

July 2016

New Jersey State Report

1. Planning

- Generation Portfolio Analysis
- Transmission Analysis
- Load Forecast
- Gas Pipeline Information

- **Existing Capacity:** Natural gas represents approximately 56 percent of the total installed capacity in New Jersey while coal represents approximately 12 percent. This differs from PJM where natural gas and coal are relatively even at 34 and 35 percent respectively.
- **Interconnection Requests:** Natural gas represents more than 96 percent of new interconnection requests in New Jersey.
- **Deactivations:** Approximately 2,500 MW of capacity in New Jersey retired in 2015. This represents more than 23 percent of the 10,800 MW that retired RTO-wide in 2015.
- **RTEP 2015:** New Jersey RTEP 2015 projects total \$2 billion of investment. 71 percent of that represents supplemental projects.
- **Load Forecast:** New Jersey load growth is nearly flat, averaging between .1 and .3 percent per year over the next 10 years. This aligns with PJM RTO load growth projections.
- **Natural Gas:** About 67 percent (6,600 MW) of New Jersey's natural gas generation is behind a local distribution company.



PJM operates and plans the bulk electric system in New Jersey, including facilities owned and operated by Atlantic City Electric Co., Jersey Central Power & Light, Linden Variable Frequency Transformer (VFT), Neptune Regional Transmission System, Public Service Electric & Gas Co.

Planning

Generation Portfolio Analysis

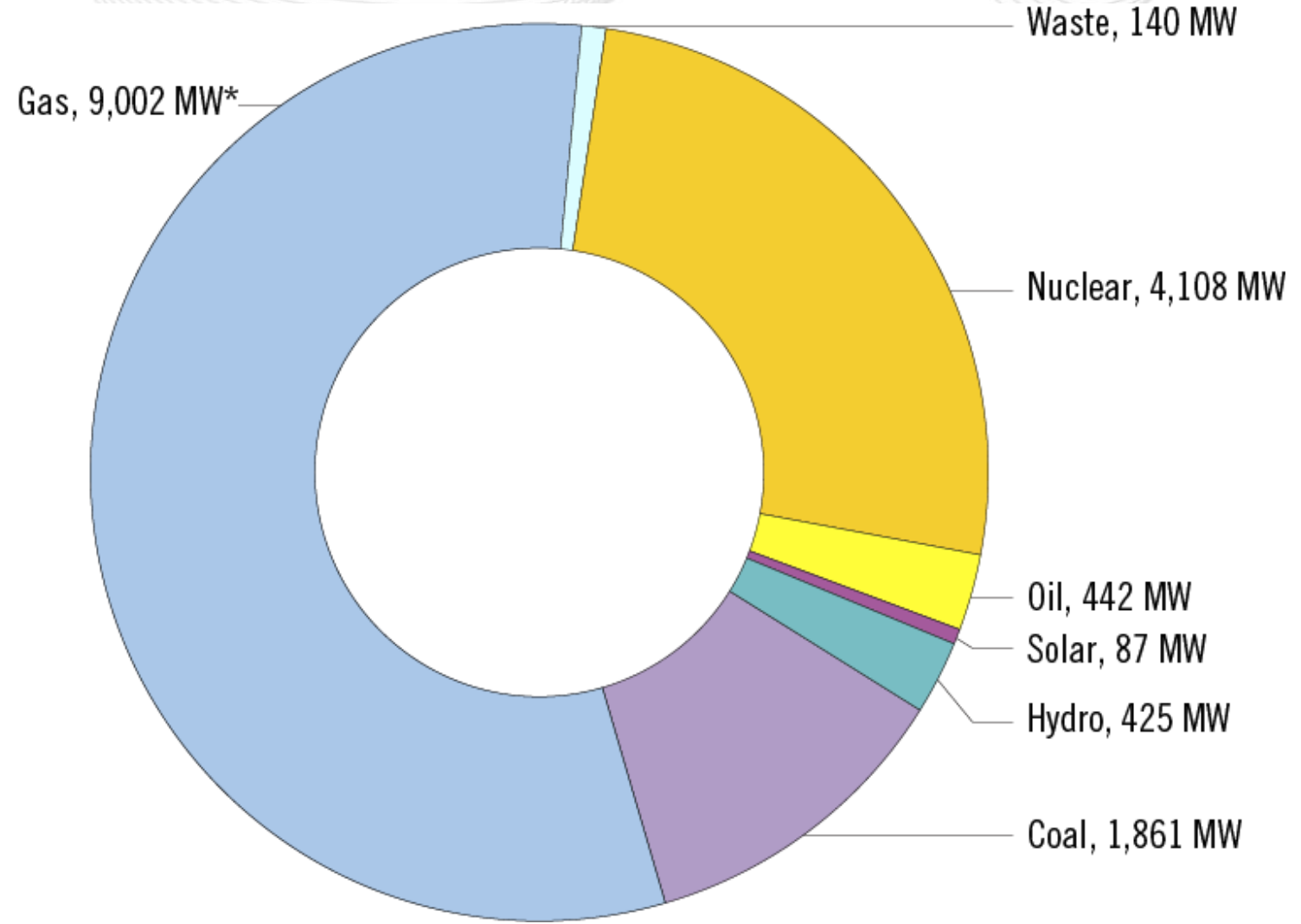
New Jersey - Existing Installed Capacity

(Capacity Rights, December 31, 2015)

Summary:

Natural gas represents approximately 56 percent of the total installed capacity in New Jersey while coal represents approximately 12 percent.

Overall in PJM, natural gas and coal are relatively even at 34 percent and 35 percent respectively.



