Lumen ENERGY

Q2 2026 · INAUGURAL ISSUE · VOL. 1 JUNE 2026

The State of Solar Leasing.

The inaugural Lumen Commercial Solar Index across the four Tier 1 community solar markets — NJ, MA, MD, IL. Plus, a deep look at how the ITC transition is reshaping deal economics, 2026 deal terms, and what's emerging: front-of-the-meter batteries.

TURN ROOFTOPS INTO REVENUE.

Lumen ENERGY

INSIDE THIS ISSUE

WHY NOW

An index for a market that didn't have one.

Solar leasing on commercial rooftops is no longer a cottage industry. In 2025 it crossed a threshold of deal flow that many institutional asset classes hit decades ago. Yet we noticed that many parties are still faced with a steep information asymmetry; point-value roof rental offers with no price transparency or context, and long-dated contracts with unfamiliar terms. This market deserves fresh transparency.

As the modern solar broker for many of the nation's largest commercial real estate owners, we run hundreds of bid processes a year. We see many thousands of live offers to institutional landlords to lease their rooftops. The Lumen Commercial Solar Index distills all this deal flow into localized metrics that owners and capital partners can actually use to manage risk, and gain confidence to transact: lease rates across the four Tier 1 states where transaction activity is deepest today.

We've modeled this report on the fiduciary value and cadence of a Green Street CPPI index or the NCREIF benchmark — quarterly, methodologically transparent, citable in a IC memo. Our hope is that the next time you need to defend an assumption to your investment committee, you now have a number to point to.

This is our first issue. Send us a line on what you'd like to see in the next one.

— THE LUMEN RESEARCH TEAM

THE NUMBERS THAT MATTER

Executive summary.

Q2 2026 marks a significant reset in commercial solar lease economics across the four Tier 1 community solar markets. The expiration of the federal Investment Tax Credit has removed a foundational piece of project financing, but developer responses to that shift have been varied. Well-capitalized developers pre-purchased specific equipment ahead of the deadline — a practice known as safe harboring — effectively preserving their ITC eligibility for projects starting well into 2027, allowing them to continue to offer competitive lease terms to landlords. Other developers are working within tighter timelines and underwriting projects accordingly. That divergence in strategy is showing up in widening bid spreads. Meanwhile, wholesale power prices are rising as data centers and the AI boom drive grid demand higher. Different developers forecast these forward grid price curves differently. As a result, developer selection is an ever more consequential decision for building owners.

ALL-MARKETS COMPOSITE RANGE · Q2 2026

$0.15 – $1.39

$/FT² / YR-1

Capacity-weighted across NJ, MA, MD, IL.

