Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	NJ	MD	DC	PA	DE
Regulation or Legislation	N.J.A.C 14:4-8 - NJ Renewable Portfolio Standards Rules A.B. 3520 (7/1/2010) SB 1925 (7/23/2012)	HB 1308 / SB 869 (2004) HB 375 (2008), SB 277 (5/2010), SB791 (5/2012), HB226 (4/2013)	Bill 15-747 (4/12/2005) Bill 17-0492 (10/6/2008) Bill 19-0384 (8/1/2011) Bill 19-10 (8/9/2011)	SB 1030/Act 213 (2004) HB 1203/Act 35 (2007) HB 2200/Act 129 (2008)	SB 74 (2005) SB 19 (2007), SB 328 (2008) SB 119 (7/2010), SB 124 (7/2011)
Geographic Eligibility	Energy shall be generated within or delivered into the PJM region. If the latter, the Energy must have been generated at a facility that commenced construction on or after January 1, 2003. Solar resources must be connected with distribution grid serving NJ.	Source must be (1) located in the PJM Region or (2) in a control area that is adjacent to the PJM Region, if the electricity is delivered into the PJM Region. Resources in states adjacent to PJM are accepted until 12/31/10. After 12/31/11 solar resources must be connected with distribution grid serving MD.	Source must be located within the PJM Interconnection region or within a state that is adjacent to the PJM Interconnection region. Solar systems approved after 2/1/2011 must be connected to the DC distribution grid.	Sources located inside the geographical boundaries of this Commonwealth or within the service territory of any regional transmission organization that manages the transmission system in any part of this Commonwealth.	"Eligible Energy Resources" include energy resources located within or imported into the PJM region. Customer-sited resources must be located in DE.
Reporting Period	June 1st to May 31st. Compliance reports due 10/1.	January 1st to December 31st. Compliance reports due 4/1.	January 1st to December 31st. Compliance reports due 5/1.	June 1st to May 31st. Compliance reports due 9/1.	June 1st to May 31st. Compliance reports due 10/1.
Banking	Class I RECs and SRECs can be banked for compliance in either of the following two energy years (per A.B. 3520). S.B. 1925 extended the lifetime for SRECs an additional two years. Class II RECs cannot be banked.	A Renewable Energy Credit shall exist for 3 years from the date created.	A Renewable Energy Credit shall exist for 3 years from the date created.	Alternative Energy credits can be banked for compliance in either or both of the two subsequent reporting years (as of the effective date of this Act)	An unused renewable energy credit shall exist for 3 years from the date created.
Credit Multipliers	No	No (they expired)	No (they expired)	No	a). 300% credit for (1) in-state solar electric or (2) renewable fuel cells installed on or before 12/31/2014. b). 150% credit for wind energy installations sited in Delaware on or before 12/31/2012. c). 350% credit for DPL wind energy installations sited off the DE coast on or before 5/31/2017. d). 110% credit for solar or wind installations sited in Delaware for which at least 50% of the equipment or components are manufactured in Delaware or installed with a minimum 75% state workforce.
Technology - Specific Requirements (set asides)	Solar Offshore wind	Solar PV, and Solar water heat commissioned after 6/1/11 Offshore wind - up to 2.5% beginning in 2017	Solar, including solar thermal	Solar	Solar Qualified fuel cells can count for up to 30% of the SREC requirement

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	NJ	MD	DC	PA	DE
