

# 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 November 1, 2021 for every ISO/RTO Queue
  - Changes from the June 04, 2021 IPSAC meeting are shown in red

# NYISO TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

*Ross Altman – NYISO*



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

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
Grand Isle Intertie Development	386	D	ISO-NE	12/2023
<del>Champlain Hudson (CH) Interconnection</del>	<del>458</del>	<del>J</del>	<del>ISO-NE / PJM</del>	<del>WITHDRAWN</del>
Empire State Connector HVDC	506	E, J	ISO-NE / PJM	10/2025
<del>PPL Electric Utilities Compass</del>	<del>518</del>	<del>G</del>	<del>PJM</del>	<del>WITHDRAWN</del>
AVANGRID Connect NY Edic – PV	540	E, G	ISO-NE / PJM	12/2020
AVANGRID Connect NY Edic – Ramapo	541	E, G	ISO-NE / PJM	12/2020
National Grid Segment B Knickerbocker-PV	543	F, G	ISO-NE / PJM	09/2022
LS Power Segment A Double Circuit	556	E, F	ISO-NE / PJM	06/2020
<del>NS Power Express</del>	<del>631</del>	<del>J</del>	<del>ISO-NE/PJM</del>	<del>10/2026</del>
GridAmerica Holdings Alps - Berkshire	632	F	ISO-NE	09/2021
ITC Lake Erie Connector	684	A	PJM	03/2024
<del>LIPA-NNCTTC Increase</del>	<del>816</del>	<del>K</del>	<del>ISO-NE</del>	<del>WITHDRAWN</del>
<del>CH Uprate</del>	<del>887</del>	<del>J</del>	<del>ISO-NE/PJM</del>	<del>10/2026</del>
Barrett Ridge Energy - PARs	1013	G	PJM	04/2024
Catskills Renewable Connector	1120	F, J	ISO-NE / PJM	06/2026
Werner - Ravenswood	1121	J	ISO-NE / PJM	12/2026
Northern New York Priority Transmission Project (NNYPTP)	1125	D, E	ISO-NE	12/2025
Excelsior Connect - Edic to Rainey	1131	E, J	ISO-NE / PJM	10/2025
Excelsior Connect - Edic to Farragut	1132	E, J	ISO-NE / PJM	10/2025
<del>New Scotland Interconnection</del>	<del>1155</del>	<del>F, J</del>	<del>ISO-NE / PJM</del>	<del>12/2025</del>
<del>CPNY</del>	<del>1167</del>	<del>E, J</del>	<del>ISO-NE / PJM</del>	<del>06/2026</del>
<del>CPNY-MH</del>	<del>1168</del>	<del>E, J</del>	<del>ISO-NE / PJM</del>	<del>06/2026</del>

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

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
Bowline to West 49th Street	1170	G, J	ISO-NE / PJM	11/2026
NY Interconnection 2	1206	J	PJM	06/2027
NY Interconnection 1	1207	J	PJM	06/2027
Atlantic Gateway	1271	H, K	ISO-NE / PJM	12/2026
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
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
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
<del>North Park Energy SW Energy</del>	<del>595</del>	<del>A</del>	<del>PJM</del>	<del>WITHDRAWN</del>	<del>100</del>
Invenery Alle Cat II Wind	596	A	PJM	02/2023	339
Renovo Energy Center Uprate	693	C	PJM	10/2020	515
<del>Seven Creek Energy</del>	<del>809</del>	<del>A</del>	<del>PJM</del>	<del>WITHDRAWN</del>	<del>240</del>
EDF Renewables Genesee Road Solar Energy Center	858	A	PJM	09/2024	350
<del>Seven Creek Energy - Squab Hollow (Energy Storage Project Located in PJM)</del>	<del>933</del>	<del>A</del>	<del>PJM</del>	<del>WITHDRAWN</del>	<del>290</del>
Empire Solar	954	A	PJM	08/2023	158
Renewable Energy Aggregators, Inc. - Mifflin	1004	E	PJM	01/2024	300
Vineyard Wind I	1010	K	ISO NE	07/2026	1400
Vineyard Wind II	1011	K	ISO NE	07/2026	1400
South Ripley BESS	1014	A	PJM	09/2022	20
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	02/2022	300

# 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
Juno Power Management - East Sayre ESS <i>(Energy Storage Project Located in PJM)</i>	1037	C	PJM	02/2022	75
Fort Edward Solar Farm (NY53)	1042	F	ISO-NE	10/2024	100
Bay State Wind - NY Wind - Pilgrim	1058	K	ISO-NE	01/2026	1275
Mineral Basin Solar Power <i>(Energy Storage Project Located in PJM)</i>	1080	C	PJM	01/2023	400
SED NY Holdings LLC - Kingbird Solar	1098	A	PJM	10/2022	20
Ray Solar, LLC	1100	F	ISO-NE	06/2024	20
<del>Chestertown-BESS</del>	<del>1101</del>	<del>F</del>	<del>ISO-NE</del>	<del>WITHDRAWN</del>	<del>20</del>
Troupsburg Solar	1102	C	PJM	11/2023	20
Buchanan Point BESS III	1107	H	ISO-NE / PJM	03/2024	300
Bangor Solar	1108	D	ISO-NE	11/2023	107
CLIES 10MW	1112	K	ISO-NE / PJM	03/2022	10
CLIES 20 MW	1113	K	ISO-NE / PJM	03/2022	20
Wading River Energy Center	1114	K	ISO-NE / PJM	09/2023	50
Flat Creek Solar 2	1115	F	ISO-NE	08/2024	100
CLIES 70MW	1117	K	ISO-NE / PJM	09/2022	70
Fuller Storage	1119	G	ISO-NE / PJM	08/2023	20
KCE NY 29	1123	K	ISO-NE / PJM	11/2023	150