AVERAGE BID PRICE SPREAD

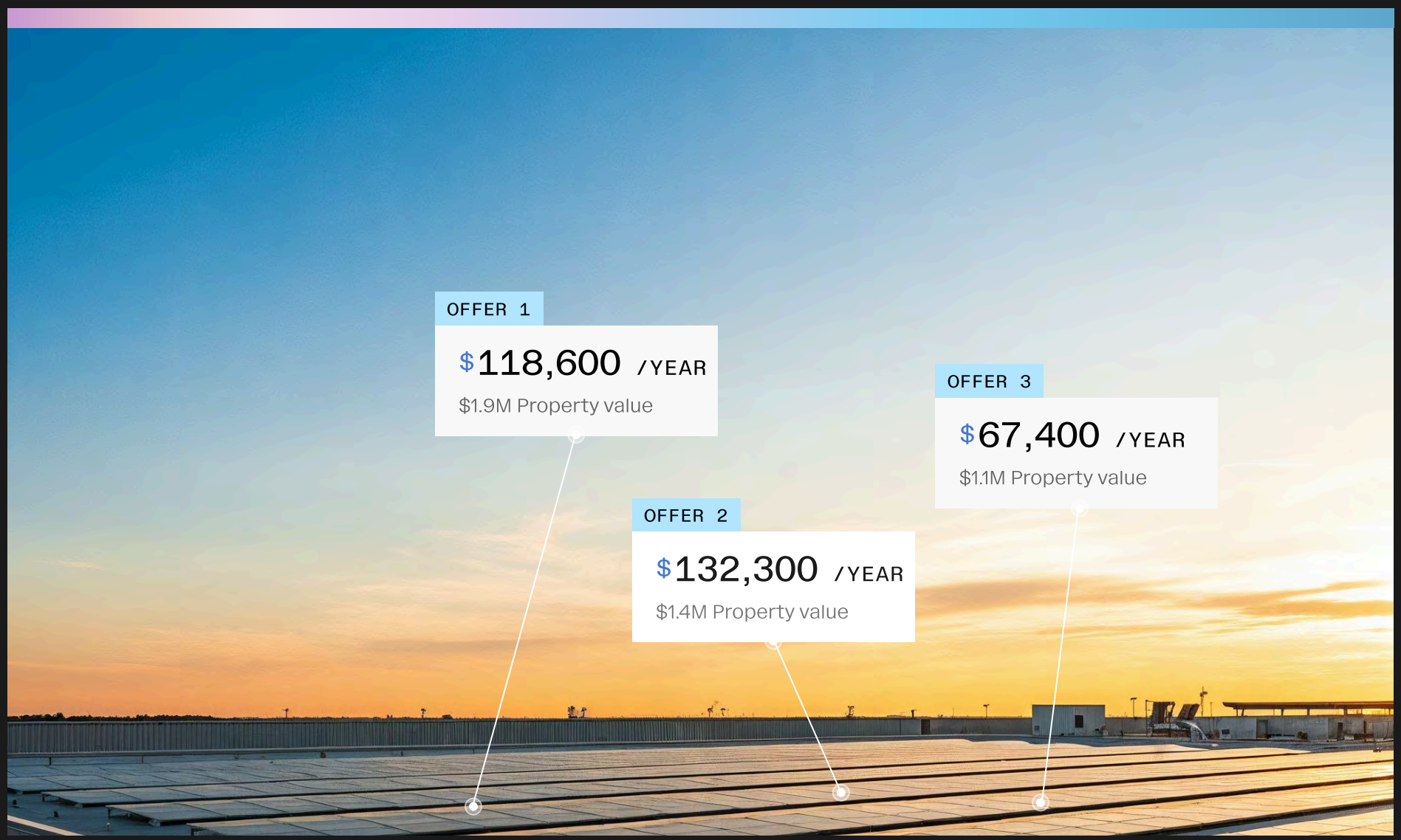
2.9x

Same roof. Different bids. Experienced, well-capitalized energy developers simply have widely ranging strategies to procure, construct, and monetize local energy assets.

WHAT WE'RE SEEING

Seven takeaways for owners.

- → **Pricing varies widely among what different developers offer landlords.** Like real estate development, energy project development is a local game. Different developers spike in different markets. They also have different strategies for equipment procurement, utility interconnection, EPC/construction vendor selection, and cost of capital.
- → **Divergence in ITC compliance strategies.** Some well-capitalized developers safe-harbored panels and transformers to extend their ability to offer leases that benefit from ITC; others are working within tighter timelines and economics.
- → **Policy is moving faster than infrastructure.** State legislatures have expanded programs and unlocked new capacity, but grid interconnection is a consistent constraint on what developers can actually build and finance.
- → **Asset class is driving meaningful divergence in pricing outcomes.** Warehouse and industrial properties continue to command a significant premium across all four markets — higher capacity, lower complexity.
- → **Timing has become a critical variable.** With federal incentive deadlines approaching and state-level compensation structures set to change, the difference between a project that moves now and one that stalls can be significant. Even after ITC credits retire, we are finding that lease rates are resetting, not collapsing. Power price increases will drive lease rates higher.
- → **Deal terms matter — and none more than rent structure and term length.** Preference varies for total term length as well as escalator structure across the lease term.
- → **Front-of-the-meter batteries are next.** The same lease architecture is now being applied to standalone storage, with a first FTM benchmark coming in 2026 (see Section 04).



01

The Lumen Solar Index.

A benchmark of lease rates across the four Tier 1 markets — NJ, MA, MD, IL — and how the ITC transition is reshaping what developers can offer building owners.