Class I or Tier I Renewable Energy Sources	Class I renewable sources: • solar technologies • photovoltaic technologies • wind Energy • fuel cells powered by renewable fuels • geothermal technologies • wave or tidal action • methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner. • In-state hydroelectric facilities <3 MW placed in service after 7/23/2012	Tier 1 Renewable sources: (1) solar and solar water heat; (2) wind; (3) qualifying biomass; (4) methane from a landfill or wastewater treatment plant; (5) geothermal; (6) ocean; (7) a fuel cell powered by methane or biomass; (8) a small hydroelectric plant (less than 30 MW); (9) poultry litter incineration facilities in Maryland. (10) waste-to-Energy facilities in Maryland (11) certain geothermal heating and cooling systems and biomass systems that generate thermal energy	Tier 1 Renewable sources: (1) solar (including solar thermal); (2) wind; (3) qualifying biomass; (4) methane from a landfill or wastewater treatment plant; (5) geothermal; (6) ocean, including Energy from waves, tides, currents, and thermal differences; and (7) a fuel cell that produces electricity from a tier 1 renewable source under item (3) or (4) of this subsection.	Tier I alternative Energy sources: (1) Solar photovoltaic and solar thermal energy. (2) Wind power. (3) Low-impact hydropower. (4) Geothermal Energy. (5) Biologically derived methane gas. (6) Fuel cells. (7) Biomass Energy. (8) Coal mine methane.	Electricity derived from: a. solar; b. wind; c. ocean; d. geothermal; e. fuel cell capable of being powered by Renewable Fuels; f. combustion of gas from the anaerobic digestion of organic material; g. small hydroelectric facility (30 megawatts or less); h. sustainable biomass, excluding waste to energy; i. landfill methane gas;
Class II or Tier II Sources	Class II renewable sources: • resource recovery facility (subject to qualifications) • small hydro power facility (less than 30 MW)	Tier 2 Renewable sources: (1) hydroelectric power other than pump storage generation	Tier 2 Renewable sources: (1) hydroelectric power other than pump storage generation (2) waste-to-Energy For Tier 2 sources, the facility must have existed and been operational as of January 1, 2004. After December 31, 2012, the incineration of solid waste shall not be eligible to generate renewable Energy credits.	Tier II alternative Energy sources: (1) Waste coal. (2) Distributed generation systems. (3) Demand-side management. (4) Large-scale hydropower (including pumped storage). (5) Municipal solid waste. (6) Generation of electricity utilizing by-products of the pulping process and wood manufacturing process (in-state resources are now Tier 1). (7) Integrated combined coal gasification technology.	"New Renewable Generation Resources" are those in commercial operation after 12/31/1997. No more than 1% of each year's sales may come from resources that aren't New.
Alternative Compliance Payment (ACP)	Class I & II (ACP) - $50/MWh Solar (SACP) – was $300/MWh initially. For 2008/2009 it is $711/MWh, declining to $239 in 2027/28.	Tier 1 - $40 / MWh Tier 2 - $15 / MWh Solar - $400 / MWh in 2009 thru 2014, declining to $50 / MWh in 2023	Tier 1 - $50/MWh Tier 2 - $10/MWh Solar - $500/MWh in 2011 thru 2016, $350 in 2017, declining to $50 in 2023 and thereafter	Tier I (except solar) and Tier II - $45 / MWh Solar – 200% of the average market value for solar RECs sold in the RTO.	$25 for 1st deficient year. $50 for 2nd deficient year. $80 for subsequent years. Solar ACP is $400, $450, and $500, respectively.

Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	NJ				MD				DC				PA				DE		
Beneficiary of ACP	ACP's fund renewable energy projects through the Clean Energy Program. SACP's will be refunded to ratepayers as a result of A.B. 3520.				MD Strategic Energy Investment Fund, to be used to support the creation of Tier 1 and solar sources in the state.				DC Renewable Energy Development Fund, to be used to support the creation of new solar sources in the District.				PA's Sustainable Energy Funds, to fund projects that increase electric Energy generated from alternative Energy resources.				Delaware Green Energy Fund		
Solar Requirements	Yes, see below. Solar ACP Schedule: 2009: $711 2016: $323 2023: $272 2010: $693 2017: $315 2024: $266 2011: $675 2018: $308 2025: $260 2012 :$658 2019: $300 2026: $253 2013: $641 2020: $293 2027: $250 2014: $339 2021: $286 2028: $239 2015: $331 2022: $279				Yes, see below.				Yes, see below.				Yes, see below.				Yes, see below.		
