & 2
- LS Power Cable East-LS Power Silver Run 230 kV

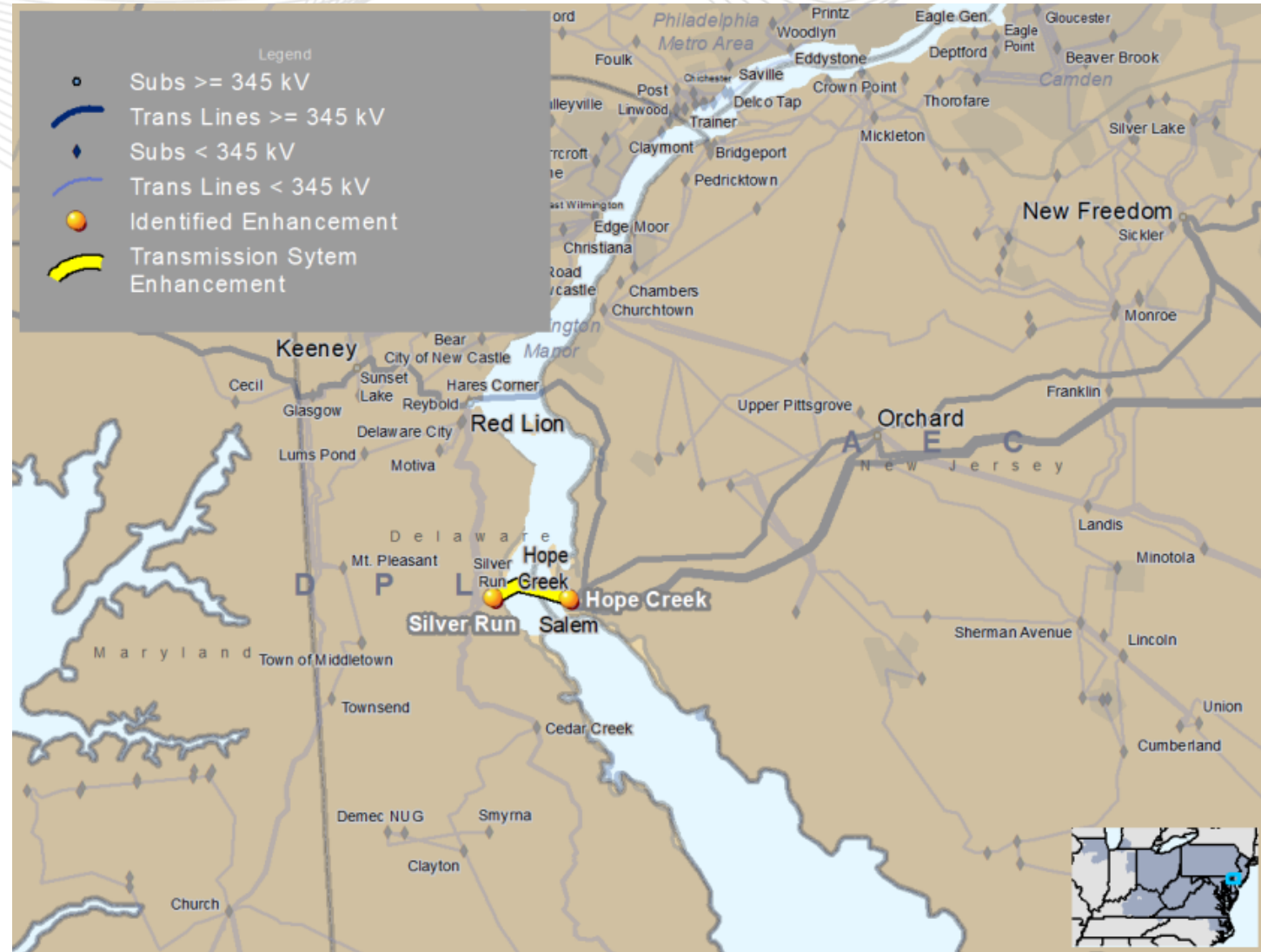
### Proposal Description:

One additional Hope Creek-Silver Run 230 kV submarine cable

**Scenarios Addressed:** None

### Proposal Cost Estimate:

\$71.92 M





**Proposing Entity: Transource**

**Problem Statement:**

**Generator Deliverability –**

- Hope Creek-LS Power Cable East 230 kV 1 & 2
- LS Power Cable East-LS Power Silver Run 230 kV
- Richmond-Waneeta 230 kV

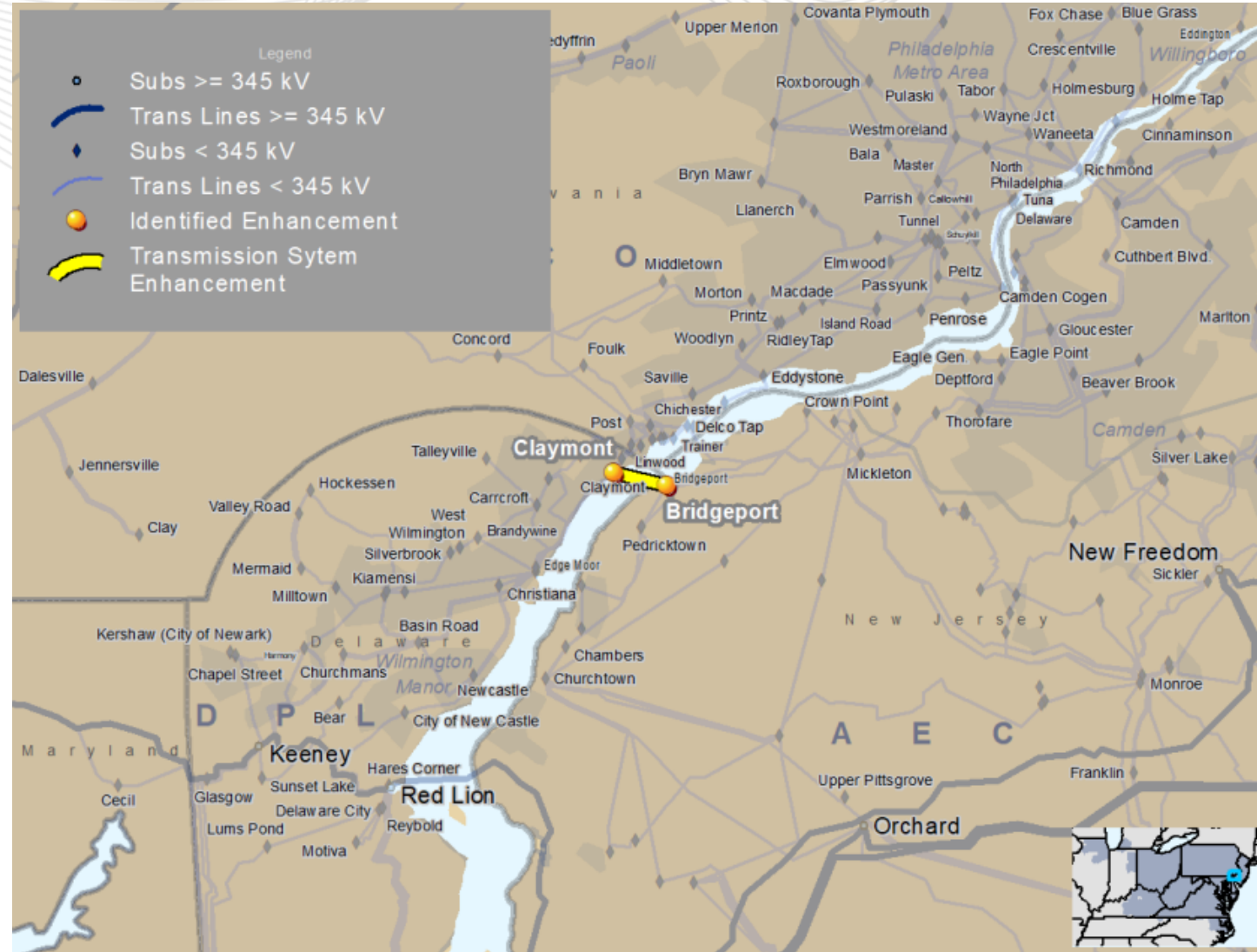
**Proposal Description:**

New Bridgeport-Claymont 230 kV DE river crossing

**Scenarios Addressed: None**

**Proposal Cost Estimate:**

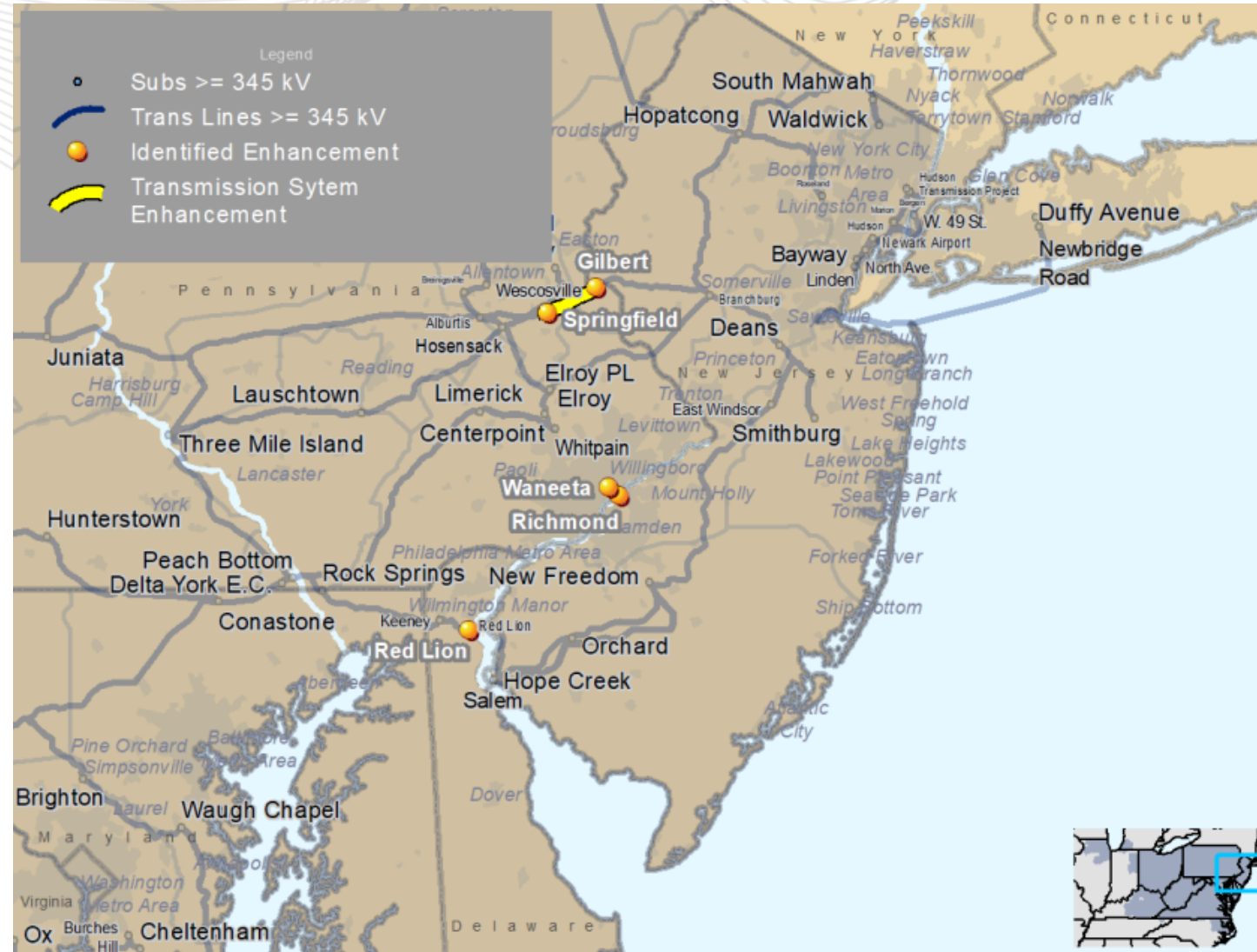
\$193.07 M



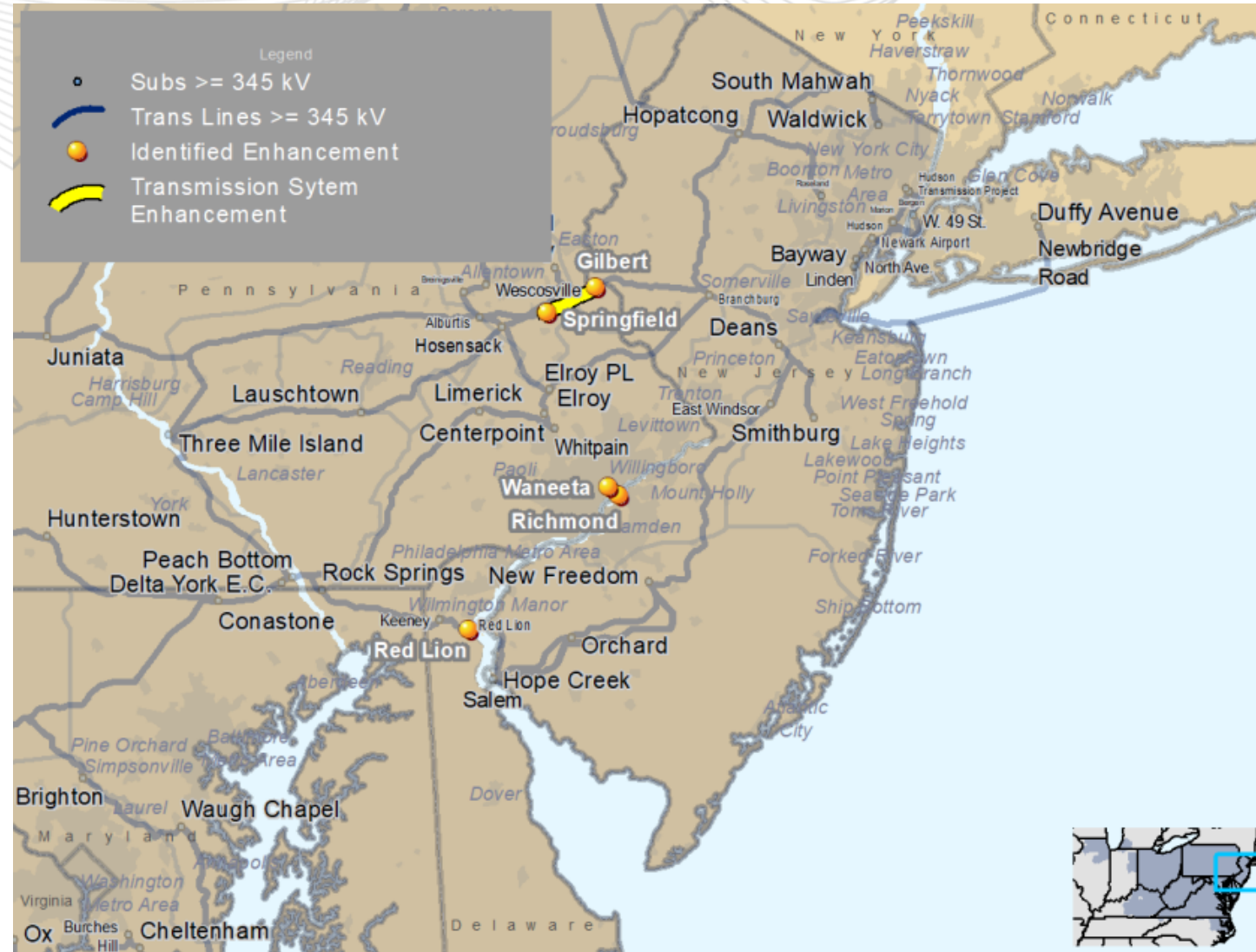
**Proposing Entity: NEETMH**

**Proposal Description:**

- 1 Reconductor Gilbert-Springfield  
230 kV (158.1)
- 2 Reconductor Richmond-Waneeta  
230 kV (158.2)
- 3 Red Lion 500 kV substation upgrade  
(158.3)



Proposing Entity: NEETMH		
Problem Statement: Generation Deliverability		Proposal Cost Estimate (\$M)
1	<b>Gilbert-Springfield 230 kV</b> Scenarios: None	\$15.53
2	<b>Richmond-Waneeta 230 kV</b> Scenarios: None	\$4.15
3	<b>Red Lion 500/230 kV #2 transformer</b> Scenarios: None	\$5





**Proposing Entity: CNTLM**

**Problem Statement:**

**Generator Deliverability –**

- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV Transformers 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

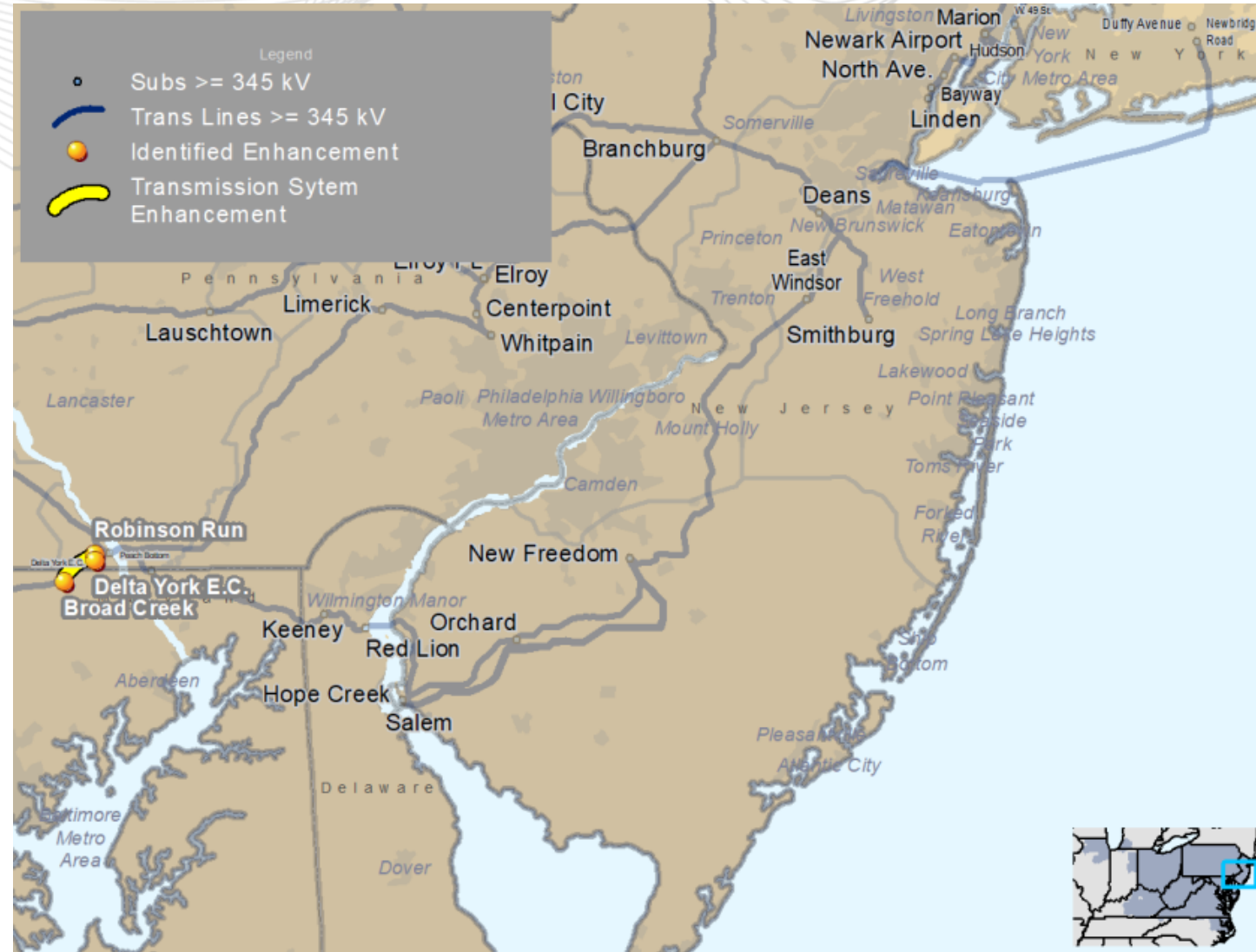
**Proposal Description:**

Broad Creek to Robinson Run Project

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

\$104.18 M



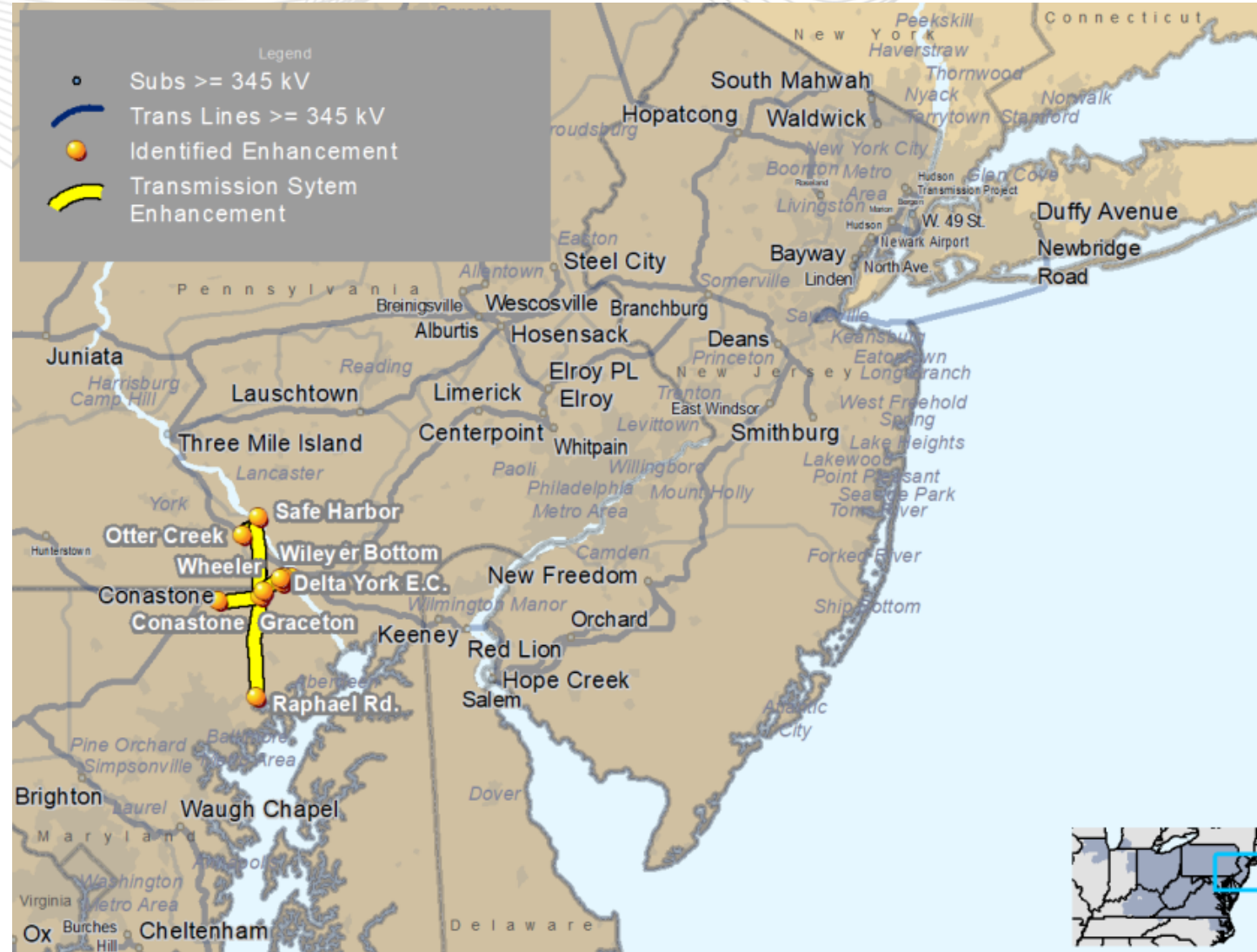


**Proposing Entity: NEETMH**

**Proposal Description:**

**1** 1A-Wiley1 (11.1-11.10)

**2** Add two PARs at Hope Creek 230 kV (11.11, 11.12)



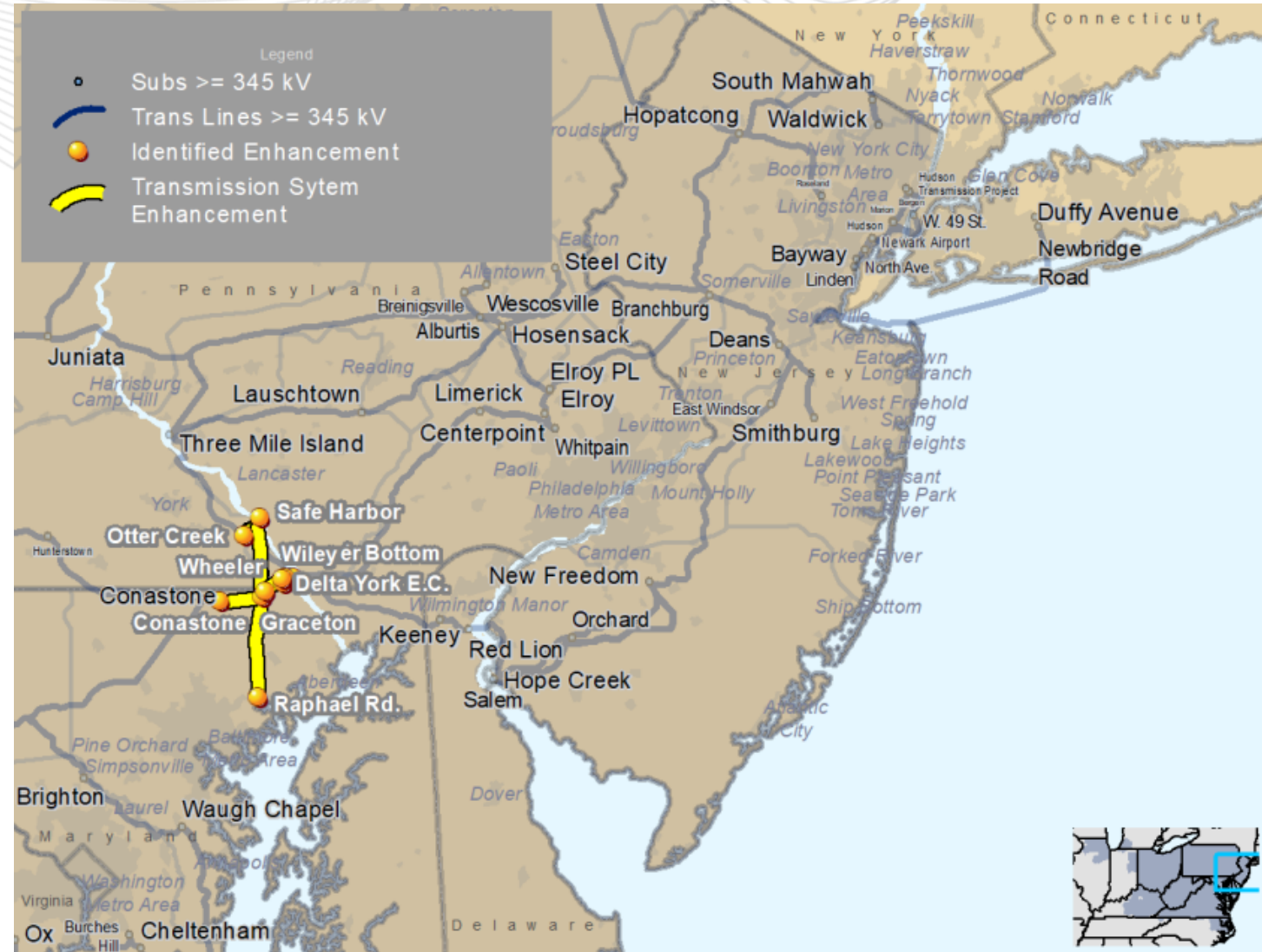
## Proposing Entity: NEETMH

### Problem Statement:

Generation Deliverability

Proposal Cost Estimate (\$M)

