

Summary of Standard Solar Pricing (06 03 2022) LAKE COUNTY

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About Solar Power Purchase Agreements

(taken from the Solar Energy Industries Association)

A solar power purchase agreement (PPA) is a financial agreement where a developer arranges for the design, permitting, financing and installation of a solar energy system on a customer's property at little to no cost. The developer sells the power generated to the host customer at a fixed rate that is typically lower than the local utility's retail rate. PPAs typically range from 10 to 25 years and the developer remains responsible for the operation and maintenance of the system for the duration of the agreement. At the end of the PPA contract term, a customer may be able to extend the PPA, have the developer remove the system or choose to buy the solar energy system from the developer.

Standard Solar provided pricing for Des Plaines, Mill Creek and Libertyville.

Regarding the Proposal

The proposal contains a few different costs: the PPA rate, the O&M rate, the EPC rate, the Interconnection Cost and the amount of grants/rebates. The PPA rate is the Power Purchase Agreement rate. This is what you pay for the energy produced by the systems. The O&M rate is what you pay for the operation and maintenance of the system. The EPC rate is what you pay for the engineering, procurement and construction of the system. The Interconnection Cost is what you pay to have the system connected to ComEd's energy grid. The grants and rebates captured in the proposal include the \$250/kW smart inverter rebate and funds associated with the Adjustable Block Program ("Illinois Shines").

Comparison of pricing from October 2021 to April 2022

	Des Plaines		Mill Creek		Libertyville	
	10/28/2021	4/21/2022	10/28/2021	4/21/2022	10/28/2021	4/21/2022
Size (kW DC)	147.42 (roof) / 993.72 (ground)	1,348.60	1,354	1,306	1,070	1,080
Production (kWh)	170,700 (roof) / 1,266,000 (ground)	1,718,912	1,710,000	1,812,467	1,473,390	1,524,960
Starting PPA Rate (\$/kWh)	\$0.0369	\$0.0418	\$0.0327	\$0.0329	\$0.0326	\$0.0442
"All-In" PPA (inc. O&M)	\$0.0445	\$0.0494	\$0.0399	\$0.0401	\$0.0399	\$0.0515
PPA Term	25	25	25	25	25	25
EPC (\$/Wdc)	\$1.593	\$1.800	\$1.566	\$1.760	\$1.620	\$2.070
Interconnection Cost (\$ or \$/Wdc)	\$1,200	\$1,200	\$20,000	\$0.015	\$50,000	\$0.046
All-In Cost (\$/Wdc) (EPC+IX)	\$1.674	\$1.881	\$1.695	\$1.840	\$1.771	\$2.196
Grants/Rebates	\$1,074,287	\$1,281,136	\$1,277,716	\$1,322,000	\$1,051,534	\$1,107,465

Notes regarding the PPA rate

Overall, the PPA pricing (approximately \$0.04-\$0.05/kWh) seems reasonable. Increase in equipment and labor costs due to supply chain constraints, inflation, and panel tariffs contribute to the increase.

The price increase for Libertyville is 29% when comparing the October 2021 price to the April 2022 price. The increase for Mill Creek is 2% and for DesPlaines, is 11%. The major contributing factor to the Libertyville increase is the requirement for an 8-10' berm and a 50' vegetative buffer stretching the entire eastern side of the project, and an access road with a pervious surface. Second, there is a spoils pile on site that will require extra site work costs.

Notes regarding the EPC rate

While the Interconnection Cost stayed the same, the proposal captures the rationale behind the increase in the EPC rates: Costs have increased due to module pricing and tariff. Steel and Copper pricing has increased. Supply chain issues have resulted in cost increases. The all-in first year cost for EPC and Interconnection ranges from \$1.840/W to \$2.196/W.

Note regarding the overall rate structure

The EPC and Interconnection costs are applied to the system size to be charged as a fixed monthly charge. The all-in PPA rate will be applied to the amount of measured system production each month.

Note regarding system sizes

System sizes have changed and range from 1.08MW to 1.35MW. Notably, the Des Plaines system size seems to have increased by about 20%.

Additional notes regarding construction and zoning

In addition to the aforementioned notes regarding work at the Libertyville location, there are also consideration at the Des Plaines and Mill Creek locations. The Des Plaines project will have the added complexity of combined roof and ground-mount systems. The Mill Creek project will have increased site work to address a dirt mound in the array area.