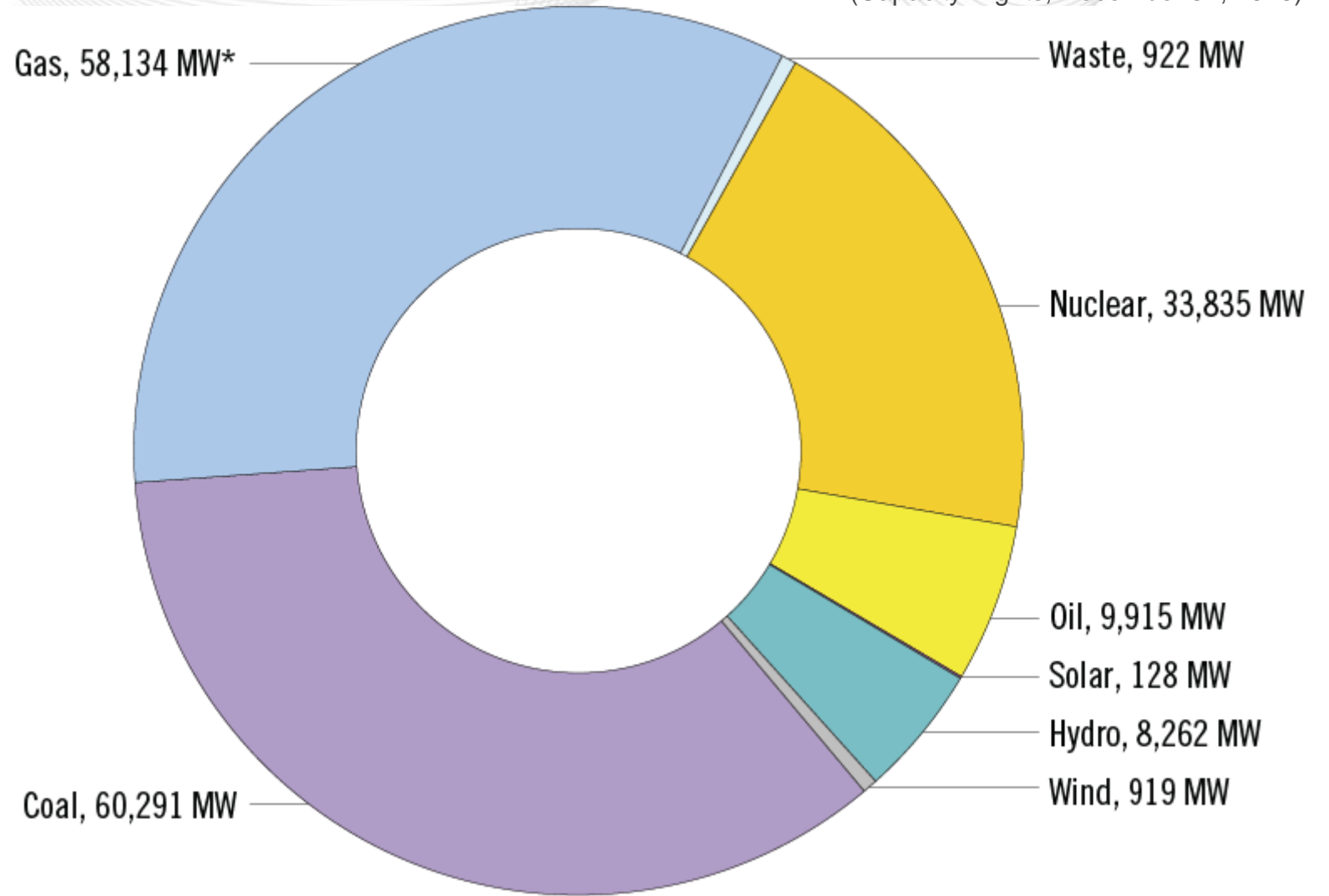
* Gas Contains

Natural Gas	8,956 MW
Other Gas	46 MW

PJM - Existing Installed Capacity

(Capacity Rights, December 31, 2015)

In PJM, natural gas and coal make up nearly 70 percent total installed capacity.



* Gas Contains

Natural Gas	57,735 MW
Other Gas	399 MW

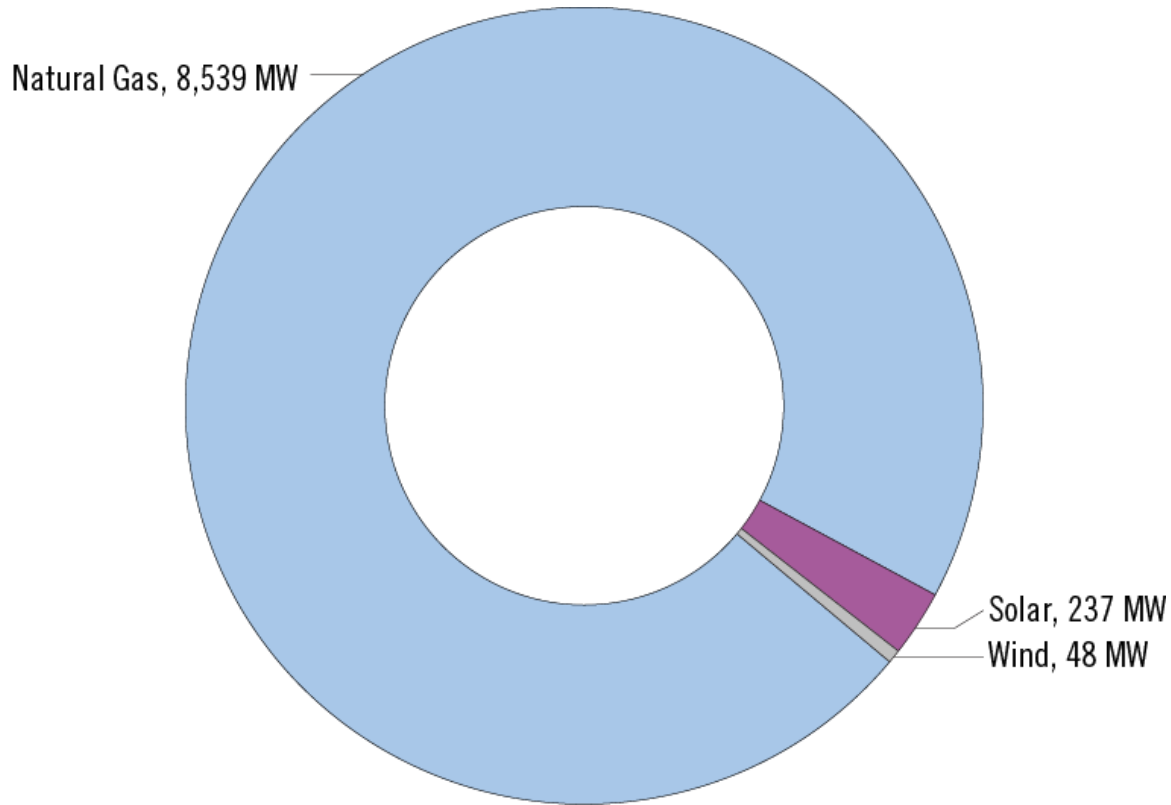


New Jersey - Interconnection Requests

(Requested Capacity Rights, December 31, 2015)

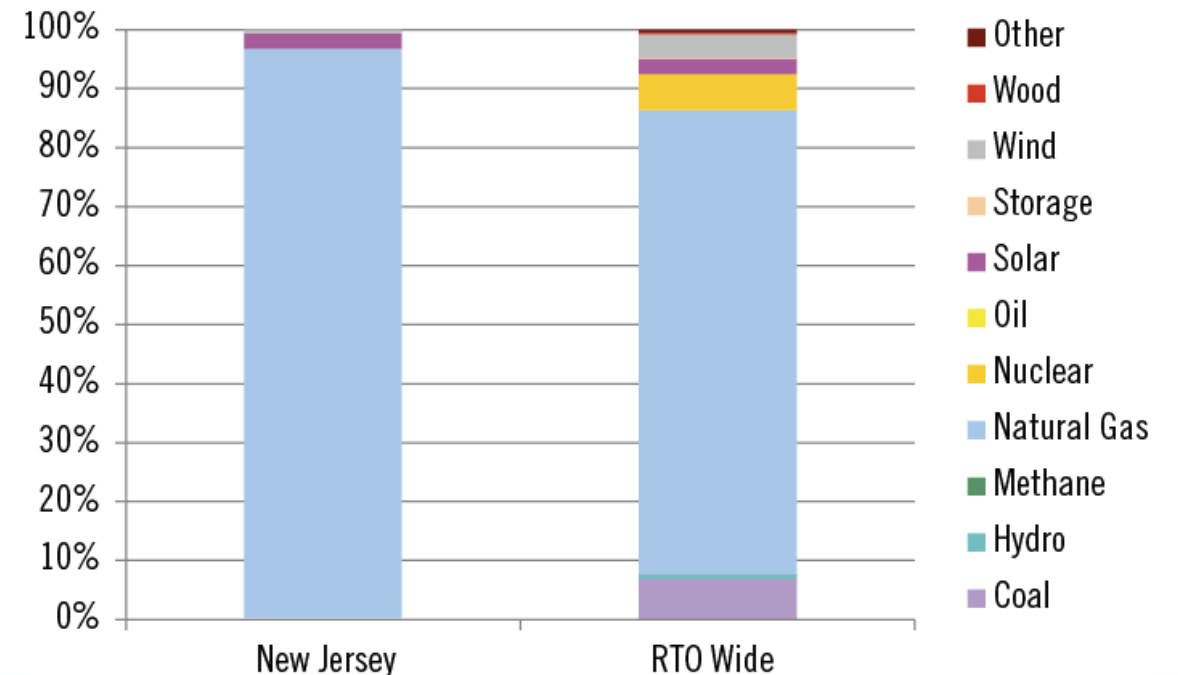
Natural gas represents more than 96 percent of new interconnection requests in New Jersey.

