

1. Is the power generated by home solar systems during the day more valuable than power generated at night?

**No, evening power is more valuable because power during the day is more prevalent. See the chart below.**

**In calendar year 2023, DPU sold 130,585 MWH to all customers excluding LANL. During this same time period, solar customers supplied 2,564 MWH (2%) to DPU.**

The chart below shows representative hourly open-market prices per MWH for an average over two years. Daytime hours are shown in yellow. (HASP is the “hourly average” sales price. HE is hour ending.)

Date / HE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
HASP Average																								
2 year HASP Average	\$ 52	\$ 58	\$ 57	\$ 58	\$ 61	\$ 68	\$ 73	\$ 74	\$ 73	\$ 70	\$ 70	\$ 71	\$ 73	\$ 76	\$ 82	\$ 87	\$ 96	\$ 105	\$ 108	\$ 110	\$ 100	\$ 84	\$ 72	\$ 66
Jan.	\$ 57	\$ 64	\$ 64	\$ 64	\$ 68	\$ 75	\$ 82	\$ 84	\$ 83	\$ 81	\$ 81	\$ 83	\$ 85	\$ 88	\$ 94	\$ 100	\$ 109	\$ 119	\$ 121	\$ 124	\$ 113	\$ 93	\$ 81	\$ 73
Feb.	\$ 58	\$ 65	\$ 64	\$ 64	\$ 68	\$ 75	\$ 82	\$ 84	\$ 83	\$ 80	\$ 80	\$ 82	\$ 84	\$ 87	\$ 93	\$ 98	\$ 108	\$ 118	\$ 120	\$ 122	\$ 111	\$ 91	\$ 81	\$ 73
Mar.	\$ 57	\$ 64	\$ 63	\$ 63	\$ 67	\$ 75	\$ 81	\$ 84	\$ 83	\$ 79	\$ 79	\$ 81	\$ 82	\$ 85	\$ 91	\$ 96	\$ 106	\$ 116	\$ 118	\$ 121	\$ 110	\$ 91	\$ 79	\$ 72
Apr.	\$ 56	\$ 63	\$ 62	\$ 63	\$ 66	\$ 74	\$ 81	\$ 83	\$ 82	\$ 78	\$ 78	\$ 80	\$ 81	\$ 84	\$ 89	\$ 95	\$ 104	\$ 114	\$ 116	\$ 119	\$ 108	\$ 90	\$ 78	\$ 71
May.	\$ 56	\$ 63	\$ 62	\$ 63	\$ 66	\$ 74	\$ 80	\$ 82	\$ 80	\$ 77	\$ 77	\$ 78	\$ 79	\$ 82	\$ 88	\$ 93	\$ 102	\$ 112	\$ 114	\$ 116	\$ 106	\$ 88	\$ 78	\$ 71
Jun.	\$ 55	\$ 61	\$ 61	\$ 61	\$ 65	\$ 72	\$ 79	\$ 80	\$ 78	\$ 75	\$ 74	\$ 76	\$ 77	\$ 80	\$ 85	\$ 90	\$ 99	\$ 108	\$ 111	\$ 113	\$ 104	\$ 86	\$ 75	\$ 69
Jul.	\$ 54	\$ 60	\$ 59	\$ 60	\$ 63	\$ 71	\$ 77	\$ 78	\$ 77	\$ 73	\$ 73	\$ 75	\$ 76	\$ 80	\$ 85	\$ 90	\$ 99	\$ 109	\$ 112	\$ 114	\$ 104	\$ 87	\$ 75	\$ 68
Aug.	\$ 53	\$ 59	\$ 59	\$ 59	\$ 63	\$ 70	\$ 76	\$ 77	\$ 75	\$ 72	\$ 72	\$ 74	\$ 76	\$ 80	\$ 85	\$ 91	\$ 100	\$ 110	\$ 114	\$ 116	\$ 105	\$ 87	\$ 74	\$ 68
Sept.	\$ 53	\$ 58	\$ 58	\$ 58	\$ 61	\$ 68	\$ 74	\$ 75	\$ 73	\$ 71	\$ 71	\$ 73	\$ 74	\$ 77	\$ 83	\$ 88	\$ 97	\$ 106	\$ 110	\$ 112	\$ 101	\$ 85	\$ 72	\$ 66
Oct.	\$ 52	\$ 58	\$ 57	\$ 58	\$ 61	\$ 68	\$ 73	\$ 75	\$ 73	\$ 70	\$ 70	\$ 72	\$ 73	\$ 77	\$ 82	\$ 88	\$ 97	\$ 106	\$ 109	\$ 111	\$ 100	\$ 84	\$ 72	\$ 66
Nov.	\$ 52	\$ 58	\$ 57	\$ 58	\$ 61	\$ 68	\$ 73	\$ 74	\$ 73	\$ 70	\$ 70	\$ 71	\$ 73	\$ 76	\$ 82	\$ 87	\$ 96	\$ 105	\$ 108	\$ 110	\$ 100	\$ 84	\$ 72	\$ 66
Dec.	\$ 54	\$ 61	\$ 61	\$ 61	\$ 64	\$ 71	\$ 77	\$ 80	\$ 79	\$ 77	\$ 77	\$ 80	\$ 83	\$ 86	\$ 93	\$ 99	\$ 109	\$ 118	\$ 119	\$ 122	\$ 111	\$ 91	\$ 79	\$ 71

