# POWERING PENNSYLVANIA: WHY CUSTOMER-GENERATION MATTERS NOW

*Natural Gas, Distributed Energy, and a Balanced Path for the Commonwealth*

**A JOINT PROJECT OF:**

PIOGA® Pennsylvania Independent Oil & Gas Association

T & EXPLORATION

PENNECO ENVIRONMENTAL SOLUTIONS, LLC

KRIEBEL ENERGY

June 2026

Executive Summary

# Powering Pennsylvania: Why Customer-Generation Matters Now

## Executive Summary

Pennsylvania is approaching an energy crossroads. Electricity demand is growing for the first time in decades, driven by artificial intelligence, data centers, advanced manufacturing, and electrification. At the same time, concerns about reliability, affordability, and infrastructure investment are becoming more urgent across the Commonwealth and the broader PJM region.

How Pennsylvania responds will have consequences for electricity prices, economic development, energy security, and grid reliability for years to come. Customer-generation and distributed generation are often discussed as net metering issues. In reality, they are questions about how Pennsylvania will add new electricity supply, who will pay for that supply, and whether private investment will be encouraged to help meet growing energy needs. There are fundamental questions about how Pennsylvania will add new electricity supply, who will pay for that supply, and whether the Commonwealth will encourage private investment to help meet growing energy needs.

The Pennsylvania Independent Oil & Gas Association (PIOGA), Penneco Environmental Solutions, LLC, Kriebel Energy, and T&F Exploration have combined their experience and resources to produce a white paper that details *Why Customer Generation Matters Now*, especially in the natural gas and distributed energy spaces.

The following five takeaways from the white paper explain why customer-generation deserves a central role in Pennsylvania's energy future.

1. **Pennsylvania Needs More Electricity Supply, Not Less**

Pennsylvania's electric system is entering a period of structural load growth unlike anything seen in recent decades. Across the Commonwealth and the broader PJM region, electricity demand is increasing due to artificial intelligence, data centers, advanced manufacturing, electrification, and economic development initiatives. At the same time, PJM, the North American Electric Reliability Corporation (NERC), and state regulators have warned that reserve margins are tightening and that additional generation resources will be required to maintain affordability and reliability.

Pennsylvania's challenge is straightforward: demand is growing faster than traditional infrastructure development can respond. The question is not whether additional supply is needed, but how quickly it can be added and at what cost to consumers.

2. **Customer-Generation Is Private Infrastructure Investment**

Customer-generators represent one of the few mechanisms capable of adding new electric supply using private capital rather than utility-funded infrastructure. Customer-generators assume the development risk, secure the financing, construct the facilities, and operate them at their own expense. Every megawatt developed through customer-generation reduces the need for comparable utility investment and the future cost recovery associated with that investment.

At a time of rising infrastructure costs and increasing electric bills, customer-generation offers a market-based approach to expanding supply.

### 3. Distributed Generation Provides Real System Value

Distributed generation provides value beyond the electricity it produces. By generating electricity near the point of consumption, it reduces transmission losses, eases congestion, improves resilience, supports reliability, and can defer costly investments in transmission and distribution infrastructure. These benefits are well-established. The U.S. Department of Energy has identified distributed generation benefits that include improved reliability, reduced peak demand, deferred infrastructure investment, enhanced resilience, and improved power quality.

As Pennsylvania modernizes its electric system, distributed generation should be viewed as a complement to traditional infrastructure rather than a substitute for it. An increase in distributed energy supply will positively impact the increasing energy capacity charges, whereas a decrease in supply would have the reverse, and unfortunate consequence.

### 4. The Current Cost-Shift Debate Is Asking the Wrong Question

Much of the current debate surrounding net metering focuses exclusively on the compensation paid to customer-generators. Viewed in isolation, that analysis is incomplete because customer-generation is also a source of electric supply. If customer-generated energy and capacity are unavailable, they must be replaced through some combination of new generation, transmission facilities, distribution upgrades, and related utility investments. Those costs are ultimately borne by consumers.

The relevant comparison is therefore not what customer-generators are paid in isolation, but how that cost compares to the cost of providing equivalent service through traditional infrastructure. At the same time, the cost-shift debate and cost-cliff comparisons being made are being done so without the PUC being required to show its math. A complete policy analysis must evaluate both sides of the ledger: the compensation paid to customer-generators and the costs avoided because those resources exist.

### 5. Customer-Generation Advances Bipartisan Policy Goals

Customer-generation advances a range of policy objectives that enjoy broad support across political, geographic, and economic interests. It increases electricity supply, attracts private investment, strengthens reliability and resilience, supports economic development, creates opportunities for rural communities, and reduces pressure on future utility infrastructure spending.

Customer-generation can also support consumer protection objectives. One potential approach is a Consumer Protection Adjustment applied to customer-generator compensation. Under such a framework, a modest adjustment could be directed toward utility-specific consumer obligations, including uncollectible account expense, universal service and low-income assistance programs, gross receipts tax recovery, and other narrowly defined consumer protection costs approved by the Commission.

Because customer-generators produce substantial quantities of electricity, even a small adjustment could generate meaningful support for vulnerable consumers. For example, an adjustment of one-half cent per kilowatt-hour applied to 500 million kilowatt-hours of annual excess generation would produce approximately $2.5 million annually, while a one-cent adjustment would generate approximately $5 million. As customer-generation deployment expands, those contributions would increase proportionally.

This approach demonstrates that customer-generation and consumer protection are not competing objectives. Properly structured, customer-generation can expand electric supply, attract private investment, and provide direct support for consumer assistance programs at the same time.

Pennsylvania's challenge is not choosing between reliability and affordability, economic development and consumer protection, or private investment and public benefit. If the Commonwealth's challenge is securing more supply, more flexibility, and more investment while protecting consumers, then customer-generation helps deliver all of these goals.