RPS Percentages	Solar	Class I	Class II	Total	Solar	Tier I (incl solar)	Tier 2	Total	Solar	Tier 1 (incl solar)	Tier 2	Total	Solar	Tier I (incl solar)	Tier II	Total	n/a	Solar	Total (incl solar)
2004, or 04/05	0.010	0.740	2.5	3.25															
2005, or 05/06	0.017	0.983	2.5	3.5															
2006, or 06/07	0.0393	2.037	2.5	4.5763	0.000	1.0	2.5	3.5					.0013	1.5	4.2	5.7			
2007, or 07/08	0.0817	2.924	2.5	5.5057	0.000	1.0	2.5	3.5	0.005	1.5	2.5	4.0	.0030	1.5	4.2	5.7			2.0
2008, or 08/09	0.160	3.840	2.5	6.5	0.005	2.005	2.5	4.505	0.011	2.0	2.5	4.5	.0063	2.0	4.2	6.2		0.011	3.0
2009, or 09/10	0.221	4.685	2.5	7.406	0.010	2.01	2.5	4.51	0.019	2.5	2.5	5.0	.0120	2.5	4.2	6.7		0.014	4.0
2010, or 10/11	306 GWh	5.492	2.5	8.297	0.025	3.025	2.5	5.525	0.028	3.0	2.5	5.5	.0203	3.0	6.2	9.2		0.018	5.0
2011, or 11/12	442 GWh	6.320	2.5	9.214	0.050	5.0	2.5	7.5	0.400	4.0	2.5	6.5	.0325	3.5	6.2	9.7		0.20	7.0
2012, or 12/13	596 GWh	7.143	2.5	10.388	0.100	6.5	2.5	9.0	0.500	5.0	2.5	7.5	.0510	4.0	6.2	10.2		0.40	8.5
2013, or 13/14	2.05	7.977	2.5	12.527	0.250	8.2	2.5	10.7	0.500	6.5	2.5	9.0	.0840	4.5	6.2	10.7		0.60	10.0
2014, or 14/15	2.45	8.807	2.5	13.757	0.350	10.3	2.5	12.8	0.600	8.0	2.5	10.5	.1440	5.0	6.2	11.2		0.80	11.5
2015, or 15/16	2.75	9.649	2.5	14.899	0.500	10.5	2.5	13.0	0.700	9.5	2.5	12.0	.2500	5.5	8.2	13.7		1.00	13.0
2016, or 16/17	3.00	10.485	2.5	15.985	0.700	12.7	2.5	15.2	0.825	11.5	2.0	13.5	.2933	6.0	8.2	14.2		1.25	14.5
2017, or 17/18	3.20	12.325	2.5	18.025	0.950	13.1	2.5	15.6	0.980	13.5	1.5	15.0	.3400	6.5	8.2	14.7		1.50	16.0
2018, or 18/19	3.29	14.175	2.5	19.965	1.400	15.8	2.5	18.3	1.150	15.5	1.0	16.5	.3900	7.0	8.2	15.2		1.75	17.5
2019, or 19/20	3.38	16.029	2.5	21.909	1.750	17.4	0.0	17.4	1.350	17.5	0.5	18.0	.4433	7.5	8.2	15.7		2.00	19.0
2020, or 20/21	3.47	17.88	2.5	23.85	2.000	18.0	0.0	18.0	1.580	20.0	0.0	20.0	.5000	8.0	10.0	18.0		2.25	20.0
2021, or 21/22	3.56	17.88	2.5	23.94	2.000	18.7	0.0	18.7	1.850	20.0	0.0	20.0						2.50	21.0
2022, or 22/23	3.65	17.88	2.5	24.03	2.000	20.0	0.0	20.0	2.175	20.0	0.0	20.0						2.75	22.0
2023, or 23/24	3.74	17.88	2.5	24.12					2.500	20.0	0.0	20.0						3.00	23.0
2024, or 24/25	3.83	17.88	2.5	24.21														3.25	24.0
2025, or 25/26	3.92	17.88	2.5	24.30														3.50	25.0
2026, or 26/27	4.01	17.88	2.5	24.39															
2027, or 27/28	4.10	17.88	2.5	24.48															

Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	IL	OH	NC	MI	VA
Regulation or Legislation	Public Act 095-0481 (August 2007) PA 096-159 (Aug 2009) SB1652 (10/26/2011) HB 2427 (6/28/2014)	SB 221 (May 2008) SB 315 (9/10/2012) SB 310 (May 2014)	SB 3 (August 2007) SB 75 (April 2011)	Public Act 295, (October 6, 2008)	SB 1416 (2007) HB 1994 (2009) HB 1022 (7/2010) HB 232 and HB 1102 (7/2012) HB 2261 (2/2013)
Geographic Eligibility	Eligible resources must be located in IL. If there are insufficient cost-effective in-state resources, resources can be procured from adjoining states, and if these are also not cost-effective, resources can be procured from other regions of the country.	The renewable energy requirement must be met by in-state facilities and resources that can be shown to be deliverable into the state.	Utilities may use unbundled RECs from out-of-state renewable energy facilities to meet up to 25% of the portfolio standard. Qualifying out-of-state facilities are (1) hydroelectric power facilities with a generation capacity up to 10 MW, or (2) renewable energy facilities placed into service on or after January 1, 2007.	Renewable energy credits used to satisfy the renewable energy standards shall be either 1) located anywhere in this state or 2) located outside of this state in the retail electric customer service territory of a utility recognized by the Michigan PSC.	Electricity must be generated or purchased in Virginia or in the interconnection region of the regional transmission entity.
Reporting Period	June 1st to May 31st. Compliance reports due 9/1.	January 1st to December 31st. Compliance reports due 4/15.	January 1st to December 31st.	January 1st to December 31st.	January 1st to December 31st. Reports due annually on November 1st.
