

Pennsylvania Update

MSSIA – 3rd Qrtly Mtg October 25, 2023 (Updated 10/27/2023)

Ron Celentano, VP - Pennsylvania



Solar Update Highlights in PA – 10/27/2023

- Current in-state solar PV capacity in PA is <u>1,178 MW_{DC}</u>, from a total of 47,926 systems, as of 10/27/2023.
- PJM Queue for PA 23.6 GW (541 applications: Active, Engineering/Procurement, and Under Construction-including in partial service), of which 13 projects totaling 488 MW are under construction.
- Largest solar PV facility in PA, 129 MW_{DC} (108 MW_{AC}), certified and partially in service on 10/17/2023.
- RW4PA, particularly PA Solar Center, coordinated a lobby day in Harrisburg on October 17, 2023 succeeded in picking up several more co-sponsors on HB1467 – which is currently at 38.
- Still no movement on the community solar bill SB550, and only some slight traction on the AEPS bill HB1467 (which includes community solar).
- MAREC is soon to release an impact study on the AEPS bills SB230/HB1467, which was conducted by Gabel Assoc.
- Senator Boscola circulated co-sponsor memo intending on introducing another expansion of the AEPS, but with much lower Tier 1 and solar goals than SB230 and HB1467; it does not include community solar; the bill will also include language revising current net meter in PA, limiting the PV capacity to 110% of annual load generation; also expanding the 2 mile radius under virtual meter aggregation to the EDC boundary lines, but possibly limiting its application in other ways.
- Representative Schweyer circulated co-sponsor meme intending on introducing another community solar bill; not much detail available.

PENNSYLVANIA LEGISLATIVE GUIDE TO STATE SOLAR POLICY PENNSYLVANIA 2023-2024

- Including Additional Listing of Memos – PASSIA -

Quick Reference Guide for Key Bills

Guide	Bill #	Prime Sponsors	History				
INCREASING RENEWABLE ENERGY GOALS							
Increases Renewable Goals in the AEPS to 30% with 14% Solar by 2030 and Enables Community Solar							
¥.	<u>SB 230</u>	Steven Santarsiero (D-Bucks County)	Referred to the Senate Consumer Protection and Professional Licensure Committee, March 15, 2023				
- <u>\</u>	<u>HB 1467</u>	Danielle Friel Otten (D- Chester County)	Referred to the House Environmental Resources and Energy Committee, June 21, 2023				
Increases Renewable Goals in the AEPS to 15% with 5.5% Solar by 2032 No Community Solar Mentioned; Revisions to Net Metering							
	MEMO	Prime: Sen. Lisa Boscola	Memo circulated on October 3, 2023				

(D-Lehigh/Northampton Counties)

https://pasolarcenter.org/wp-content/uploads/2023/07/PA-State-Solar-Legislative-Guide.2023-2024 updated 07182023.pdf







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COMMUNITY SOLAR/SHARED SOLAR

Enables Community or Shared Solar Programs in Pennsylvania

		Prime: Rep. Peter Schweyer (D-Lehigh County)	Memo circulated on September 15, 2023
	MEMO	Prime: Daniel Laughlin (R-Erie County)	Memo circulated on March 24, 2023 (likely a companion bill to SB 330)
*	<u>HB 330</u>	Prime: Perry Stambaugh (R-Perry, Juniata Counties)	Referred to the House Consumer Protection, Technology and Utilities Committee, March 13, 2023
	<u>MEMO</u>	Prime: Aaron Kaufer (R-Luzerne County) and Joseph Hohenstein (D-Philadelphia County)	Memo circulated on April 10, 2023 (likely a companion bill to SB 550)
	<u>SB 550</u>	Prime: Rosemary Brown (R-Lackawanna, Monroe and Wayne Counties)	Referred to the Senate Consumer Protection and Professional Licensure Committee, April 13, 2023