Total MW Capacity by Fuel Type



	MW	# of Projects
Active	6,848.5	54
Under Construction	1,053.2	63
Suspended	922.3	23
Total	8,824.1	140

Fuel as a Percentage of Projects in Queue



New Jersey - Interconnection Requests

(Requested Capacity Rights, December 31, 2015)

	Active		In Service		Suspended		Under Construction		Withdrawn		Total Sum	
	MW	# of Projects	MW	# of Projects	MW	# of Projects	MW	# of Projects	MW	# of Projects	MW	# of Projects
Biomass	0	0	0	0	0	0	0	0	10	1	10	1
Coal	0	0	24	1	0	0	0	0	15	1	39	2
Diesel	0	0	0	1	0	0	0	0	0	0	0	1
Hydro	0	0	20.5	2	0	0	0	0	1,001.12	2	1021.62	4
Methane	0	0	45.3	16	0	0	0	0	40.56	9	85.86	25
Natural Gas	6821.6	25	7,179	64	818	2	898.9	9	41,584.54	119	57,302.04	219
Nuclear	0	0	381	6	0	0	0	0	0	0	381	6
Oil	0	0	35	2	0	0	0	0	945	8	980	10
Solar	26.94	14	107.018	56	56.03	18	154.33	52	1,134.428	338	1,478.746	478
Storage	0	15	0	2	0	0	0	2	20	10	20	29
Wind	0	0	0	1	48.25	3	0	0	556.71	16	604.96	20
Wood	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	45.5	2	45.5	2
Total	6,848.54	54	7,791.818	151	922.28	23	1053.23	63	45,352.85	506	61,968.72	797



Following agreement (ISA/WMPA) execution, 1,143 MW of capacity withdrew from PJM's interconnection process. Another 1,976 MW have executed agreements but were not in service as of December 31, 2015. Overall, 14 percent of requested capacity MW reaches commercial operation.

New Jersey – 2015 Generation Deactivations

(MW Capacity, December 31, 2015)

Unit	MW Capacity	TO Zone	Age	Actual/Projected Deactivation Date
Cedar 1	44	AE	39	1/28/2015
Gilbert CT C1	23	JCPL	42	5/1/2015
Gilbert CT C2	25	JCPL	42	5/1/2015
Gilbert CT C3	25	JCPL	42	5/1/2015
Gilbert CT C4	25	JCPL	42	5/1/2015
Glen Gardner CT 1	20	JCPL	40	5/1/2015
Glen Gardner CT 2	20	JCPL	40	5/1/2015
Glen Gardner CT 3	20	JCPL	40	5/1/2015
Glen Gardner CT 4	20	JCPL	40	5/1/2015
Glen Gardner CT 5	20	JCPL	40	5/1/2015
Glen Gardner CT 6	20	JCPL	40	5/1/2015
Glen Gardner CT 7	20	JCPL	40	5/1/2015
Glen Gardner CT 8	20	JCPL	40	5/1/2015
Werner CT C1	53	JCPL	40	5/1/2015
Werner CT C2	53	JCPL	40	5/1/2015
Werner CT C3	53	JCPL	40	5/1/2015
Werner CT C4	53	JCPL	40	5/1/2015
Cedar 2	22	AE	39	5/1/2015

Summary:

- Approximately 2,500 MW of capacity in NJ retired in 2015. This represents more than 23 percent of the 10,800 MW that retired RTO-wide in 2015.
- The average unit age was 41 years.
- 1,230 MW of capacity in NJ announced in 2015 plans to retire; roughly half in 2018, and half in 2019.



New Jersey – 2015 Generation Deactivations

(MW Capacity, December 31, 2015)

Unit	MW Capacity	TO Zone	Age	Actual/Projected Deactivation Date
Middle Energy Center 1	19	AE	42	5/1/2015
Middle Energy Center 2	20	AE	42	5/1/2015
Middle Energy Center 3	36	AE	41	5/1/2015
Missouri Ave CT B	20	AE	42	5/1/2015
Missouri Ave CT C	20	AE	42	5/1/2015
Missouri Ave CT D	20	AE	42	5/1/2015
Kearny 9	21	PSEG	43	8/4/2014
Burlington 8	21	PSEG	44	6/1/2015
National Park 1	21	PSEG	42	6/1/2015
Mercer 3	115	PSEG	44	6/1/2015
Sewaren 6	111	PSEG	46	6/1/2015
Essex 12 (#121)	46	PSEG	41	6/1/2015
Essex 12 (#122)	46	PSEG	41	6/1/2015
Essex 12 (#123)	46	PSEG	41	6/1/2015
Essex 12 (#124)	46	PSEG	41	6/1/2015
Burlington 11 #111	46	PSEG	40	6/1/2015
Burlington 11 #112	46	PSEG	40	6/1/2015
Burlington 11 #113	46	PSEG	40	6/1/2015
Burlington 11 #114	46	PSEG	40	6/1/2015
Edison 1 #11	42	PSEG	41	6/1/2015



New Jersey – 2015 Generation Deactivations

(MW Capacity, December 31, 2015)

Unit		MW Capacity	TO Zone	Age	Actual/Projected Deactivation Date
Edison 1	#12	42	PSEG	41	6/1/2015
Edison 1	#13	42	PSEG	41	6/1/2015
Edison 1	#14	42	PSEG	41	6/1/2015
Edison 2	#21	42	PSEG	41	6/1/2015
Edison 2	#22	42	PSEG	41	6/1/2015
Edison 2	#23	42	PSEG	41	6/1/2015
Edison 2	#24	42	PSEG	41	6/1/2015
Edison 3	#31	42	PSEG	41	6/1/2015
Edison 3	#32	42	PSEG	41	6/1/2015
Edison 3	#33	42	PSEG	41	6/1/2015
Edison 3	#34	42	PSEG	41	6/1/2015
Essex 10	#101	42	PSEG	41	6/1/2015
Essex 10	#102	42	PSEG	41	6/1/2015
Essex 10	#103	42	PSEG	41	6/1/2015
Essex 10	#104	42	PSEG	41	6/1/2015
Essex 11	#111	46	PSEG	41	6/1/2015
Essex 11	#112	46	PSEG	41	6/1/2015
Essex 11	#113	46	PSEG	41	6/1/2015
Essex 11	#114	46	PSEG	41	6/1/2015