Banking		RECs have a lifetime of five years following their purchase or acquisition	On or after January 1, 2008 an Energy supplier can receive and accumulate RECs. Excess REC's can be applied to the next year's compliance target.		RECs acquired after January 1, 2014 will expire after five years.
Credit Multipliers	No	No	Triple credit for every one REC generated by the first 20 MW of a biomass facility located at a "cleanfields renewable energy demonstration park."	• Solar receives an additional 2 credits per MWh • Lesser bonuses awarded for on-peak production, storage, and using in-state labor or equipment	• Wind and solar power receive a double credit toward RPS goals. • Offshore wind: triple credit
Technology - Specific Requirements (set asides)	• Wind (IOUs): 75% • Wind (ARES): 60% • Solar PV: 6% for compliance year 2015-2016 and after • Distributed Gen (IOUs): 1%	• 0.5% from solar energy resources by 12/31/2026.	• 0.2% solar by 2018 • 0.2% energy recovery from swine waste by 2018 • 900,000 MWh of electricity derived from poultry waste by 2015.	None.	None.

Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	IL	OH	NC	MI	VA
Renewable Energy Sources	Renewable energy resources: • wind, • solar thermal energy, photovoltaic cells and panels, • biodiesel, • crops and untreated and unadulterated organic waste biomass, • tree waste, • anaerobic digestion, • in-state landfill gas, • hydropower that does not involve new construction or significant expansion of hydropower dams, and • "other alternative sources of environmentally preferable energy."	Renewable Energy sources: • solar photovoltaics (PV), • solar thermal, • wind, • geothermal, • biomass, • biologically derived methane gas, • landfill gas, • certain non-treated waste biomass products, • fuel cells that generate electricity and • qualified hydroelectric facilities. • certain cogeneration and waste heat recovery system technologies • run-of-the-river hydroelectric systems on the Ohio River exceeding 40 MW capacity • biological methane gas not converted into electricity.	Renewable sources: • solar-electric photovoltaics, • solar thermal, • wind, • hydropower up to 10 MW, • ocean or wave energy, • biomass, • landfill gas, • waste heat from renewables, and • hydrogen derived from renewables. • energy efficiency technologies (up to 25% of requirement), including CHP systems powered by non-renewable fuels. • electricity demand reduction (up to 100%)	Eligible Renewables include: • biomass, • solar and solar thermal, • wind, • landfill gas, • water released through a dam, • waves, tides, or currents, • geothermal, • municipal solid waste Credits from Energy Optimization and Advanced Cleaner Enegry Systems (defined below) can be used to satisfy up to 10% of the renewable energy requirement	Eligible energy resources: • solar, • wind, • geothermal, • hydropower, • wave, • tidal, • biomass energy, • landfill gas, Research and development expenses releated to renewable energy can meet up to 20% of the RPS goal.
Alternative Energy Sources	Distributed generation: • must be 2 MW or less and powered by wind, solar thermal, PV, biodiesel, biomass, tree waste, or hydropower. • must be interconnected on the customer side of the electric meter at the distribution system level. • distributed generation may also count toward the wind and solar requirements.	Advanced Energy Resources include: • clean coal; • generation III advanced nuclear power; • distributed combined heat and power (CHP); • fuel cells that generate electricity; • certain solid waste conversion technologies; • and demand side management or efficiency improvements. • any new, retrofitted, refueled, or repowered generating facility in Ohio	n/a	Energy Optimization may include: energy efficeincy, load management, or energy conservation. Advanced Cleaner Energy System is any of the following: • Gasification, • industrial cogeneration, and • coal-fired facilities that capture and sequester (CCS) 85% of carbon dioxide emissions	n/a

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	IL				OH			NC				MI			VA		
Alternative Compliance Payment (ACP)	For compliance year June 1, 2013 to May 31, 2014, the ACP is $1.4661/MWh of sales for ARES operating in Ameren territory and $1.5923/MWh of sales for ARES operating in ComEd territory.				REC - $45/MWh Solar –$300 for 2014, 2015, and 2016; $250 for 2017 and 2018; and similarly reduced by $50 every two years thereafter through 2026, to a minimum of $50.			None. Recoverable costs are capped.				Not applicable for the Renewable Energy Requirement.			None. It is a voluntary goal.		