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SOLAR FOR SCHOOLS

Allocates Grant Funding for Schools to go Solar

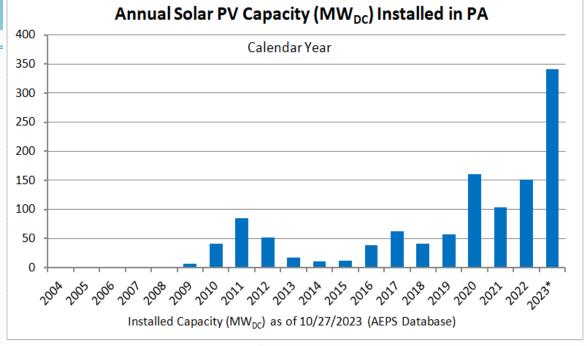
	<u>HB 1032</u>	Prime: Elizabeth Fiedler (D-Bradford, Philadelphia County)	Final House passage (Y-134; N-69), June 29, 2023. Awaiting action in the Senate.
-ġ-	<u>MEMO</u>	Prime: Vincent Hughes (D-Montgomery and Philadelphia Counties) & Carolyn Comitta (D-Chester County)	Memo circulated on April 13, 2023 (likely a companion bill to HB 1032)

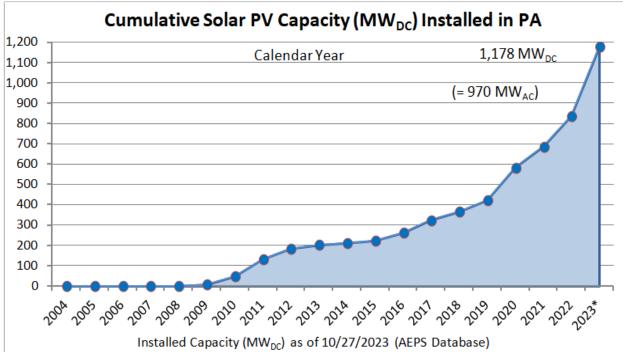
DECOMMISSIONING AND BONDING OF SOLAR ENERGY PROJECTS

Requires decommissioning plans and financial assurances

×	<u>SB 211</u>	Prime: Gene Yaw (R-Bradford, Lycoming, Sullivan, Tioga and Union Counties)	Final Senate passage (Y-36; N-13), March 8, 2023. Referred to the House Environmental Resources and Energy Committee, April 25, 2023
Ě	Brime: Kathy Dapp		Referred to the House Environmental Resources and Energy Committee, April 25, 2023

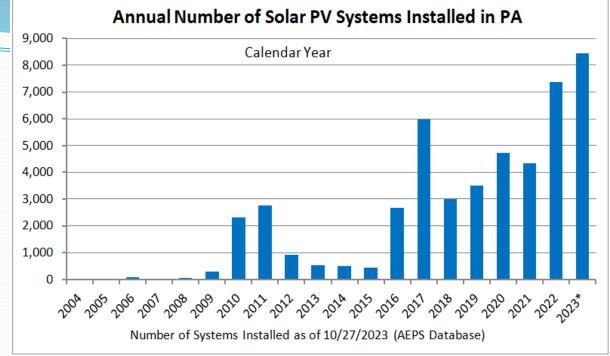
PV Capacity in PA Annual & Cumulative As of 10/27/2023