<b>1</b>	<b>Peach Bottom-Conastone</b> 500 kV/Peach Bottom-Furnace Run 500 kV/Furnace Run 500/230 kV Transformers 1 & 2/Furnace Run-Conastone 230 kV 1 & 2	\$202.06
	Scenarios: None	
<b>2</b>	<b>Hope Creek-LS Power Cable East</b> 230 kV 1 & 2/LS Power Cable East- LS Power Silver Run 230 kV	\$30
	Scenarios: None	



**Proposing Entity: NEETMH**

**Problem Statement:**

**Generator Deliverability –**

- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV Transformers 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

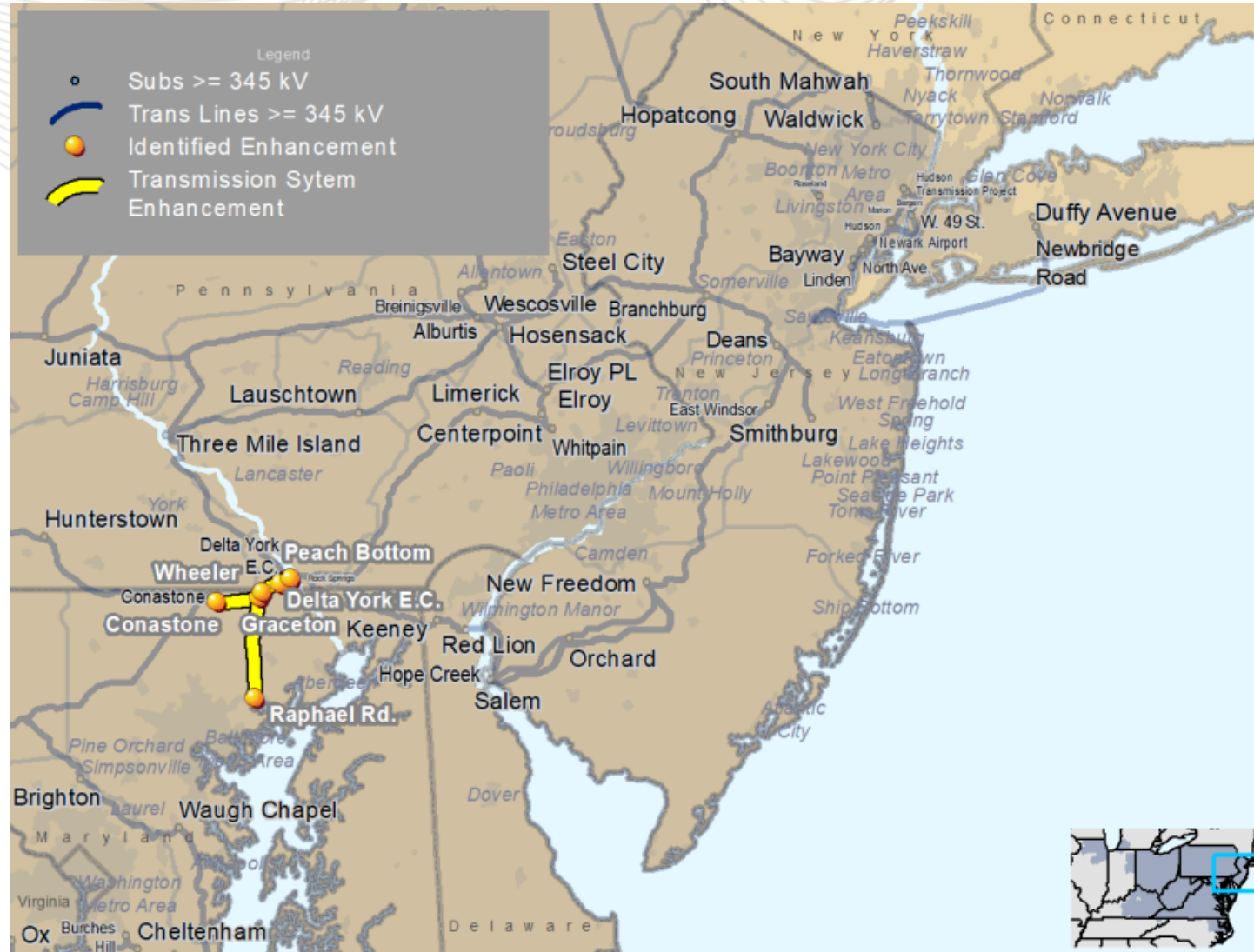
**Proposal Description:**

1A-Wiley2 (982.1-982.10)

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

\$181.92 M





**Proposing Entity: NEETMH**

**Problem Statement:**

**Generator Deliverability –**

- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV Transformers 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

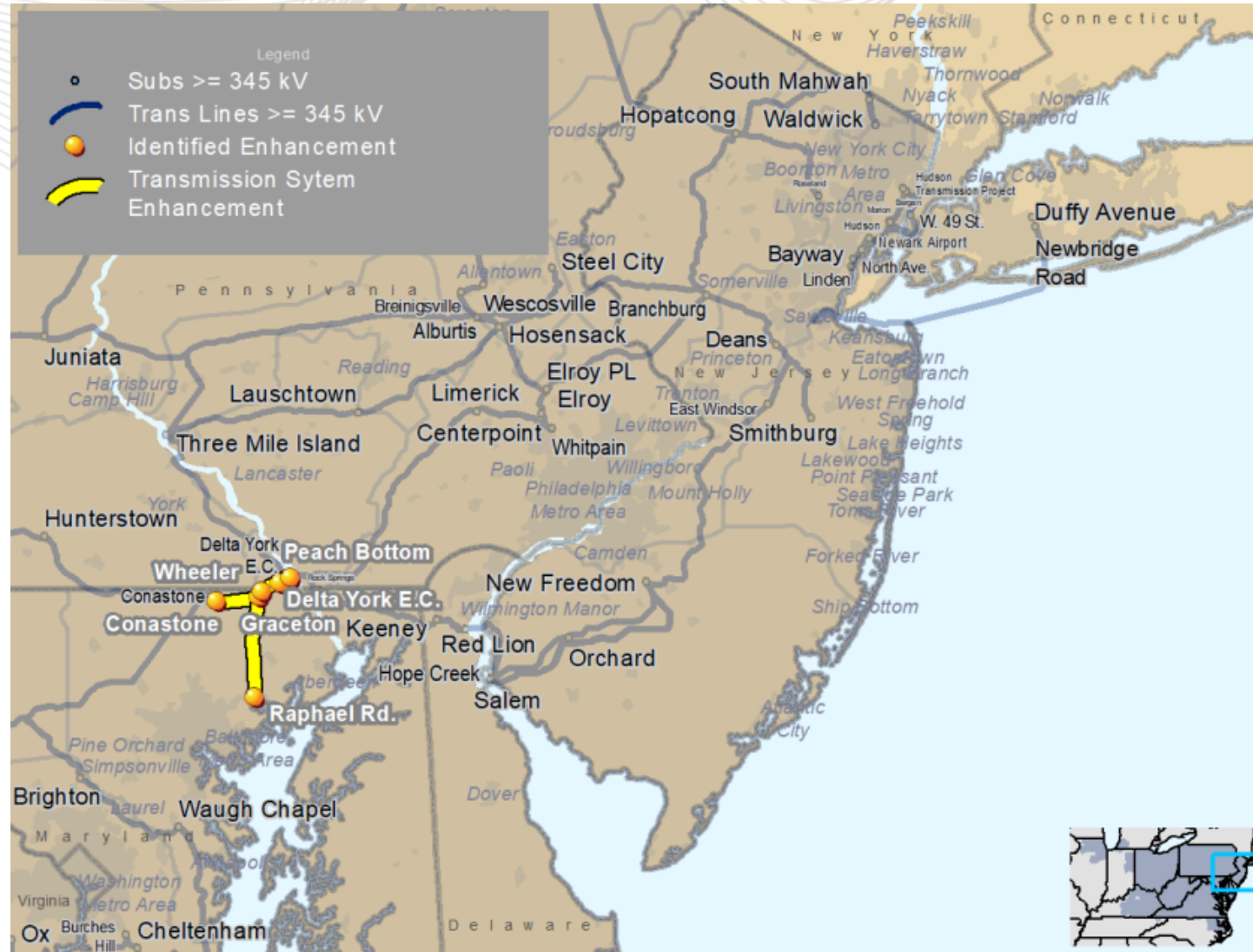
**Proposal Description:**

1A-Wiley3 (587.1-587.5)

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

\$96.44 M





**Proposing Entity:** Transource

**Problem Statement:**

**Generator Deliverability –**

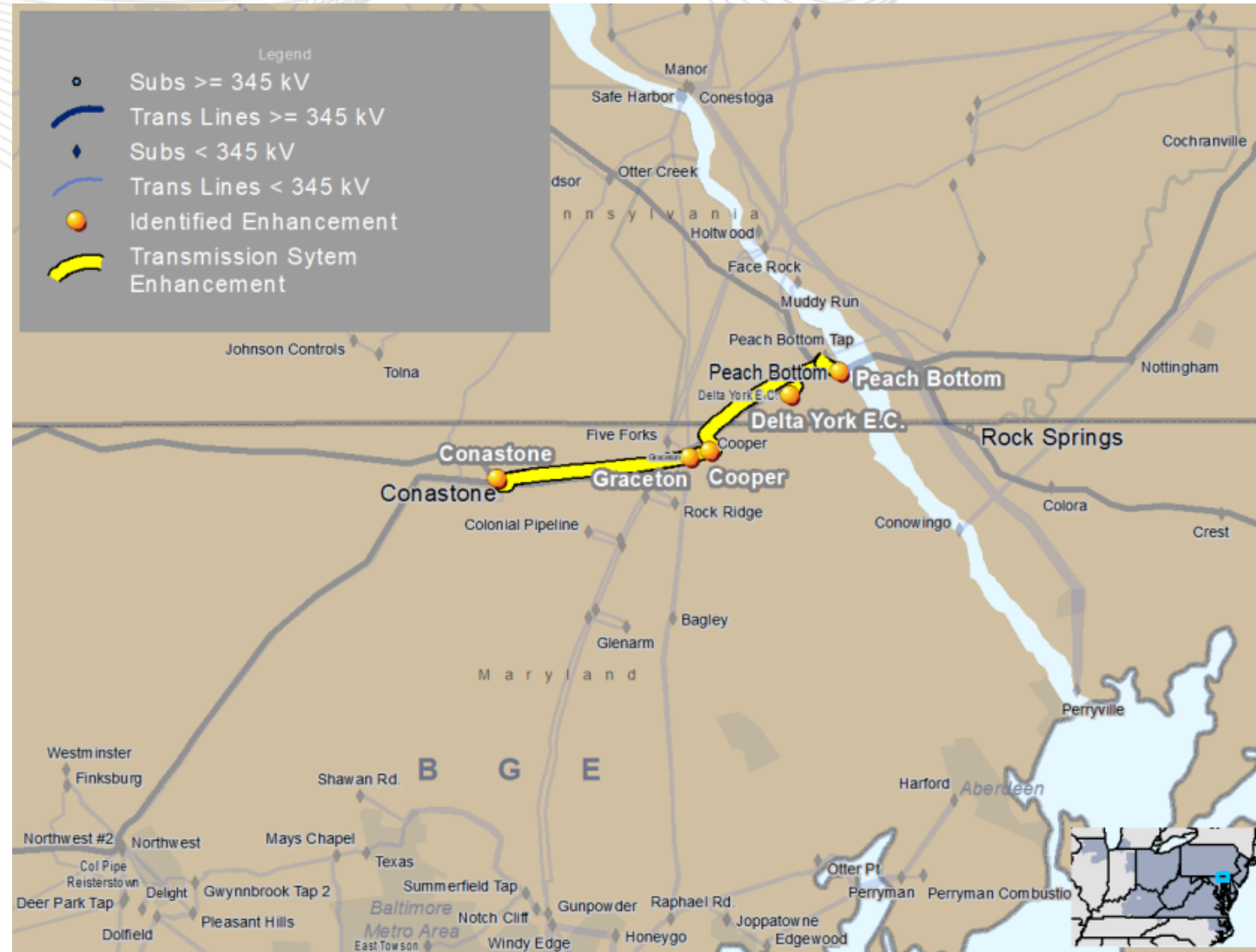
- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV Transformers 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

**Proposal Description:**

Second Peach Bottom-Conastone 500 kV (345.1-345.3)

**Scenarios Addressed:** None

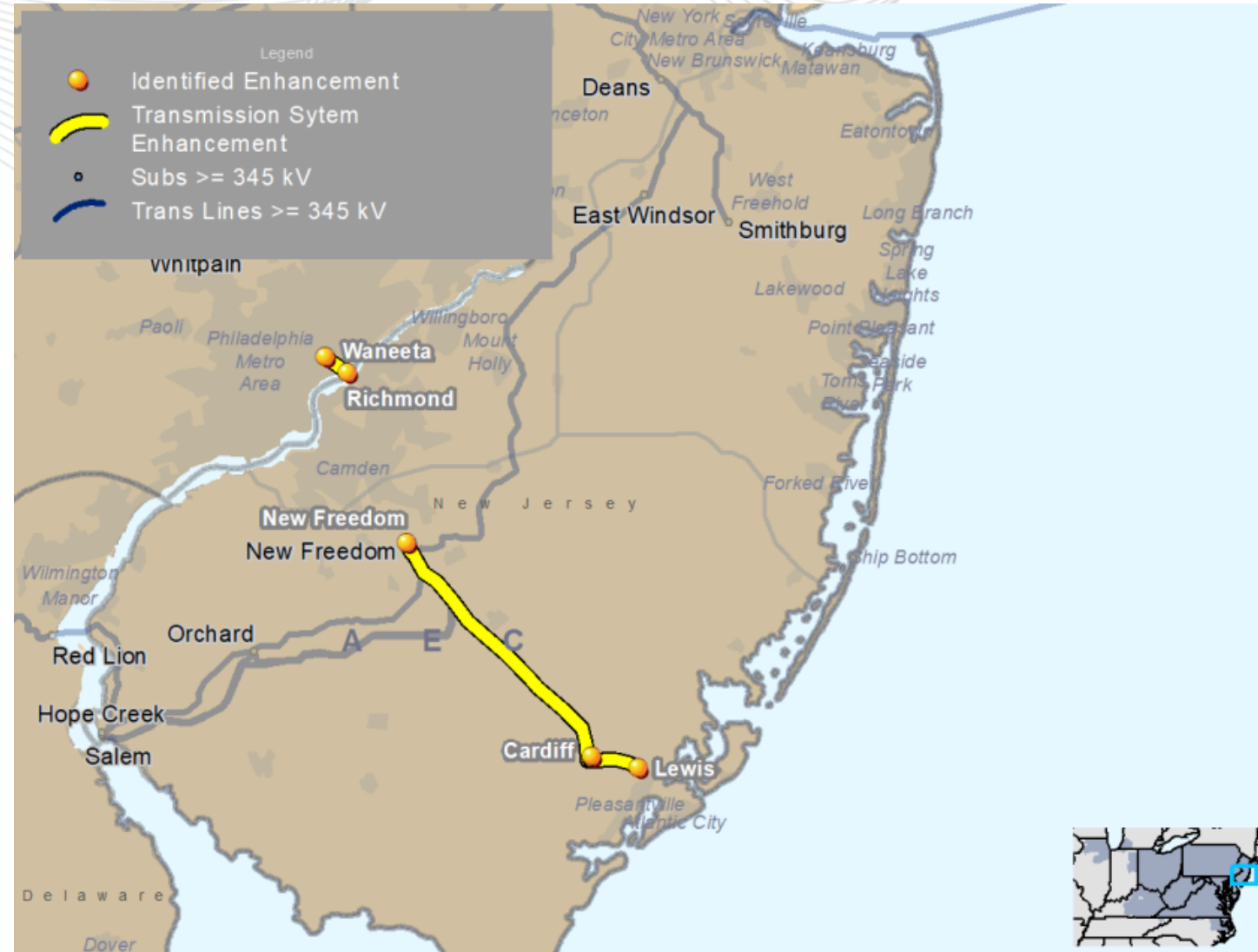
**Proposal Cost Estimate:**  
\$104.29 M



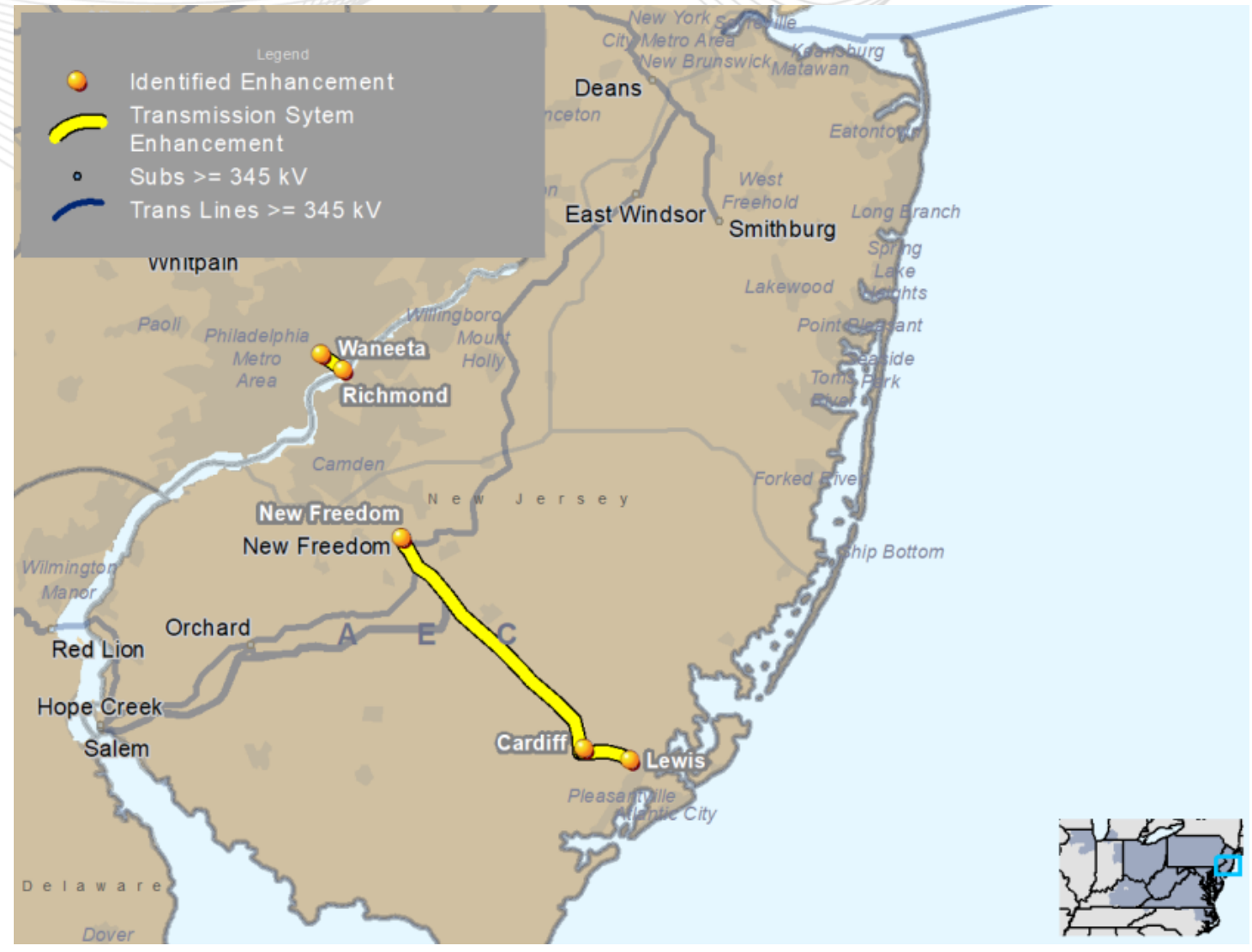
**Proposing Entity: AE**

**Proposal Description:**

1	Reconductor Richmond-Waneeta 230 kV (127.10)
2	Upgrade Cardiff-Lewis 138 kV (127.1)
3	Upgrade Lewis No. 2-Lewis No. 1 138 kV (127.2)
4	Upgrade Cardiff-New Freedom 230 kV (127.3)
5	Rebuild Cardiff-New Freedom 230 kV as DCTL (127.9)



Proposing Entity: AE	
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)	
	Proposal Cost Estimate (\$M)
1	<b>Richmond-Waneeta 230 kV</b> \$16 Scenarios: 1.1/1.2/1.2a/1.2b/2a/2c/3/4/4a/5/6/7/10/11/12/13/ 14/16/16a/17/18/20/20a/20b
2	<b>Cardiff 2-Lewis 2 138 kV</b> \$0.1 Scenarios: 1.1/1.2/1.2a/1.2b/3/4/4a/5/6/7/10/11/12/13/14/15/ 16a/17/18/19/20/20a/20b
3	<b>Lewis 2-Lewis 1 138 kV</b> \$0.5 Scenarios: All
4	<b>Cardiff-New Freedom 230 kV</b> \$0.3 Scenarios: 1.1/1.2/1.2a/1.2b/3/4/4a/5/6/7/10/11/12/13/14/15/ 16a/17/18/19/20/20a/20b
5	<b>Cardiff-New Freedom 230 kV</b> \$154.96 Scenarios: None