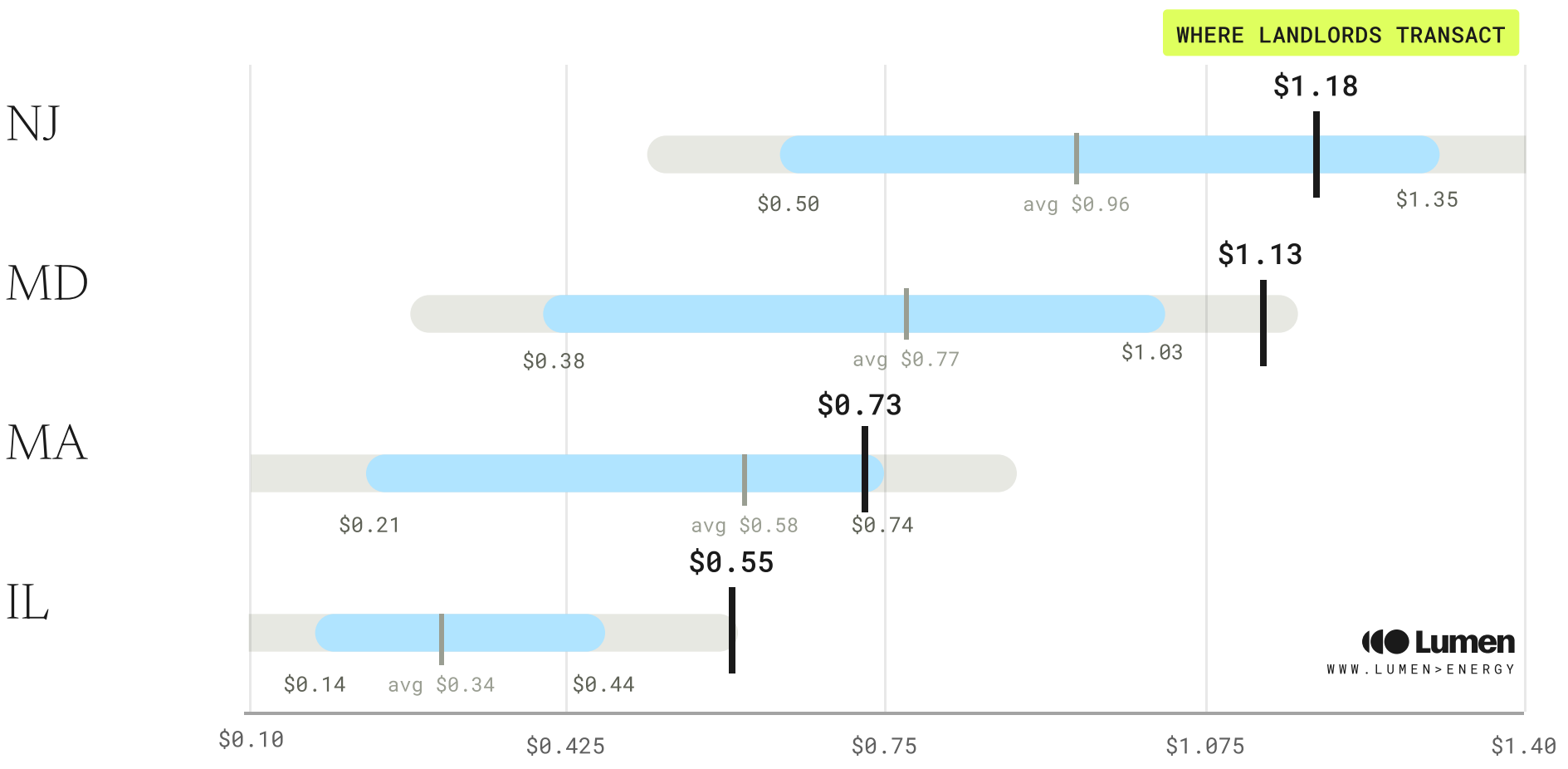
4-STATE COMPOSITE · Q2 2026

Solar lease price ranges by market

The all-markets lease range represents the 25th to 75th percentile of Year 1 lease rates across active deals in Q2 2026. The intra-state spread shows how much conditions vary by utility territory, roof size, and asset quality. The black tick is where landlords actually transact. Price matters greatly, and price pulls owners to choose bids at the average to the higher end of the spectrum. Yet risk and lease terms matter as well. The package of price and terms define where landlords ultimately transact. More on key lease terms in Section 03.