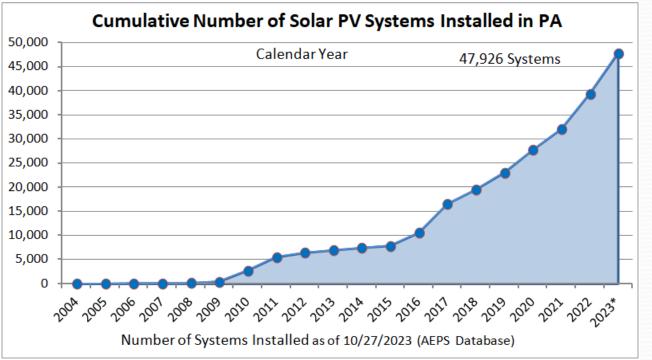




SEIA reports 1,195 MW installed through Qrt 2-2023

Number of PV Systems in PA Annual & Cumulative As of 10/27/2023





SEIA reports 61,281 systems installed through Qrt 2-2023

Breakdown Of PV Installations in PA

Cumulative PV Installed in PA					
Capacity (DC)	# of Systems	Total MW			
<u><</u> 15 kW	40,102	331			
> 15 kW to < 250 kW	7,535	222			
> 250 kW to < 1 MW	204	100			
> 1 MW to \leq 3 MW	55	86			
> 3 MW to <u><</u> 5 MW	16	60			
> 5 MW to <u><</u> 10 MW	2	14			
> 10 MW	12	366			
Total	47,926	1,178			

* as of 10/27/2023 as per PA AEPS (PUC)

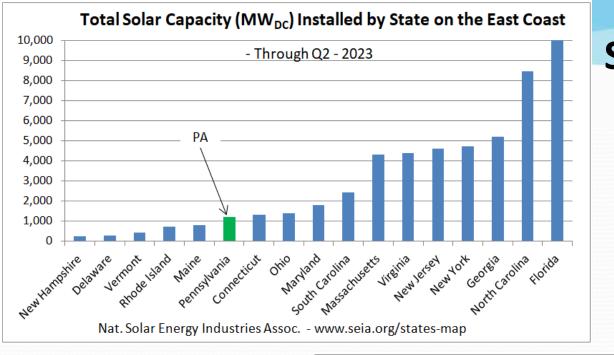
Since March 2022: 85 MW Grid Scale

> 3 to < 5 MW : 2 Projects, 8 MW
> 5 to < 10 MW : 1 Projects, 8 MW
> 10 MW : 6 Projects, 252 MW

Last Year

Cumulative PV Installed in PA					
Capacity (DC)	# of Systems	Total MW			
<u><</u> 15 kW	28,189	225			
> 15 kW to < 250 kW	4,700	153			
> 250 kW to < 1 MW	175	86			
>1 MW to < <u></u> 3 MW	47	75			
> 3 MW to <u><</u> 5 MW	14	52			
> 5 MW to <u><</u> 10 MW	1	6			
> 10 MW	6	114			
Total	33,132	711			

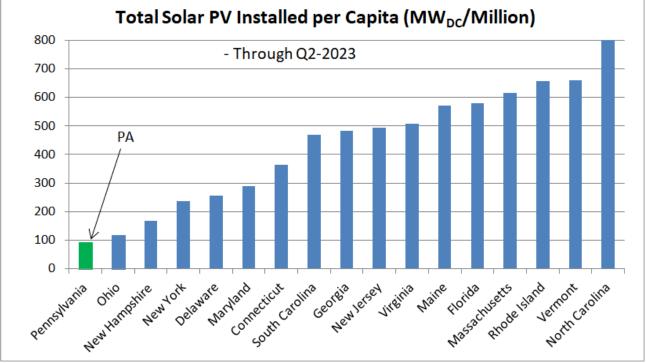
* as of 3/12/2022 as per PA AEPS (PUC)



Solar in Other East Coast States Compared to PA

Solar in Pennsylvania Ranks 17th in the Nation

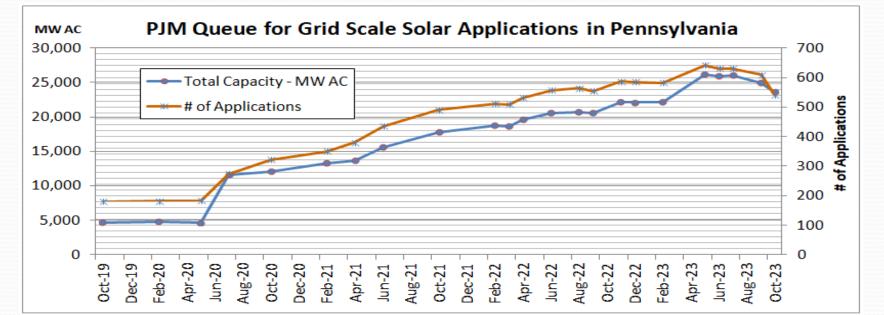
Wood Mackenzie/SEIA US Solar Market Insight – Qrt 1, 2023