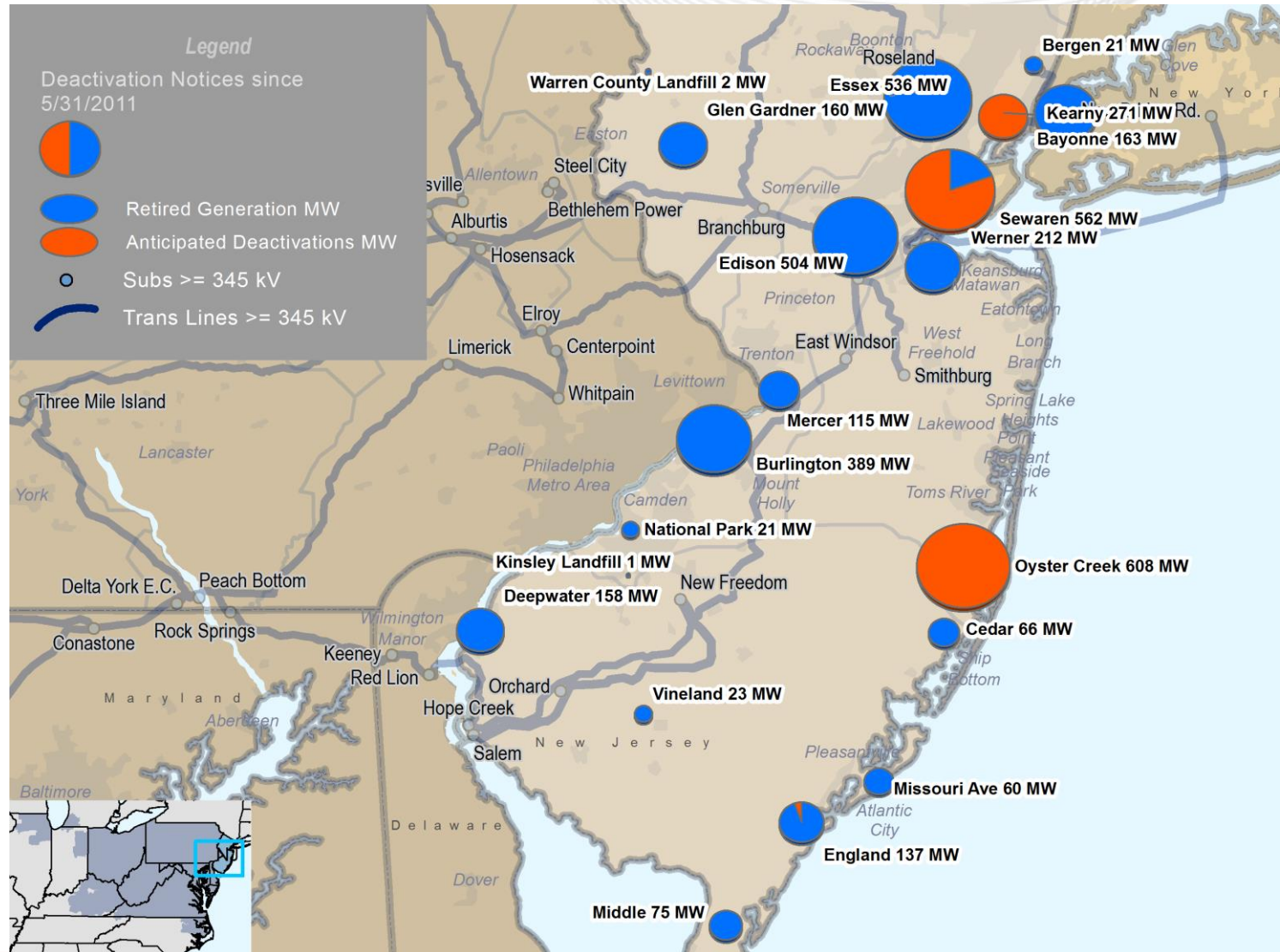
New Jersey – 2015 Generation Deactivations

(MW Capacity, December 31, 2015)

Unit	MW Capacity	TO Zone	Age	Actual/Projected Deactivation Date
Essex 10 #102	42	PSEG	41	6/1/2015
Essex 10 #103	42	PSEG	41	6/1/2015
Essex 10 #104	42	PSEG	41	6/1/2015
Essex 11 #111	46	PSEG	41	6/1/2015
Essex 11 #112	46	PSEG	41	6/1/2015
Essex 11 #113	46	PSEG	41	6/1/2015
Essex 11 #114	46	PSEG	41	6/1/2015
Generation announcing retirement in 2015				
BL England Diesel(s){IC1, IC2, IC3, IC4}	8	AE	51	5/31/2016
Sewaren 1	103	PSEG	66	6/1/2018
Sewaren 2	118	PSEG	66	6/1/2018
Sewaren 3	106	PSEG	66	6/1/2018
Sewaren 4	124	PSEG	66	6/1/2018
Bayonne Cogen Plant (CC)	163	PSEG	12	11/1/2018
Oyster Creek Nuclear Generating Station	607.7	JCPL	46	12/31/2019

New Jersey – 2015 Generation Deactivations

(MW Capacity, December 31, 2015)



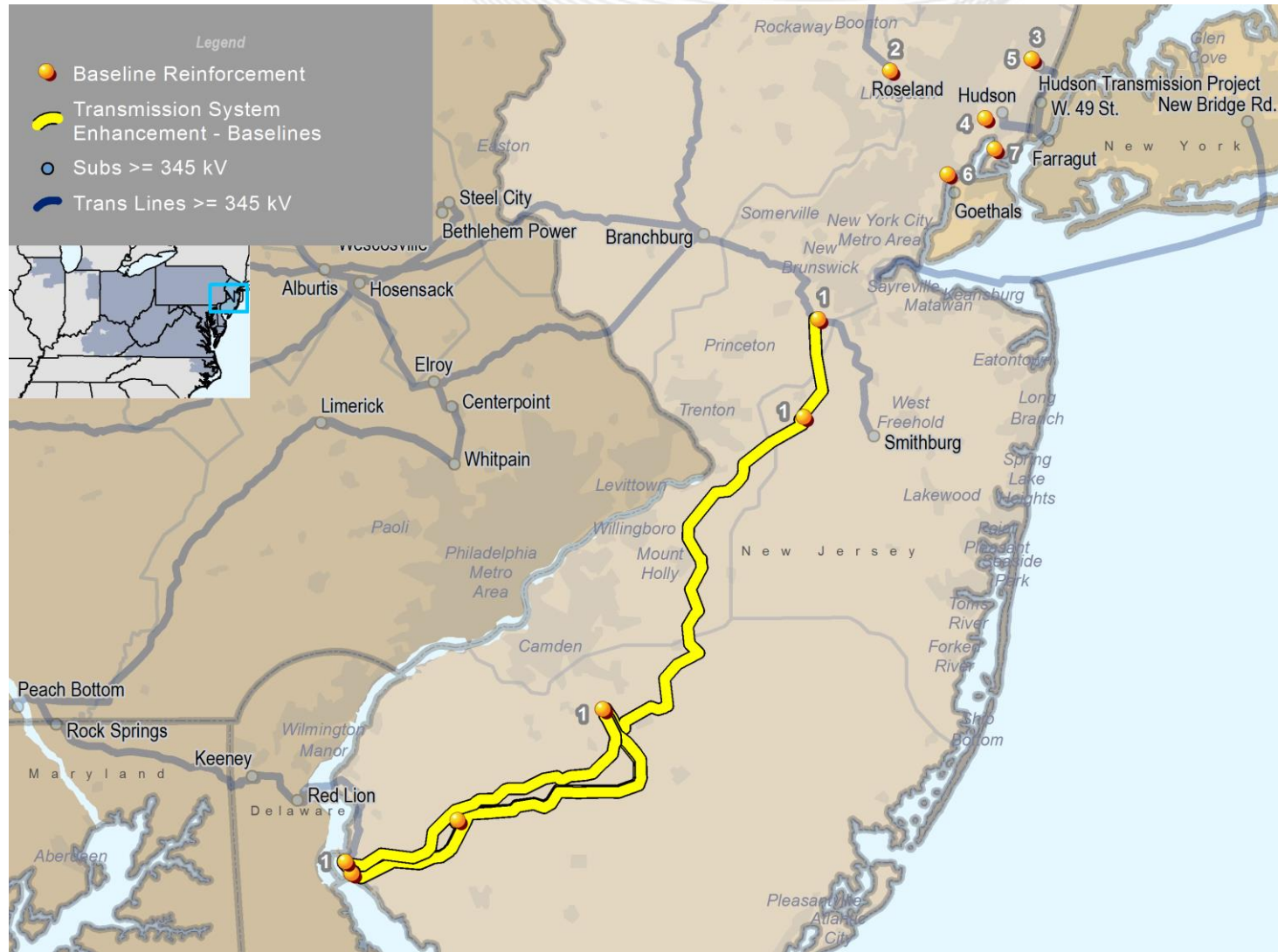
This map illustrates the known generating unit deactivation request in New Jersey between January 1, 2015 and December 31, 2015.

