

# Queue Interconnection Studies of Projects Potentially Affecting Neighboring Systems

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*IPSAC WebEx*

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# Summary

- Projects in the respective ISO/RTO interconnection queues may have potential interregional effects on neighboring systems
  - This requires coordination of studies across ISO/RTO borders
- The Joint ISO/RTO Planning Committee continues to
  - Coordinate system data bases and models
  - Identify and evaluate the performance of projects affecting interregional system performance
- The ISO/RTO interconnection queues can be found at:
  - <https://www.iso-ne.com/irq>
  - <https://www.nyiso.com/interconnections>
  - <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx>
- Several projects will now be discussed with the IPSAC
  - Slides show the effective date of April 1, 2023 for every ISO/RTO Queue
  - Changes from the December 5, 2022 IPSAC meeting are shown in red

# NYISO Interconnection Queue Projects with Potential ISO-NE/PJM Impact

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
<b>Empire State Connector HVDC</b>	<b>506</b>	<b>E,J</b>	<b>ISO-NE / PJM</b>	<b>10/2025</b>
National Grid Segment B Knickerbocker-PV	543	F, G	ISO-NE / PJM	12/2023
LS Power Segment A Double Circuit	556	E, F	ISO-NE / PJM	06/2023
NS Power Express	631	J	ISO-NE/PJM	10/2025
Renovo Energy Center	654	C	PJM	12/2024
CH Uprate	887	J	ISO-NE/PJM	<b>05/2026</b>
Barrett Ridge Energy - PARs	1013	G	PJM	04/2024
Northern New York Priority Transmission Project (NNYPTP)	1125	D,E	ISO-NE	12/2025
CPNY	1167	E,J	ISO-NE / PJM	06/2026
<b>NY Interconnection 2</b>	<b>1206</b>	<b>J</b>	<b>PJM</b>	<b>06/2027</b>
NY Interconnection 1	1207	J	PJM	06/2027
Downstate Clean Powerlink	1273	I,J,K	ISO-NE / PJM	12/2028
Propel NY Energy - Base Solution 2	1274	I,J,K	ISO-NE / PJM	12/2028
Propel NY Energy - Base Solution 4	1275	J, K	ISO-NE / PJM	12/2028
Propel NY Energy - Base Solution 1	1276	I,J,K	ISO-NE / PJM	12/2028
Propel NY Energy - Base Solution 3	1277	I,J,K	ISO-NE / PJM	12/2028
New York Renewable Connect - Core 1	1278	I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Core 2	1279	I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Core 3	1280	I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Core 4	1281	I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Core 5	1282	I,J,K	ISO-NE / PJM	12/2030

# NYISO Interconnection Queue Projects with Potential ISO-NE/PJM Impact (Cont.)

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
New York Renewable Connect - Core 6	1283	I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Core 7	1284	H,I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Enhanced 1	1285	H,I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Enhanced 2	1286	G,H,I,J,K	ISO-NE / PJM	12/2030
New York Renewable Connect - Plus 3	1287	I,J,K	ISO-NE / PJM	12/2030
CPNY-X	1288	E,J	ISO-NE / PJM	12/2026
Propel NY Energy - Alternate Solution 5	1289	I,J,K	ISO-NE / PJM	12/2028
Propel NY Energy - Alternate Solution 6	1290	I,J,K	ISO-NE / PJM	12/2030
Propel NY Energy - Alternate Solution 7	1291	I,J,K	ISO-NE / PJM	12/2030

# NYISO Interconnection Queue Projects with Potential ISO-NE/PJM Impact (Cont.)

Generation Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date	MW
Invenergy Alle Cat II Wind	596	A	PJM	11/2024	339
Liberty Generating Alternative	668	J	PJM	01/2028	1171
<del>Renovo Energy Center Upgrade</del>	<del>693</del>	<del>C</del>	<del>PJM</del>	<del>12/2024</del>	<del>515</del>
EDF Renewables Genesee Road Solar Energy Center	858	A	PJM	12/2027	250
Empire Solar	954	A	PJM	10/2023	158
Renewable Energy Aggregators, Inc. - Mifflin	1004	E	PJM	01/2024	300
Vineyard Wind I	1010	K	ISO NE	07/2026	1403
Vineyard Wind II	1011	K	ISO NE	07/2026	1403
Equinor Wind US - El Fort Salonga	1020	K	ISO NE	12/2026	1300
Equinor Wind US - El East Shoreham	1021	K	ISO NE	12/2026	1300
Equinor Wind US - El Glenwood Landing	1022	K	ISO-NE	12/2026	1300
Juno Power Management - Mainesburg ESS (Energy Storage Project Located in PJM)	1036	C	PJM	10/2023	130
Juno Power Management - East Sayre ESS (Energy Storage Project Located in PJM)	1037	C	PJM	10/2023	75
Fort Edward Solar Farm (NY53)	1042	F	ISO-NE	10/2025	100
Bay State Wind - NY Wind - Pilgrim	1058	K	ISO-NE	01/2026	1276
Mineral Basin Solar Power (Energy Storage Project Located in PJM)	1080	C	PJM	01/2025	402
SED NY Holdings LLC - Kingbird Solar	1098	A	PJM	10/2023	20
Ray Solar, LLC	1100	F	ISO-NE	04/2024	20
Bangor Solar	1108	D	ISO-NE	10/2023	107