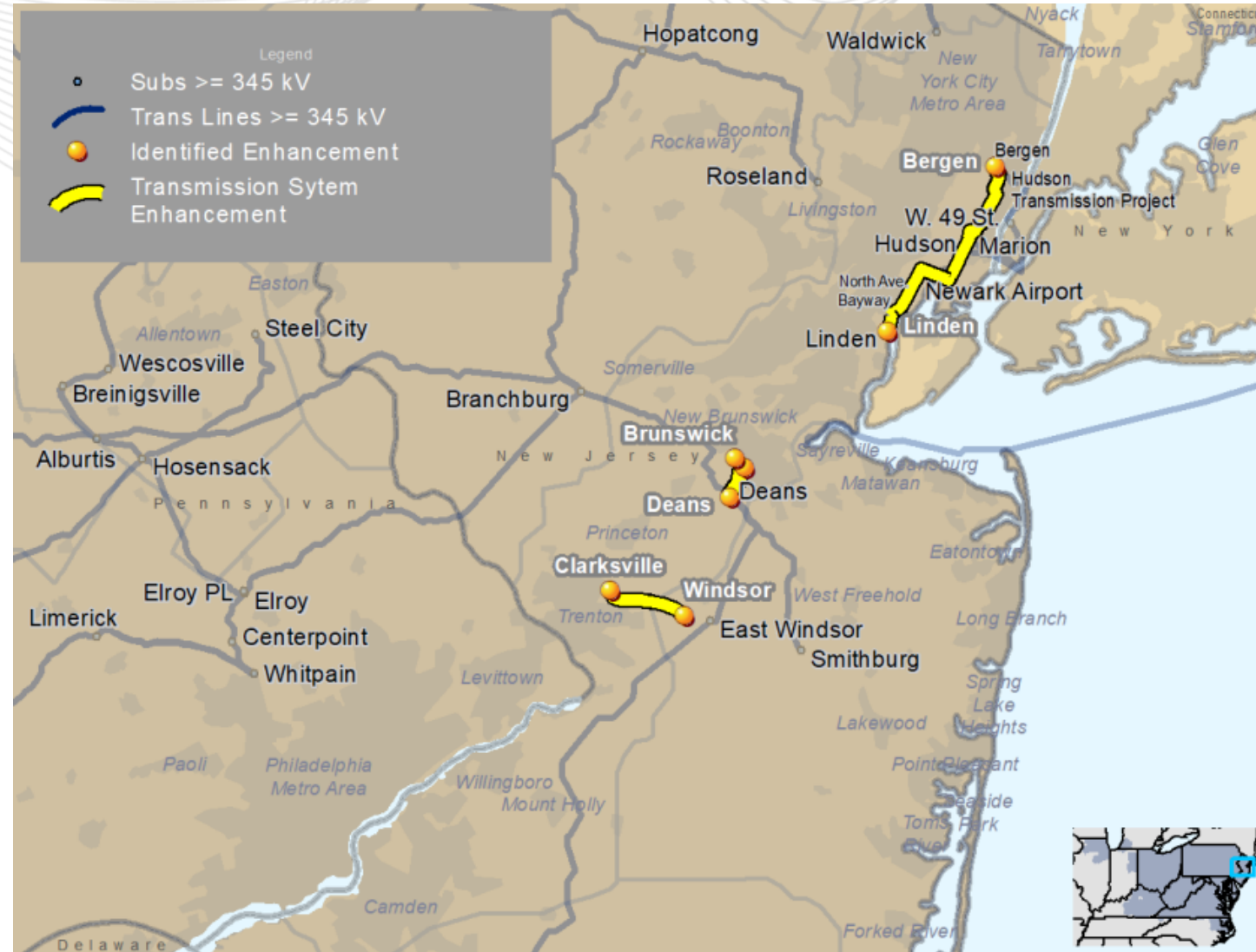
**Proposing Entity: PSEG**

**Proposal Description:**

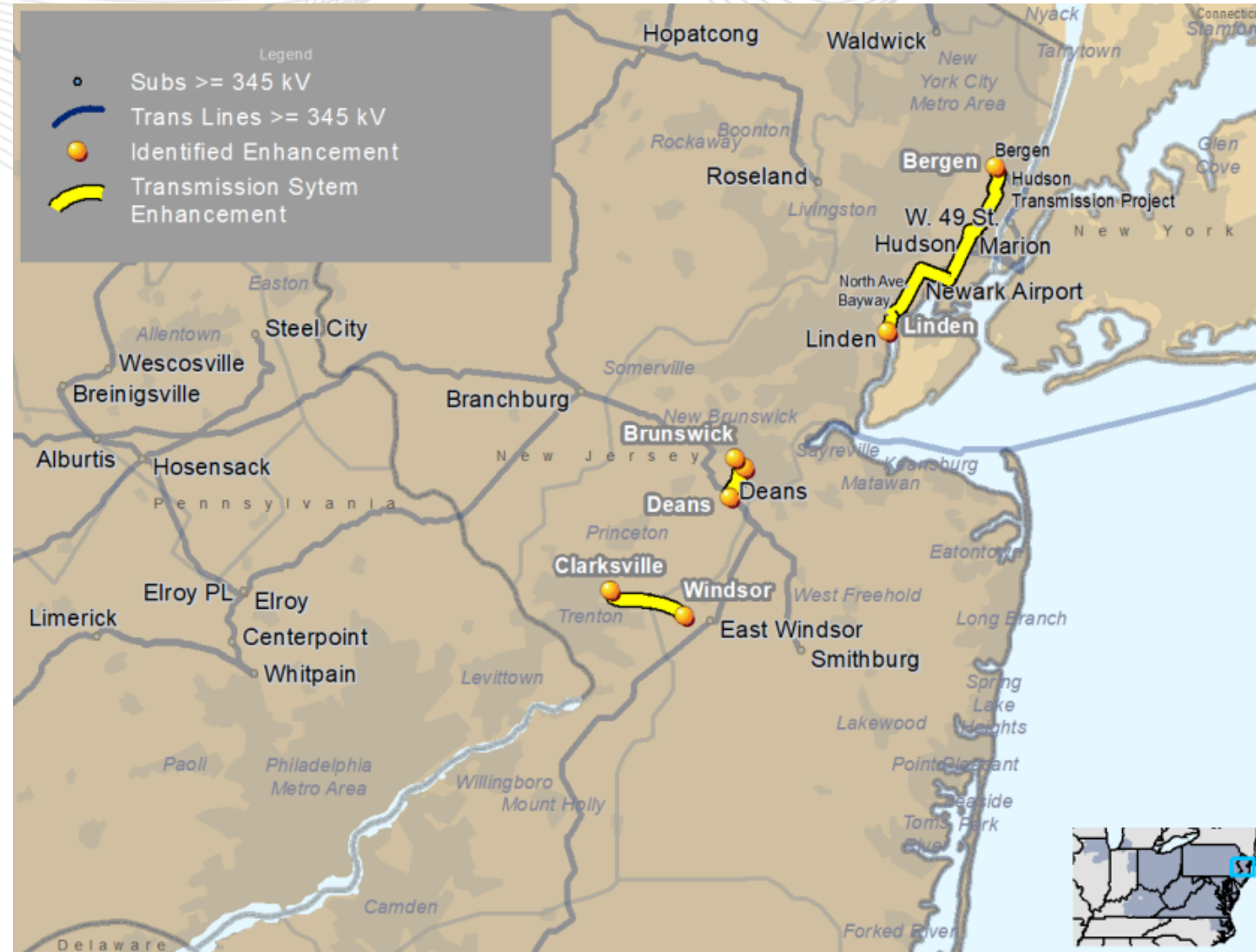
**1** Linden & Bergen Subprojects (180.3, 180.4, 180.7)

**2** Brunswick to Deans & Deans Subprojects (180.1, 180.2)

**3** Windsor to Clarksville Subproject (180.5, 180.6)



Proposing Entity: PSEG	
Problem Statement: Generation Deliverability (Summer & Winter Thermal Violations)	
	Proposal Cost Estimate (\$M)
1	<b>Linden-Tosco 230 kV/Aldene-Springfield Rd 230 kV/Aldene-Stanley Terrace 230 kV/Bergen-Bergen Reactor 138 kV/Stanley Terrance-McCarter 230 kV</b>  Scenarios: All  \$30.45
2	<b>Deans-Brunswick 230 kV</b>  Scenarios: 1.1/1.2/1.2a/1.2b/4/4a/10/11/14/15/16/ 16a/19  \$50.54
3	<b>Windsor-Clarksville 230 kV</b>  Scenarios: 1.1/1.2/1.2a/1.2b/2a/2c/3/4/4a/5/14/15/ 16a/17/18/19/20/20a/20b  \$5.77



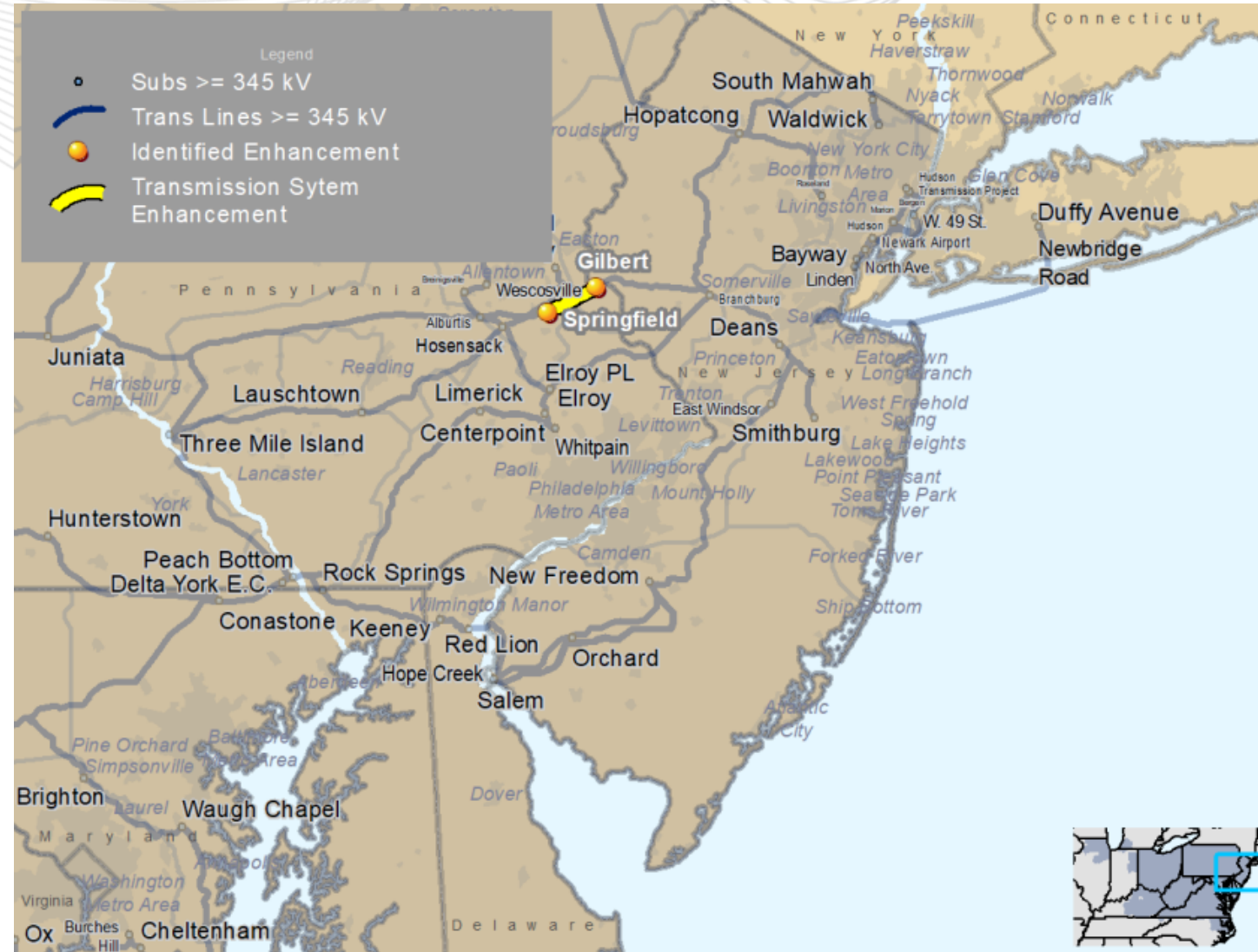
**Proposing Entity: PPL**

**Problem Statement:**  
**Generator Deliverability (Winter Thermal Violation) – Gilbert-Springfield 230 kV**

**Proposal Description:**  
 Reconductor Gilbert-Springfield 230 kV

**Scenarios Addressed:**  
 4/4a/5/6/10/11/12/14/17/18/20/20a/20b

**Proposal Cost Estimate:**  
 \$0.38 M





**Proposing Entity: AE**

**Problem Statement:**

**Generator Deliverability – Richmond-Waneeta 230 kV**

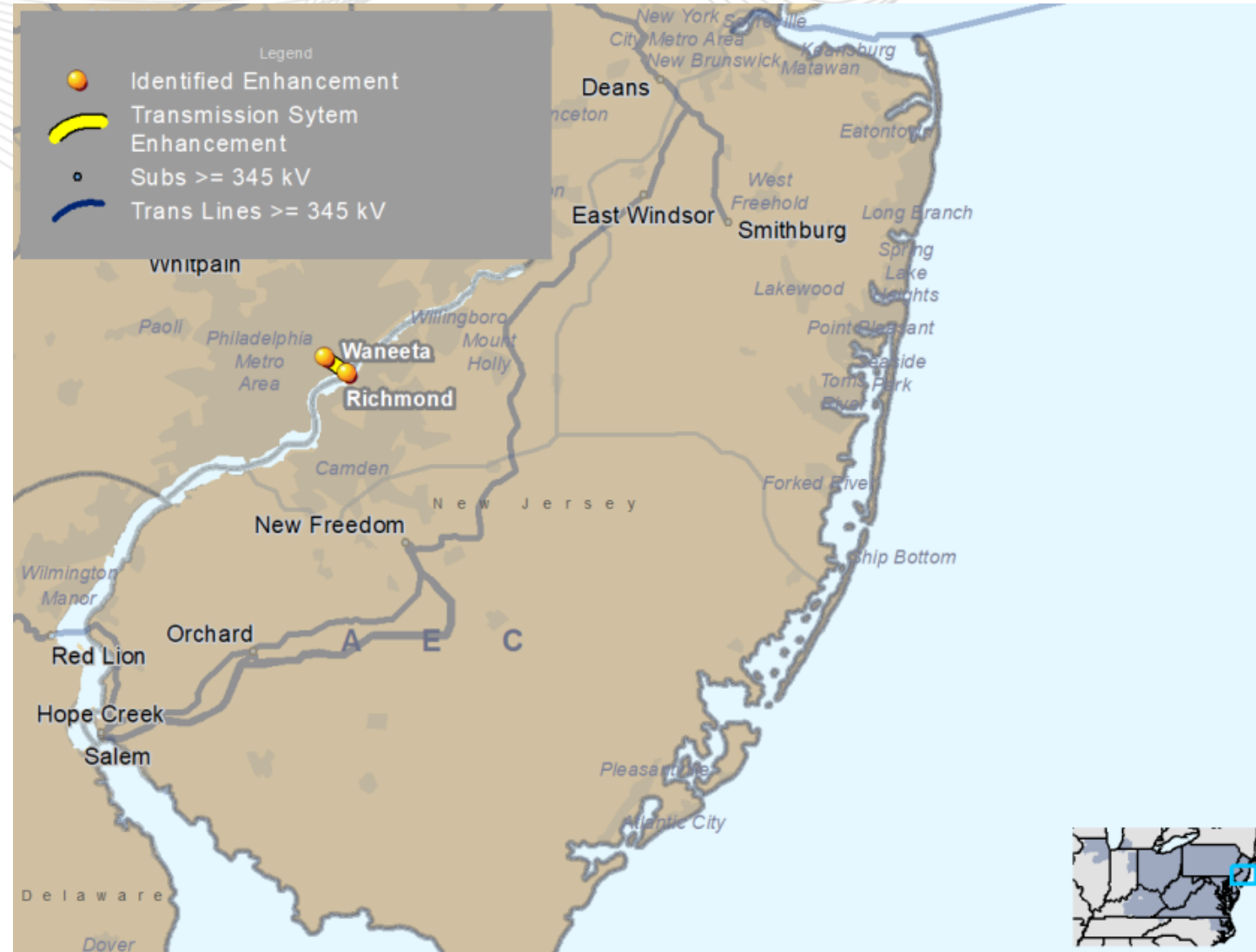
**Proposal Description:**

Install Smart Wire on Richmond-Waneeta 230 kV (734.7)

**Scenarios Addressed: None**

**Proposal Cost Estimate:**

\$4.7 M



**Proposing Entity: Transource**

**Problem Statement:**

**Generator Deliverability –**

- Peach Bottom-Conastone 500 kV
- Peach Bottom-Furnace Run 500 kV
- Furnace Run 500/230 kV Transformers 1 & 2
- Furnace Run-Conastone 230 kV 1 & 2

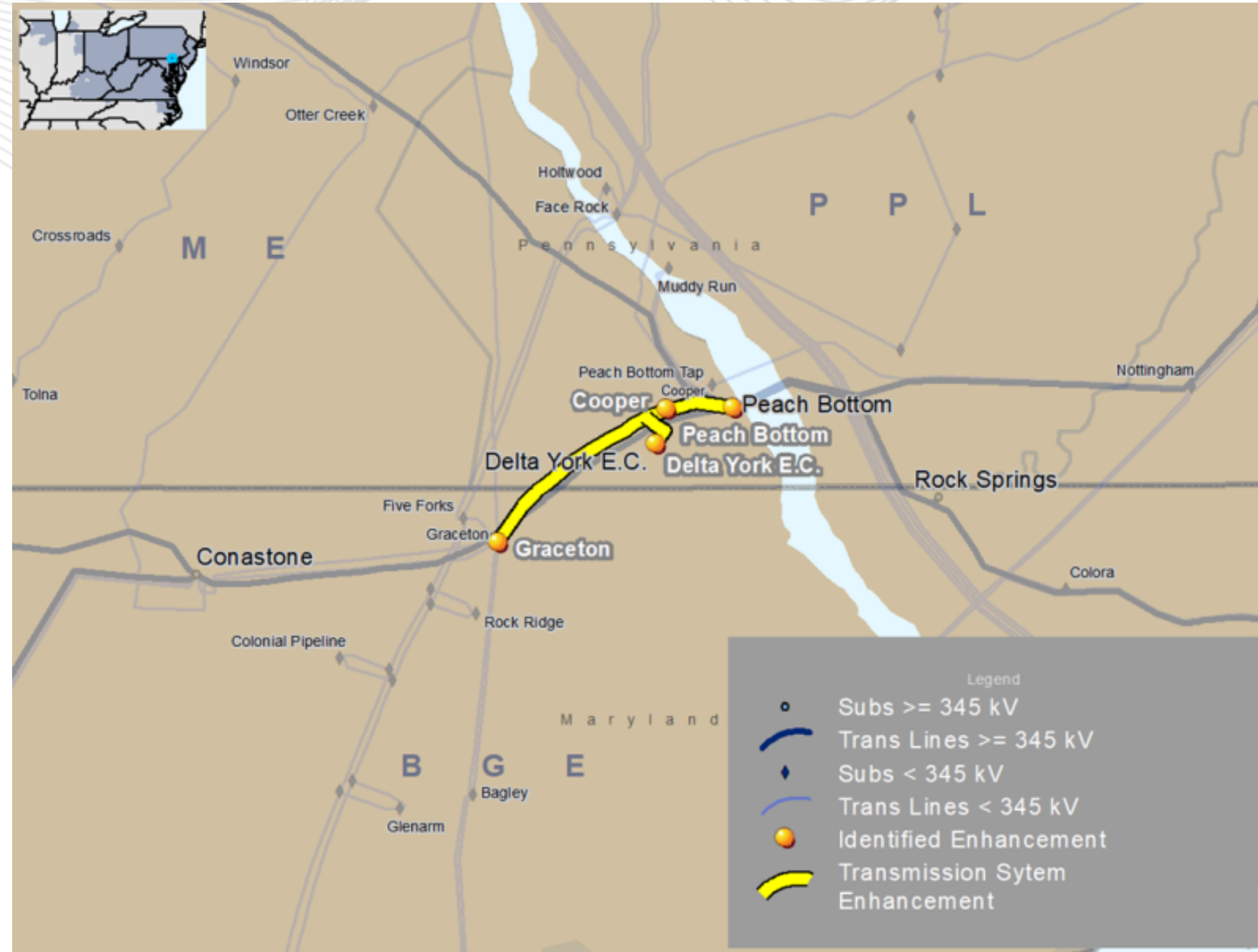
**Proposal Description:**

Same as option 1a proposal 63 (North Delta Option A) but with one 500/230 kV transformer and install 0.5% reactor on new North Delta-Graceton 230 kV line.

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

\$87.02 M



**Proposing Entity: PSEG**

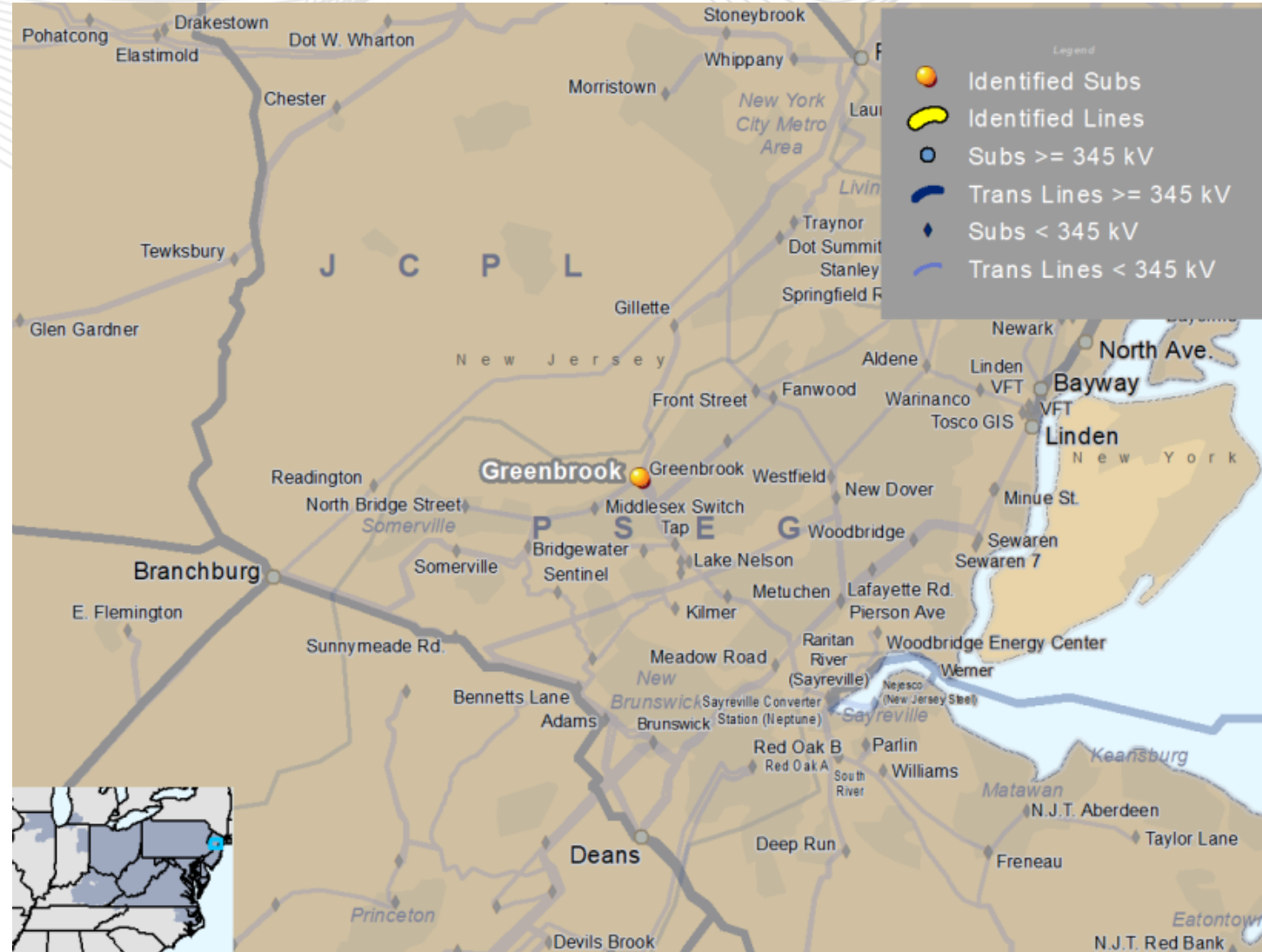
**Problem Statement:**  
**Generator Deliverability (Summer & Winter Thermal Violations) –**