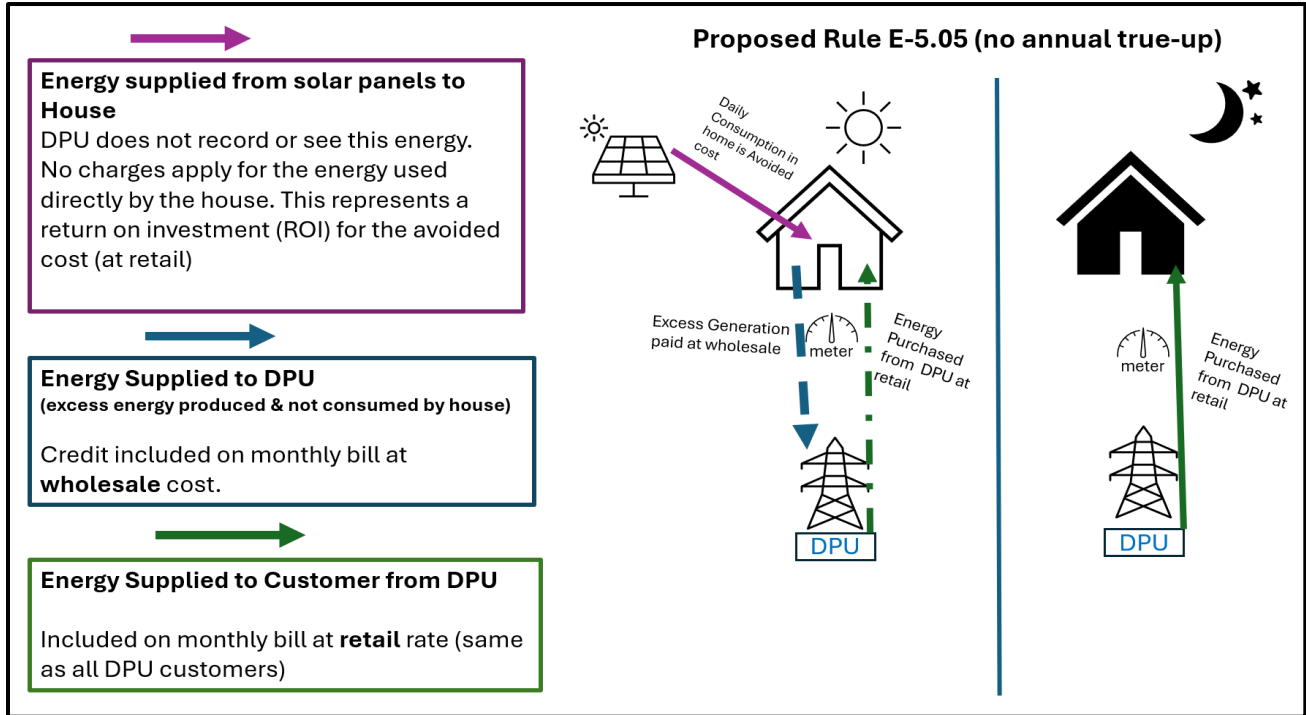
2. Isn't DPU penalizing solar users during the day with wholesale rate when the use is mostly at night?