# NYISO Interconnection Queue Projects with Potential ISO-NE/PJM Impact (Cont.)

Generation Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date	MW
CLIES 20 MW	1113	K	ISO-NE	12/2025	20
Wading River Energy Center	1114	K	ISO-NE / PJM	10/2026	50
Flat Creek Solar 2	1115	F	ISO-NE	09/2025	100
CLIES 70MW	1117	K	ISO-NE / PJM	09/2024	70
Fuller Storage	1119	G	ISO-NE / PJM	06/2023	20
KCE NY 29	1123	K	ISO-NE / PJM	09/2025	150
<del>Allegany 2 Battery 2</del>	<del>1128</del>	<del>E</del>	<del>PJM</del>	<del>07/2023</del>	<del>20</del>
Wintergreen Solar	1138	F	ISO-NE	06/2024	75
Taproot Solar	1140	E	ISO-NE	06/2024	205
Minerva BESS I	1142	J	PJM	10/2025	300
Champlain Solar	1146	F	ISO-NE	06/2026	100
Wawayanda Solar	1147	G	PJM	10/2023	20
York Run Solar	1151	A	PJM	07/2026	90
Arcade Solar	1160	A	ISO NE	08/2024	75
Oakdale Energy Center	1177	C	PJM	10/2028	200
OW Ocean Winds East 4	1190	J	PJM	09/2029	1600
OW Ocean Winds East 6	1192	J	PJM	09/2029	1600
Stern Solar	1198	F	ISO-NE	07/2024	20
Atlantic Shores Offshore Wind Bight 2	1338	J	PJM	12/2029	2100
Atlantic Shores Offshore Wind Bight 4	1340	J	PJM	12/2029	2100
Moonlight Flats Solar Power	1343	C	PJM	06/2025	250
Goethals Energy Storage Project	1345	J	PJM	09/2026	500

# NYISO Interconnection Queue Projects with Potential ISO-NE/PJM Impact (Cont.)

Generation Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date	MW
Community OSW Goethals 1	1371	J	PJM	04/2029	1100
Community OSW Farragut 1	1372	J	PJM	04/2029	1100
Community OSW Goethals 2	1377	J	PJM	04/2029	210
Community OSW Farragut 2	1378	J	PJM	04/2029	210
Attentive Energy 2	1386	J	PJM	12/2028	1310
Mineral Basin II Solar Power	1393	C	PJM	06/2026	222
NY Interconnection 6	1434	J	PJM	06/2027	1050
NY Interconnection 7	1438	J	PJM	06/2027	270
Ramapo Storage Project 1	1507	J	PJM	10/2026	500
Ramapo Storage Project 2	1510	J	PJM	10/2026	500

# ISO NEW ENGLAND TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

*Stojan Nikolov – ISO-NE*





# ISO New England Interconnection Requests that had, are having, or will need Interregional Coordination

## Active Projects

QP	Type	Requested	Name	Net MW	ST	OpDate	Interconnection Point	SIS
501	ETU	2/16/2015	HVDC Tie - Import only	1000	VT	12/31/2027	HQ 735 kV substation to VELCO 345 kV Coolidge substation	Yes
592	G	1/21/2016	Pumped Storage Upgrade	66	MA	12/19/2022 Commercial	GRID-230 kV Bear Swamp substation	Yes
639	ETU	4/19/2017	HVDC Tie	1000	ME	12/20/2024	CMP Larrabee Rd 345 kV Substation	Yes
1093	ETU	02/24/2021	NB TA#1365950 HVDC	0	NB	01/01/2030	Salisbury, New Brunswick	No
1310	G	9/22/2022	Battery Storage	118.8	MA	10/31/2025	115 kV Transmission line (1211 - Present between Doreen and Oswald substation)	No
1317	ETU	9/30/2022	Non-controllable objective ETU to enable 1200 MW injection near Norwalk substation	1200	CT	12/30/2029	Norwalk substation	No
1333	ETU	5/31/2028	2400 controllable ETU - unidirectional	1200	CT	5/31/2022	1. Singer 345kV Substation existing available circuit breaker position and new circuit breaker position. 2. Offshore platform at the MA/RI BOEM Wind Energy Areas	No
1337	G	11/22/2022	Battery Storage	130	MA	12/31/2026	Adams - NG Q117 VEL - Bennington 115 kV line	No
1338	G	12/06/2022	Battery Storage	275.06	MA	6/30/2027	Agawam to Ludlow - 345kV line, 2.5 miles west of Ludlow substation	No

