

Supplemental Rejoinder

Testimony of Nathan

Johnson

BEFORE

THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2025-3054394
	:	
Citizens' Electric Company of Lewisburg, PA	:	

**SUPPLEMENTAL REJOINDER
TESTIMONY**

OF

NATHAN JOHNSON

ON BEHALF OF

CITIZENS' ELECTRIC COMPANY OF LEWISBURG, PA

September 9, 2025

1 A. First, although I appreciate the opportunity to provide this Supplemental Rejoinder
2 Testimony, there is insufficient time and opportunity for discovery at this stage to
3 thoroughly review Mr. Lucas' hourly data and assumptions for the revised capacity factors
4 assumed for the 400-kW fixed and 3 MW tracker solar arrays. To the extent this
5 supplemental rejoinder omits a direct response to any assumptions in Mr. Lucas' analysis,
6 such omission should not be construed as agreement to the assumptions or methodology.
7 Second, Mr. Lucas' analysis demonstrates that costs are shifted between the net metered
8 non-residential customer-generators served on the Generation Supply Service Rate – 1
9 ("GSSR-1") and the other non-generating customers on the GSSR-1, but not avoided by
10 Citizens'. Citizens' does not avoid capacity and transmission costs when a customer-
11 generator exports power to the system, and we do not charge the customer the GSSR-1
12 retail rate when we supply the banked power back to them.

13 **Q. Please explain why Citizens' does not avoid capacity costs.**

14 A. Citizens' is directly responsible to the PJM Interconnection ("PJM") for the GSSR-1
15 capacity costs. That is a fixed charge determined on a \$/MW-day basis using the PJM
16 capacity auction results and the capacity obligation assigned by PPL Electric Utilities
17 ("PPL")/PJM. Both the rate and the capacity obligation change on June 1 each year. The
18 only way our daily wholesale capacity costs for the GSSR-1 customers can change during
19 that period is if a customer shops with an Electric Generation Supplier ("EGS") or returns
20 to default service after being served by an EGS. The hourly fluctuations in the number of
21 MWhs flowing from PJM's system into the Citizens' distribution system does not change
22 these capacity costs.

23 **Q. Is the transmission cost analysis similar?**

1 A. Yes. We are directly responsible to PJM for the transmission costs. This is a fixed charge
2 determined on a \$/MW-day basis using the PPL transmission rate and the PPL/PJM
3 assigned transmission obligation for the GSSR-1 customers.

4 **Q. On a real-time basis, does a customer-generator exporting power to the Citizens'**
5 **distribution system change the capacity costs for the GSSR-1 class on that day?**

6 A. No. The costs remain the same.

7 **Q. On a real-time basis, does a customer-generator exporting power to the Citizens'**
8 **distribution system change the transmission costs for the GSSR-1 class on that day?**

9 A. No. The costs remain the same.

10 **Q. On a real-time basis, does a customer-generator exporting power to the Citizens'**
11 **distribution system reduce the wholesale costs that Citizens' may incur from its**
12 **wholesale supplier for the GSSR-1 class on that day?**

13 A. Most likely, yes; conversely, however, when we are returning banked supply to the
14 customer-generator, the wholesale costs that Citizens' incurs from its wholesale supplier
15 for the GSSR-1 class increase.

16 **Q. What is your conclusion?**

17 A. My conclusion is that Mr. Lucas' testimony and analysis is flawed because it does not
18 reflect what actually occurs with Citizens' costs. We are not avoiding transmission or
19 capacity costs.

20 **Q. You previously indicated that Mr. Lucas' analysis is useful to demonstrate another**
21 **point. Please elaborate.**

22 A. The analysis actually shows how the net-metered customer-generators are shifting
23 responsibility for capacity and transmission costs to other customers.

1 The GSSR-1 rate is designed to be an energy-only rate, which converts certain wholesale
2 costs that are incurred on a demand (MW) basis into a cents per kWh retail rate. Customer-
3 generators are entitled to net metering, which returns to their account(s) banked excess
4 supply. When the supply is returned to the account, Citizens' does not collect the GSSR-1
5 rate from the account. As a result, that supply is being provided without contribution to
6 the capacity and transmission costs that are recovered through the retail rate. According to
7 Mr. Nolt, the size of the customer-generator's array will be determined to offset 100% or
8 more of the account(s) consumption. All of that consumption then avoids contributing to
9 the transmission and capacity costs that are recovered through the GSSR-1 rate, even
10 though those accounts rely on and utilize transmission and capacity services similarly to
11 other customers.

12 This situation can create an overall under-recovery of wholesale capacity and transmission
13 costs for the GSSR-1 customers. When we perform the E-Factor reconciliation, this under-
14 recovery will be added to the calculation, thus increasing the costs that will be recovered
15 from the GSSR-1 customers. In addition, as fewer MWh of energy are purchased through
16 the GSSR-1 rate, the fixed transmission and capacity costs are divided across fewer units,
17 increasing the price for non-exporting customers. So, the "avoided costs" are really just
18 shifted to the other GSSR-1 customers.