Planning

Transmission Infrastructure Analysis

New Jersey - RTEP Baseline Projects

(Approved in 2015, greater than \$10 million)



Baseline Projects are transmission enhancements identified as part of reliability criteria tests, operational performance issues and market efficiency studies that identify upgrade need driven by thermal, voltage, short circuit, stability and light load issues

New Jersey - RTEP Baseline Projects

(Approved in 2015, greater than \$10 million)

Map ID	Project ID	Project	NJ Baseline Project Driver					Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
			Baseline Load Growth / Deliverability & Reliability	Congestion Relief – Economic	Operational Performance	Generator Deactivation	TO Criteria Violation				
1	b2633.1	Build a new 230 kV transmission line between Salem and Silver Run.			•			4/1/2019	\$146.00	LS Power	4/28/2015
	b2633.3	Install an SVC at New Freedom 500 kV substation.			•			4/1/2019	\$34.45	PSE&G	4/28/2015
	b2633.4	Add a new 500 kV bay at Salem (Expansion of Salem substation).			•			4/1/2019	\$7.35	PSE&G	4/28/2015
	b2633.5	Add a new 500/230 kV autotransformer at Salem.			•			4/1/2019	\$60.65	PSE&G	4/28/2015
	b2633.6	Implement high speed relaying utilizing OPGW on Deans-East Windsor 500 kV and East Windsor - New Freedom 500 kV lines.			•			4/1/2019	\$1.00	JCPL	4/28/2015

New Jersey - RTEP Baseline Projects

(Approved in 2015, greater than \$10 million)

Map ID	Project ID	Project	NJ Baseline Project Driver					Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
			Baseline Load Growth / Deliverability & Reliability	Congestion Relief - Economic	Operational Performance	Generator Deactivation	TO Criteria Violation				
1	b2633.6.1	Implement high speed relaying utilizing OPGW on East Windsor - New Freedom 500 kV line at East Windsor Substation.			•			4/1/2019	\$0.50	JCPL	4/28/2015
	b2633.8	Implement high speed relaying utilizing OPGW on Salem - Orchard 500 kV, Hope Creek - New Freedom 500 kV, New Freedom - Salem 500 kV, Hope Creek - Salem 500 kV, and New Freedom - Orchard 500 kV lines.			•			4/1/2019	\$23.50	PSE&G	4/28/2015
	b2633.9	Implement changes to the tap settings for the three Artificial Island unit's step up transformers.			•			4/1/2019	\$0.10	PSE&G	4/28/2015

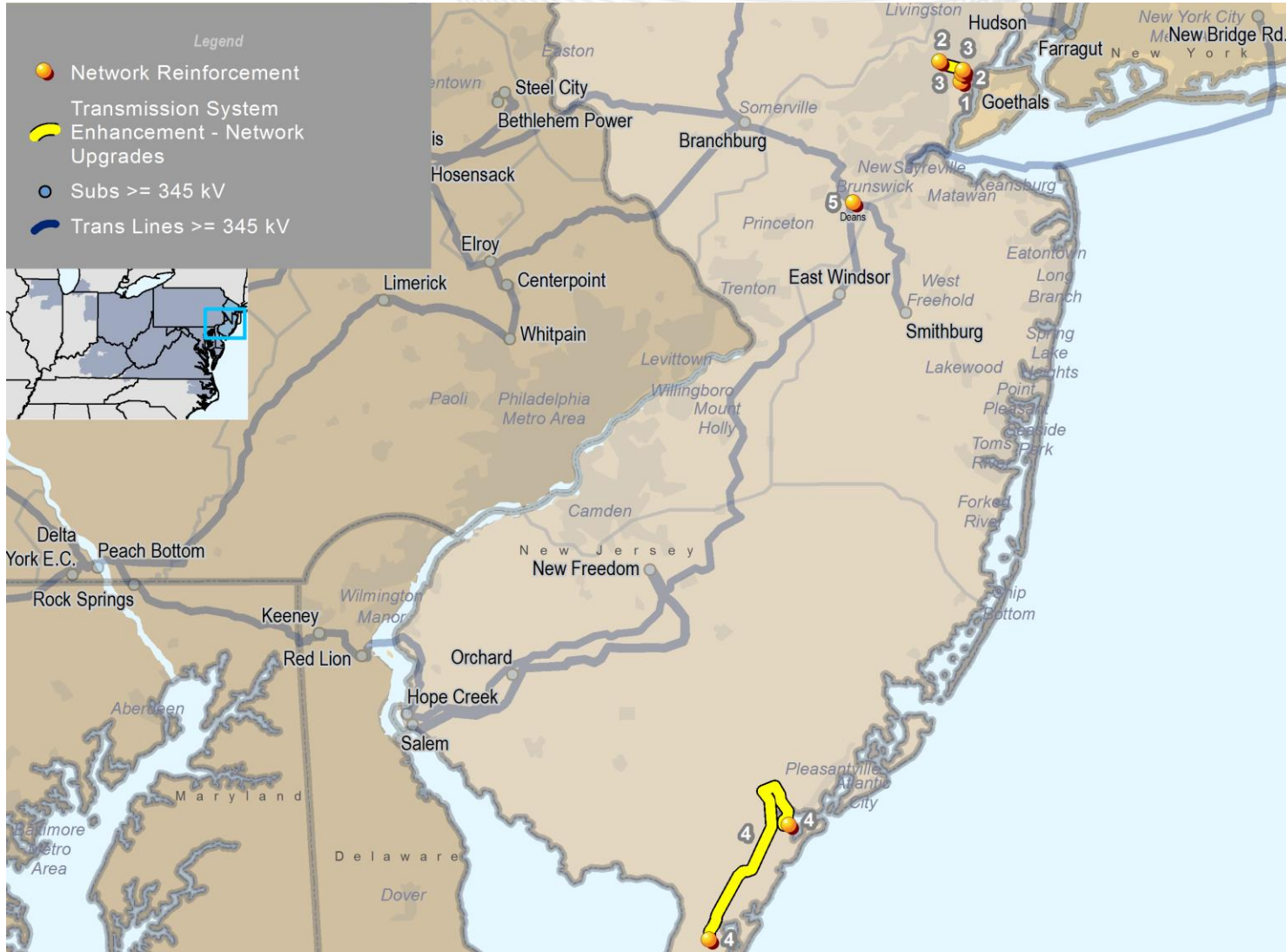
New Jersey - RTEP Baseline Projects

(Approved in 2015, greater than \$10 million)