Beneficiary of ACP	Renewable Energy Resources Fund Alternative Suppliers must meet at least 50% of their renewable quota through ACPs.				Ohio Advanced Energy Fund, which provides financial support to renewable energy and energy efficiency projects within the state.			n/a				n/a			n/a		
Solar Requirements	Yes, see below.				Yes, see below.			Yes, see below.				n/a			n/a		
RPS Percentages	For Electric Utillities:																Total (% of 2007 sales)
	Wind	Solar	Dist. Gen.	Total		Solar	Total	Solar	Swine Waste	Poultry Litter (GWh)	Total			Total			
2008, or 08/09	1.5			2.0%													
2009, or 09/10	3.0			4.0%		0.004%	0.25%										
2010, or 10/11	3.75			5.0%		0.010%	0.50%	0.02%									4.0%
2011, or 11/12	4.50			6.0%		0.030%	1.0%	0.02%									4.0%
2012, or 12/13	5.25	0.0035		7.0%		0.060%	1.5%	0.07%	0	0	3.0%			2%			4.0%
2013, or 13/14	6.00	0.12	0.040	8.0%		0.090%	2.0%	0.07%	0.07%	170	3.0%			3.33%			4.0%
2014, or 14/15	6.75	0.27	.0675	9.0%		0.12%	2.5%	0.07%	0.07%	700	3.0%			5%			4.0%
2015, or 15/16	7.50	0.60	0.100	10.0%		0.12%	2.5%	0.14%	0.14%	900	6.0%			10%			4.0%
2016, or 16/17	8.625	0.69	0.115	11.5%		0.12%	2.5%	0.14%	0.14%	900	6.0%						7.0%
2017, or 17/18	9.975	0.78	0.130	13.0%		0.15%	3.5%	0.14%	0.14%	900	6.0%						7.0%
2018, or 18/19	10.875	0.87	0.145	14.5%		0.18%	4.5%	0.20%	0.20%	900	10.0%						7.0%
2019, or 19/20	12.00	0.96	0.160	16.0%		0.22%	5.5%	0.20%	0.20%	900	10.0%						7.0%
2020, or 20/21	13.125	1.05	0.175	17.5%		0.26%	6.5%	0.20%	0.20%	900	10.0%						7.0%
2021, or 21/22	14.25	1.14	0.190	19.0%		0.30%	7.5%	0.20%	0.20%	900	12.5%						7.0%
2022, or 22/23	15.375	1.23	0.205	20.5%		0.34%	8.5%										12.0%
2023, or 23/24	16.50	1.32	0.220	22.0%		0.38%	9.5%										12.0%
2024, or 24/25	17.625	1.41	0.235	23.5%		0.42%	10.5%										12.0%
2025, or 25/26	18.75	1.50	0.250	25.0%		0.46%	11.5%										15.0%
2026, or 26/27						0.50%	12.5%										

Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	IN	WV	KY	TN	
Regulation or Legislation	SB 251 (May 2011)	None. HB2010 (January 2015) repealed the Alternative and Renewable Energy Portfolio standard	None.	None.	
Geographic Eligibility	Clean energy must be generated by a facility located in a control area that is part of a regional transmission organization of which an electricity supplier is a member. At least 50% must originate in Indiana.				
Reporting Period	January 1st to December 31st. Reports due annually on March 1 beginning in 2014				
Banking					
Credit Multipliers	None.				
Technology - Specific Requirements (set asides)	None.				
Renewable Energy Sources	Clean energy resources: wind; solar energy; photovoltaic cells and panels; dedicated crops grown for energy production; organic waste biomass; hydropower; fuel cells; hydrogen; energy from waste to energy facilities; energy storage systems or technologies; geothermal energy; coal bed methane; industrial byproduct technologies that use fuel or energy that is a byproduct of an industrial process; waste heat recovery; demand side management or energy				

Comparison of Renewable Portfolio Standards (RPS) Programs in PJM States

	IN			WV			KY			TN					
	efficiency initiatives; nuclear energy; combined heat and power systems; natural gas that displaces electricity from coal; clean coal technology; and net metered distributed generation facilities														
Alternative Energy Sources	See above.														
Alternative Compliance Payment (ACP)	None. It is a voluntary goal.														
Beneficiary of ACP	n/a														
Solar Requirements	n/a														
RPS Percentages			Total (% of 2010 sales)												
2010, or 10/11															
2011, or 11/12															
2012, or 12/13															
2013, or 13/14			4.0%												
2014, or 14/15			4.0%												
2015, or 15/16			4.0%												
2016, or 16/17			4.0%												
2017, or 17/18			4.0%												
2018, or 18/19			4.0%												
2019, or 19/20			7.0%												
2020, or 20/21			7.0%												
2021, or 21/22			7.0%												
2022, or 22/23			7.0%												
2023, or 23/24			7.0%												
2024, or 24/25			7.0%												
2025, or 25/26			10.0%												