PJM Queue for PA Solar Applications

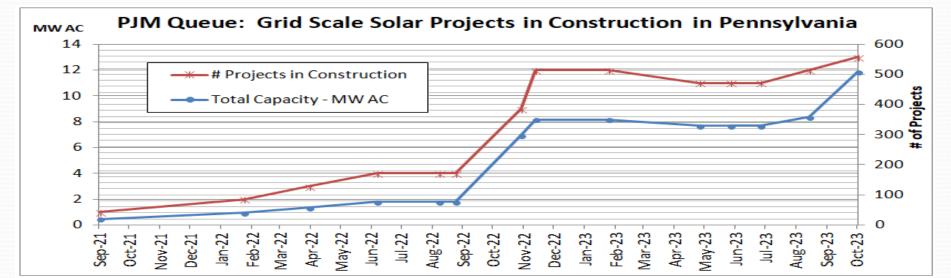
PJM Queue for PA	As of 10/25/2023					
		Max Facility Output (MFO)		Total Cap		
		Total Cap	Capacity Range		IC Queue	
Status	# of Apps	AC MW	Min	Max	Position	
Active	448	20,891	1.0	300.0	3,246	
Engineering/Procurement	79	2,147	2.0	120.0	1,105	
Under Construction	13	508	13.8	150.0	307	
Part in Srvc - Under Const	1	100	100.0 100.0		60	
Sub-Total	541	23,646	5		4,719	
In Service	20 327 3.3 20.0		103			
Grand Total*	561 23,973			4,822		

* Total Applications catagorized as "Solar & Storage" = 105

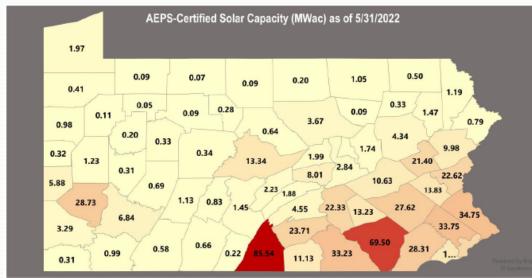


PJM Queue for PA Solar Facilities - Under Construction

	Projects Currently Under Construction - Solar PV Facilities in PA (10/25/2023)						MFO	
	T						Capacity	
-	Queue #	Name	Commercial Name	State	County	Owner	MW	
	AD1-020	Hunterstown-Lincoln 115 kV	Adams Solar LLC	PA	Adams	ME	100	×
	AD2-009	McConnellsburg 138 kV	Great Cover Solar LLC	PA	Fulton	APS	70.0	xxx
	AD2-115	Lyons-Moselem 69kV	Lyons Solar	PA	Berks	ME	20.0	xx
	AD2-116	Hokes-Grantley 69 kV	Cottontail Solar 2	PA	York	ME	20.0	xxx
	AE1-101	McConnellsburg-Texas Eastern 1	Great Cove Solar II	PA	Franklin	APS	150.0	×
	AE1-185	Hokes-Jackson 69 kV	Cottontail Solar 1	PA	York	ME	20.0	xxx
	AE1-196	Hokes-Jackson 69 kV II	Cottontail Solar 8	PA	York	ME	20.0	xxx
	AE2-059	Derry Tap-Derry Bus 69 kV	Cottontail Solar 4 aka East Chil	PA	Northumberland	PPL	20.0	xx
	AE2-060	Mifflintown Bus-Mifflintown Tap	Cottontail Solar 5 aka Walker S	PA	Juniata	PPL	20.0	xxx
	AE2-114	Midland 23 kV I	BE-PINE 1 Cain Road	PA	Beaver	DL	17.1	xxx
	AE2-115	Midland 23 kV II	BE-PINE 2 Dam Road	PA	Beaver	DL	17.1	xxx
	AE2-125	Stahlstown-Ligonier 25 kV	Stahlstown-Ligonier 25 kV	PA	Westmoreland	APS	13.8	xxx
	AE2-133	Penns Tap-Richfield Tie 69 kV	Penn Solar (Cottontail 6)	PA	Snyder	PPL	20.0	xx
		Total		-	·	·	488.0	
		n	In Service in 2023					-
	AE2-129	Philipsburg-Clarence 34.5 kV	Philipsburg-Clarence 34.5 kV	PA	Clearfield	PENELEC	20	1/28/2023
	AE2-126	Dubois-Curwensville 34.5 kV	CL-Viaduct	PA	Clearfield	PENELEC	20	3/23/2023
	AF2-184	McConnelsburg-Mercersburg		PA	Franklin	APS	20	5/1/2023
		34 kV II						
	AC2-168	Clinton 23kV	Gaucho Solar	PA	Washington	DL	11.7	6/29/2023
	AD1-135	Clinton 23 kV II	Gaucho Solar	PA	Washington	DL	20	6/29/2023
	AE2-224	Bearrock-Johnstown 230 kV	CPV Maple Hill Solar	PA	Cambria	PENELEC	14> 100	10/17/202