Map ID	Project ID	Project	NJ Baseline Project Driver				Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
			Baseline Load Growth / Deliverability & Reliability	Congestion Relief – Economic	Operational Performance	Generator Deactivation				
2	b2702	Install a 350 MVAR reactor at Roseland 500 kV.			•		6/1/2016	\$50.10	PSE&G	10/8/2015
3	b2703	Install a 100 MVAR reactor at Bergen 230 kV.			•		6/1/2016	\$10.60	PSE&G	10/8/2015
4	b2704	Install a 150 MVAR reactor at Essex 230 kV.			•		6/1/2016	\$16.70	PSE&G	10/8/2015
5	b2705	Install a 200 MVAR reactor (variable) at Bergen 345 kV.			•		6/1/2016	\$38.30	PSE&G	10/8/2015
6	b2706	Install a 200 MVAR reactor (variable) at Bayway 345 kV.			•		6/1/2016	\$26.60	PSE&G	10/8/2015
7	b2707	Install a 100 MVAR reactor at Bayonne 345 kV.			•		6/1/2016	\$15.40	PSE&G	10/8/2015

New Jersey - RTEP Network Projects

(Approved in 2015, greater than \$10 million)



Network Projects are transmission upgrades identified as part of the interconnection process System Impact Studies. Network upgrades are necessary to interconnect new generation and merchant transmission facilities to the existing transmission grid or to provide new long-term firm transmission service.

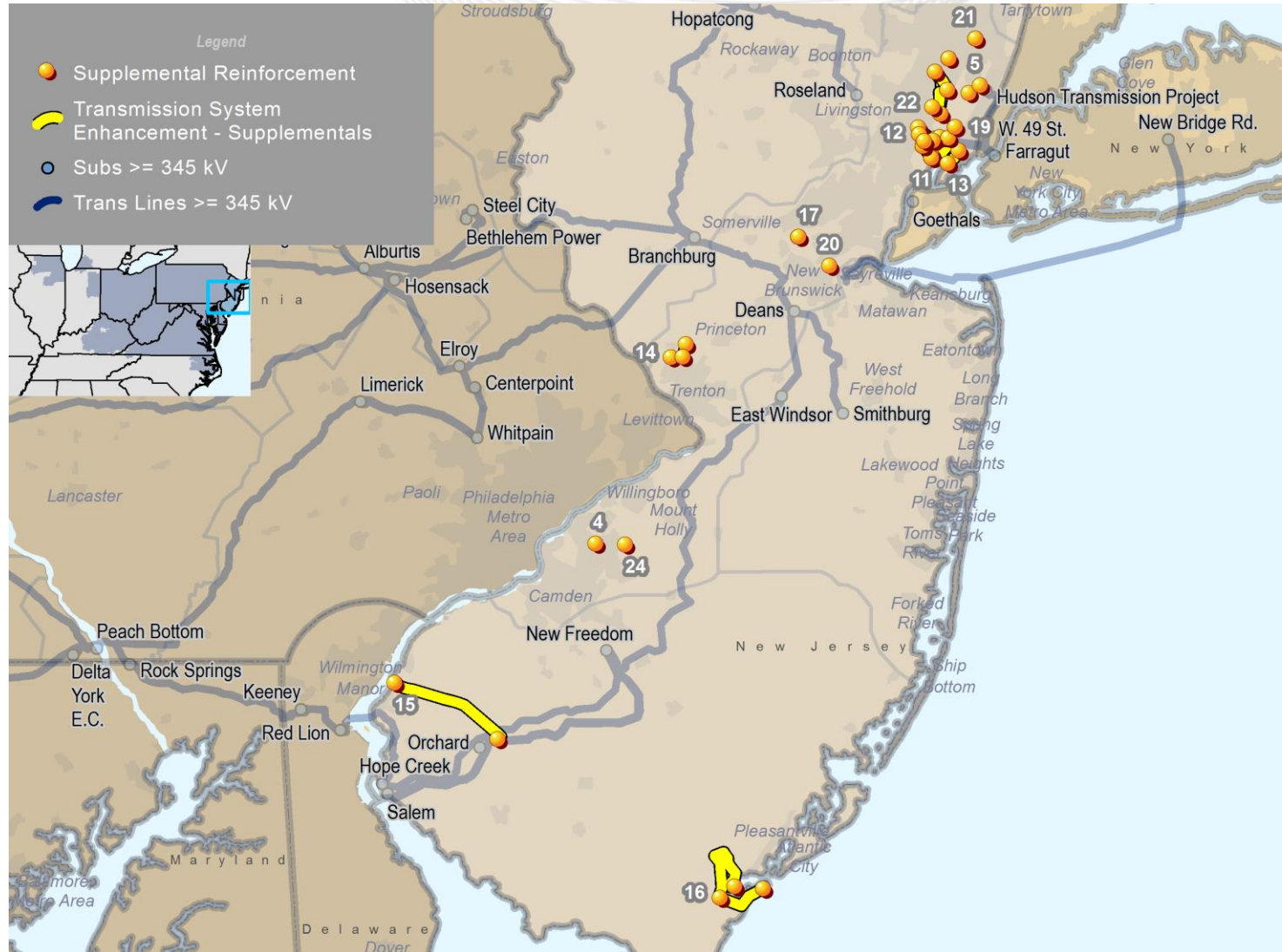
New Jersey - RTEP Network Projects

(Approved in 2015, greater than \$10 million)

			NJ Network Project Drivers						
Map ID	Project ID	Project	Generation Interconnection	Merchant Transmission Interconnection	Long-Term Firm Transmission Service	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
1	n4275	Install a new 3 breaker ring bus on the S-2271 line.	Z1-109			6/1/2016	\$16.60	PSE&G	9/10/2015
2	n4276	Reconductor the VFT-Warinanco 230 kV line.	Z1-109			6/1/2016	\$36.40	PSE&G	9/10/2015
3	n4278	Reconductor the Warinanco-Aldene 230 kV line.	Z1-116			6/1/2017	\$65.70	PSE&G	9/10/2015
4	n4297	Rebuild the BL England-Middle Tap 138 kV line. The new emergency rating will be 286 MVA.	Y1-077			6/1/2015	\$19.50	AEC	9/10/2015
5	n4301	Construct new bay at Deans substation and install 2 500 kV breakers for a new position to connect the X1-078 converter station.		X1-078		5/1/2016	\$20.00	PSE&G	9/10/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)