- Lake Nelson W-Middlesex W 230 kV
- Middlesex W-Greenbrook W 230 kV

**Proposal Description:**  
 Upgrade Greenbrook W 230 kV

**Scenarios Addressed:**  
 2a/2c/4/5/17/18/20/20a/20b

**Proposal Cost Estimate:**  
 \$0.12 M





**Proposing Entity: JCPL**

**Problem Statement:**

**Generator Deliverability (Summer Thermal Violations) – Lakewood-Larrabee 230 kV**

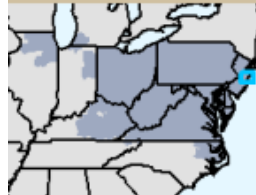
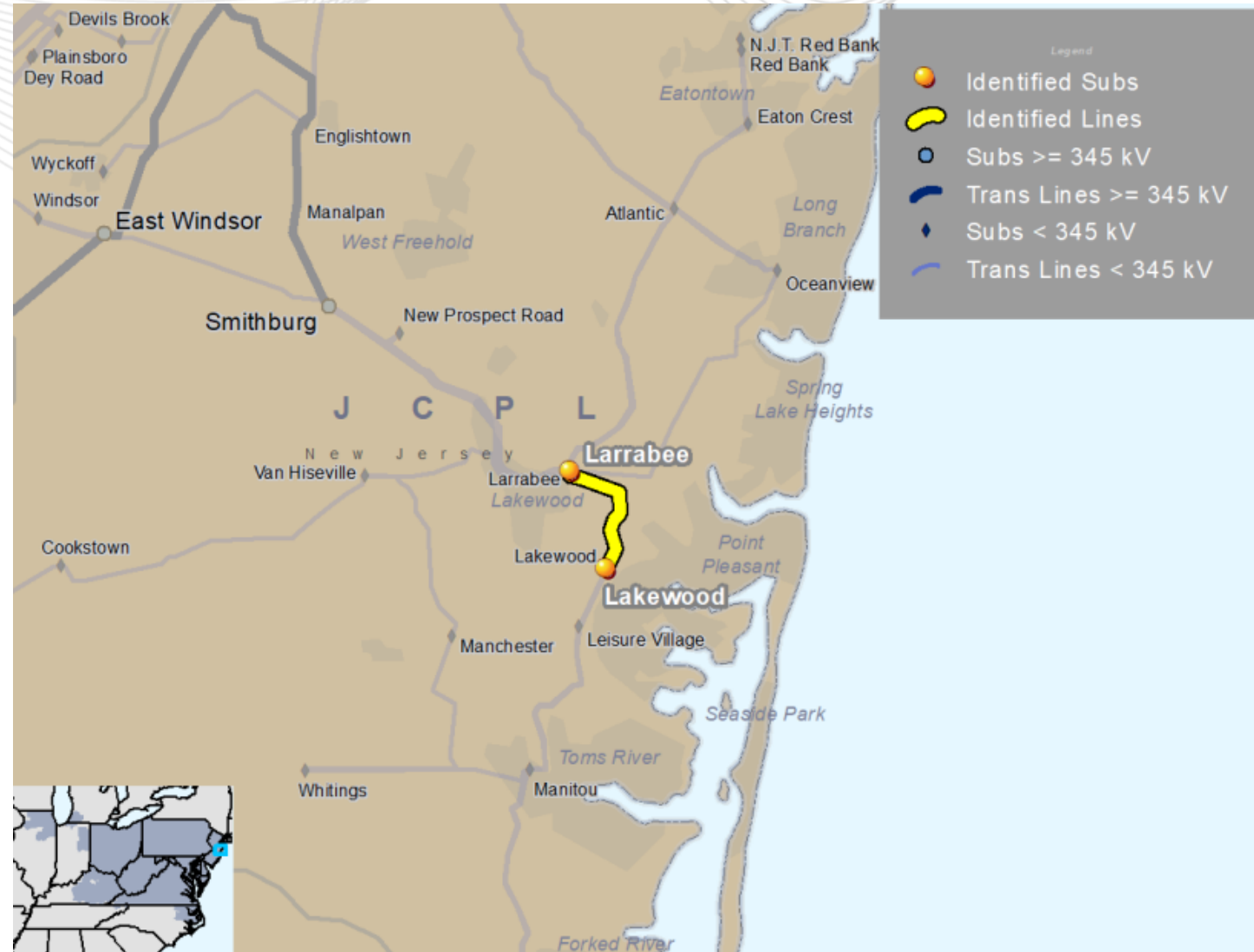
**Proposal Description:**

Replace substation terminal conductors at Lakewood and Larrabee to bring the facility rating up to the line conductor (Lakewood-Larrabee 230 kV)

**Scenarios Addressed: 16**

**Proposal Cost Estimate:**

\$1.5 M



# Options 1b, 2 and 3 Proposals

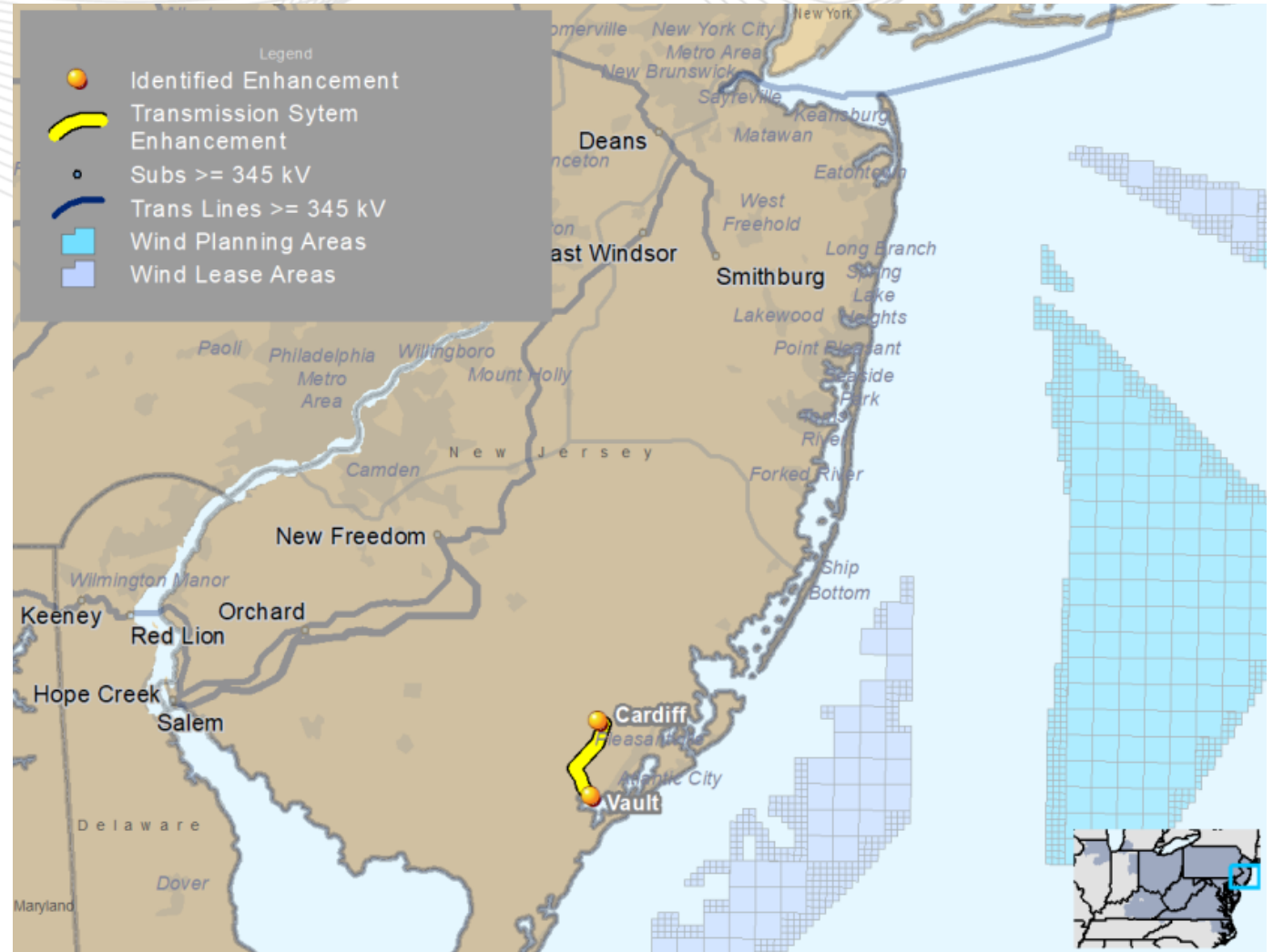
**Proposing Entity:**  
Atlantic City Electric Company

**Proposal Description: Boardwalk Power**

- Facilitates 1,200 MW of offshore wind injection
- Build transition vault near shore at Great Egg Harbor connecting 275 kV offshore cables and 275 kV onshore cables
- Includes three new 275 kV 400 MW AC transmission lines between transition vault and new 275/230 kV substation near Cardiff

**Scenarios Addressed:** 2a/3/2c

**Proposal Cost Estimate:**  
#797 – \$233 M





## Proposing Entity:

Anbaric Development Partners, LLC

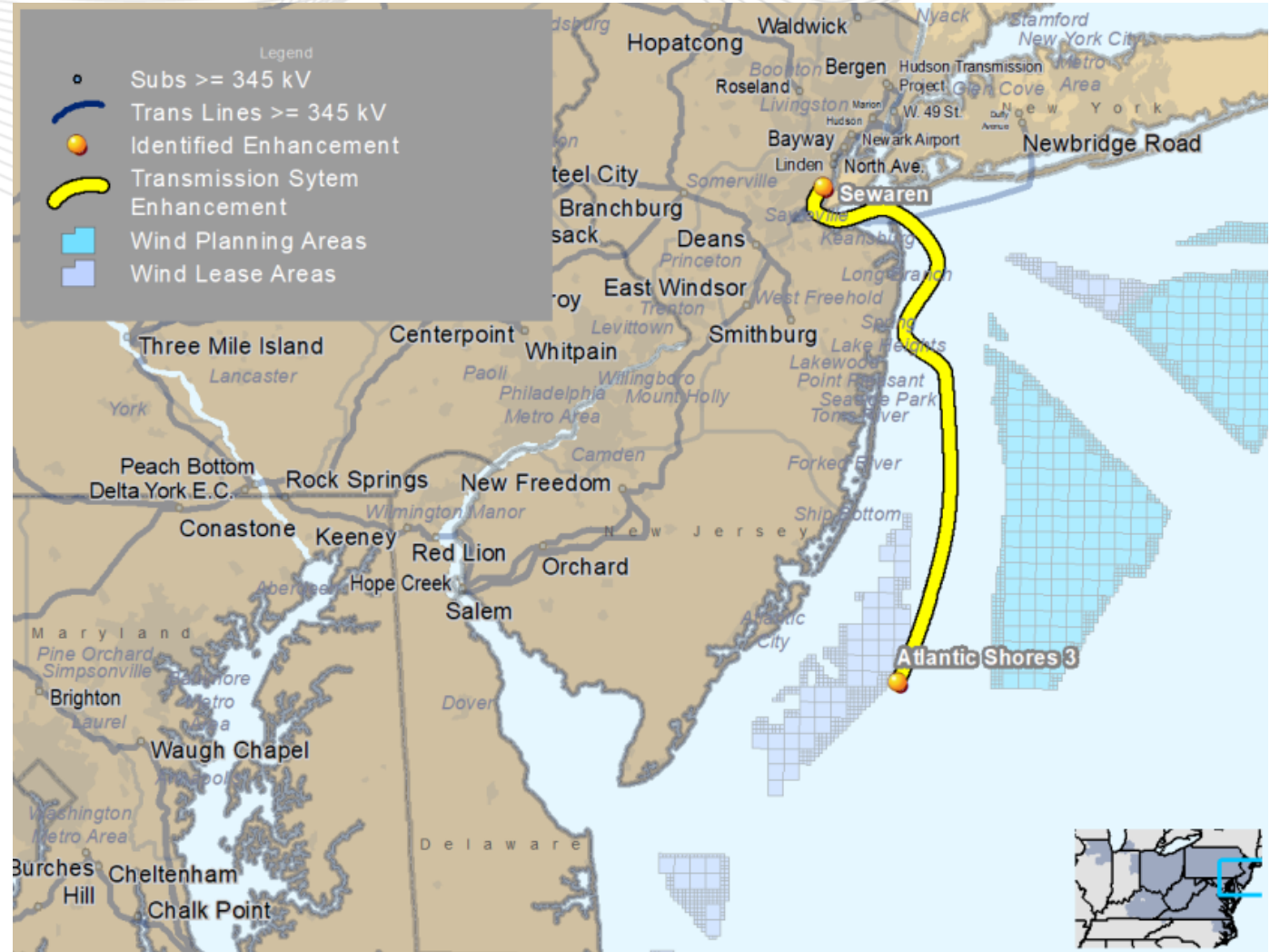
## Proposal Description: Boardwalk Power

- #131 – Sewaren to Atlantic Shores 3 (SM Cable): 400 kV 1,400 MW HVDC link between Sewaren & Atlantic Shores 3
- #183 – Sewaren to Atlantic Shores 3: 400 kV 1,400 MW HVDC link between Sewaren & Atlantic Shores 3 (alternate route)
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Sewaren 230 kV substation

**Scenarios Addressed:** 10

## Proposal Cost Estimate:

#131 – \$1.648 B | #183 – \$1.682 B



## Proposing Entity:

Anbaric Development Partners, LLC

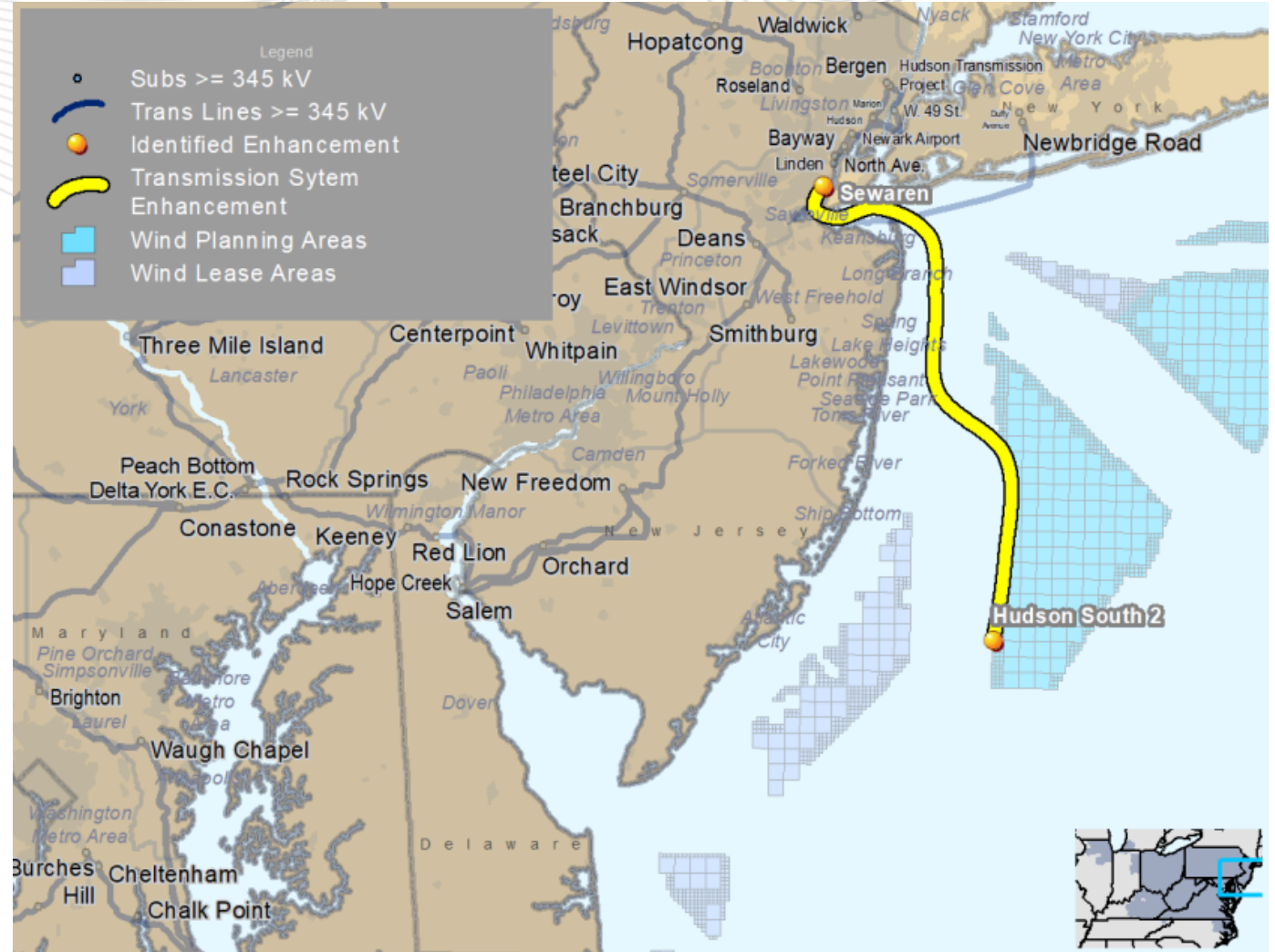
## Proposal Description: Boardwalk Power

- #802 – Sewaren to Hudson South 2 (SM Cable): 400 kV 1,400 MW HVDC link between Sewaren and Hudson South 2
- #944 – Sewaren to Hudson South 2: 400 kV 1,400 MW HVDC link between Sewaren and Hudson South 2 (alternate route)
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Sewaren 230 kV substation.

**Scenarios Addressed:** None

## Proposal Cost Estimate:

#802 – \$1.715 B | #944 – \$1.748 B



## Proposing Entity:

Anbaric Development Partners, LLC

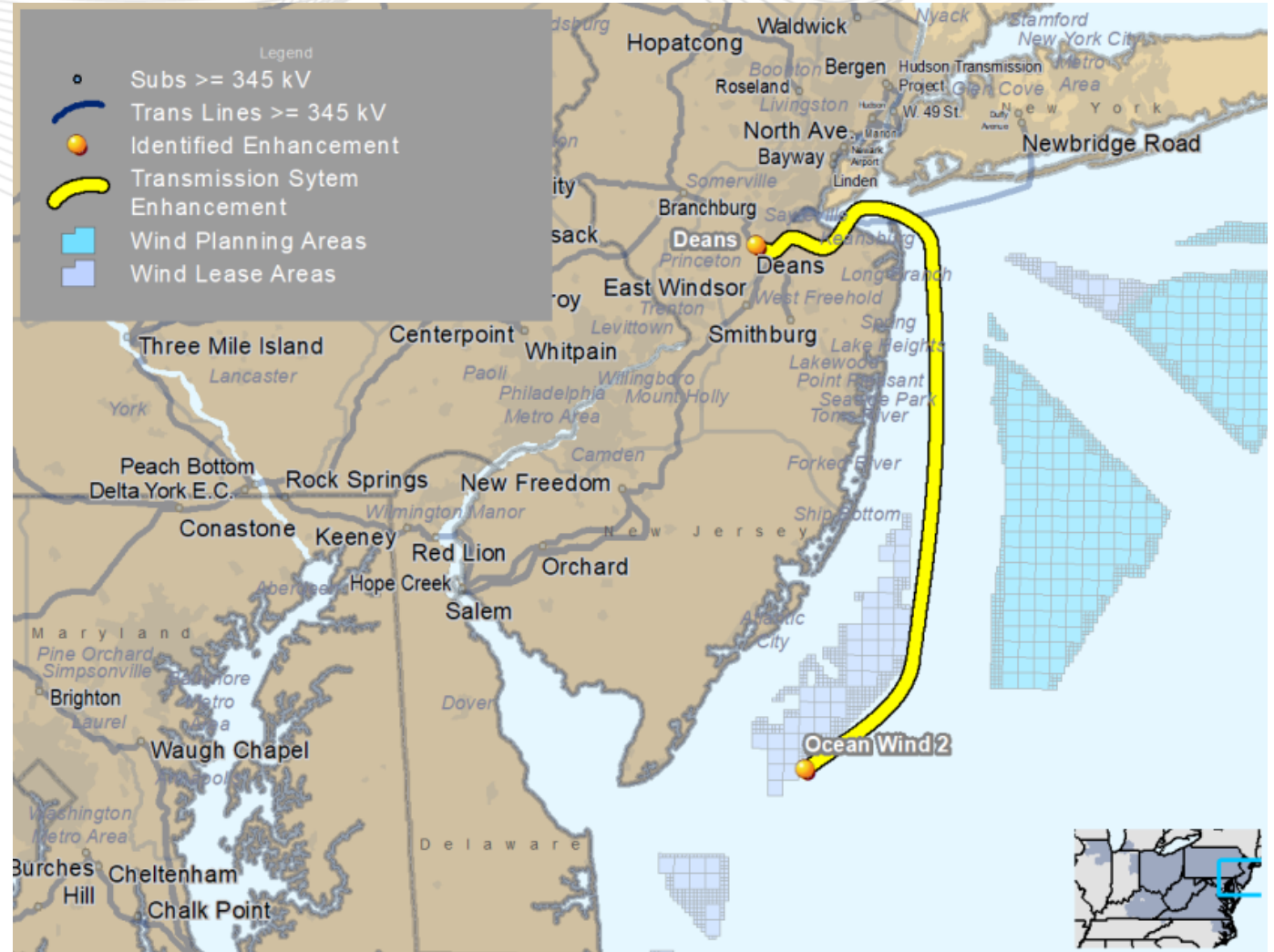
## Proposal Description: Boardwalk Power

- #145 - Deans to Ocean Wind 2: 400 kV 1,148 MW HVDC link between Deans and Ocean Wind 2.
- #882 - Deans to Ocean Wind 2: 320 kV 1,148 MW HVDC link between Deans and Ocean Wind 2.
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Deans 500 kV substation.

**Scenarios Addressed:** 10

## Proposal Cost Estimate:

#145 – \$1.905 B | #882 – \$1.776 B





## Proposing Entity:

Anbaric Development Partners, LLC

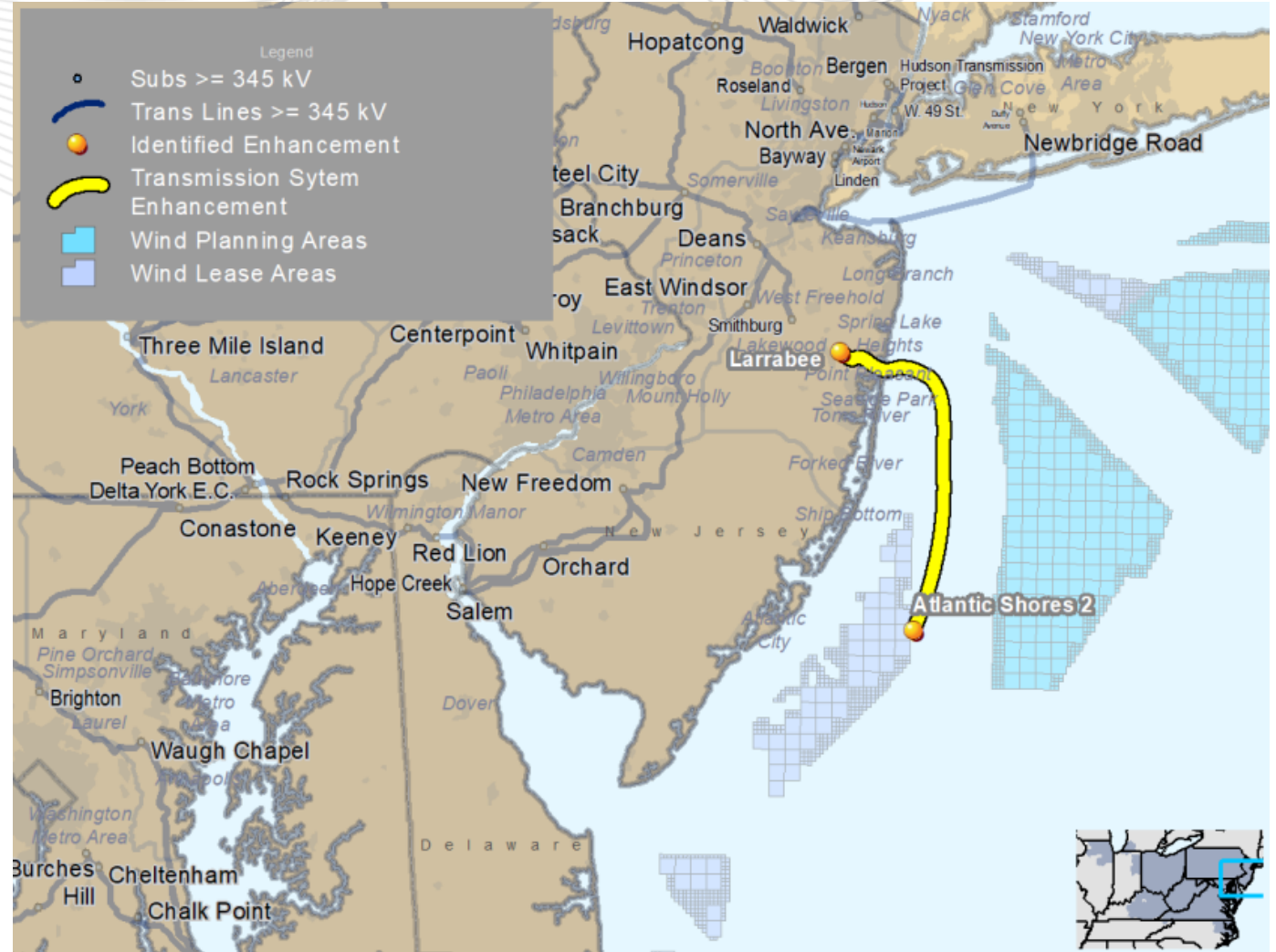
## Proposal Description: Boardwalk Power

- #285 – Larrabee to Atlantic Shores 2 – 400 kV  
1,400 MW HVDC link between Larrabee and Atlantic Shores 2
- #921 – Larrabee to Atlantic Shores 2 – 400 kV  
1,200 MW HVDC link between Larrabee and Atlantic Shores 2
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Larrabee 230 kV substation.