ROOFTOP SOLAR LEASE PRICE RANGES

$/FT² / YR



SOURCE: LUMEN ENERGY TRANSACTION DATA. BLUE BARS SHOW 25TH–75TH PERCENTILE OF YEAR 1 LEASE RATES ON ACTIVE PLATFORM BIDS, Q2 2026. GREY BARS SHOW 1-100TH PERCENTILE OF YEAR 1 LEASE RATES ON ACTIVE PLATFORM BIDS, Q2 2026. BLACK TICK = LUMEN-OBSERVED CONTRACTED BID. GRAY TICK = MARKET AVERAGE.

BY BUILDING TYPE · Q2 2026

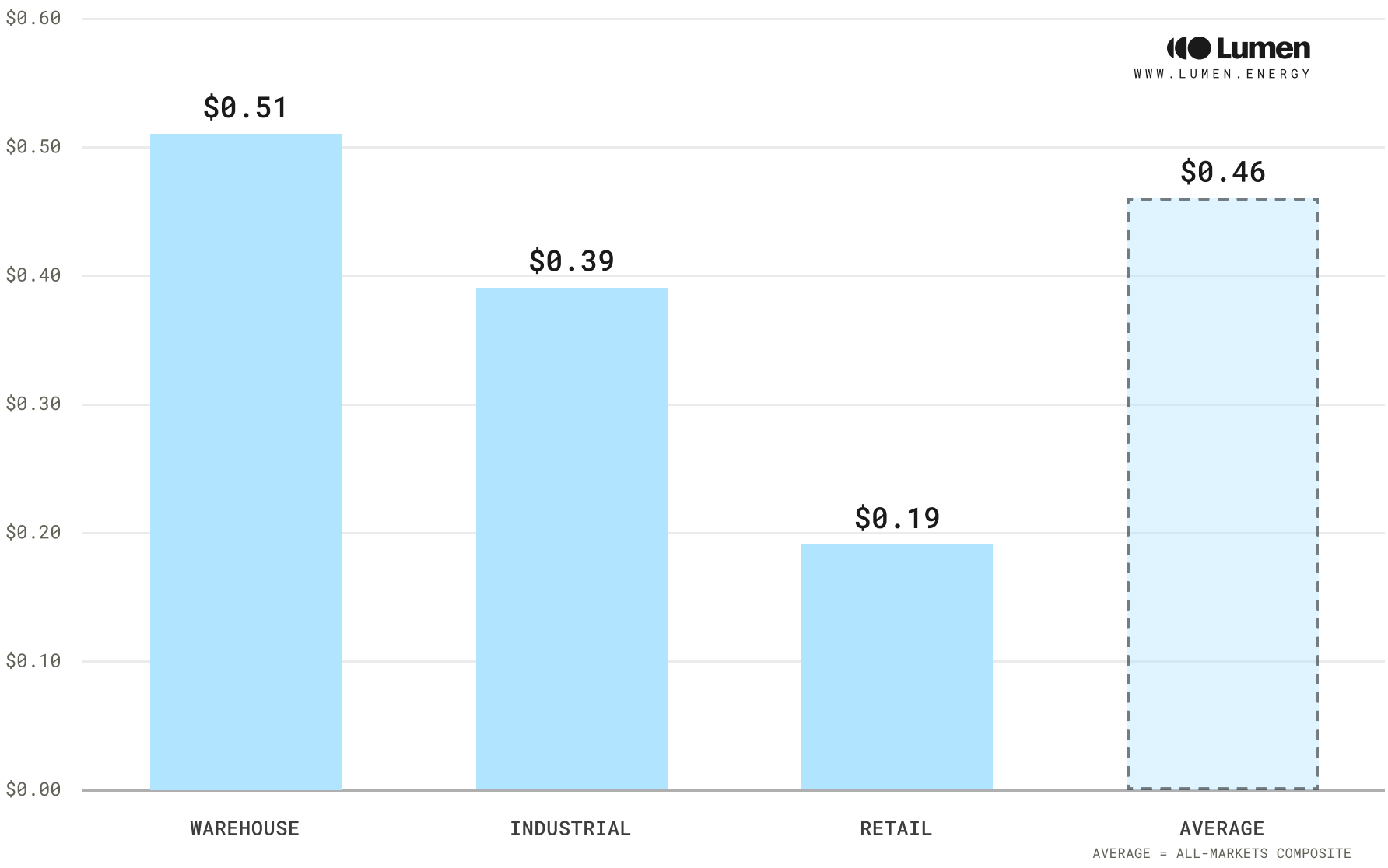
Diverse assets, diverse values.