New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
1	s0688	Upgrade the B-1328/C-1355 (Foundry St.- ECRRF-Essex 138 kV circuit).	12/31/2018	\$27.70	PSE&G	3/5/2015
2	s0876	Install fourth bay and two 69/26 kV transformers at Carlstadt substation.	6/1/2016	\$22.10	PSE&G	3/5/2015
3	s0877	Replace Saddle Brook T-1 and T-4 138/69 kV transformers.	12/31/2017	\$12.50	PSE&G	3/5/2015
4	s0878	Replace Maple Shade T-2 and T-3 69/13 kV transformers.	12/31/2017	\$12.50	PSE&G	3/5/2015
5	s0879	Construct Bergen 138 kV ring bus and upgrade to 80 kA.	12/31/2017	\$27.50	PSE&G	3/5/2015
6	s0928.1	Modify P.V.S.C. 138 kV station and P.V.S.C.- Bayonne 138 kV circuit to 69 kV operation.	6/1/2018	\$49.60	PSE&G	7/29/2015
	s0928.2	Install two new circuit breakers at P.V.S.C.	6/1/2018		PSE&G	7/29/2015
	s0928.3	Build a new 69 kV circuit from P.V.S.C.- Federal Square and P.V.S.C.- Foundary Street.	6/1/2018		PSE&G	7/29/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
7	s0929.1	Build 69 kV ring bus at Federal Square and install one 138/69 kV transformer.	6/1/2017	\$66.20	PSE&G	7/29/2015
	s0929.2	Build 69 kV circuit from Federal Square to Foundry Street.	6/1/2017		PSE&G	7/29/2015
8	s0930.1	Build 69 kV ring bus at Foundry Street and install one 138/69 kV transformer.	6/1/2017	\$66.90	PSE&G	7/29/2015
	s0930.2	Build 69 kV circuit from Foundry Street to Kearny.	6/1/2017		PSE&G	7/29/2015
9	s0931	Build 69 kV circuit from Clay Street to Federal Square.	6/1/2017	\$36.90	PSE&G	7/29/2015
10	s0933.1	Replace the Saddle Brook T2 230/13 kV transformer.	12/31/2018	\$5.00	PSE&G	7/29/2015
	s0933.2	Replace the Saddle Brook T3 230/13 kV transformer.	12/31/2018	\$5.00	PSE&G	7/29/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
11	s0934.1	Build a new Port Street 69 kV substation.	6/1/2019	\$67.50	PSE&G	7/29/2015
	s0934.2	Install two Port Street 69/13 kV transformers.	6/1/2019		PSE&G	7/29/2015
	s0934.3	Loop the Federal Square-P.V.S.C. 69 kV circuit in to the Port Street 69 kV station.	6/1/2019		PSE&G	7/29/2015
	s0934.4	Build a new Port Street-Ironbound 69 kV circuit.	6/1/2019		PSE&G	7/29/2015
12	s0938.1	Build a new 69 kV substation at McCarter by installing 2 breaker and a half bay and one 230/69 kV transformer.	6/1/2018	\$38.50	PSE&G	7/29/2015
	s0938.2	Build a new 69 kV circuit from McCarter to Branch Brook.	6/1/2018		PSE&G	7/29/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
13	s0939.1	Convert the 138 kV Bayonne station to 69 kV operation and install one 345/69 kV transformer.	6/1/2018	\$95.00	PSE&G	7/29/2015
	s0939.2	Replace the Greenville station with 69 kV six breaker ring bus configuration and install three 69/4 kV transformers.	6/1/2018		PSE&G	7/29/2015
	s0939.3	Build two 69 kV circuits from Greenville to Bayonne.	6/1/2018		PSE&G	7/29/2015
14	s0940.1	Build Hopewell 230/69 kV station by tapping the Lawrence-Pleasant Valley 230 kV circuit and installing two 230/69 kV transformers, and building 69 kV breaker and half configuration.	6/1/2018	\$110.00	PSE&G	7/29/2015
	s0940.2	Reconfigure the Transco 69 kV to five breaker ring bus.	6/1/2018		PSE&G	7/29/2015
	s0940.3	Build 69 kV circuit from Transco to Mt. Rose and install 36 MVAR capacitor at Mt. Rose.	6/1/2018		PSE&G	7/29/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
15	s0978	Rebuild the 1404 and 1405 138 kV double circuit from Deepwater – Upper Pittsgrove (17.47 mi).	12/31/2015	\$23.80	AEC	7/29/2015
16	s0980.1	Upgrade the Ocean City 12 kV to 138/12 kV substation, and install two 138/12 kV transformers.	12/30/2019	\$64.00	AEC	7/29/2015
	s0980.2	Build two new 138 kV feeders from BL England and Merion to the Ocean City substation.	9/28/2019		AEC	7/29/2015
	s0980.3	Establish a new Ocean City terminal at BL England 138 kV substation.	12/30/2020		AEC	7/29/2015
	s0980.4	Establish a new Ocean City terminal at Merion 138 kV substation.	12/30/2020		AEC	7/29/2015
17	s1010.1	Purchase 750 MVA 345/230 kV autotransformer (Special Divided or Dissociated Phases).	6/1/2016	\$11.50	PSE&G	11/5/2015
	s1010.2	Purchase 750 MVA, 345/230 kV autotransformer (Conventional 3-Phase).	6/1/2018	\$11.50	PSE&G	11/5/2015



New Jersey - NJ TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
17	s1010.3	Purchase 750 MVA 345/138 kV autotransformer (Special Divided or Dissociated Phases).	6/1/2018	\$11.00	PSE&G	12/8/2015
	s1010.4	Purchase 750 MVA 345/138 kV autotransformer (Conventional 3-Phase).	6/1/2018	\$11.00	PSE&G	12/8/2015
	s1010.5	Purchase 300 MVA 345/69 kV autotransformer.	6/1/2018	\$7.40	PSE&G	12/8/2015
	s1010.6	Purchase 150 MVA, 345/27.72/13.8 kV transformer.	6/1/2018	\$7.00	PSE&G	12/8/2015
	s1010.7	Purchase 45 MVA 345/13.8 kV transformer.	6/1/2018	\$5.50	PSE&G	12/8/2015
18	s1015.1	Build a new Kearny breaker and a half design 69 kV switching station consisting of 3 bays with 9 circuit breakers and space for a fourth bay.	6/1/2018	\$125.10	PSE&G	12/8/2015
	s1015.2	Install two Kearny 230/69 kV transformers.	6/1/2018		PSE&G	12/8/2015

New Jersey - TO Supplemental Projects

(Notification in 2015; greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
18	s1015.3	Install a new bay at the Kearny 230 kV station for the new Kearny 230/69 kV transformers.	6/1/2018	\$125.10	PSE&G	12/8/2015
19	s1016.1	Build a new Madison 230 kV substation with three breaker ring bus configuration by looping the R-2270 230 kV circuit.	6/1/2018	\$124.63	PSE&G	12/8/2015
	s1016.2	Build a new Madison 69 kV substation with eight breaker ring configuration and install one 230/69 kV autotransformer.	6/1/2018		PSE&G	12/8/2015
	s1016.3	Install four 69/4 kV transformers at new Madison station.	6/1/2018		PSE&G	12/8/2015
20	s1018	Install Edison Control House.	1/31/2017	\$10.00	PSE&G	12/8/2015
21	s1019.1	Build a new New Milford 69 kV substation with ring bus configuration.	6/1/2019	\$79.70	PSE&G	12/8/2015