Scenarios Addressed: 10

## Proposal Cost Estimate:

#285 – \$1.580 B | #921 – \$1.545 B



## Proposing Entity:

Anbaric Development Partners, LLC

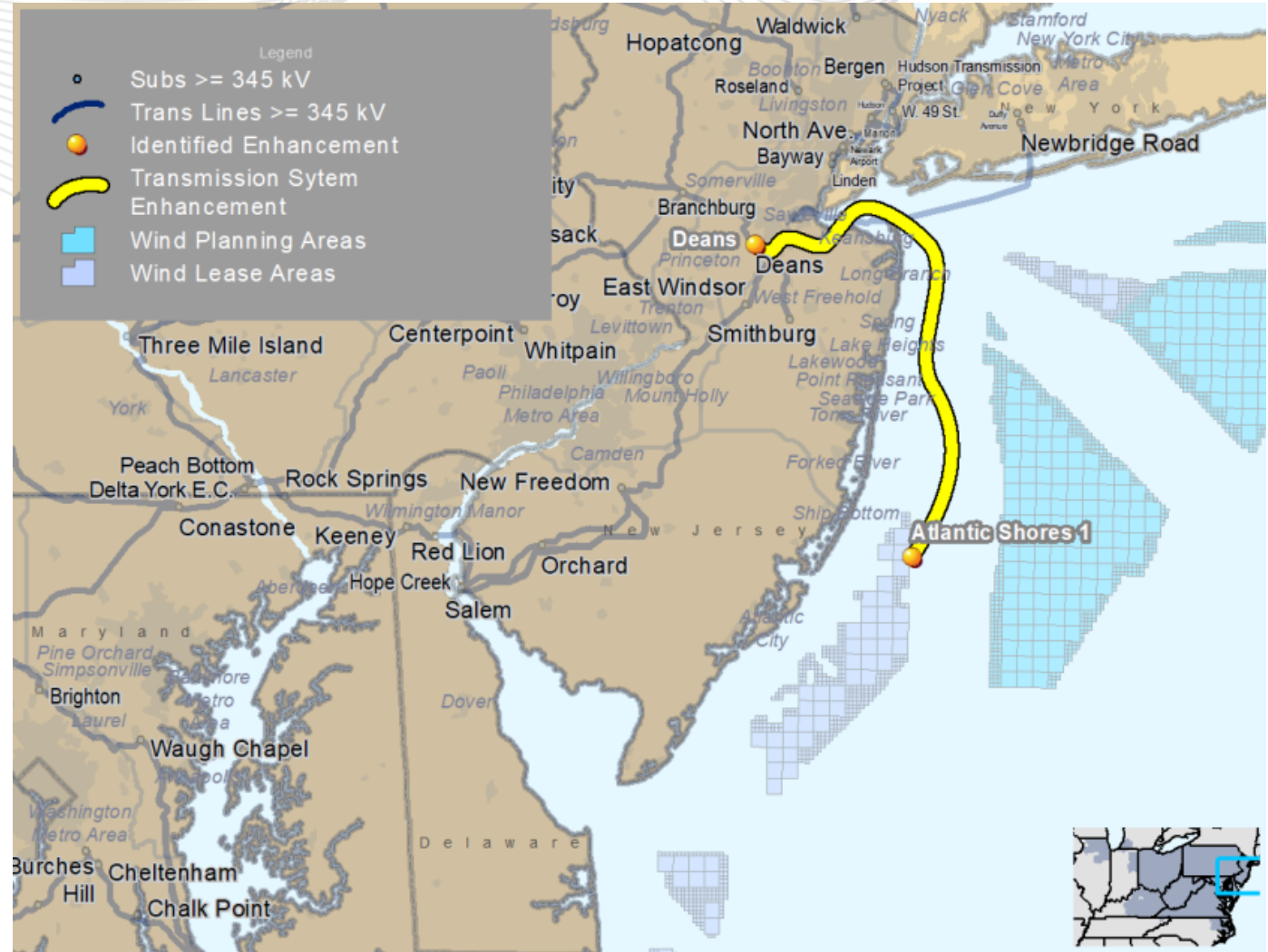
## Proposal Description: Boardwalk Power

- #568 – Deans to Atlantic Shores 1: 400 kV 1,510 MW HVDC link between Deans and Atlantic Shores 1
- Includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Deans 500 kV substation

**Scenarios Addressed:** None

## Proposal Cost Estimate:

#568 – \$1.978 B



## Proposing Entity:

Anbaric Development Partners, LLC

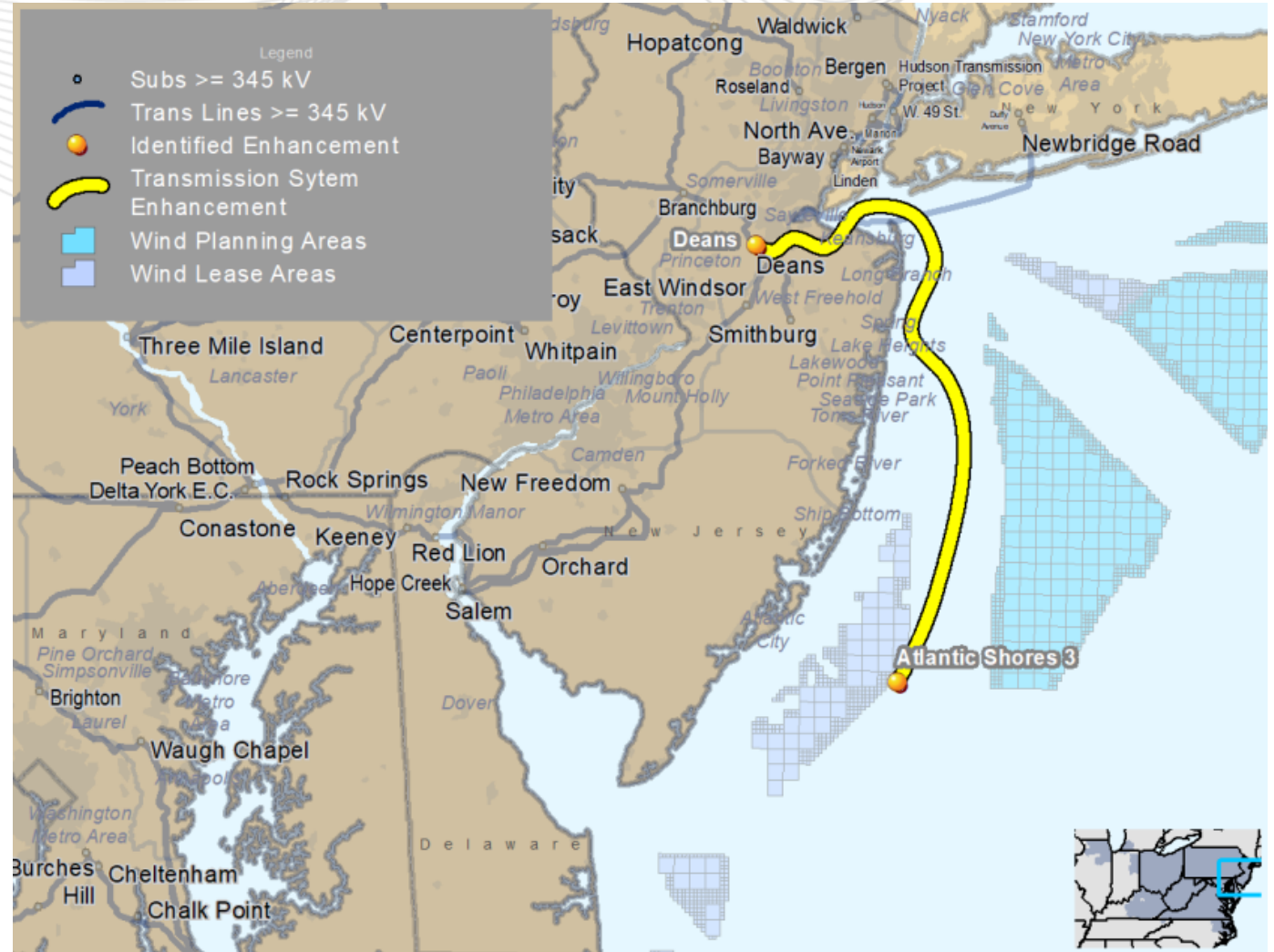
## Proposal Description: Boardwalk Power

- #574 – Deans to Atlantic Shores 3: 400 kV 1,400 MW HVDC link between Deans and Atlantic Shores 3
- Includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Deans 500 kV substation

**Scenarios Addressed:** 1.1/1.2a/20a

## Proposal Cost Estimate:

#574 – \$1.810 B





## Proposing Entity:

Anbaric Development Partners, LLC

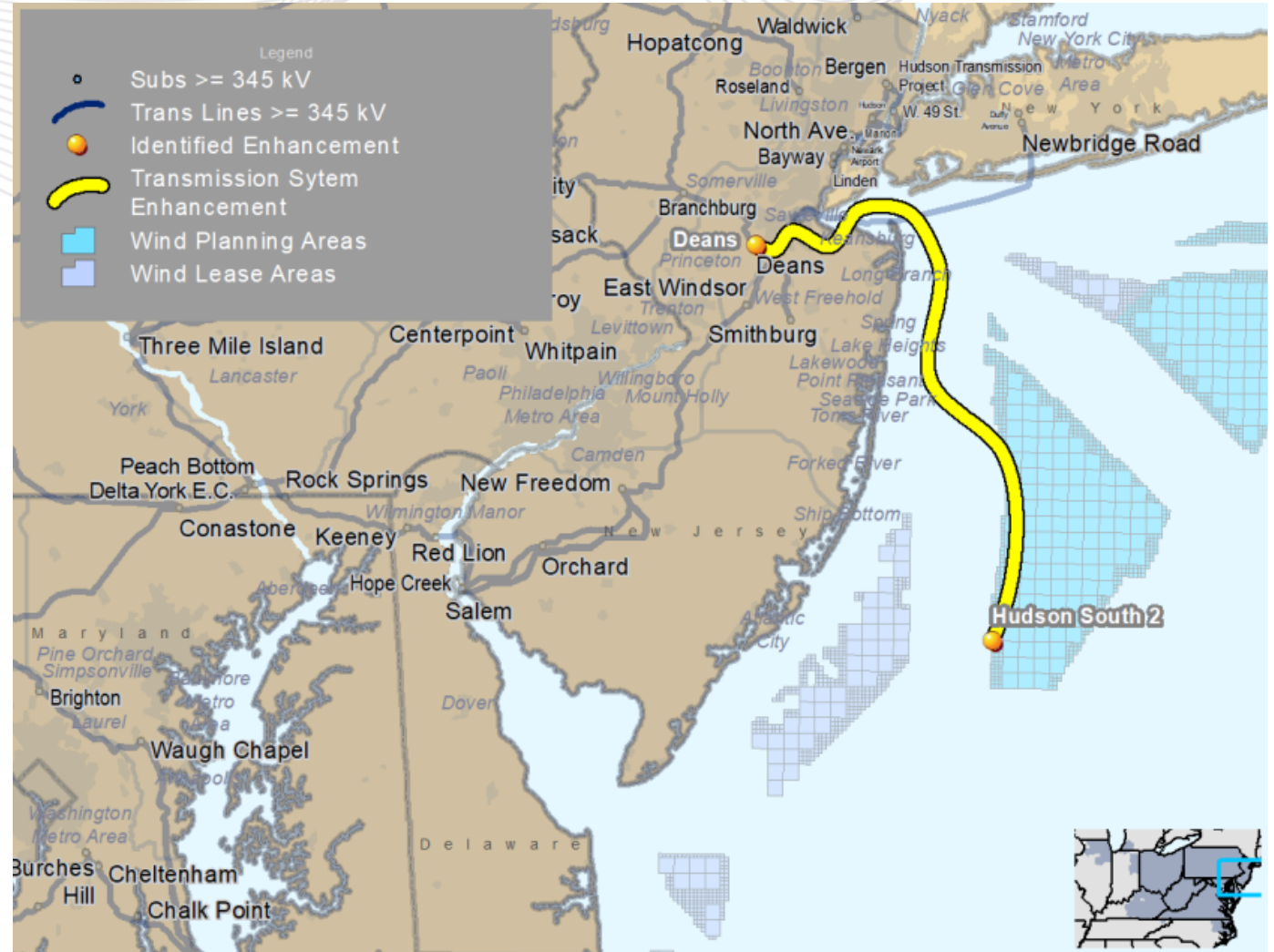
## Proposal Description: Boardwalk Power

- #831 – Deans to Hudson South 2: 400 kV 1,400 MW HVDC link between Deans and Hudson South 2
- Includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Deans 500 kV substation

**Scenarios Addressed:** 1.1

## Proposal Cost Estimate:

#831 – \$1.877 B



## Proposing Entity:

Anbaric Development Partners, LLC

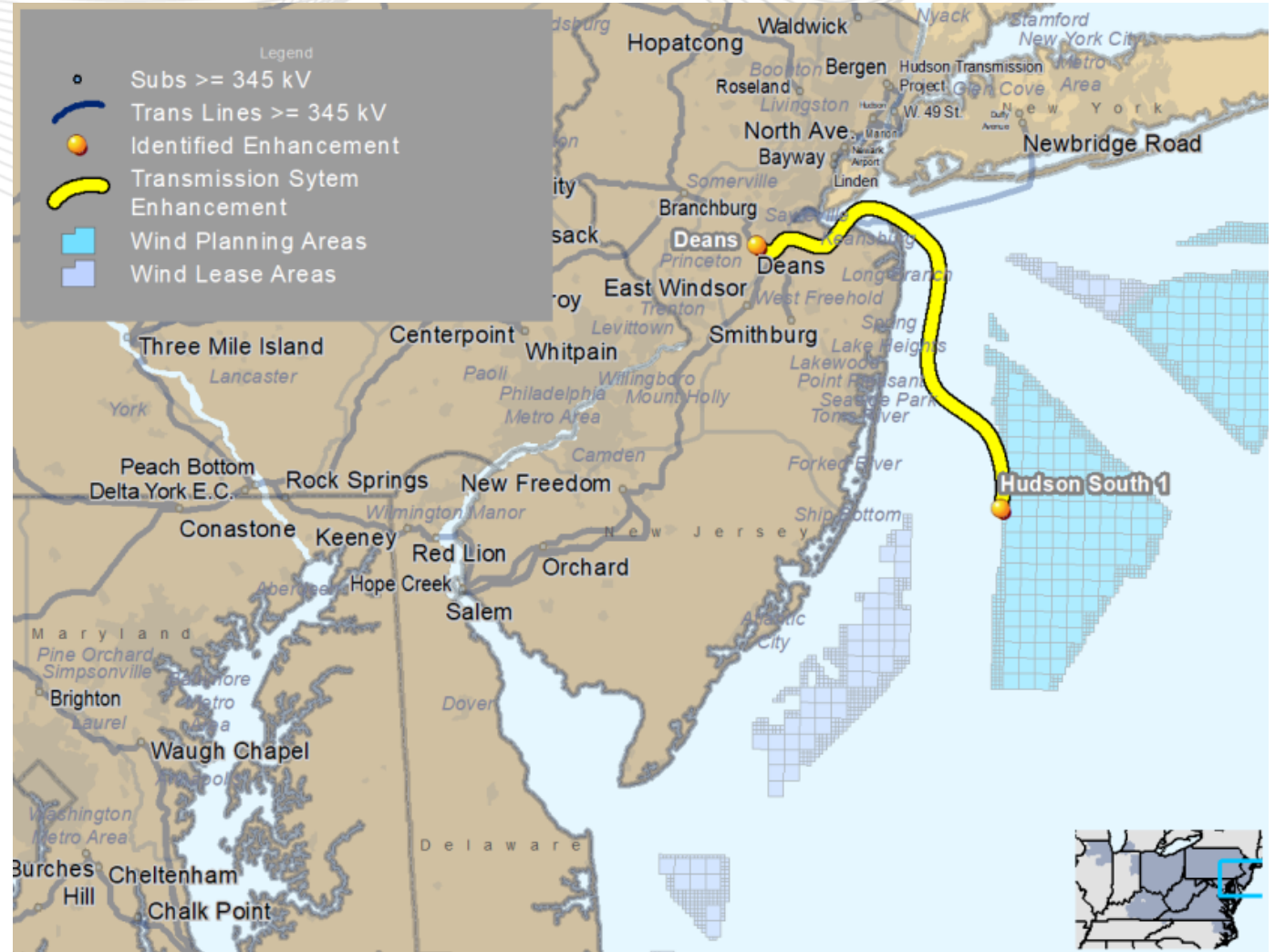
## Proposal Description: Boardwalk Power

- #841 – Deans to Hudson South 1: 400 kV 1,400 MW HVDC link between Deans and Hudson South 1
- Includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, HVAC underground cable segment, and necessary upgrades to the Deans 500 kV substation

**Scenarios Addressed:** 10

## Proposal Cost Estimate:

#841 – \$1.794 B



## Proposing Entity:

Anbaric Development Partners, LLC

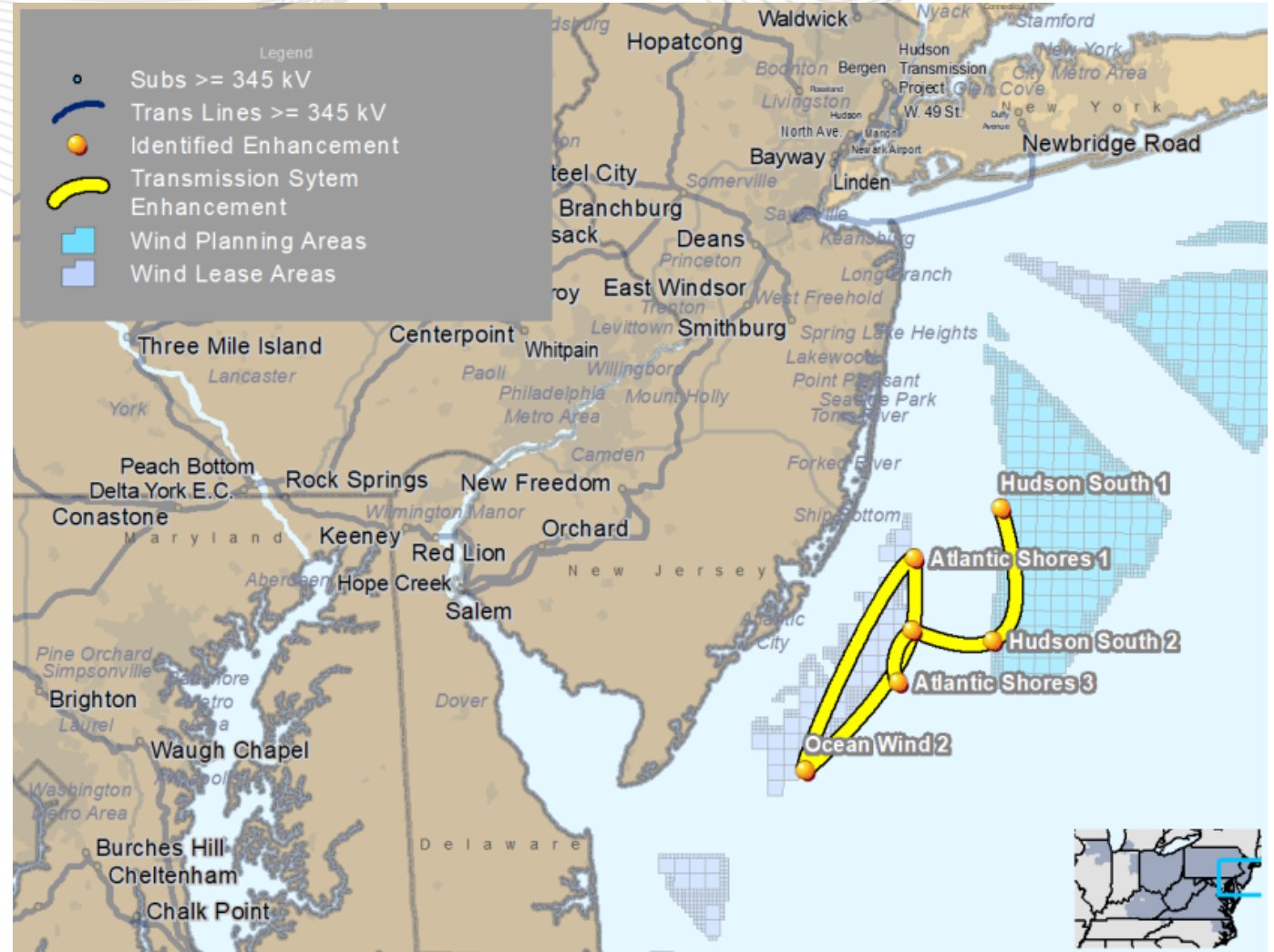
## Proposal Description: Boardwalk Power

- Seven 400 kV 700 MW HVDC cable links between offshore substation platforms proposed in Anbaric Option 2 solutions

**Scenarios Addressed:** None

## Proposal Cost Estimate:

- #137: Atlantic Shores 2 to Atlantic Shores 1 – \$60 M
- #243: Atlantic Shores 2 to Ocean Wind 2 – \$96 M
- #248: Ocean Wind 2 to Atlantic Shores 1 – \$80 M
- #428: Hudson South 1 to Hudson South 2 – \$81 M
- #748: Hudson South 2 to Atlantic Shores 2 – \$67 M
- #889: Hudson South 1 to Atlantic Shores 3 – \$72 M
- #896: Atlantic Shores 2 to Atlantic Shores 3 – \$65 M





## Proposing Entity:

Atlantic Power Transmission, LLC

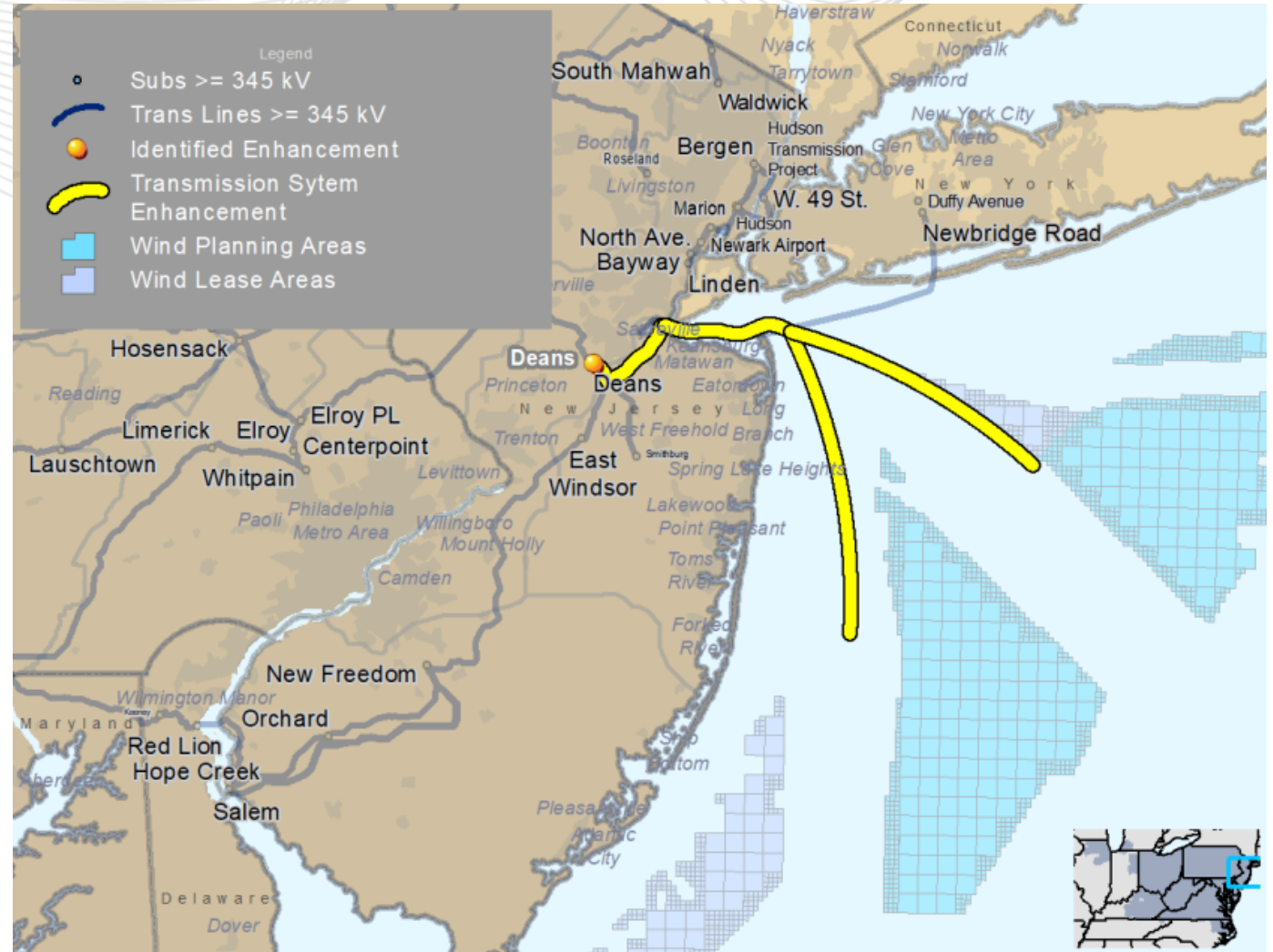
## Proposal Description:

- Three 320 kV 1,200 MW HVDC systems injecting up to 3,600 MW into Deans 500 kV substation
- Each 1,200 MW system is being offered as its own project proposal, enabling selection of either a 1,200 MW, 2,400 MW or the full 3,600 MW solution.
- Each system includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, and a 500 kV HVAC underground line to the Deans 500 kV substation.

