

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/irg>
 - <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, 2020 for every ISO/RTO Queue
 - Changes from the May 15, 2019 IPSAC meeting are shown in **red**

NYISO TRANSMISSION AND GENERATION PROJECTS WITH POTENTIAL INTERREGIONAL IMPACTS

Zamiyad Dar – 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	2023/12
Champlain Hudson (CH) Interconnection	458	J	ISO-NE / PJM	2022/12
Hudson Transmission Partners NY to PJM	465	J	PJM	2021/03
Empire State Connector HVDC	506	E, J	ISO-NE / PJM	2021/10
PPL Electric Utilities Compass	518	G	PJM	2023/12
AVANGRID Connect NY Edic – PV	540	E, G	ISO-NE / PJM	2020/12
AVANGRID Connect NY Edic – Ramapo	541	E, G	ISO-NE / PJM	2020/12
National Grid Segment B Knickerbocker-PV	543	F, G	ISO-NE / PJM	2022/09
NAT Segment A Double Circuit	556	E, F	ISO-NE / PJM	2020/06
GridAmerica Holdings Alps - Berkshire	632	F	ISO-NE	2021/09
ITC Lake Erie Connector	684	A	PJM	2024/03
LIPA NNC TTC Increase	816	K	ISO-NE	2023/12
Barrett Ridge Energy - PARs	1013	G	PJM	2024/04

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
Atlantic Wind Bone Run	466	A	PJM	2021/11	132
Renovo Energy Center	496	C	PJM	2022/09	480
Tioga County Power	498	C	PJM	2020/06	550
Dunkirk Unit 2	523	A	PJM	2020/01	75
Dunkirk Unit 3 & 4	524	A	PJM	2020/01	370
North Park Energy SW Energy	595	A	PJM	2021/10	100
Invenergy Alle Cat II Wind	596	A	PJM	2021/10	339
Renovo Energy Center Uprate	693	C	PJM	2020/10	515
Seven Creek Energy	809	A	PJM	2022/03	240
Diamond Generating Corporation CWW 300 Wind Dun	814	A	PJM	2023/12	300
EDF Renewables Genesee Road Solar Energy Center	858	A	PJM	2024/09	350
Seven Creek Energy - Squab Hollow (Energy Storage Project Located in PJM)	933	A	PJM	2023/01	290
Empire Solar	954	A	PJM	2023/08	158
Renewable Energy Aggregators, Inc. - Mifflin	1004	E	PJM	2024/01	300
Vineyard Wind I	1010	K	ISO NE	2026/12	1400
Vineyard Wind II	1011	K	ISO NE	2026/12	1400
South Ripley BESS	1014	A	PJM	2022/11	20
Equinor Wind US - El Fort Salonga	1020	K	ISO NE	2027/11	1300
Equinor Wind US - El East Shoreham	1021	K	ISO NE	2027/11	1300
Equinor Wind US - El Glenwood Landing	1022	K	ISO-NE	2027/11	1300

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
Renewable Energy Aggregators, Inc. - Cuomo Hydro 1	1024	H	PJM	2024/06	300
Juno Power Management - Mainesburg ESS <i>(Energy Storage Project Located in PJM)</i>	1036	C	PJM	2022/06	290
Juno Power Management - East Sayre ESS <i>(Energy Storage Project Located in PJM)</i>	1037	C	PJM	2022/06	75
Fort Edward Solar Farm (NY53)	1042	F	ISO NE	2024/12	100
Bay State Wind - NY Wind - Pilgrim	1058	K	ISO NE	2027/04	1325
Mineral Basin Solar Power <i>(Energy Storage Project Located in PJM)</i>	1080	C	PJM	2023/05	400
SED NY Holdings LLC - Kingbird Solar	1098	A	PJM	2022/11	20