19 **Q. Is it possible that excess generation from the customer-generator could decrease the**
20 **Company's capacity and transmission obligations in future years?**

21 A. It may be possible; however, that is not relevant to the design of the GSSR-1. Any customer
22 may claim that they took actions during the peak hours that benefitted the entire service
23 territory; however, the GSSR-1 rate is not designed to directly flow through those benefits

1 to the particular customer. Similarly, any customer or customer-generator may find
2 themselves unable to replicate the load reduction in the following year. Every GSSR-1
3 customer pays the same rate, regardless of load factor.

4 **Q. Should customer-generators be credited for the theoretical reduction in future**
5 **transmission or capacity obligations for the service territory?**

6 A. No. Initially, Mr. Lucas' suggestion is directly contrary to his attempt to explain, in his
7 Surrebuttal Testimony on pp. 13-21, why a larger customer-generator could not impact the
8 GSSR-1 Price to Compare ("PTC") by withholding its exports during the peaks. If, as Mr.
9 Lucas argues, a single 400-kW generator could reduce the Company's fixed PJM costs by
10 \$30,000 or more annually at a value of approximately \$13.56/MWh, then that customer-
11 generator has the ability, whether it actually seeks to do so or not, to influence future PTC
12 costs—to *its own benefit*—by approximately 12%. Mr. Lucas argues for even greater
13 impact by a 3MW generator, with the ability to influence PTC costs by 23%.¹

14 Moreover, there is no guarantee that the solar generator will actually operate during the
15 peaks. In addition to the discussion in the prior paragraph, the generator may be non-
16 operational due to mechanical failures, maintenance activities, or weather conditions. PJM
17 capacity peaks are heavily influenced by large metropolitan areas, while the Company's
18 obligation is driven by local factors. Weather conditions in Lewisburg do not necessarily
19 correlate with the broader drivers of capacity peaks. For example, a capacity peak driven
20 by hot weather in Chicago could occur as a storm system passes over Lewisburg.

21 This is why dispatchability is important. Dispatchability is not about load forecasting. It
22 is about whether the customer-generator should be considered to reduce capacity and

¹ Solar Projects Statement No. 2-SR (Lucas Surrebuttal Testimony), at 39.

1 transmission costs. Without the ability to dispatch—and thus reward or penalize generators
2 for their participation or lack thereof—there is no direct economic incentive for generators
3 to export during peak hours, aside from the unit value of the energy they produce. While
4 that is not an insignificant value, it does not constitute an incentive to participate
5 specifically during anticipated peak hours, or a penalty for non-participation. In essence,
6 the Solar Projects argue that they deserve compensation for when they contribute during
7 peak hours without bearing any risk for failing to (*or choosing not to*) contribute.

8 **Q. Is Mr. Lucas' calculation of the PTC components in Figure 2 on page 40 relevant?**

9 A. No. There are over 7,000 customers on the GSSR-1 rate, and each has a distinct load factor.
10 The rate, however, is calculated as the Commission has approved it to be—on a uniform
11 cents-per-kWh basis.

12 **Q. Does Citizens' have a default service rate where a customer's load factor and usage
13 pattern makes a difference in how they are charged?**

14 A. Yes. That is our Generation Supply Service Rate – 2 ("GSSR-2") default service rate,
15 where the capacity and transmission obligations are directly assigned and the hourly retail
16 rate reflects the PJM locational marginal price.

17 **Q. Does the PTC component breakdown in Figure 2 of Mr. Lucas' Surrebuttal support
18 the Company's proposal to reconcile customer-generators over 400 kW in the GSSR-
19 2 class?**

20 A. Yes. It illustrates how their activity is not similar to the average GSSR-1 customer. They
21 should be categorized with the other larger customers on the GSSR-2.

1 **Q. On pages 42-43, Mr. Lucas claims that the impact of any cost-shifting is small because**
2 **Citizens' cashed out only 636 MWh of net excess energy at the end of the 2024-25**
3 **energy year. Is this attempted minimization of your concerns appropriate?**

4 A. No. First, Mr. Lucas is focusing only on the end-of-year cashout and ignores the
5 explanation above of how capacity and transmission costs are shifted through the monthly
6 net metering process. Second, once Mr. Nolt's additional projects are in operation, he
7 claims he alone will be producing 4,100.5 MWh of energy a year.² We have no information
8 regarding how much of that power will be returned as banked supply and how much will
9 be cashed out. That is only the projects that we know about and does not reflect additional
10 projects that he may be developing or that other developers may pursue in our territory.

11 **Q. Finally, Mr. Lucas suggests that the Company include generation from customer-**
12 **generators in its sales forecast for the GSSR-1. Is this appropriate?**

13 A. No. Output from customer-generators is not a default service resource under Section
14 2807(e)(3.1)-(3.6) of the Public Utility Code. Furthermore, projecting output from non-
15 dispatchable customer-generators is subject to error. Our current process works well. We
16 should not change our current process just to bolster Mr. Lucas' attempted defense of solar
17 generators subject to net metering. Even if the Company were to include this generation
18 in its forecasts, it would not avoid the cost shifting discussed earlier; at best, it would just
19 reallocate the costs during the current period rather than through the reconciliation process.
20 Given the probability of error during any single period, it would likely still result in material
21 over/under-collection which would need to be reconciled in future periods.

² Solar Projects Statement No. 1 (Nolt Direct Testimony), at 2.

1 Q. Does this conclude your Supplemental Rejoinder Testimony?

2 A. Yes.