**Scenarios Addressed:** 1.2b/17/19/20b

## Proposal Cost Estimate:

- #172: APT Second 1,200 MW – \$1.601 B
- #210: APT First 1,200 MW – \$2.024 B
- #769: APT Third 1,200 MW – \$1.478 B



**Proposing Entity: Con Edison  
Transmission**

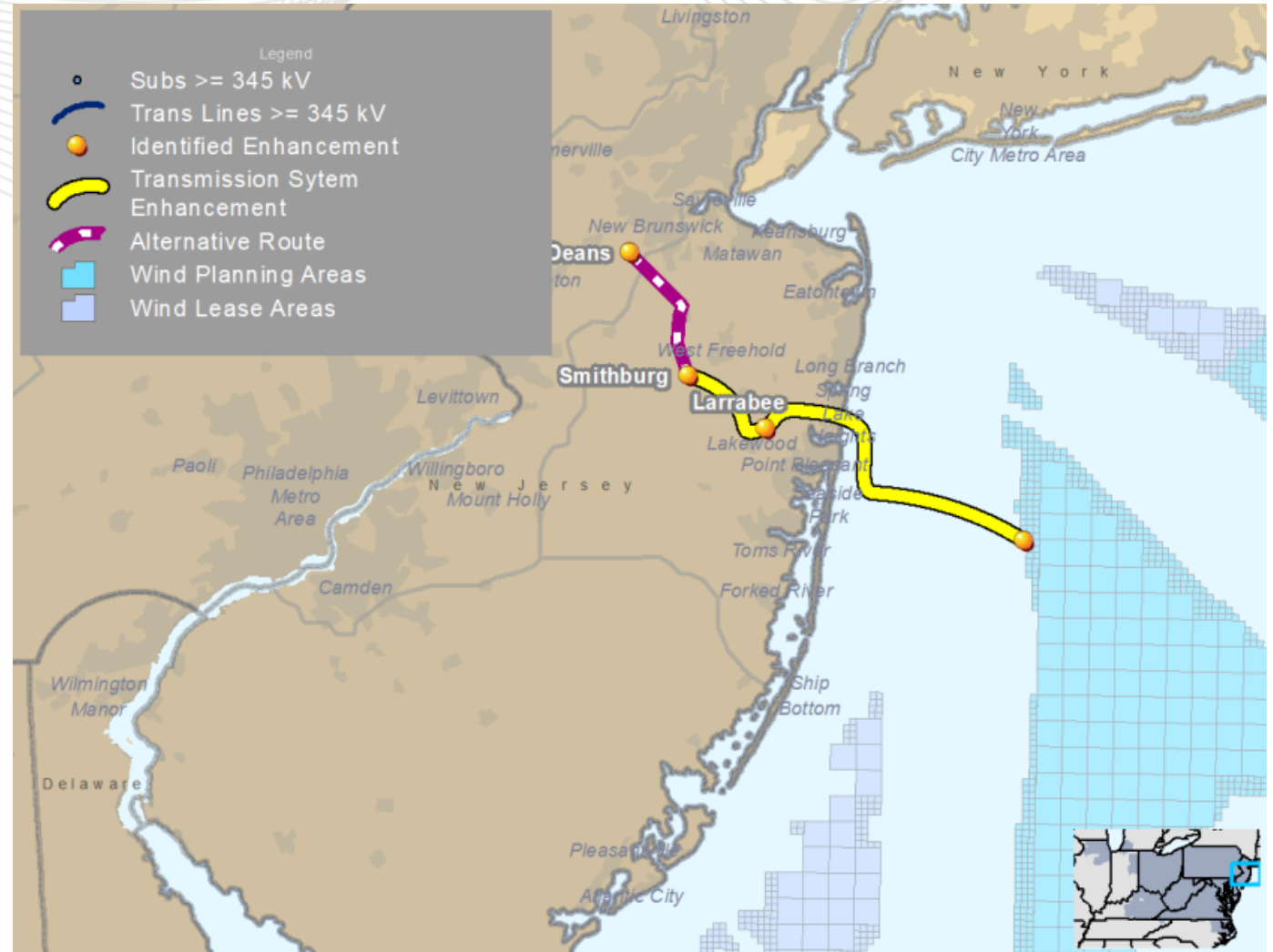
**Proposal Description: Clean Link New Jersey**

- Clean Link New Jersey (CLNJ) includes two 320 kV 1,200 MW HVDC systems from offshore platforms in the New York Bight offshore wind area to default POIs at Smithburg 500 kV and Larrabee 230 kV stations.
- An option to change one or both POIs to Deans 500 KV is also included.
- Each system includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, and HVAC underground line(s) to the Smithburg, Larrabee or Deans substations.

**Scenarios Addressed:** 1.1/1.2/1.2a/1.2b

**Proposal Cost Estimate:**

#990 – \$2.747 B



**Proposing Entity:** Jersey Central Power & Light Company (JCPL)

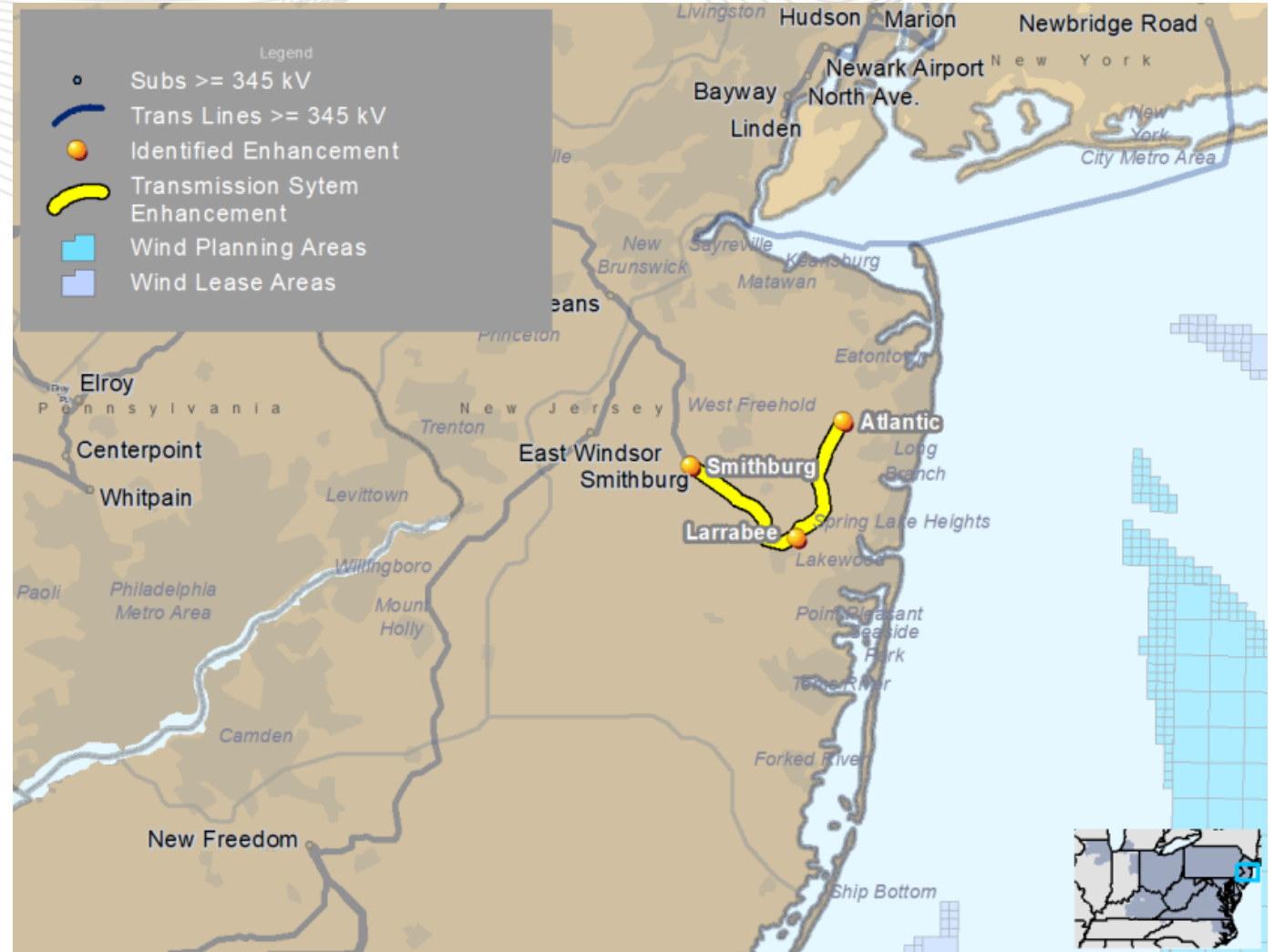
**Proposal Description:**

- Expands existing JCPL stations to enable offshore wind injections of 2,490 MW at Smithburg, 1,200 MW at Larrabee, and 1,200 MW at Atlantic
- Collaborates with Mid-Atlantic Offshore Development (MAOD) Option 2 proposals, which include onshore Larrabee Converter station and offshore HVDC cable systems
- Includes expansions at Smithburg 500 kV, Atlantic 230 kV and Larrabee 230 kV stations, and overhead lines from MAOD Larrabee Converter Station to Smithburg (x2) 500 kV, Atlantic 230 kV and Larrabee 230 kV

**Scenarios Addressed:** 2a/2c/3/5/14/18

**Proposal Cost Estimate:**

#453 – \$620 M





## Proposing Entity: Mid-Atlantic Offshore Development (MAOD)

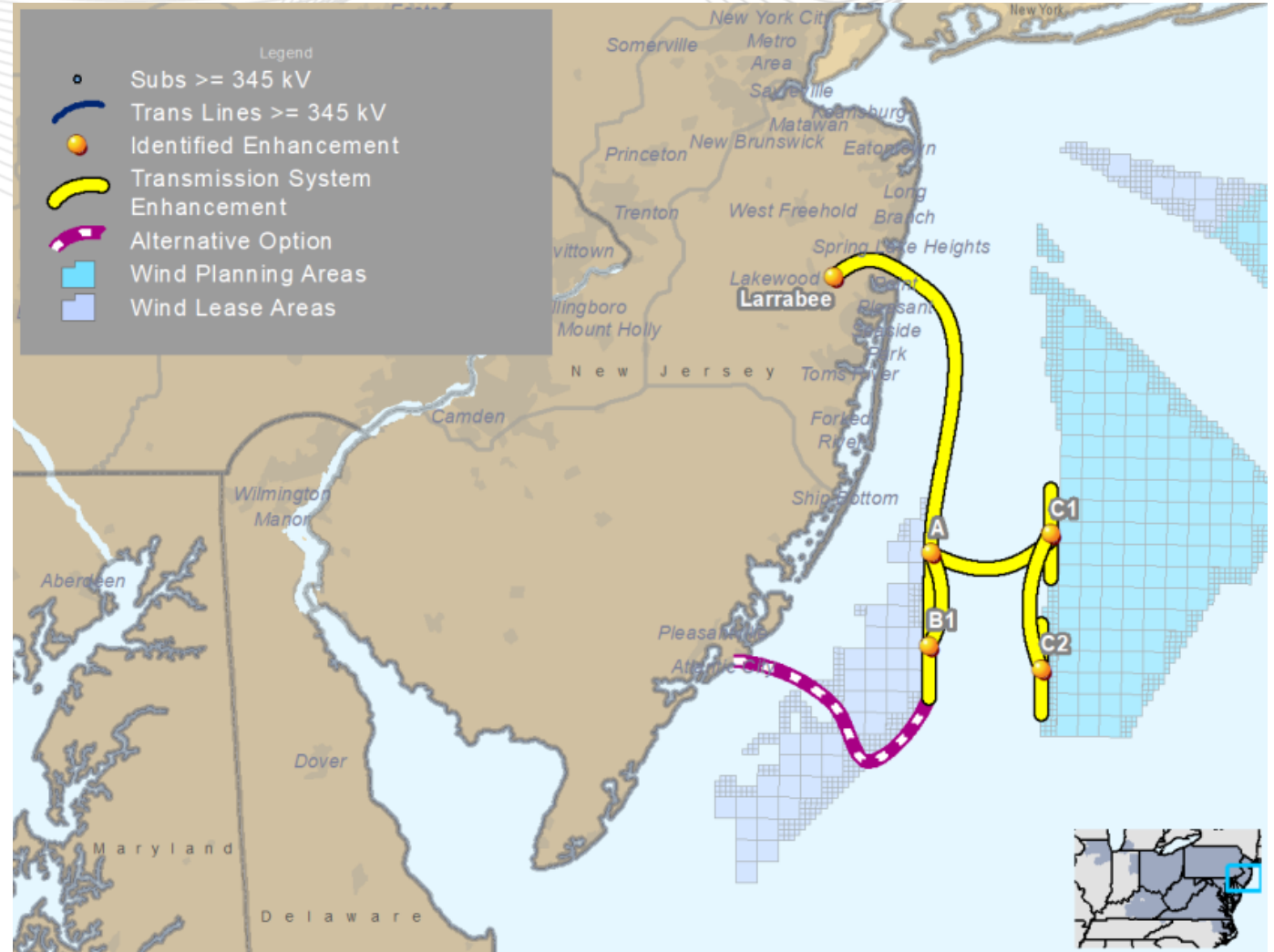
### Proposal Description:

- Up to four 320 kV 1,200 MW HVDC systems injecting 4,800 MW via new Larrabee onshore converter station to Smithburg, Atlantic and Larrabee POIs
- Offered as three project proposals, enabling selection of either 2x1200, 3x1200, or 4x1200 HVDC solutions
- Collaborates with JCPL Option 1b proposal, which includes expansion of existing Smithburg, Atlantic and Larrabee stations
- Includes up to four new offshore platforms and four HVDC submarine and underground cable segments, new onshore converter station, and a new 500/230 kV onshore AC substation both located at Larrabee site

**Scenarios Addressed:** 2c/5

### Proposal Cost Estimate:

- #431: MAOD Proposal 1 – \$2.957 B
- #551: MAOD Proposal 2 – \$4.411 B
- #321: MAOD Proposal 3 – \$5.726 B



**Proposing Entity: LS Power Grid  
Mid-Atlantic LLC**

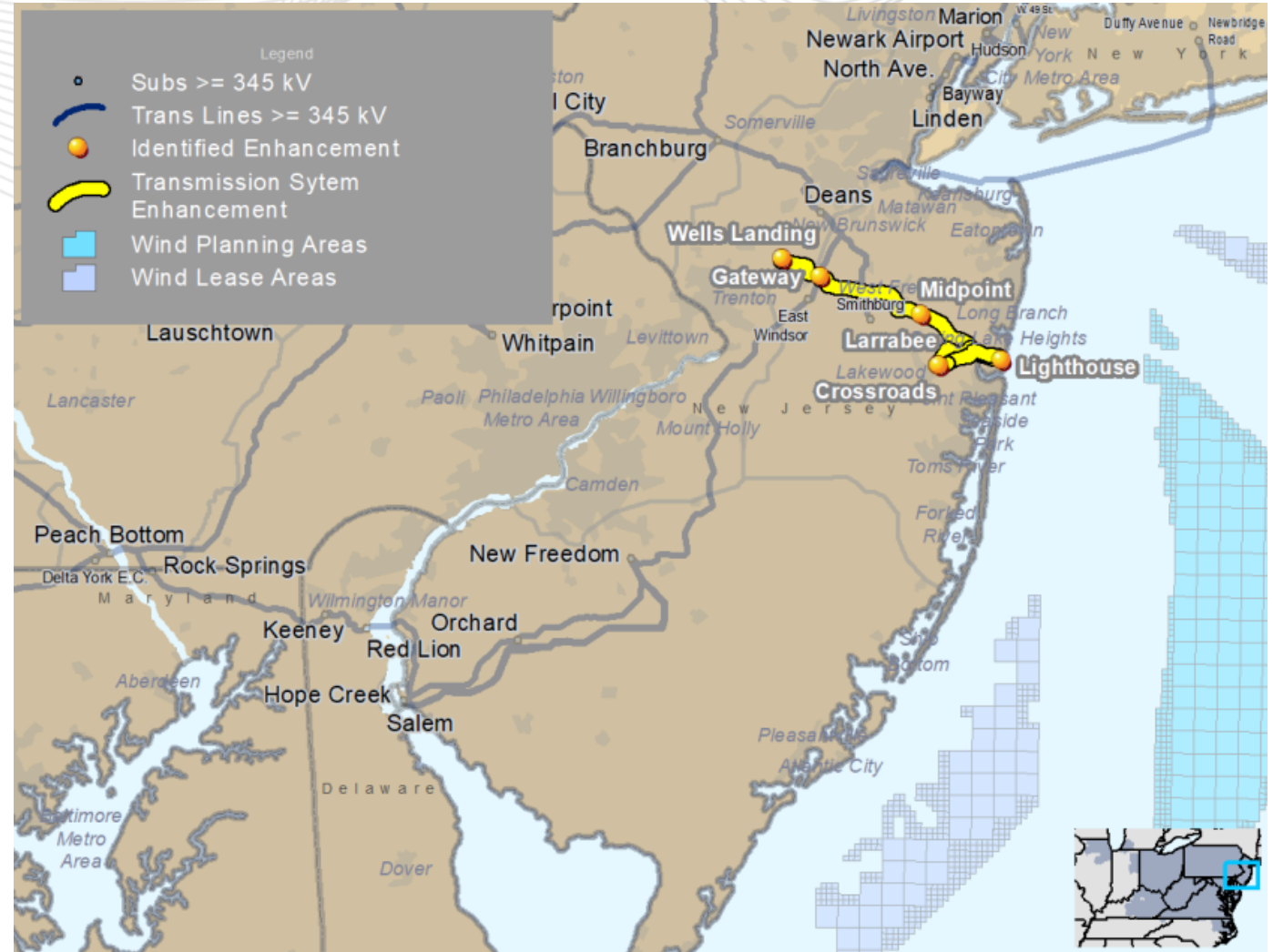
**Proposal Description: Clean Energy Gateway**

- #781 – Clean Energy Gateway Solution A is a fully underground transmission proposal allowing up to 6,000 MW offshore wind injection via new Lighthouse shore substation.
- Includes new Lighthouse 500 kV shore substation that accepts up to 15 offshore 345 kV AC cables, new Crossroads, Gateway and Wells Landing HVAC substations, Midpoint reactive compensation station, and eight 500 kV AC underground transmission lines connecting them
- #294 – Clean Energy Gateway Solution A Light is a reduced scope version of #781 for 4,200 MW injection that excludes Crossroads substation and two 500 kV underground lines.

**Scenarios Addressed:** 6/12

**Proposal Cost Estimate:**

#781 – \$1.772 B | #294 – \$1.545 B



**Proposing Entity: LS Power Grid  
Mid-Atlantic LLC**

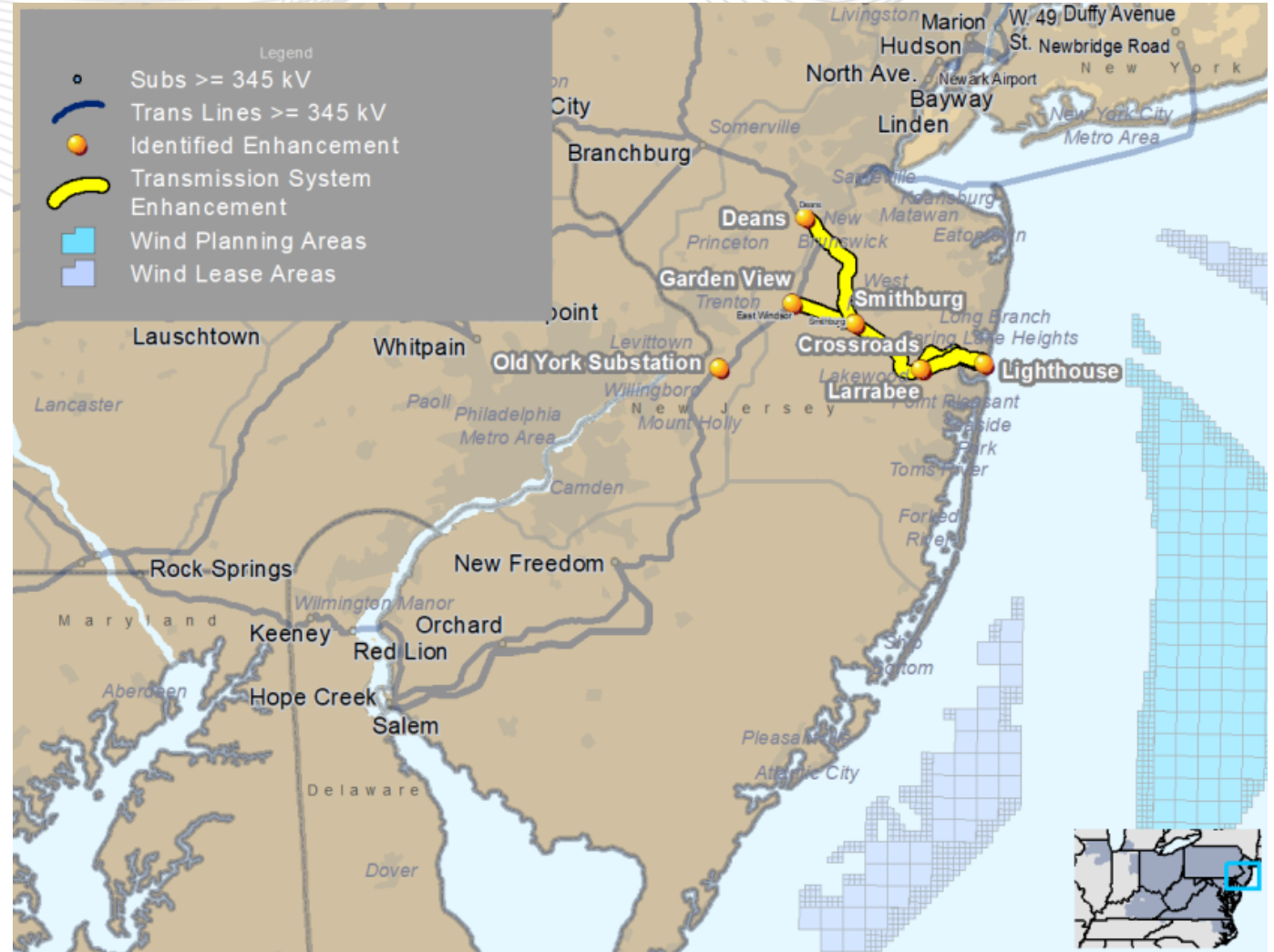
**Proposal Description: Clean Energy Gateway**

- #629 – Clean Energy Gateway Solution B proposes an overhead/underground 500 kV system allowing up to 5,600 MW offshore injection via new Lighthouse shore substation.
- Includes new Lighthouse 500 kV shore substation that accepts offshore 345 kV AC cables, new Crossroads and Garden View AC substations, six new underground lines from Lighthouse-Crossroads, and two new overhead lines connecting Crossroads to Smithburg, and Gardenview; Old York AC substation (LS Power Option 1a Proposal #103) substation is also included.

**Scenarios Addressed: 7/13**

**Proposal Cost Estimate:**

#629 – \$1.568 B





**Proposing Entity: LS Power Grid  
Mid-Atlantic LLC**

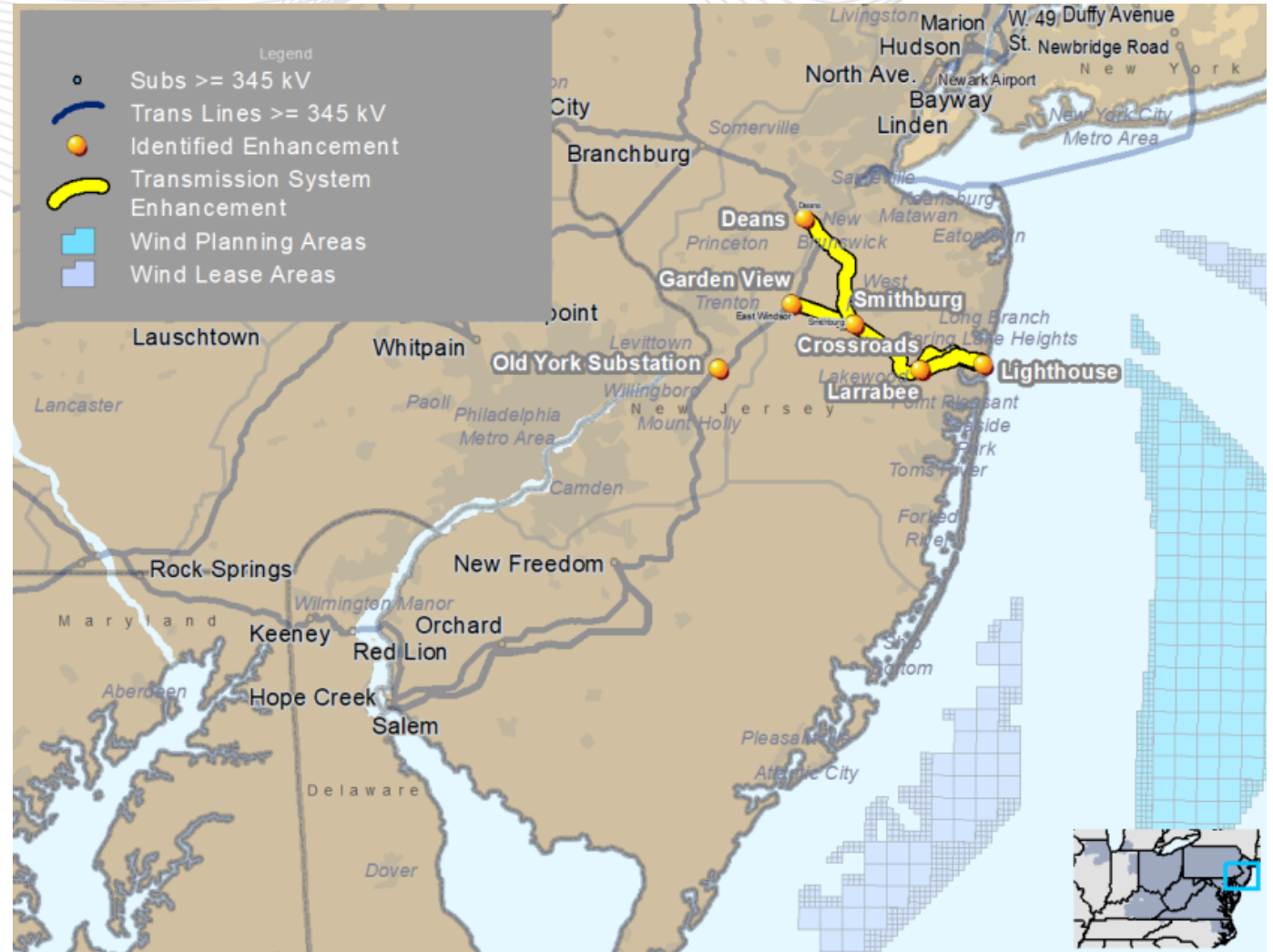
**Proposal Description: Clean Energy Gateway**

- #627 – Clean Energy Gateway Solution B Light is a reduced scope version of #629 for 4,200 MW injection that excludes two Lighthouse-Crossroads underground lines.
- #72 – Clean Energy Gateway Solution B-Alt is an alternate version of #629 for 5,600 MW injection that includes an additional 500 kV line between Deans and Smithburg and connects Crossroads-Garden View to Smithburg.