New Jersey - TO Supplemental Projects

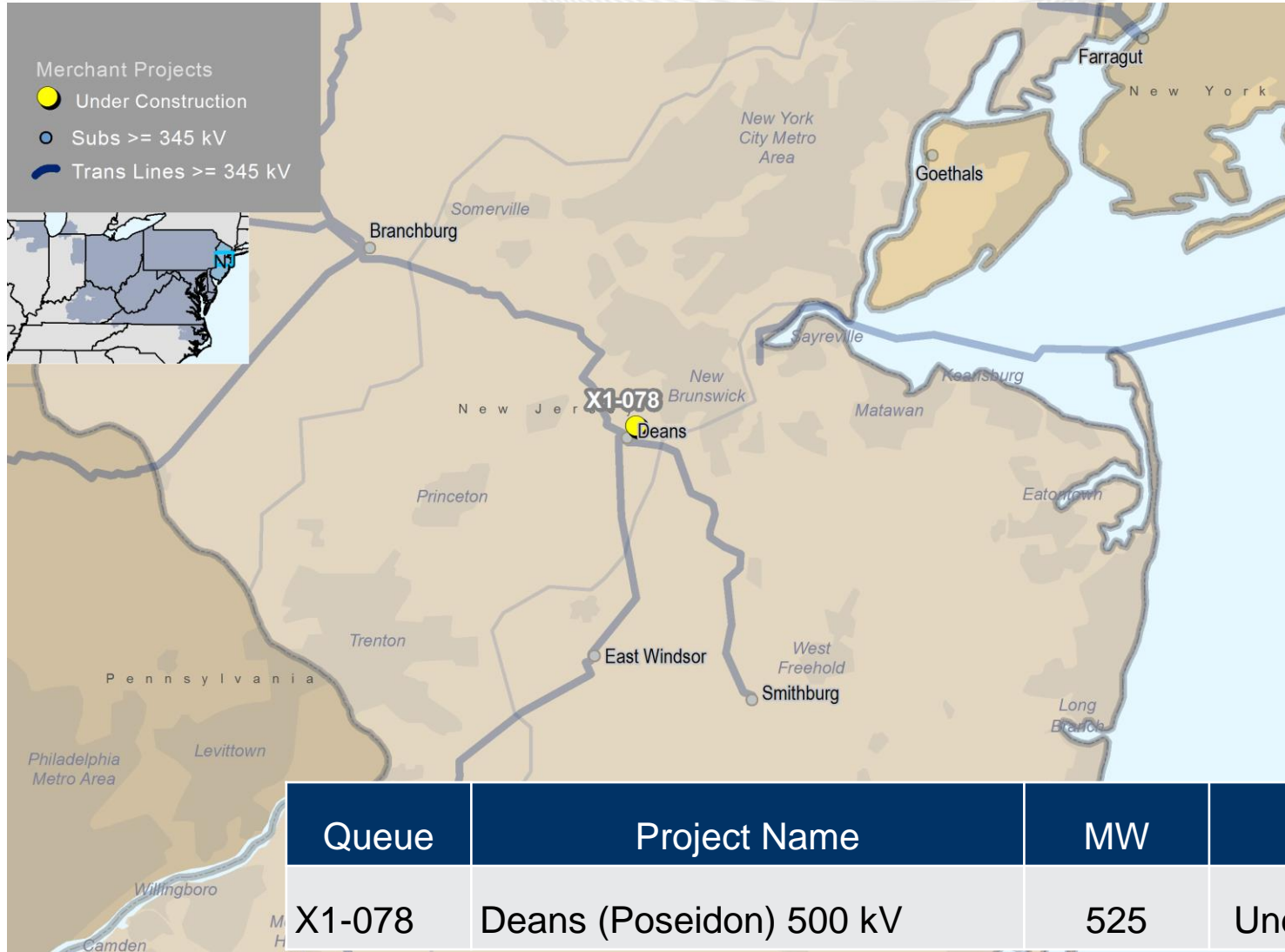
(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
21	s1019.2	Install 230/69 kV transformer at New Milford substation.	6/1/2019	\$79.70	PSE&G	12/8/2015
	s1019.3	Build a new 69 kV circuit from New Milford to Dumont and install 18 MVAR capacitor at Dumont 69 kV station.	6/1/2019		PSE&G	12/8/2015
22	s1021.1	Build a new Kingsland 69 kV substation and install 230/69 kV transformer.	6/1/2019	\$138.50	PSE&G	12/8/2015
	s1021.2	Re-build the Kingsland 230 kV 1 to five breaker ring bus configuration.	6/1/2019		PSE&G	12/8/2015
	s1021.3	Build a new Van Winkle 69 kV substation with breaker and half configuration and install three 69/4 kV transformers.	6/1/2019		PSE&G	12/8/2015
	s1021.4	Build a new 69 kV circuit from Kingsland to Harrison station.	6/1/2019		PSE&G	12/8/2015
	s1021.5	Build a new 69 kV circuit from Kingsland to Van Winkle.	6/1/2019		PSE&G	12/8/2015

New Jersey - TO Supplemental Projects

(Notification in 2015, greater than \$10 million)

			NJ Supplemental Projects			
Map ID	Project ID	Project	Date	Cost (\$M)	TO Zone(s)	2015 TEAC Review
22	s1021.6	Build a new 69 kV circuit from Van Winkle to Belleville Switch.	6/1/2019	\$138.50	PSE&G	12/8/2015
	s1021.7	Build a new 69 kV circuit from Van Winkle to E. Rutherford switch.	6/1/2019		PSE&G	12/8/2015
23	s1022.1	Build a new Ironbound 69kV Substation.	6/1/2019	\$75.00	PSE&G	12/8/2015
	s1022.2	Build a new 69 kV circuit from Ironbound to Federal Square.	6/1/2019		PSE&G	12/8/2015
	s1022.3	Build a new 69 kV circuit from Ironbound to Foundry Street.	6/1/2019		PSE&G	12/8/2015
24	s1023	Replace the existing limiting Locust Street two 69/4 kV and three 69/13 kV unit transformers with two 45/60 MVA 69/13 kV transformers.	1/31/2017	\$14.82	PSE&G	12/8/2015



As of December 31, 2015, PJM's queue contained one merchant transmission interconnection request project.

Queue	Project Name	MW	Status	Schedule	TO
X1-078	Deans (Poseidon) 500 kV	525	Under Construction	05/01/17	PSE&G

Planning

Load Forecast

Transmission Owner	Summer Peak (MW)			Winter Peak (MW)		
	2016	2026	Growth Rate (%)	2015/16	2025/26	Growth Rate (%)
Atlantic City Electric Company	2,524	2,502	-0.1%	1,626	1,624	0.0%
Jersey Central Power and Light	5,968	6,156	0.3%	3,766	3,892	0.3%
Public Service Electric and Gas Company	10,090	10,222	0.1%	6,712	6,904	0.3%
Rockland Electric Company	407	410	0.1%	232	234	0.1%
PJM RTO	130,243	140,912	0.8%	152,131	161,891	0.6%

Note: The improved load forecast methodology was used to develop the 2016 and beyond load forecast. This methodology accounts for energy efficiency and utilizes more current weather data.

Operations

Gas Pipeline Information

Gas Generators		Dual Fuel Capable (MW)	Total Generator (MW)
Connected to Interstate Pipelines		300	3,300 (33%)
Behind the Local Distribution Company		4,700	6,600 (67%)
Total Gas-Fired Generators		5,000	9,900
Interstate Pipelines:		Local Distribution Companies	
Columbia Gas Transmission (COL)		South Jersey Gas	
Transcontinental – Williams (TRANSCO)		New Jersey Natural Gas	
		Elizabethtown Gas	
		Public Service Enterprise Group (PSEG)	