# 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
<del>CBB-PARK LLC</del>	<del>1127</del>	<del>G</del>	<del>ISO-NE</del>	<del>WITHDRAWN</del>	<del>50</del>
Northland Power U.S. Projects	1128	C	PJM	03/2021	20
Invenergy Solar Project Development LLC	1138	F	ISO-NE	02/2021	75
Invenergy Solar Project Development LLC	1140	E	ISO-NE	03/2021	205
Minerva Power Connection LLC	1142	J	ISO-NE / PJM	03/2021	600
Minerva Power Connection LLC	1143	J	ISO-NE / PJM	03/2021	600
Galehead Development, LLC	1146	F	ISO-NE	03/2021	100
Wawayanda Solar 1, LLC	1147	G	ISO-NE / PJM	03/2021	20
York Run Solar, LLC	1151	A	PJM	03/2021	90
Arcade Solar	1160	A	ISO NE	08/2024	75
Oakdale Energy Center	1177	C	PJM	03/2025	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
Brunswick Energy Storage	1262	J	PJM	11/2024	150



# 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	05/31/2022	GRID 230 kV Bear Swamp substation	Yes
639	ETU	4/19/2017	HVDC Tie	1000	ME	12/13/2023	CMP Larrabee Rd 345 kV Substation	Yes
930	G	10/17/2019	Power Station Increase	1262	CT	05/13/2022	Eversource's Millstone 345 KV switchyard (15G)	No
1093	ETU	02/24/2021	NB TA#1365950 HVDC	0	NB	01/01/2030	Salisbury, New Brunswick	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
Y2-089	Increase to X4-048 (PJM Project) a combined cycle natural gas facility connected at the Lackawana 230 kV bus	Natural Gas	PPL	1370	370	370	In-service
Y3-092	Merchant transmission project (HVDC) connected at the Erie West 345 kV bus	N/A	PENELEC	1000 MW firm injection; 500 MW firm withdrawal; 500 MW non-firm withdrawal			In-service
AA1-111	Natural gas generating facility along the Moshannon-East Towanda 230 kV line	Natural Gas	PENELEC	463	463	463	Suspended – ISA signed
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	Suspended – ISA signed
AB1-160	Wind facility uprate to the Z1-069 project tapping the Gold-Sabinsville 115 kV line	Wind	PENELEC	90	3.8	20	In-service
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	Facilities Study
AD1-108	Grover 34 kV	Natural Gas	PENELEC	21.4	1.5	1.5	In-service
AD1-109	Canton 34.5 kV	Natural Gas	PENELEC	21	1.1	1.1	In-service
AD1-110	North Meshoppen 34.5 kV	Natural Gas	PENELEC	21.4	1.5	1.5	In-service
AD1-142	Milan 34.5 kV	Natural Gas	PENELEC	21	1.1	1.1	In-service
AD2-009	McConnellsburg 138 kV	Solar	APS	70	48.1	70	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
AD2-035	Ontelaunee 230 kV	Natural Gas	METED	630	14	38.9	In-service
AD2-055	Moshannon-East Towanda 230 kV	Natural Gas	PENELEC	548	35	44	Suspended – ISA signed
AE1-051	East Carbondale-Lackawanna 69kV	Battery/Storage	PPL	74.5	10	0	Facilities Study
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	Facilities Study
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	Facilities Study
AE2-113	Farmers Valley-Ridgeway 115 kV	Solar	APS	130	62.6	130	Facilities Study
AE2-126	Dubois-Curwensville 34.5 kV	Solar	PENELEC	20	12	20	Engineering and Procurement
AE2-139	East Towanda-Grover 230 kV	Solar	PENELEC	100.5	60.3	100.5	SIS
AE2-224	Bearrock-Johnstown 230 kV	Solar	PENELEC	100	60	100	Facilities Study
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	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
AF1-043	Moshannon-East Towanda 230 kV	Natural Gas	PENELEC	640	105	92	SIS
AF1-006	Fairview East 34.5 kV	Solar	PENELEC	20	12.8	20	ISA signed
AF1-177	Warren 115 kV	Natural Gas	PENELEC	62	5	5	Partially in service / under construction
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	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	Facilities Study
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
AF1-096	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	20	12	20	Facilities Study
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	Engineering and Procurement
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
AF2-282	Edelle 12.47 kV	Solar; Storage	PPL	3	0	3	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	Facilities Study
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	Facilities Study
AG1-198	Union City 34.5 kV	Solar	Penelec	12	7.2	12	Facilities Study
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	ISA Signed
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