**Scenarios Addressed: 7/13**

**Proposal Cost Estimate:**

#627 – \$1.474 B | #72 – \$1.601 B

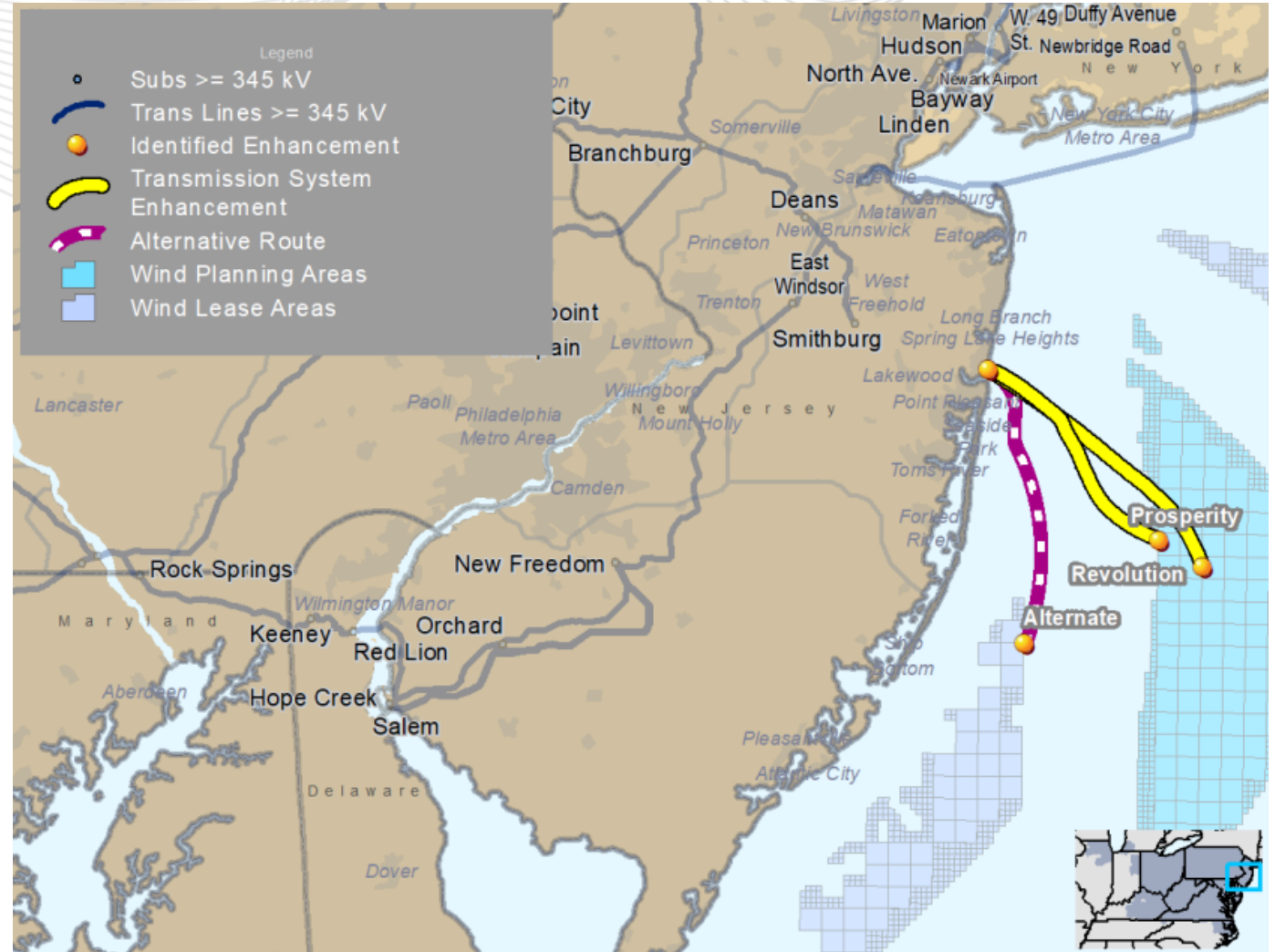


**Proposing Entity: LS Power Grid  
Mid-Atlantic LLC**

**Proposal Description: Clean Energy Gateway  
#594 – Clean Energy Gateway – Offshore consists of two 345 kV offshore substations, Revolution and Prosperity, and eight 345 kV HVAC submarine cables that connect to the LS Power Option 1b solutions.**

**Scenarios Addressed: 6/7**

**Proposal Cost Estimate:  
#594 – \$1.968 B**



**Proposing Entity: NextEra Energy Transmission Mid-Atlantic Holdings, LLC (NEETMH)**

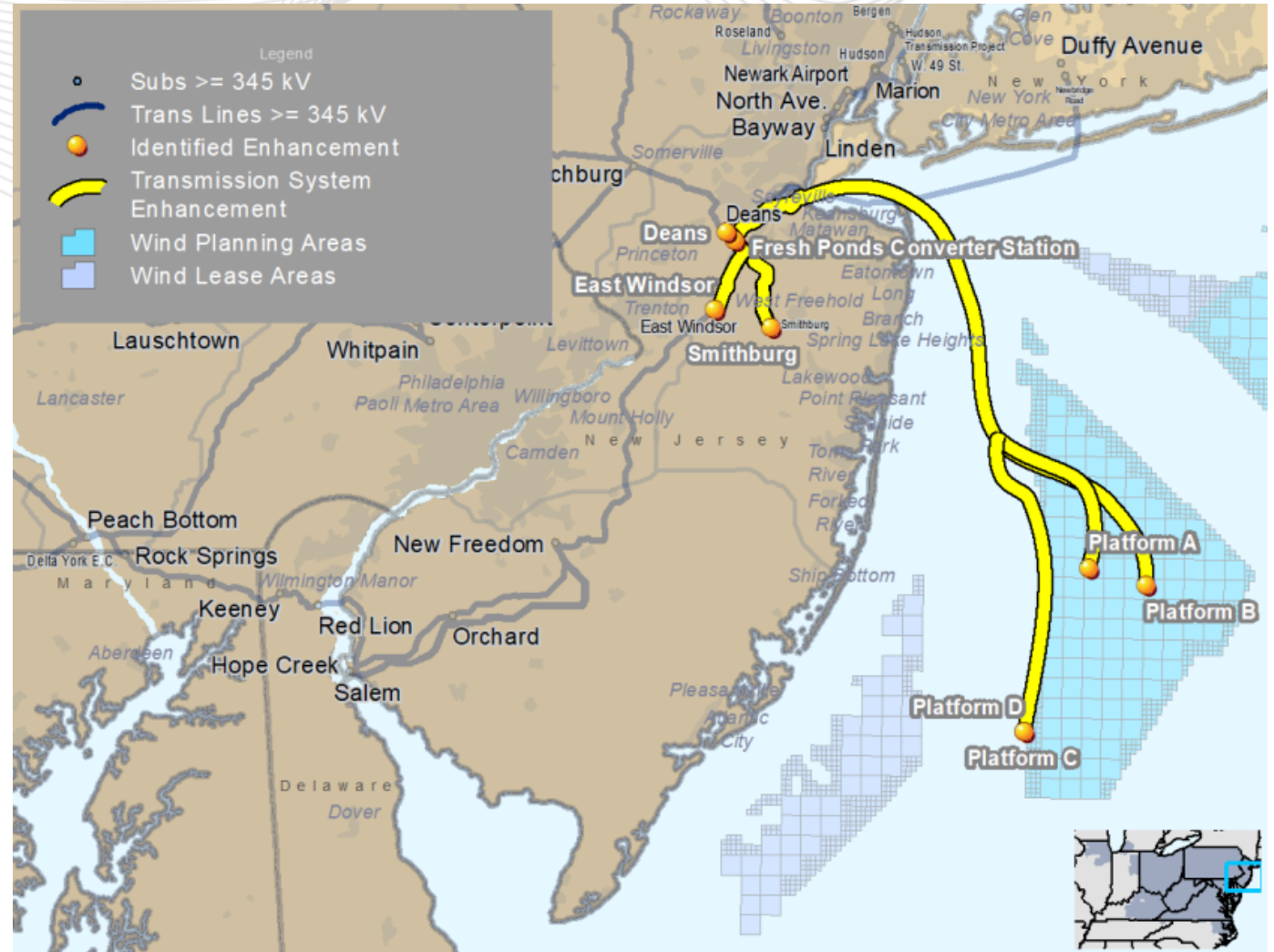
**Proposal Description:**

- Up to four 400 kV 1,500 MW HVDC symmetrical monopole systems connecting offshore platforms in the Hudson South lease area to a new Fresh Ponds 500 kV substation near the existing Deans 500 kV switchyard
- Offered as three project proposals, enabling selection of either 2x1500, 3x1500, or 4x1500 HVDC solutions
- Includes up to four new offshore platforms and four HVDC submarine and underground cable segments, new Fresh Ponds onshore converter station, and tie-ins to Deans-Smithsburg and Deans-E. Windsor 500 kV overhead transmission lines

**Scenarios Addressed:** 4/4a/15/16/16a/20

**Proposal Cost Estimate:**

- #461: Deans 3,000 MW DC Injection – \$3.608 B
- #860: Deans 4,500 MW DC Injection – \$5.285 B
- #250: Deans 6,000 MW DC Injection – \$7.029 B





**Proposing Entity: NextEra Energy Transmission Mid-Atlantic Holdings, LLC (NEETMH)**

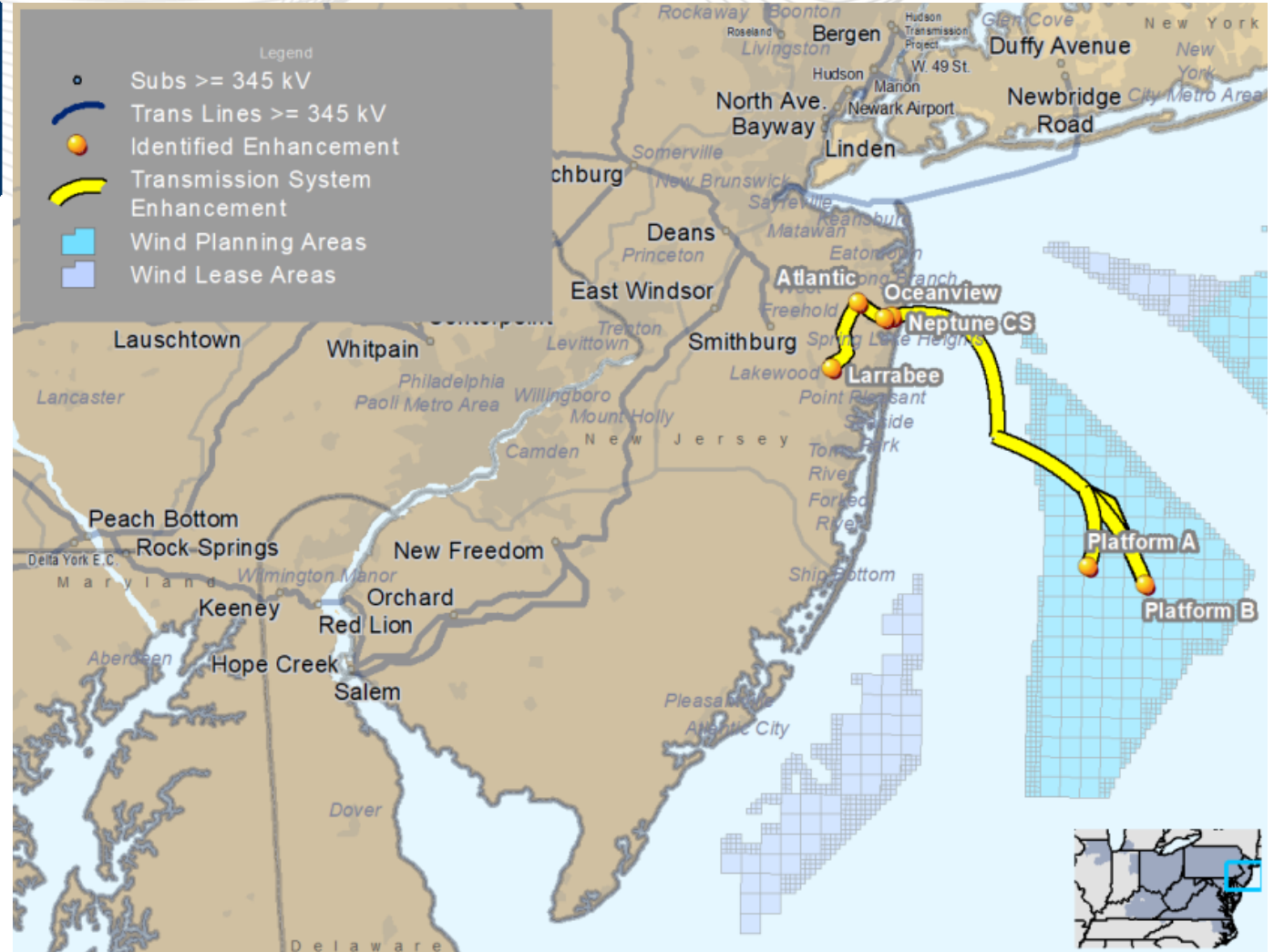
**Proposal Description:**

- Combination of 400 kV 1,200 MW or 1,500 MW HVDC symmetrical monopole systems connecting offshore platforms in the Hudson South lease area to a new Neptune 230 kV switchyard near the existing Oceanview 230 kV substation
- Offered as three project proposals, enabling selection of either 1x1500, 2x1200, or 2x1500 HVDC solutions
- Includes up to two new offshore platforms and two HVDC submarine and underground cable segments, new Neptune onshore converter station, and tie-ins to Atlantic-Oceanview and Larrabee-Oceanview 230 kV overhead transmission lines

**Scenarios Addressed:** 4/4a/20/20a/20b

**Proposal Cost Estimate:**

- #27: Oceanview 1,500 MW DC Injection – \$1.477 B
- #298: Oceanview 2,400 MW DC Injection – \$2.662 B
- #15: Oceanview 3,000 MW DC Injection – \$3.023 B



**Proposing Entity: NextEra Energy Transmission Mid-Atlantic Holdings, LLC (NEETMH)**

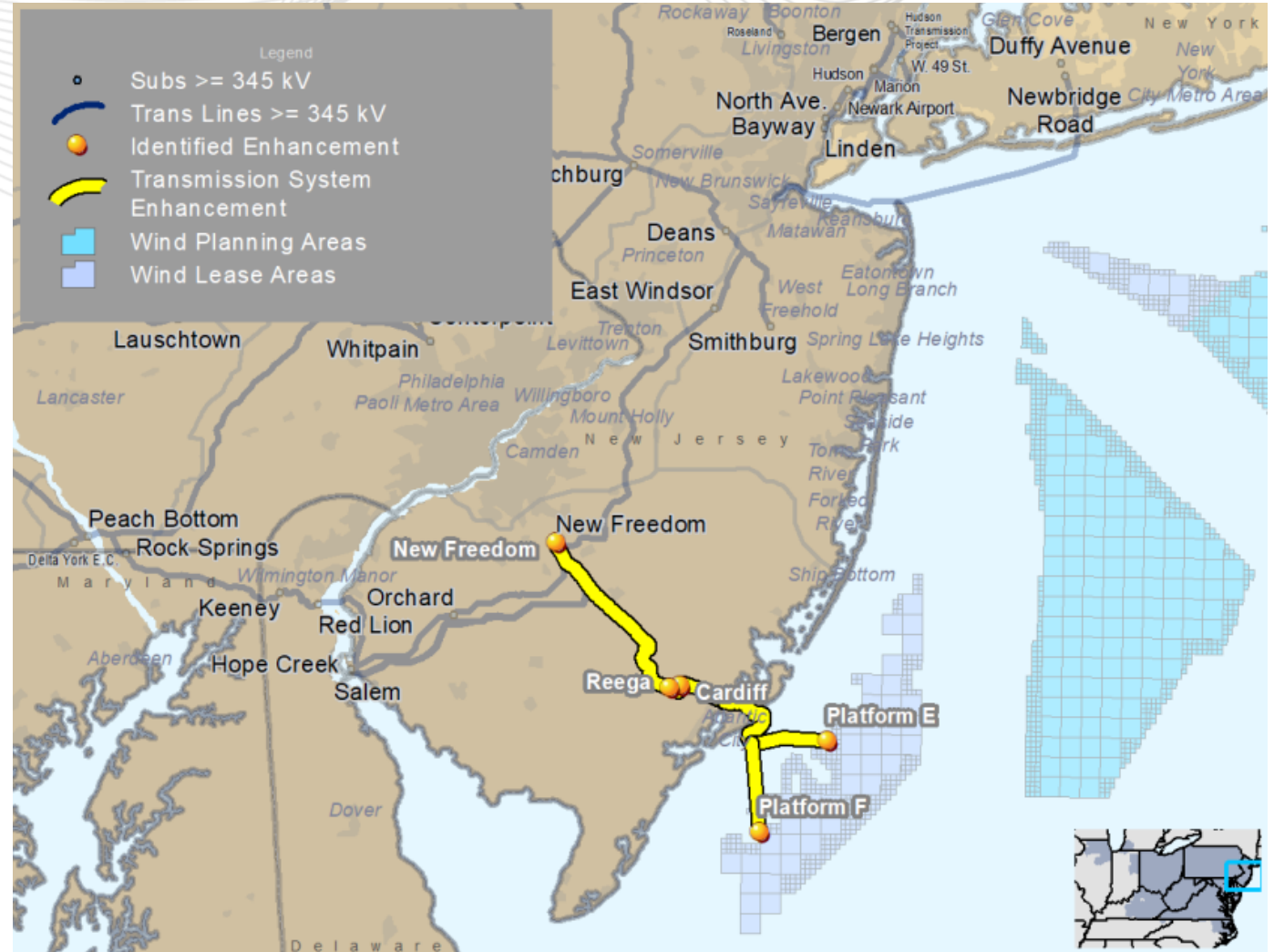
**Proposal Description:**

- One 1,200 MW and one 1,500 MW 400 kV HVDC symmetrical monopole systems connecting offshore platforms to deliver Atlantic Shores and Ocean Wind 2 offshore projects to a new Reega 230 kV switchyard near the existing Cardiff 230 kV substation
- Includes two new offshore platforms and two HVDC submarine and underground cable segments, new Reega onshore converter station, and rebuild of New Freedom-Cardiff 230 kV overhead line into two circuits to tie in Reega station

**Scenarios Addressed: 16**

**Proposal Cost Estimate:**

#604: Cardiff 2,700 MW DC Injection – \$2.943 B



**Proposing Entity:** NextEra Energy Transmission Mid-Atlantic Holdings, LLC (NEETMH)

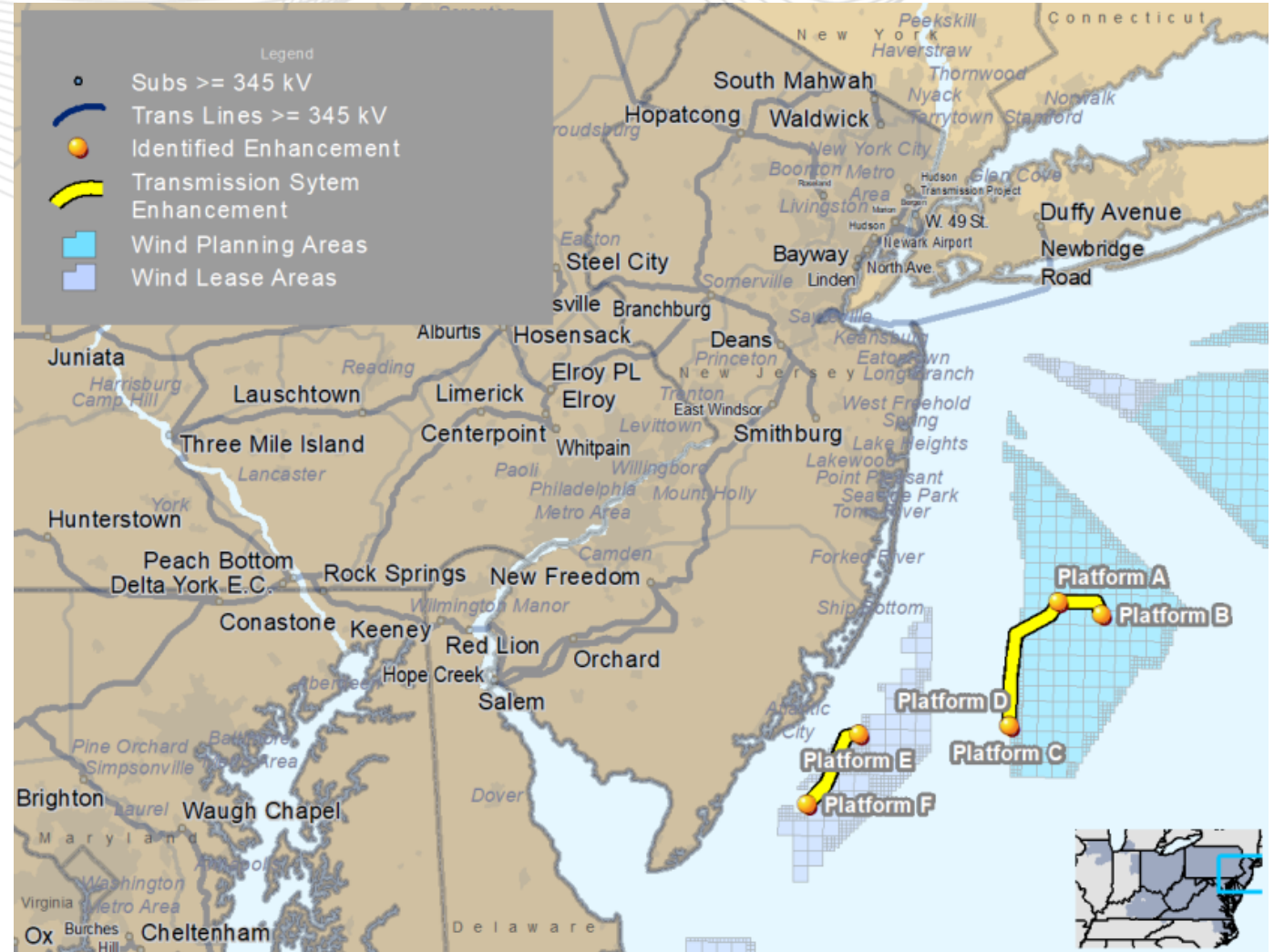
**Proposal Description:**

- Four 230 kV 800 MW AC cable links between the six offshore substation platforms proposed in NEETMH Option 2 solutions