**No. The energy produced during the day is not the same energy delivered to customers at night. The wholesale costs are comprised of what DPU pays for purchasing power during the day and night. The retail rate DPU charges for power includes both the cost of energy (wholesale rate) and the operational costs for electric distribution (e.g. power lines, substations, transformers and distribution energy losses.) to deliver that energy to homes. DPU currently does not have a time-of-use rate.**

**See the chart above and note that power is less expensive during the day (8 am to 5 pm) than it is at peak night hours (5 pm to 10 pm). The daytime market price is an average of \$75.11 and the total 24-hour average is \$77.55.**

3. Why is the wholesale rate being recommended?  
**DPU recommends paying the wholesale cost for all energy delivered to the local distribution system from home solar systems because it is equitable to all customers. This wholesale cost is what DPU pays for purchased power delivered to the local distribution system. The wholesale cost includes power purchases, transmission charges and other demand costs.**
4. What are the rates that neighboring communities pay their solar customers?  
**PNM \$0.05135 average on peak (8 am to 10 pm) <https://www.pnm.com/rates>  
 Kit Carson \$0.035 <https://kitcarson.com/electric/electric-info/rates/>  
 Jemez Coop \$0.02591 <https://www.jemezcoop.org/rates-rules>  
 LAC \$0.0738 (12 month rolling average for December 2023)**

5. Are some grid-tied PV systems in the County only supplying power to DPU and not to the home?  
**All grid-tied home PV systems supply home loads first (e.g. any appliances, televisions, computers, air conditioning that are in use while solar is generating power) and excess generation goes to the local distribution system. See the figure below.**

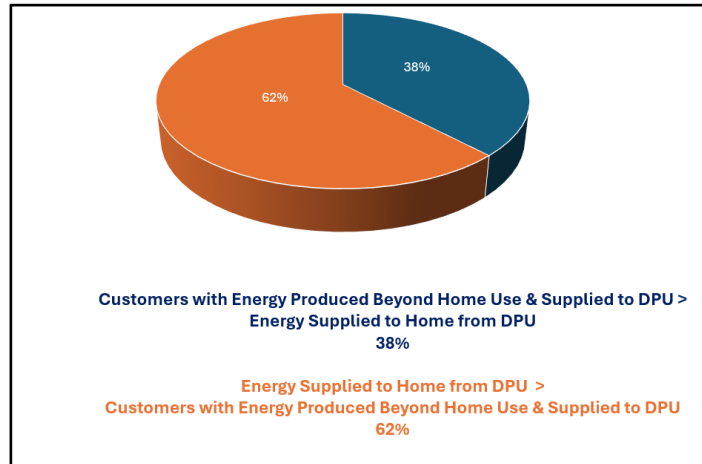


**Note: Whether excess generation is supplied to DPU or energy is being purchased from DPU, is determined by the amount of energy produced from a home’s solar panels as well as direct consumption by the house.**