Warehouse and industrial assets tend to secure lease rates, on a $/sqft basis, well above retail across all four markets. The gap reflects the structural realities of retail rooftops — more complex tenant arrangements, less favorable roof configurations, and smaller average system sizes that reduce useable space and developer returns per site.

For owners of warehouse and industrial properties in particular, the current environment represents a meaningful opportunity to evaluate solar leases against a backdrop of sustained developer demand.

Current-quarter average lease rates by building type

2026-Q2 · AVERAGE NORMALIZED YEAR 1 LEASE ($/FT²)



AVERAGE = ALL-MARKETS COMPOSITE

SOURCE: LUMEN ENERGY · Q2 2026 · AVERAGE NORMALIZED YEAR 1 LEASE · ALL FOUR TIER 1 MARKETS

02

2026 solar leasing market.

How the leasing model works, with a policy-by-policy look at what's driving outcomes in each of the four Tier 1 states this quarter.

POLICY DRIVERS — FOUR-STATE DEEP DIVE · Q2 2026

Four markets, one quarter.

ALL-MARKETS COMPOSITE	NEW JERSEY HIGHEST AVG	MARYLAND WIDEST RANGE	MASSACHUSETTS NARROW RANGE	ILLINOIS NARROWEST RANGE
$0.25–$0.95	$0.50–$1.35	$0.38–$1.03	$0.36–$0.74	$0.14–$0.48
$/ft² / yr	Avg ~$0.96	Avg ~$0.77	Avg ~$0.58	Avg ~$0.34

SOURCE: LUMEN ENERGY · Q2 2026 · 25TH–75TH PERCENTILE OF YEAR 1 LEASE RATES ON ACTIVE PLATFORM BIDS · CAPACITY-WEIGHTED ACROSS NJ, MA, MD, IL.

New Jersey

MARKET RECALIBRATION COMPLETE

New Jersey's current market conditions reflect two policy actions that together reshaped the program. In August 2025, Governor Murphy signed S4530, which added 3,000 MW of new capacity and replaced the competitive application process with first-come, first-served registration — driven largely by record PJM capacity auction prices pushing up electricity bills and the state's 100% clean energy by 2035 target. Then in March 2026, the NJBPU reduced the incentive rate paid to developers from $80/MWh to $60/MWh, citing higher electricity rates as justification for the cut. Together, these changes compressed developer returns and reset the lease rates that building owners can expect. Those who signed leases before March 2026 locked in more favorable terms; those negotiating now are working within a recalibrated market, though New Jersey still carries the highest average lease rates of the four states.

The key variable to watch going forward is interconnection capacity. As more developers compete for grid connection slots under the expanded program, queue timing will increasingly influence which projects move forward and what lease offers look like.

Maryland

MULTIPLE DEADLINES CONVERGING

In 2025, Maryland transitioned from a pilot program to a permanent, uncapped community solar program. That move drove strong developer interest, but ongoing changes to how developers are compensated for the energy their projects produce have since pressured rates. Additionally, a key incentive requires projects to be placed in service by the end of 2028 — some developers are now underwriting projects assuming they will no longer qualify. With multiple deadlines converging, developers are recalibrating the lease rates they can offer to reflect both the policy transition and the timeline pressure those windows create. Well-positioned assets with strong roof characteristics and clear development paths are still attracting competitive offers, while properties that face any complexity in permitting or grid connection are seeing developers price in the added risk.

For building owners, Maryland retains meaningful upside for those who can move quickly and get a project into the development queue in the near term.

FOUR-STATE DEEP DIVE — CONTINUED

Massachusetts

SMART 3.0 STRONG — GRID IS THE CONSTRAINT

Despite the launch of SMART 3.0 in fall 2025 — a significant overhaul of the state's solar incentive program that doubled available capacity, introduced a simpler rate structure, and locks in a developer's payment rate at the time of application — the binding constraint remains infrastructure. Massachusetts entered 2026 with a substantial backlog of projects waiting for grid connection approvals, and connecting new projects to the electric grid here takes considerably longer on average than in the other three markets. That timeline risk is being priced into what developers offer, which is why current lease rates reflect execution uncertainty as much as underlying market value.