QP is Queue Position; ETU is Elective Transmission Upgrade; G is Generator; SIS: Yes means report available, No means system impact study is not complete and no report is available

# PJM TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

*Zach Van Ness— PJM*



# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AA1-111	Natural gas generating facility along the Moshannon-East Towanda 230 kV line	Natural Gas	PENELEC	463	463	463	Withdrawn
AB1-092	Uprate to the AA1-111 project connected as a tap of the Chapman-Lobo 230 kV line	Natural Gas	PENELEC	504	17	41	Withdrawn
AB1-182	Storage facility connected at the Bear Creek 69kV	Battery/Storage	PPL	20	0	20	Suspended – ISA signed
AC2-092	Susquehanna-Lackawanna 500kV	Natural Gas	PPL	1105	65	55	In-service
AD2-009	McConnellsburg 138 kV	Solar	APS	70	48.1	70	Under Construction

# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AD2-055	Moshannon-East-Towanda 230 kV	Natural-Gas	PENELEC	548	35	44	Withdrawn
AE1-051	East-Carbondale-Lackawanna 69kV	Battery/Storage	PPL	74.5	10	0	Withdrawn
AE1-059	Stanton-Summit 230 kV	Hydro	PPL	500	250	500	Facilities Study
AE1-128	Bedford-North-Wills-Mounain 115 kV	Solar	PENELEC	120	72	120	Withdrawn
AE1-160	Venango 34.5 kV	Solar	PENELEC	20	12.7	20	Engineering and Procurement
AE2-074	Potter 46 kV	Solar	PENELEC	35	15.11	35	Engineering and Procurement
AE2-113	Farmers Valley-Ridgeway 115 kV	Solar	APS	130	62.6	130	Engineering and Procurement
AE2-126	Dubois-Curwensville 34.5 kV	Solar	PENELEC	20	12	20	In Service
AE2-139	East Towanda-Grover 230 kV	Solar	PENELEC	100.5	60.3	100.5	Facilities Study
AE2-224	Bearrock-Johnstown 230 kV	Solar	PENELEC	100	60	100	Under Construction
AE2-249	Bedford North-Pennsylvania Hollow 23 kV	Solar	PENELEC	13.5	8.1	13.5	Suspended – ISA signed
AE2-299	Erie East 230 kV	Battery/Storage	PENELEC	160	32	160	Facilities Study
AE2-344	Edinboro South-Venango Junction 115 kV	Solar	PENELEC	116.5	69.9	116.5	Engineering and Procurement

# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AF1-043	Moshannon-East Towanda 230 kV	Natural Gas	PENELEC	640	105	92	Withdrawn
AF1-006	Fairview East 34.5 kV	Solar	PENELEC	20	12.8	20	Engineering and Procurement
AF1-177	Warren 115 kV	Natural Gas	PENELEC	62	5	5	In-service
AF1-170	Springboro-Venango Junction 115 kV	Solar	PENELEC	77.5	46.5	77.5	Facilities Study
AF1-198	Blossburg #1 CT 34.5 kV	Natural Gas	PENELEC	22.5	2.5	2.5	Partially in service / under construction
AF1-277	Lewis Run-Pierce Brook 2 230 kV	Solar	PENELEC	200	67	100	SIS
AF1-103	Warren 34.5 kV	Solar and Battery	PENELEC	20	20	20	Facilities Study
AF1-106	East Sayre 34.5 kV	Solar and Battery	PENELEC	20	20	20	Facilities Study
AF1-104	Erie West 34.5 kV	Solar and Battery	PENELEC	20	20	20	Facilities Study
AF1-286	East Sayre 34.5 kV II	Solar	PENELEC	13.6	8.1	13.6	Engineering and Procurement
AF1-287	Eдинboro South 34.5 kV II	Solar	PENELEC	20	12	20	Engineering and Procurement
AF1-304	Titusville-Grandview 115 kV	Solar and Battery	PENELEC	100	60	100	Facilities Study

# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AF1-306	Squab Hollow 230 kV	Battery	APS	246.5	49.3	246.5	SIS
AF1-278	Lewis Run-Pierce Brook 3 230 kV	Solar	PENELEC	280	53.44	80	SIS
AF1-094	Union City-Cambridge Springs 34.5 kV	Solar	PENELEC	20	12	20	Facilities Study
<del>AF1-096</del>	<del>Titusville-Oil-Creek 34.5 kV</del>	<del>Solar</del>	<del>PENELEC</del>	<del>20</del>	<del>12</del>	<del>20</del>	<del>Withdrawn</del>
AF1-098	Four Mile Jct-Corry East 115 kV	Solar	PENELEC	80	48	80	Facilities Study
AF1-276	Lewis Run-Pierce Brook 230 kV	Solar	PENELEC	100	67	100	SIS
AF1-217	Edinboro -Cambridge Springs 34.5 kV	Solar	PENELEC	20	12	20	Suspended
AF2-010	Union City-Titusville 115 kV	Solar	PENELEC	77	46	77	Facilities Study
AF2-197	East Towanda 115 kV	Storage	PENELEC	100.8	40.32	100.8	SIS
AF2-235	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	30	6	10	Facilities Study
AF2-265	South Troy-Athens 34.5 kV	Solar	PENELEC	15	8.6	15	Engineering and Procurement

# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AF2-283	Greenfield 12.47 kV	Solar; Storage	PPL	2	0	2	Engineering and Procurement
AF2-285	W. Damascus 12.47 kV	Solar; Storage	PPL	3	0	3	Engineering and Procurement
AF2-294	Thompson 34.5 kV	Solar	PENELEC	20	12	20	Engineering and Procurement
AF2-405	East Sayre 34.5 kV III	Storage	PENELEC	10	10	10	Facilities Study
AF2-406	Sayre 115 kV	Storage	PENELEC	75	75	75	SIS
AF2-412	Mainesburg 115 kV	Storage	PENELEC	130	130	130	SIS
AF2-417	West Damascus Tap-West Damascus 69 kV	Solar	PPL	20	12	20	Facilities Study
AF2-436	Wyalusing 34.5 kV II	Natural Gas	PENELEC	21.4	1.5	1.5	In Service
AF2-437	Oxbow 34.5 kV III	Natural Gas	PENELEC	21.4	1.5	1.5	In Service

# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AG1-040	Morgan Street-Mount Hope 34.5 kV	Solar	Penelec	20	12	20	Facilities Study
AG1-100	Venango-Saegertown 34.5 kV	Solar	Penelec	20	12	20	Facilities Study
AG1-140	Union City 34.5 kV	Solar	Penelec	2.6	1.7	2.6	Engineering and Procurement
AG1-156	Jack Frost-Lake Harmony 69 kV	Solar	PPL	60	39.5	60	Facilities Study
AG1-197	Morgan Street-Cochranton 34.5 kV	Solar	Penelec	15	9	15	Engineering and Procurement
AG1-198	Union City 34.5 kV	Solar	Penelec	12	7.2	12	Engineering and Procurement
AG1-202	Springboro 12.47 kV	Solar	Penelec	10	6.6	10	Facilities Study
AG1-206	Snyder Twp 34.5 kV	Solar	Penelec	10	6.5	10	SIS
AG1-253	Erie East-Union City 34.5 kV	Solar	Penelec	4	2.7	4	Engineering and Procurement
AG1-303	Geneva 115 kV	Solar	Penelec	44	26.4	44	Facilities Study



# PJM QUEUE PROJECTS JOINTLY COORDINATED WITH NYISO AND ISO-NE

Queue ID	Project Description	Fuel Type	Transmission Zones	Total Facility	Capacity Value (MW)	Energy Value (MW)	Project Status
AG1-392	Gold 115 kV I	Solar	Penelec	40	24	40	SIS
AG1-392A	Gold 115 kV II	Solar	Penelec	40	24	40	SIS
AG1-392B	Gold 115 kV III	Solar	Penelec	20	12	20	SIS
AG1-392C	Gold 115 kV IV	Solar	Penelec	20	12	20	SIS
AG1-455	Springboro-Venango Junction 115 kV	Storage	Penelec	112.5	35	35	SIS
AG1-548	Erie South-Union City 115 kV	Solar/Storage	Penelec	150	115	150	SIS

# Questions

