

Missing Energy and Missing Transmission

Mike Jacobs

PJM Planning Committee

Dec 11 Workshop

Interconnection

mjacobs@ucsusa.org
@MJNewEnergy

**[Union of
Concerned Scientists**

CIRs and Summer Rated MW



NGCC

Solar Track

Solar Fixed

Wind

■ Offer to RPM

■ Uncertain at peak

24 GW NG with MWE = MWC

Only 16% of gas generation requests provide energy in cold weather above summer rating (in-service gen).

This limits ability to supply energy in colder weather.

Queue Number	Commercial Name	State	Status	MFO	MW Energy	MW Capacity	Fuel	Queue Date	Actual In Service
A03	Linden 5 & 6	NJ	In Servic	120	120	120	Natural Gas	4/1/1997	6/1/2000
A05	Bergen	NJ	In Servic	500	500	500	Natural Gas	4/1/1997	6/1/2002
A12	Lower Mt Bethel	PA	In Servic	600	600	600	Natural Gas	8/20/1997	5/14/2004
A15	Red Oak CC1, CT1 - CT4	NJ	In Servic	765	765	765	Natural Gas	1/20/1998	2/1/2002
A18		PA	In Servic	557	557	557	Natural Gas	5/11/1998	12/1/2002
A19	Liberty (Eddy)	PA	In Servic	521	521	521	Natural Gas	5/15/1998	1/1/2002
A21	Phillips Island	PA	In Servic	725	725	725	Natural Gas	8/17/1998	12/31/2004
A29	Rock Springs	MD	In Servic	465	465	465	Natural Gas	11/18/1998	6/13/2003
A30	Rock Springs	MD	In Servic	465	465	465	Natural Gas	12/3/1998	12/1/2005
A36	Hunterstown	PA	In Servic	830	830	830	Natural Gas	1/27/1999	7/31/2003
A55	Lakewood NUG	NJ	In Servic	500	500	500	Natural Gas	2/22/1999	12/31/2005
B03	Bethlehem	PA	In Servic	750	750	750	Natural Gas	4/30/1999	1/28/2003
B09A	Burlington	NJ	In Servic	168	168	168	Natural Gas	6/10/1999	7/22/2000
B12_W01	South Bend CT1 - CT4	PA	In Servic	600	600	600	Natural Gas	1/1/1999	3/1/2002
B12_W02	Oak Grove CT1 & CT2	WV	In Servic	300	300	300	Natural Gas	1/1/1999	10/1/2002
B18_W03	Springdale CT3, CT4, ST5	PA	In Servic	525	525	525	Natural Gas	1/1/1999	8/1/2003
B30	Ford Mill	PA	In Servic	605	605	605	Natural Gas	11/22/1999	6/29/2004
D08	Kearny #12	NJ	In Servic	168	168	168	Natural Gas	7/3/2000	8/4/2001
D11	DEMEC/Smyrna 1 & 2	DE	In Servic	100	100	100	Natural Gas	7/26/2000	5/1/2002
D18	Conectiv Bethlem CT 6, ST2	PA	In Servic	350	350	350	Natural Gas	7/28/2000	5/1/2004
E17_W27	Ronco CT1, CT2, STG	PA	In Servic	661	620	620	Natural Gas	11/15/2000	6/1/2003
P04	Delta	PA	In Servic	557	550	550	Natural Gas	9/8/2005	3/1/2011
P06	Cumberland 2	NJ	In Servic	225	225	225	Natural Gas	9/9/2005	12/31/2008
Q90	West Deptford Energy Station	NJ	In Servic	650	650	650	Natural Gas	7/31/2006	8/11/2014

24 GW NG with MWE = MWC, p. 2

Queue Number	Commercial Name	State	Status	MFO	MW Energy	MW Capacity	Fuel	Queue Date	Actual In Service
R19	Ladysmith CI Units 3 & 4	VA	In Service	720	340	340	Natural Gas	10/3/2006	6/1/2008
S101	Dresden	OH	In Service	580	580	580	Natural Gas	7/31/2007	10/22/2011
S25	Calpine Parlin Energy Center	NJ	In Service	124	114	114	Natural Gas	4/9/2007	5/13/2008
S32	Perryman 6 Units 1-4	MD	In Service	130	130	130	Natural Gas	5/3/2007	5/9/2015
T107	Newark Energy Center	NJ	In Service	675	625	625	Natural Gas	11/21/2007	6/29/2015
T117	Hunlock Creek	PA	In Service	126	126	126	Natural Gas	12/17/2007	1/31/2011
T94		MI	In Service	1035	1035	1035	Natural Gas	10/24/2007	6/1/2016
V3-017	St. Charles CC Facility	MD	In Service	725	725	725	Natural Gas	8/24/2009	11/25/2016
W3-032A	Garrison Energy Center	DE	In Service	309.2	309.2	309.2	Natural Gas	8/30/2010	5/21/2015
W4-009	Woodbridge Energy Center	NJ	In Service	725	725	725	Natural Gas	11/22/2010	12/4/2015
X2-025	Sunbury Generation Facility	PA	In Service	416	416	416	Natural Gas	5/31/2011	3/18/2018
X2-052	St. Joseph Energy Center, LLC	MI	In Service	675	675	675	Natural Gas	6/29/2011	4/1/2018
X4-035	Keys Energy Center	MD	In Service	735.5	735.5	735.5	Natural Gas	1/20/2012	5/21/2018
X4-048	Lackawanna Thermal Generating St	PA	In Service	1000	1000	1000	Natural Gas	1/31/2012	3/8/2018
Y1-069	Oregon Energy Center	OH	In Service	799	799	799	Natural Gas	4/27/2012	6/23/2017
Y2-089	Lackawanna Thermal Generating St	PA	In Service	1370	370	370	Natural Gas	10/31/2012	10/2/2018
Y3-043	Delta York	PA	In Service	760	760	760	Natural Gas	2/28/2013	12/11/2018
Z1-079	Middletown Energy Center	OH	In Service	513	513	513	Natural Gas	10/30/2013	2/6/2018
Z2-028	Lordstown Energy Center	OH	In Service	800	800	800	Natural Gas	2/21/2014	8/15/2018
AA1-145	Doswell SC Units 2 & 3	VA	In Service	340	340	340	Natural Gas	10/31/2014	5/30/2018
AA2-115	Birdsboro Power LLC Generation Fa	PA	In Service	450	450	450	Natural Gas	4/28/2015	2/7/2019
AB1-144	Shawville Generating Station	PA	In Service	590	590	590	Natural Gas	10/30/2015	10/24/2016

Additional 5.5 GW in procurement or construction in PJM with MWE = MWC