

Queue Interconnection Studies of Projects Potentially Affecting Neighboring Systems

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/service-requests/services-request-status>
- Several projects will now be discussed with the IPSAC
 - Slides show the effective date of November 1, 2024 for every ISO/RTO Queue
 - Changes from the May 3, 2024 IPSAC meeting are shown in red

NYISO TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

Supriya Tawde – NYISO

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

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
National Grid Segment B Knickerbocker-PV	543	F, G	ISO-NE / PJM	12/2023
NS Power Express	631	J	ISO-NE/PJM	05/2026
Renovo Energy Center	654	G	PJM	12/2024
CH Uprate	887	J	ISO-NE/PJM	05/2026
Northern New York Priority Transmission Project (NNYPTP)	1125	D,E	ISO-NE	12/2025
NY Interconnection 1	1207	J	PJM	06/2027
CPNY-X	1288	E,J	ISO-NE / PJM	06/2028
Propel NY Energy - Alternate Solution 5	1289	I,J,K	ISO-NE / PJM	12/2028
Liberty Green Line	1555	J	PJM	01/2029
Clean Borough Power Link #1	1685	I,J	PJM	12/2032
Clean Borough Power Link #2	1686	J	PJM	12/2032
Clean Borough Power Link #3	1687	J	PJM	12/2032
Liberty Link 1	1688	J	PJM	12/2032
Liberty Link 2	1689	J	PJM	12/2032
Liberty Link 3	1690	J	PJM	12/2032
Energy Link NY Solution 1	1691	I,J	PJM	01/2033
Energy Link NY Solution 2	1692	I,J	PJM	01/2033
Energy Link NY Solution 3	1693	I,J	PJM	01/2033
Energy Link NY Solution 4	1694	I,J	PJM	01/2033
Energy Link NY Solution 5	1695	I,J	PJM	01/2033

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

Transmission Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date
Energy Link NY Solution 6	1696	I, J	PJM	01/2033
Energy Link NY Solution 7	1697	I, J	PJM	01/2033
Energy Link NY Solution 10	1698	I, J	PJM	01/2033
Five Boro Energy Connect - Mint	1694	E, J	PJM	01/2033
Energy Link NY Solution 8	1696	I, J	PJM	01/2033
Energy Link NY Solution 9	1697	I, J	PJM	01/2033
Five Boro Energy Connect - Sage	1702	J	PJM	09/2032
Five Boro Energy Connect - Ruby	1703	J	PJM	09/2032
Five Boro Energy Connect - Rose	1704	J	PJM	09/2032
Five Boro Energy Connect - Olive	1705	E, J	PJM	06/2033
Five Boro Energy Connect - Kelly	1706	J	PJM	08/2033
Five Boro Energy Connect - Hazel	1707	E, J	PJM	12/2033
Five Boro Energy Connect - Navy	1708	I, J	PJM	09/2032
Five Boro Energy Connect - Royal	1709	J	PJM	05/2033
Five Boro Energy Connect - Golden	1710	E, I, J	PJM	10/2033
Five Boro Energy Connect - Honey	1711	E, J	PJM	10/2033
Five Boro Energy Connect - Cobalt	1712	E, J	PJM	10/2033

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

Generation Project	Queue Number(s)	Zone(s)	Regions Affected	Proposed I/S Date	MW
Mineral Basin Solar Power (Energy Storage Project Located in PJM)	1080	C	PJM	10/2027	402
Flat Creek Solar 2	1115	F	ISO-NE	10/2028	100
KCE NY 29	1123	K	ISO-NE / PJM	09/2027	150

NYISO Interconnection Queue Update

- The NYISO opened its Transitional Cluster Application Window on August 1, 2024. The deadline to submit an application for the Transitional Cluster window ended on October 15, 2024.
- NYISO will identify potential impacts on External Affected Systems once the Cluster Study Projects participating in the Cluster Study Process have been confirmed. The Cluster Study Project list was not finalized as of November 1, 2024 (the effective date for queue update for December 6, 2024 IPSAC).

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
639	ETU	4/19/2017	HVDC Tie	1000	ME	12/20/2024 1/07/2026	CMP Larrabee Rd 345 kV Substation	Yes
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	5/31/2028	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

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

Active Projects - Continued

QP	Type	Requested	Name	Net MW	ST	OpDate	Interconnection Point	SIS
1381	ETU	4/11/2023	1200 MW (+/- 400 kV) HVDC External ETU	1200	NH	7/01/2029	1. In New Hampshire, the point of interconnection is near the old Monroe yard (AC capacitors and reactors and Phase II filters presently reside in this yard). The project will tie into the currently existing Comerford 230 kV substation. 2. The northern section of the project will connect with the Hydro-Quebec system at the US-Canada border near Canaan, Vermont.	No
1513	G	4/08/2024	Battery Storage	408.1	MA	8/30/2028	Bear Swamp- Pratts Junction 230kV	No
1515	G	4/09/2024	Battery Storage	508.39	MA	8/30/2028	Alps-Berkshire 345kV line	No
1561	G	6/06/2024	Battery Storage	141.6	CT	4/01/2027	115 kV line between Rocky River and Bulls Bridge substations	No
1566	G	6/11/2024	Wind	197.39	ME	10/01/2028	Orrington – Albion Road 345kV	No