6. What is included in DPU’s retail rate?  
**DPU’s retail rate includes wholesale costs and operational costs. The operational costs include electric distribution system repair and replacement, line personnel, equipment, transformers and distribution energy losses. The retail rate is for consumption per kWh. The fixed monthly service charge is separate from the retail rate.**
7. Is there a basis that was used to calculate the 6 MW distributed generation limit?  
**The basis is approximately 30% of the County’s load demand. Power reliability issues can occur if the system is above 30% because of backflowing current as proven industry wide by other utilities.**
8. How does PV affect the local grid?  
**When solar production exceeds 30% of load, it will reduce the flow of power on the feeders. This can cause reliability issues with system protection and power quality for all customers. The upcoming electrification assessment will assist DPU in determining what electric distribution system modifications will be required to accommodate additional solar installations.**

9. It seems unfair to pay for operating costs of distributing power for the energy that you produce with your own panels.

**The operating costs are the cost DPU incurs to deliver energy to all customers including all homes with solar. If you are connected to Los Alamos County electric distribution system you are benefiting from having power available after the sun goes down and should pay for your share of those costs. DPU is not charging for daytime use of the solar energy produced that is directly used by the home.**



10. Explain how the rule change is consistent with DPU/BPU/CC/County statements supporting carbon-free energy & how does this rule support the climate change policy?

**Our infrastructure must be fiscally sustainable.**

**The Board of Public Utilities adopted the following:**

**The Department of Public Utilities will be a carbon-neutral electrical energy provider when the electricity distributed to Los Alamos County consumers is generated or purchased from sources that in their normal operation cause no net release of carbon dioxide to the atmosphere.**

**1. “Los Alamos County consumers” means those customers scheduled in the Los Alamos County Code of Ordinances Section 40-121; this does not include DOE/LANL.**

**2. “No net release of carbon dioxide” means that purchases or generation of carbon-based electrical energy, necessary when carbon-free supplies are not practically available to supply Los Alamos County consumers, will be fully offset from previous sales of surplus carbon-free electricity to other entities.**

**Net carbon neutral initiative**

**In 2016, the Board of Public Utilities adopted a strategic initiative for DPU to be a net carbon-neutral electrical energy provider by 2040. DPU plans to complete the carbon-neutral initiative through the addition of non-carbon emitting generation resources such as solar, wind, and nuclear energy, and energy storage systems. Some energy from carbon-emitting sources may be needed to meet the County’s load while managing the variability of intermittent wind and solar resources and unplanned generation outages.**

11. Will DPU grandfather existing customers?

**All customers must be treated equitably which is contrary to having a grandfathered class of customer.**

12. Does this action violate the existing agreement?

**No, the existing agreement allows the utility to change rule E-5.**

2.2. Customer understands that if this agreement is accepted, connection and operation of customer's Qualifying Facility must meet at all times all applicable safety and performance standards, including those established by the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), the National Electrical Safety Code (NESC), and all additional safety and performance standards of Utility that are necessary to protect public safety and system reliability.

Customer shall be subject to the terms and conditions set forth in the Utility's Electric Rule E-5 for Interconnection – Connection with Cogeneration and Small Power Producers ("Utility Rule"), a copy of which is attached to this agreement. Customer hereby acknowledges that Customer has read this rule. Electric rates, including net metering customers, are subject to change.

3. UTILITY RULE. This Agreement shall be subject to and interpreted consistent with the provisions of Utility Electric Rule E-5.

4. CREDIT FOR NET ENERGY. Credit for net energy shall be in accordance with the Utility's Rule, E-5.05, Metering Calculation.

