

Speed to Power: Pennsylvania's Industrial Development Power Crisis and the Microgrid Opportunity

Energy Infrastructure Expansion Act | 66 Pa. C.S. Section 3401 et seq.

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4-5 yrs

Median PJM interconnection timeline from request to commercial operation

\$240/kW

Avg. network upgrade cost for projects completing PJM process

\$16.1B

PJM capacity auction 2026/27 — record cost driven by generation deficit

Sources: PJM Interconnection queue data; PJM 2026/27 capacity auction results; PA PUC 2025 Electric Power Outlook Report; NERC reliability assessment.

The Problem

Pennsylvania is losing manufacturing investment to Ohio, West Virginia, and New York, and the reason is power. Before a developer can build an industrial facility, they need to know whether power is available, at what cost, and on what timeline. Getting that answer alone can take up to two years. Once they have an answer, the construction of utility infrastructure takes another 18 to 24 months, requiring a multi-million-dollar capital contribution before a single lease is signed, a permit issued, or a tenant committed.

Pennsylvania's own PUC acknowledged in its 2025 Electric Power Outlook Report that rapid growth in large-load demand poses 'significant challenges for interconnection timelines,' and NERC has warned that 'operational risks could emerge during periods of extreme weather as soon as 2026.' The result: a site that cannot demonstrate a credible power solution within 12 to 18 months loses the manufacturer to a competing state. That means lost construction jobs, lost permanent manufacturing jobs, and a lost tax base.

Why Microgrids Are the Answer

A microgrid is a private, geographically limited electrical system with its own generation and distribution network. It can deliver power to an industrial site from day one, without waiting for utility-built infrastructure.

Pennsylvania developers cannot use them for multi-tenant industrial sites for one reason: current Pennsylvania law. Under 66 Pa. C.S. Section 102, supplying electricity 'to or for the public for compensation' can classify the operator as a public utility, requiring a Certificate of Public Convenience. This means that a developer who builds a microgrid to power multiple tenants in an industrial park risks being regulated as a utility. No developer will accept that exposure.

The current framework was built to protect ratepayers and maintain regulated reliability. That intent is sound. The result, however, is that Pennsylvania law makes it structurally impossible for developers to solve the power problem themselves, even when utilities cannot deliver power on a timeline that supports real economic development.

What the Legislation Does

The Energy Infrastructure Expansion Act (66 Pa. C.S. Section 3401 et seq.) creates a defined legal pathway for developers to build and operate microgrids that serve industrial tenants, without being classified as public utilities. Key elements:

- Microgrids authorized for multi-tenant industrial and commercial use, defined by geographic limits (up to 2 square miles) and construction standards.
- A Minimum Operation Period of five years gives developers a bankable, legally protected runway to recover their infrastructure investment before transitioning to utility service.
- Energy Infrastructure Development Districts (EIDDs) provide a mechanism for utilities to recover infrastructure costs from the new customers who benefit, eliminating speculative risk.
- After the Minimum Operation Period, the utility absorbs the microgrid infrastructure into its rate base, gaining new customers and assets it did not have to finance.
- Zoning guardrails limit microgrids and EIDDs to industrially or commercially zoned areas, protecting residential communities.
- Emissions standards, referenced to DEP's Air Pollution Control Act (35 P.S. Section 4001), use concentration-based modeling at the nearest residential boundary.

The Four-Way Win

BUILD — Developers Replace a 4-to-5-year utility timeline with a defined 5-year Minimum Operation Period. Develop rural and brownfield industrial sites that are currently unfeasible.	JOBS — Communities Quality manufacturing jobs, expanded local tax base, and air quality protections through zoning guardrails and DEP-referenced emissions standards.
GRID — Utilities Absorb proven, occupied customer load and generation assets into rate base without upfront capital risk. Grow customer base without speculative infrastructure investment.	GEN+ — PJM / Grid New distributed generation assets added to the PJM capacity supply stack, directly addressing the generation deficit driving record capacity prices.

This legislation does not ask utilities to produce power they do not have. It asks the Commonwealth to create a legal framework for developers to do so themselves, on a timeline that makes Pennsylvania competitive.