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	12/31/2024	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	05/31/2023	CMP Larrabee Rd 345 kV Substation	Yes
640	ETU	4/21/2017	HVDC Tie - Import only	1200	MA	12/31/2022	Coleson Cove 345kV Substation, New Brunswick to 345kV lines from Pilgrim Substation	No
890	ETU	05/13/2019	Increase transfer capability from Norwalk Harbor to Northport	N/A	CT	07/01/2023	Not Applicable (Increase associated with existing cable connection)	No
930	G	10/17/2019	Power Station Increase	1262	CT	05/13/2022	Eversource's Millstone 345 KV switchyard (15G)	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

Jason Miller – 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			Engineering and Procurement
AA1-111	Natural gas generating facility along the Moshannon-East Towanda 230 kV line	Natural Gas	PENELEC	463	463	463	Facilities Study
AB1-082	Natural gas facility connected as a tap of the Potter-Coneville 46kV line in APS	Natural Gas	APS	19.9	19.9	19.9	Suspended
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	Facilities Study
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	Engineering and Procurement
AC2-092	Susquehanna-Lackawana 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
AD2-002	Franklin-Emerald 25 kV	Natural Gas	APS	20	20	20	Engineering and Procurement
AD2-009	McConnellsburg 138 kV	Solar	APS	70	48.1	70	Facilities Study
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	SIS

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
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
AE1-116	Somerset Windpower 23 kV	Battery/Storage	PENELEC	9	4.5	0	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
AE1-169	Titusville 115 kV	Solar	PENELEC	85	51	85	Withdrawn
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	Facilities Study
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	Facilities Study
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	92	105	SIS
AF1-006	Fairview East 34.5 kV	Solar	PENELEC	20	20	12.8	SIS
AF1-177	Warren 115 kV	Natural Gas	PENELEC	62	5	5	SIS
AF1-170	Springboro-Venango Junction 115 kV	Solar	PENELEC	77.5	77.5	46.5	SIS
AF1-198	Blossburg #1 CT 34.5 kV	Natural Gas	PENELEC	22.5	2.5	2.5	SIS
AF1-277	Lewis Run-Pierce Brook 2 230 kV	Solar	PENELEC	200	100	67	SIS
AF1-103	Warren 34.5 kV	Solar and Battery	PENELEC	20	20	20	SIS
AF1-106	East Sayre 34.5 kV	Solar and Battery	PENELEC	20	20	20	SIS
AF1-104	Erie West 34.5 kV	Solar and Battery	PENELEC	20	20	20	SIS
AF1-286	East Sayre 34.5 kV II	Solar	PENELEC	13.6	13.6	8.1	SIS
AF1-287	Edinboro South 34.5 kV II	Solar	PENELEC	20	20	12	SIS
AF1-304	Titusville-Grandview 115 kV	Solar and Battery	PENELEC	100	100	60	SIS

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	246.5	49.3	SIS
AF1-278	Lewis Run-Pierce Brook 3 230 kV	Solar	PENELEC	280	80	53.44	SIS
AF1-094	Union City-Cambridge Springs 34.5 kV	Solar	PENELEC	20	20	12	SIS
AF1-096	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	20	20	12	SIS
AF1-098	Four Mile Jct-Corry East 115 kV	Solar	PENELEC	80	80	48	SIS
AF1-276	Lewis Run-Pierce Brook 230 kV	Solar	PENELEC	100	100	67	SIS
AF1-217	Edinboro -Cambridge Springs 34.5 kV	Solar	PENELEC	20	20	12	SIS
AF1-306	Squab Hollow 230 kV	Battery	APS	246.5	246.5	49.3	SIS
AF1-278	Lewis Run-Pierce Brook 3 230 kV	Solar	PENELEC	280	80	53.44	SIS
AF1-094	Union City-Cambridge Springs 34.5 kV	Solar	PENELEC	20	20	12	SIS
AF1-096	Titusville-Oil Creek 34.5 kV	Solar	PENELEC	20	20	12	SIS
AF1-098	Four Mile Jct-Corry East 115 kV	Solar	PENELEC	80	80	48	SIS

Questions