13. How does the existing rule affect customers without PV?

**The customers without PV unwittingly end up paying for operational costs of PV customers. When the retail rate is used for both energy supplied to DPU and for energy delivered to solar customers, both the wholesale cost and the operational cost can be cancelled out by the solar credit. This results in a number of solar customers avoiding the operational cost and paying less than the \$12 monthly service charge in a billing period (month). This avoided operational cost must then be recovered from other (non-PV) customers. The proposed rule corrects this inequity.**

14. Who pays for the solar panels, breakers, networking?

**The homeowner who chooses to add solar panels/solar system to their homes. DPU's cost for wire connection from the home's meter to the local distribution system are covered within DPU's operational costs recovered through the retail rate to all electric customers.**

15. Why wasn't the true-up being done?

**We made a mistake. This is a manual process and with turnover in the department, the manual true-up was last performed for calendar 2019 production.**

16. Will DPU claw back the prior year amounts?

**No, DPU is not planning to claw back past over-payments to solar customers.**

17. Why weren't all PV customers notified with a postcard about the change?

**All meetings are noticed through paper, social media, county website and legal postings.**

18. Shouldn't surplus energy production provide incentive to add solar?

**The intent of both the current rule and the proposed rule revisions is to provide credit for surplus energy production at the wholesale costs which is an equitable rate. The wholesale costs are higher than the surrounding communities which does retain an incentive.**

19. When will time of use rates be available for what we produce?

**After the new billing system is purchased and implemented. Planned for rollout between July 2025 and June 2026.**

20. Did wholesale rates get raised when electric rates were increased recently?

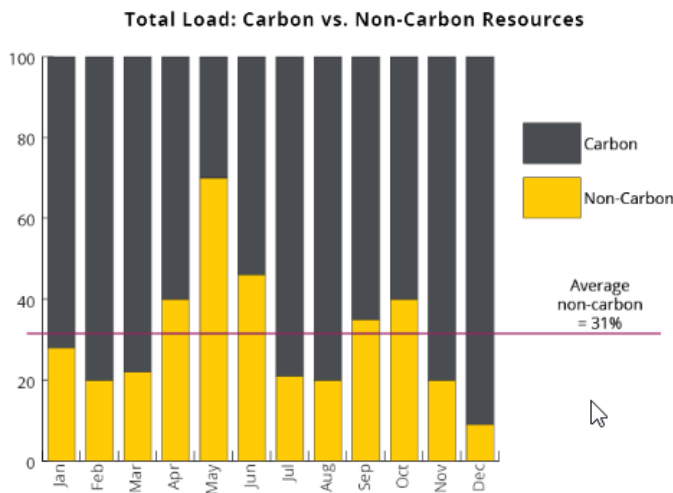
**Yes, the two are related. The electric rate charged to all customers is based on increases in the wholesale cost of energy plus operational costs.**

21. Monthly true-up vs. annual true-up: are producers being hurt?

**The existing rule calls for monthly true-up (billing period). If the true up is performed monthly, customer producing beyond their use will have lower credits than if the true up is done annually. The historical annual true-up (pre-2020) was due to technical limitations of the billing system. This process benefited the solar customer although it did not comply with the rule. DPU does not intend to claw back the over benefit to the solar customers.**