PJM TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

Mojtaba Hoshmand– 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 Lackawanna 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			Withdrawn
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
AB1-160	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	In-service
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	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
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	Withdrawn
AE1-051	East Carbondale-Lackawanna 69kV	Battery/Storage	PPL	74.5	10	0	Withdrawn
AE1-059	Stanton-Summit 230 kV	Hydro	PPL	200	200	200	Withdrawn
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	Withdrawn
AE2-074	Potter 46 kV	Solar	PENELEC	35	15.11	35	Engineering and Procurement
AE2-113	Farmers Valley-Ridgeway 115 kV	Solar	APS	120	61.9	120	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	Engineering and Procurement
AE2-224	Bearrock-Johnstown 230 kV	Solar	PENELEC	100	60	100	In Service
AE2-249	Bedford North-Pennsylvania Hollow 23 kV	Solar	PENELEC	16.6	9.96	16.6	Engineering and Procurement
AE2-299	Erie East 230 kV	Battery/Storage	PENELEC	160	32	160	Suspended
AE2-344	Edinboro South-Venango Junction 115 kV	Solar	PENELEC	116.5	69.9	116.5	Suspended

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	Under Construction
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	In Service
AF1-198	Blossburg #1 CT 34.5 kV	Natural Gas	PENELEC	22.5	2.5	2.5	In Service
AF1-277	Lewis Run-Pierce Brook 2 230 kV	Solar	PENELEC	200	67	100	Withdrawn
AF1-103	Warren 34.5 kV	Solar and Battery	PENELEC	20	20	20	Withdrawn
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	Engineering and Procurement
AF1-286	East Sayre 34.5 kV II	Solar	PENELEC	13.6	5	13.6	Withdrawn
AF1-287	Edinboro South 34.5 kV II	Solar	PENELEC	20	12	20	Suspended
AF1-304	Titusville-Grandview 115 kV	Solar and Battery	PENELEC	100	60	100	Withdrawn

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	Withdrawn
AF1-278	Lewis Run-Pierce Brook 3 230 kV	Solar	PENELEC	280	53.44	80	Withdrawn
AF1-094	Union City-Cambridge Springs 34.5 kV	Solar	PENELEC	20	12	20	Engineering and Procurement
AF1-096	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	20	12	20	Withdrawn
AF1-098	Four Mile Jct-Corry East 115 kV	Solar	PENELEC	80	48	80	Engineering and Procurement
AF1-276	Lewis Run-Pierce Brook 230 kV	Solar	PENELEC	100	67	100	Withdrawn
AF1-217	Edinboro -Cambridge Springs 34.5 kV	Solar	PENELEC	20	12	20	Engineering and Procurement
AF2-197	East Towanda 115 kV	Storage	PENELEC	100.8	40.32	100.8	Withdrawn
AF2-235	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	30	6	10	Engineering and Procurement
AF2-265	South Troy-Athens 34.5 kV	Solar	PENELEC	15	8.6	15	Withdrawn
AF2-282	Edelle 12.47 kV	Solar; Storage	PPL	3	0	3	Withdrawn

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	Withdrawn
AF2-285	W. Damascus 12.47 kV	Solar; Storage	PPL	3	0	3	Withdrawn
AF2-294	Thompson 34.5 kV	Solar	PENELEC	17	10.2	17	Suspended
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	Withdrawn
AF2-412	Mainesburg 115 kV	Storage	PENELEC	130	130	130	TC1 – Ph2
AF2-417	West Damascus Tap-West Damascus 69 kV	Solar	PPL	20	12	20	Engineering and Procurement
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
AG1-455	Springboro-Venango Junction 115 kV	Storage	Penelec	112.5	35	35	Facility 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
AG1-040	Morgan Street-Mount Hope 34.5 kV	Solar	Penelec	20	12	20	Engineering and Procurement
AG1-100	Venango-Saegertown 34.5 kV	Solar	Penelec	20	12	20	Engineering and Procurement
AG1-140	Union City 34.5 kV	Solar	Penelec	2.6	1.7	2.6	Suspended
AG1-156	Jack Frost-Lake Harmony 69 kV	Solar	PPL	60	39.5	60	Facilities Study
AG1-197	Morgan Street-Cochranon 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	Withdrawn
AG1-206	Snyder Twp 34.5 kV	Solar	Penelec	10	6.5	10	Withdrawn
AG1-253	Erie East-Union City 34.5 kV	Solar	Penelec	4	2.7	4	Suspended
AG1-303	Geneva 115 kV	Solar	Penelec	44	26.4	44	Facilities Study

Questions