AEPS Report 2022 – Observations on Solar Resources



Note: As of 5/31/2022, the AEPS certified solar generation capacity was 12.55 MWac in Delaware County and 21.94 MWac in Philadelphia County.



Note: As of 5/31/2022, Philadelphia County has 2,277 AEPS certified solar generation facilities

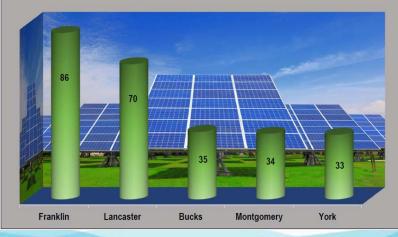
0.5% Solar PV Requirement = 525.0 MW_{AC} Solar PV Capacity

534.4 $\rm MW_{AC}$ had been installed in PA by 5/31/2021

Currently, 970 MW_{AC} is installed (as of 10/27/2023), or the solar share = 0.92%

Chart 12: Top Five Pennsylvania Counties for Installed Solar Capacity

Top Five PA Counties for Solar Installations (MWac)



Current & Historic PA SREC Prices

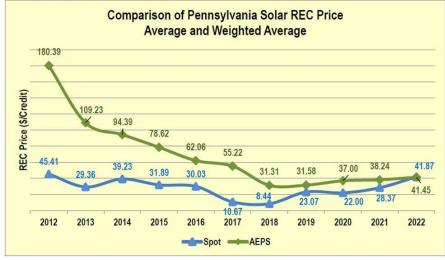
Latest Bid Price: \$30.00



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PA



Current PA SACP = \$82.90/SREC

PA Utility Solar Incentive Programs for C&I Customers

Four utilities currently provide an incentive for solar projects for commercial customers, including schools, under their Act 129 energy efficiency plans. PECO, Duquesne Light Company (DLC), First Energy (including Met-Ed, Penn Power, Penelec and West Penn Power) and PPL have announced solar incentives in their current Act 129 plans. Most of them require the project meets a minimum Total Resource Cost Test ("TRC") value. The utilities will reimburse commercial/industrial customers for every solar kWh generated and used on site for the first 12-month period.

Utility	Payment per kWh	Min TRC Requirement	For solar systems put in service	Сар
PECO	\$0.10	May not apply	1/1/23 - 5/31/26	Must not exceed system cost
DLC - Duquesne	\$0.05	0.90 is acceptable	Uncertain	Up to 90% of system costs, capped at \$500,000
First Energy	\$0.03	0.85	1/1/23 - 5/31/26	Up to 50% of system costs, capped at \$500,000
PPL	\$0.03	0.85	1/1/23 - TBD	Up to 50% of system costs, capped at \$500,000

Note: Utility program availability & incentive levels are subject to change without prior notice.