22. Isn't local energy clean and isn't DPU purchasing dirty energy?

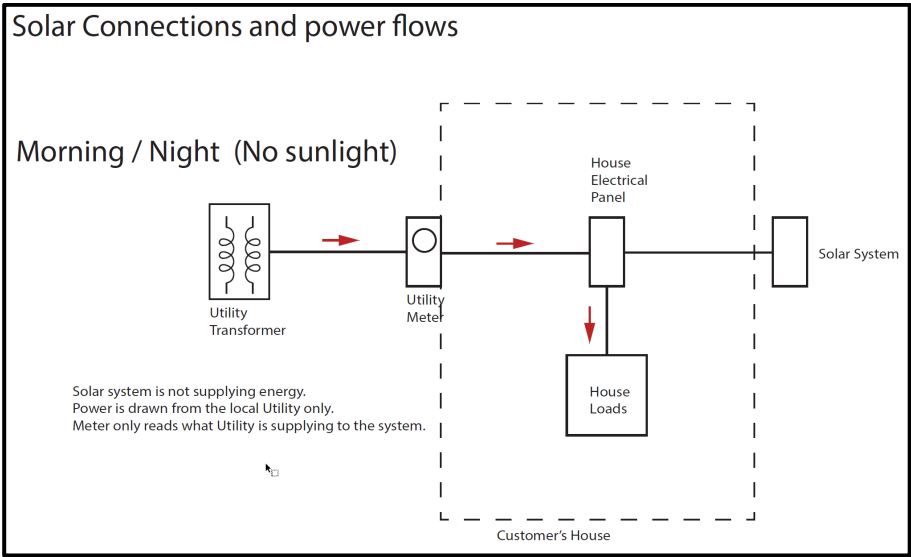
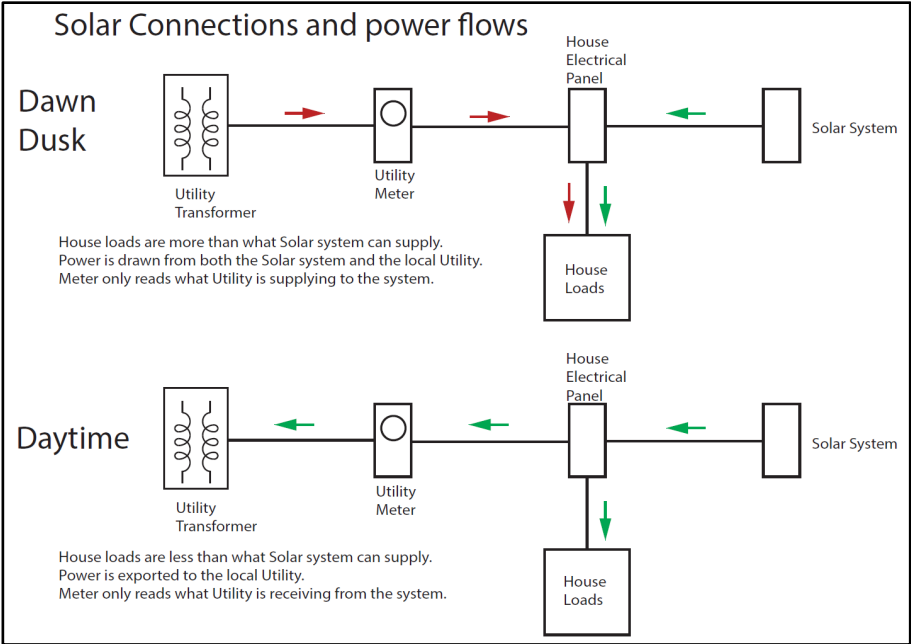
**The chart below for calendar year 2023 appears in DPU's quarterly report.**



23. Will the true-up at wholesale be only for the extra energy generated?

**No annual true-up will be performed. Wholesale will be paid for all energy that is exported to the utility in excess of that used directly by the home.**

**Energy can only flow in a single direction at a time. The grid does not store energy. It is used at the same rate that it is produced or produced at the same rate that it is used.**



24. What will the electric portion of my bill look like after the rule change?

**Below is a sample of the electric portion of a bill using the proposed rule. The net amount due from the customer in this example is \$17.67.**

Energy Supplied to Customer from DPU of \$19.10  
 plus Monthly Service Charge of \$12.00  
 less Energy Supplied to DPU from Customer, credit of <\$13.43>  
 equals net charge of \$17.67

**Monthly Billing with Wholesale Rate based on proposed E-5.05 rule change.**

Description	Meter	Read Type	Previous Meter Reading	Current Meter Reading	Demand Charges	Demand Rate	Multi.	Usage	Commodity Rate	Charge
ELECTRIC	KWH	A	4521	4670			1	149		
						Energy supplied to Customer from DPU		149	0.128200	19.10
									Retail Rate	12.00
										<b>31.10</b>
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ELECTRIC	KWH	A	6547	6729			1	182		
						Energy supplied to DPU		182	-0.0738	-13.43
									Wholesale Costs	0.00
										<b>(13.43)</b>
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