**Scenarios Addressed:** None

**Proposal Cost Estimate:**

#359: Platform Connections – \$739 M





## Proposing Entity: PSEG/Orsted

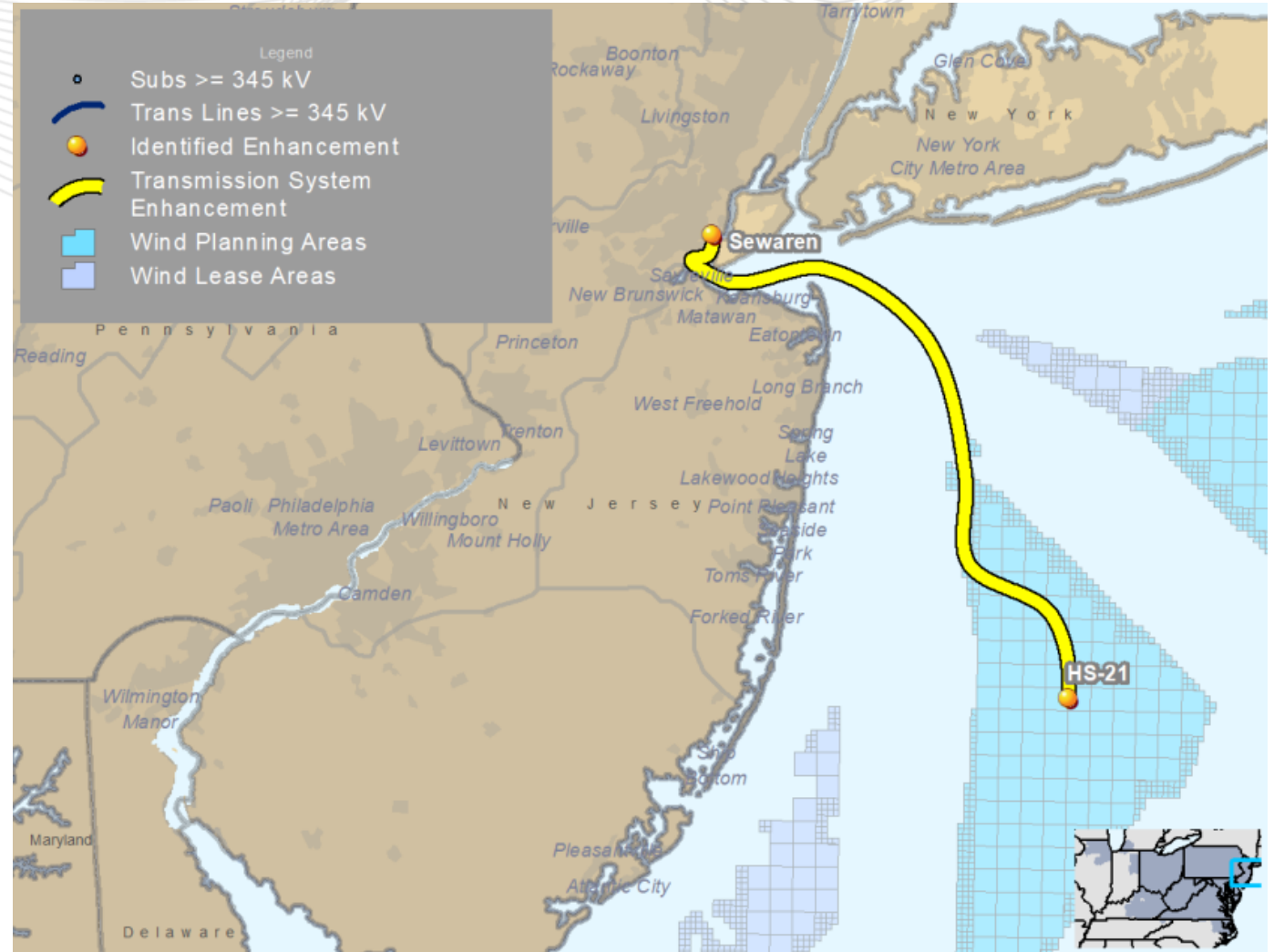
### Proposal Description: Coastal Wind Link

- #214 – Sewaren 400 kV Collector: One 400 kV 1,400 MW HVDC link connecting Sewaren and offshore platform in the Hudson South lease area
- #397– Sewaren 320 kV Collector: One 320 kV 1,200 MW HVDC link connecting Sewaren and offshore platform in the Hudson South lease area
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, 230 kV AC overhead line, and necessary upgrades to the Sewaren 230 kV substation

**Scenarios Addressed:** None

### Proposal Cost Estimate:

#214 – \$2.445 B | #397 – \$2.295 B



## Proposing Entity: PSEG/Orsted

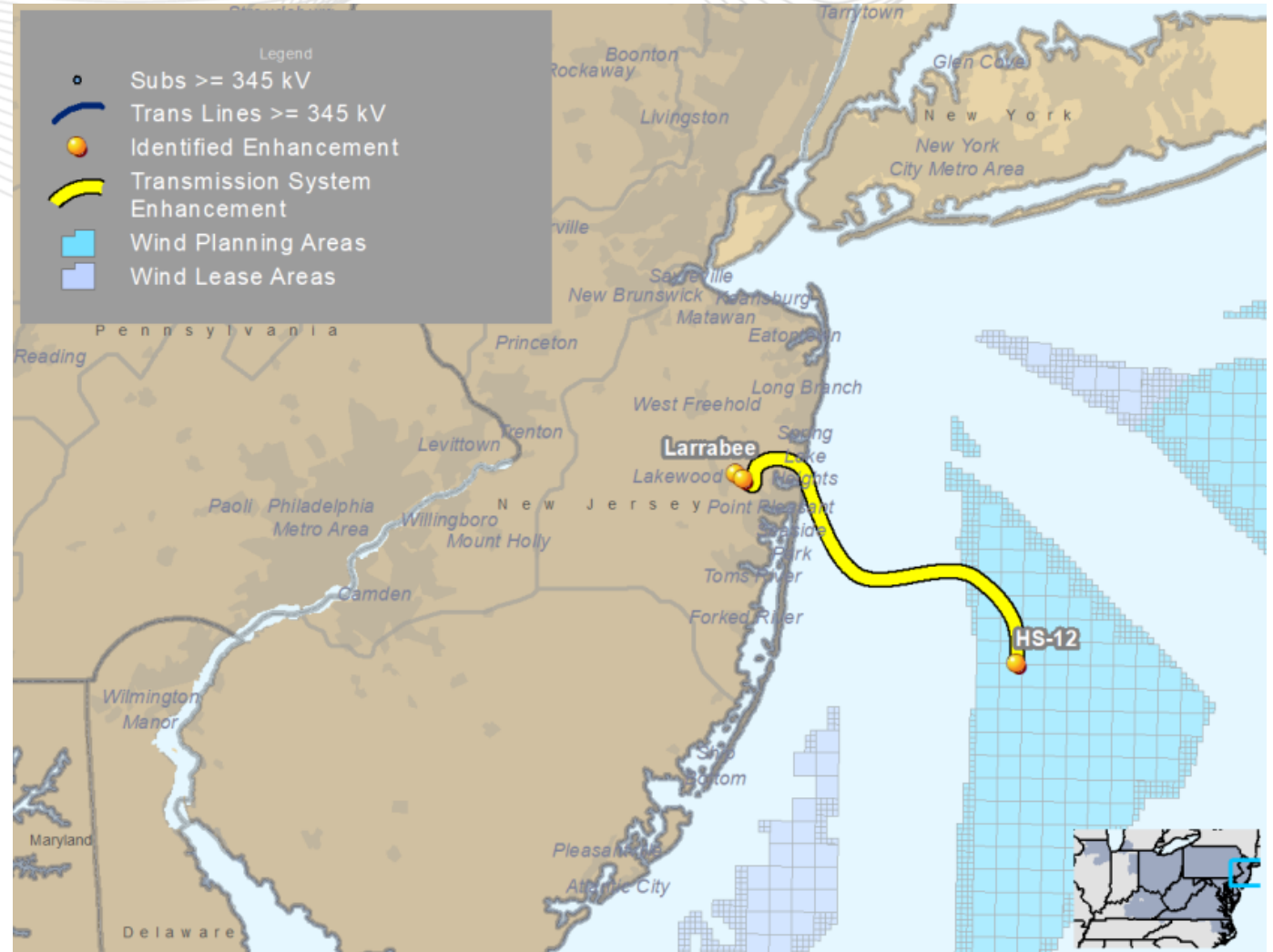
### Proposal Description: Coastal Wind Link

- #230 – Larrabee 400 kV Collector: One 400 kV 1,400 MW HVDC link connecting Larrabee and offshore platform in the Hudson South lease area
- #613 – Larrabee 320 kV Collector: One 320 kV 1,200 MW HVDC link connecting Larrabee and offshore platform in the Hudson South lease area
- Each includes a new offshore platform, HVDC submarine and underground cable segments, new onshore converter station, 500 kV AC underground cable segment, and necessary upgrades to the Larrabee 230 kV substation

**Scenarios Addressed:** 1.2

### Proposal Cost Estimate:

#230 – \$2.328 B | #613 – \$2.151 B



## Proposing Entity: PSEG/Orsted

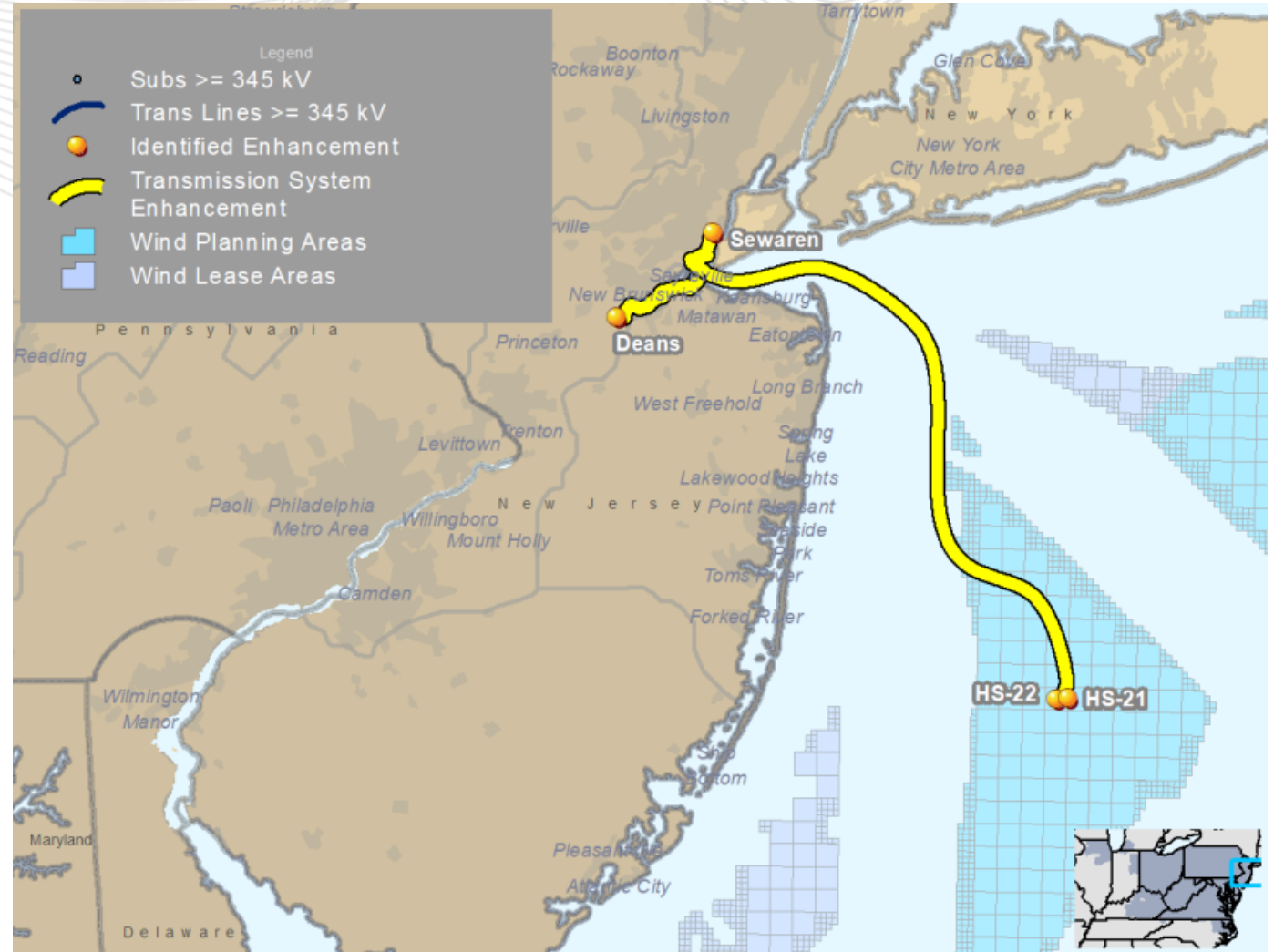
### Proposal Description: Coastal Wind Link

- #871 – Sewaren/Deans Twin Collector: Two 400 kV 1,400 MW HVDC links, one connecting Sewaren and offshore platform in the Hudson South lease area, and the other connecting Deans and offshore platform in Hudson South lease area
- Includes two new offshore platforms, two 400 kV HVDC submarine and underground cable segments, new onshore converter station, 230 kV AC overhead line connecting to Sewaren, 500 kV AC underground cable connecting to Deans, and necessary upgrades to the Sewaren and Deans substations

**Scenarios Addressed:** None

### Proposal Cost Estimate:

#871 – \$4.843 B





## Proposing Entity: PSEG/Orsted

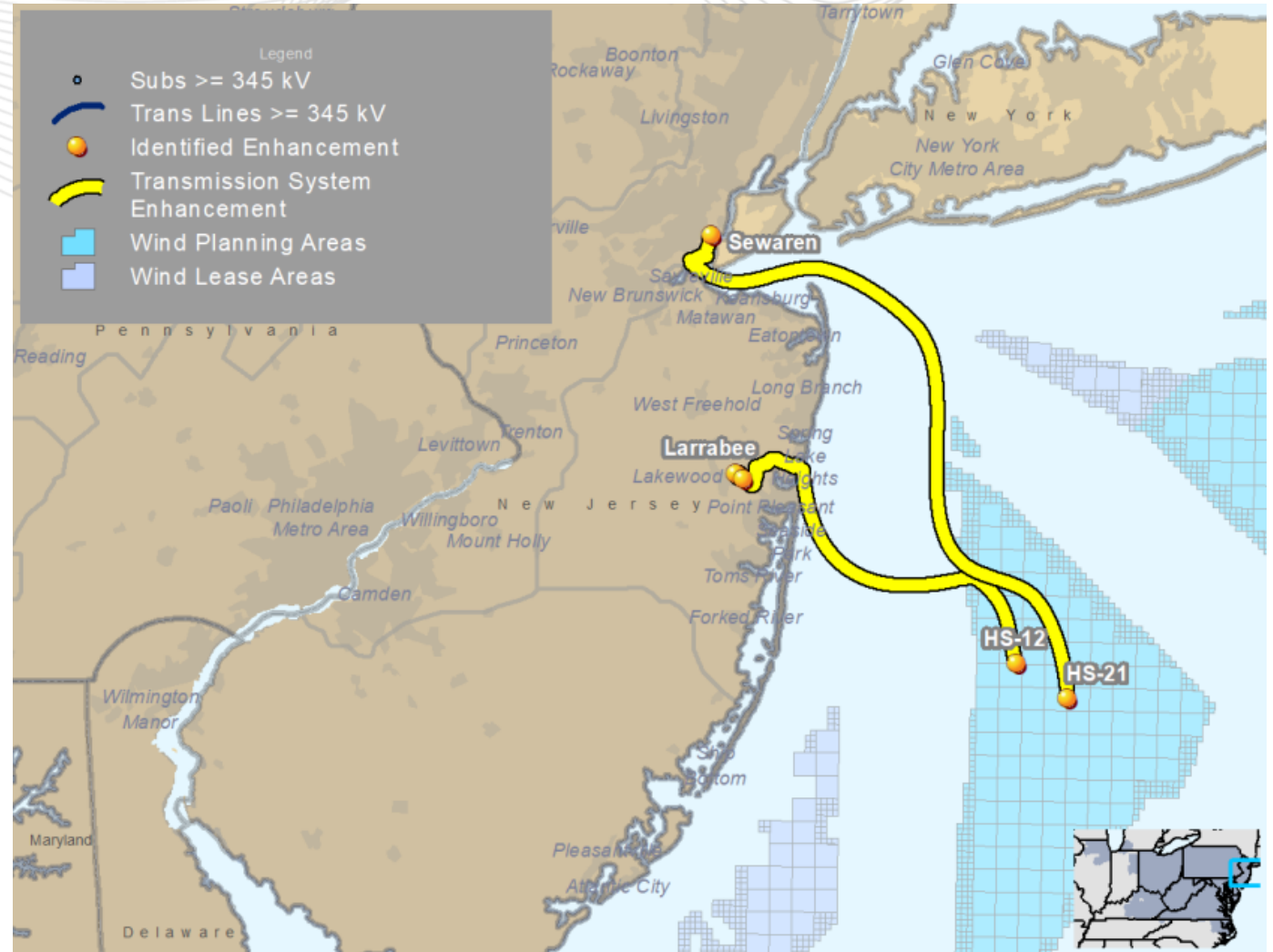
### Proposal Description: Coastal Wind Link

- #208 – Sewaren/Larrabee Twin Collector: Two 400 kV 1,400 MW HVDC links, one connecting Sewaren and offshore platform in Hudson South lease area and the other connecting Larrabee and offshore platform in Hudson South lease area
- Includes two new offshore platforms, two 400 kV HVDC submarine and underground cable segments, new onshore converter station, 230 kV AC overhead line connecting to Sewaren, 500 kV AC underground cable connecting to Larrabee, and necessary upgrades to the Sewaren and Larrabee substations

**Scenarios Addressed:** None

### Proposal Cost Estimate:

#208 – \$4.719 B



## Proposing Entity: PSEG / Orsted

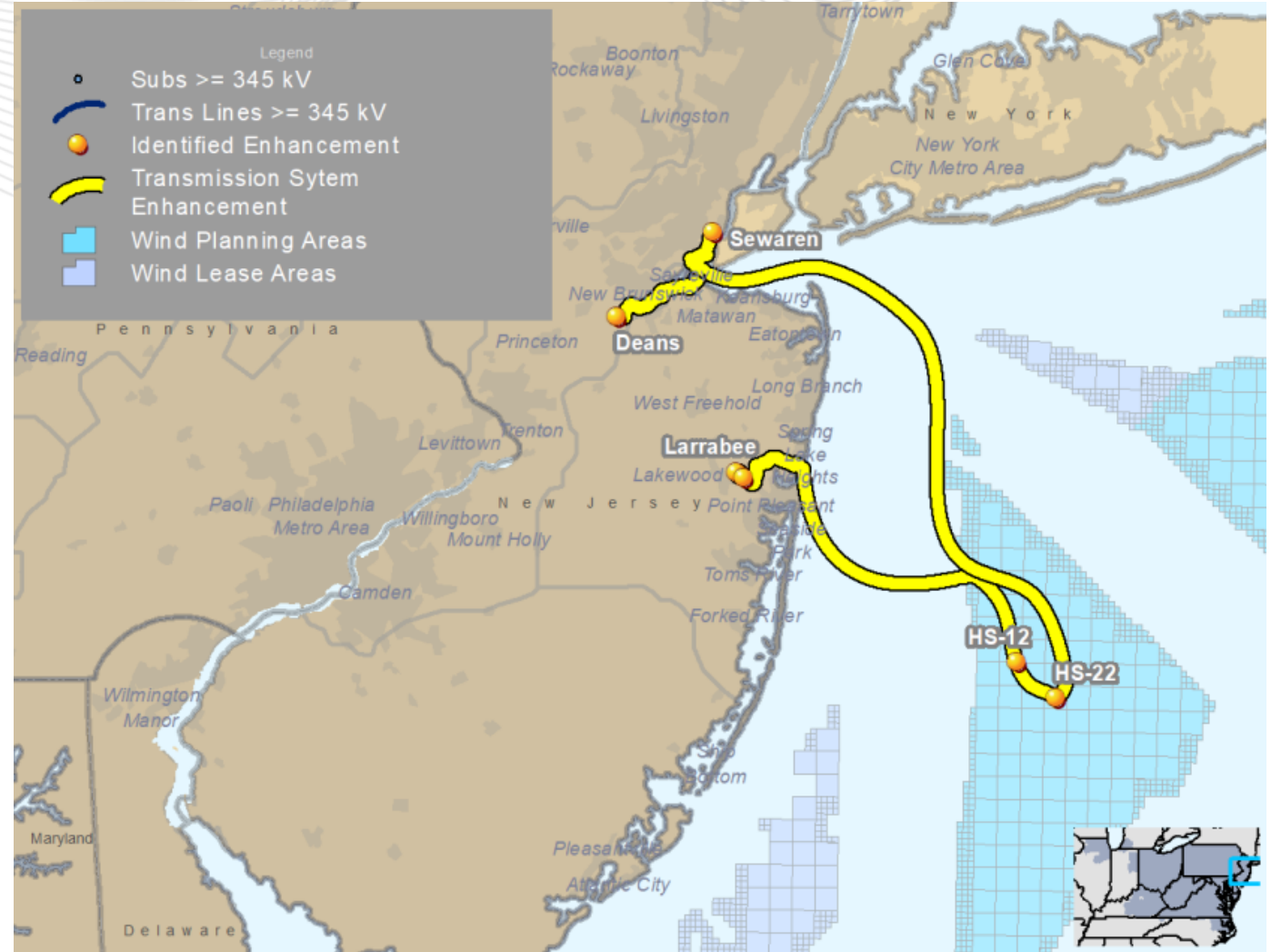
### Proposal Description: Coastal Wind Link

- #871 – Sewaren/Deans/Larrabee Tri Collector: Three 400 kV 1,400 MW HVDC links, one connecting Sewaren and offshore platform in the Hudson South lease area, the second connecting Deans and offshore platform in Hudson South lease area, and the third connecting Larrabee and offshore platform in Hudson South lease area
- Includes three new offshore platforms, three 400 kV HVDC submarine and underground cable segments, new onshore converter station, 230 kV AC overhead line connecting to Sewaren, two 500 kV AC underground cables (to Deans & Larrabee stations), and necessary upgrades to the Sewaren Deans and Larrabee substations

**Scenarios Addressed:** 11

### Proposal Cost Estimate:

#683 – \$7.181 B



## Proposing Entity: Rise Light & Power (RILPOW)

### Proposal Description:

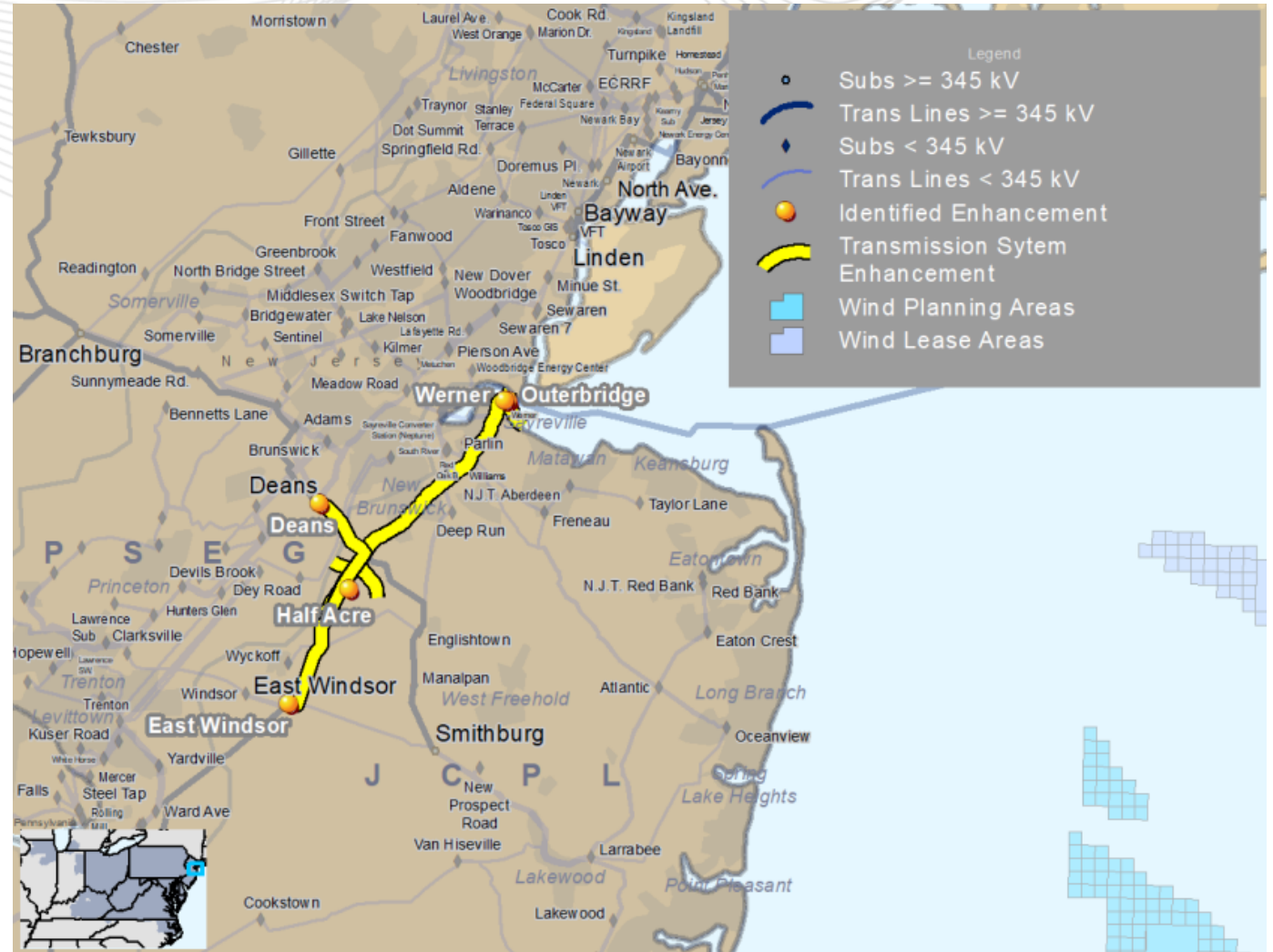
- Outerbridge Renewable Connector Projects (1,200–3,200 MW)
  - #582 – Base Offer 1: One 320 kV 1,200 MW onshore HVDC system
  - #490 – Base Offer 2: Two 320 kV 1,200 MW onshore HVDC systems
  - #376 – Add'l Offer A: Upgrade Werner station to enable 400 MW injection
  - #171 – Add'l Offer B: Upgrade Werner station to enable 800 MW injection
- Base Offers include new Outerbridge AC collector station to receive offshore cables, Outerbridge HVDC converter station(s), underground HVDC line(s), new Half Acre HVDC converter station(s), Half Acre AC switching station, tie-in to Deans-E.Windsor 500 kV

**Scenarios Addressed:** 3/14

### Proposal Cost Estimate:

#582 – \$1.035 B | #490 – \$1.732 B

#376 – \$67 M | #171 – \$109 M





Version No.	Date	Description
1	10/6/2022	<ul style="list-style-type: none"><li>• Original slides posted</li></ul>