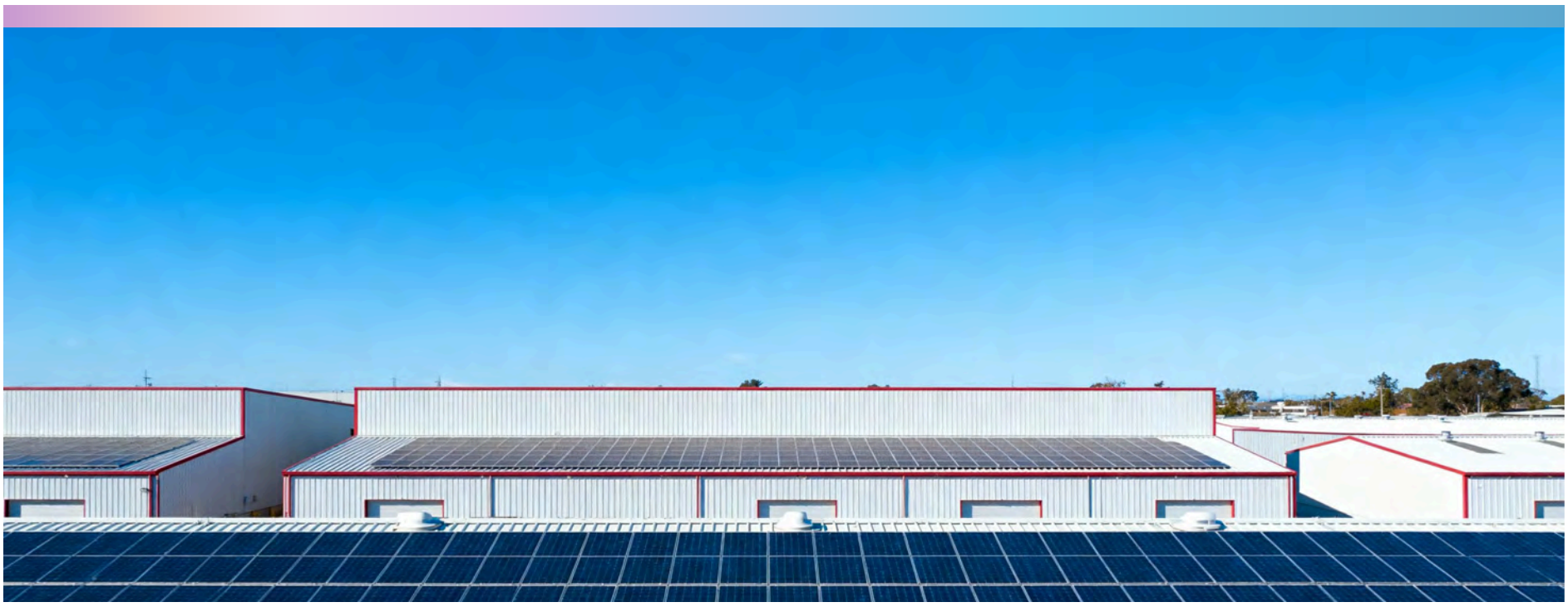
As the backlog clears, energy prices increase, and innovative flexible interconnection policies start to be implemented, there is cautious optimism that the Massachusetts market will strengthen materially over the next several quarters.

Illinois

NEW CAPACITY, GRID CONSTRAINTS

Illinois lease rates reflect a market in active recalibration following significant policy changes. Last year, major program categories were significantly oversubscribed with long waitlists. Aiming to spur development ahead of the federal tax credit disappearing, the IL Shines program wiped away the waitlist with a large infusion of new capacity. Building on that foundation, the state signed the Clean and Reliable Grid Affordability Act in January 2026, which effectively doubled the maximum size of community solar projects and created new revenue opportunities for projects that pair solar with battery storage. Both changes give developers additional tools to support stronger lease offers over time. The most significant constraint in Illinois right now is interconnection capacity. Properties in the northern part of the state, served by ComEd, are seeing stronger developer interest and higher lease offers than those in central and southern Illinois (served by Ameren), where grid connection wait times are considerably longer.

Near-term deal activity is concentrated in areas where a developer can realistically begin construction before federal incentive deadlines expire, making a project's location within the state one of the most important variables in evaluating a solar lease opportunity.



03

Focus: key deal terms.

Term length and extensions: what’s market, and risk management explained for Owners (Hosts), Developers (Providers), Lenders, and Counsel.

DEAL TERM · 01

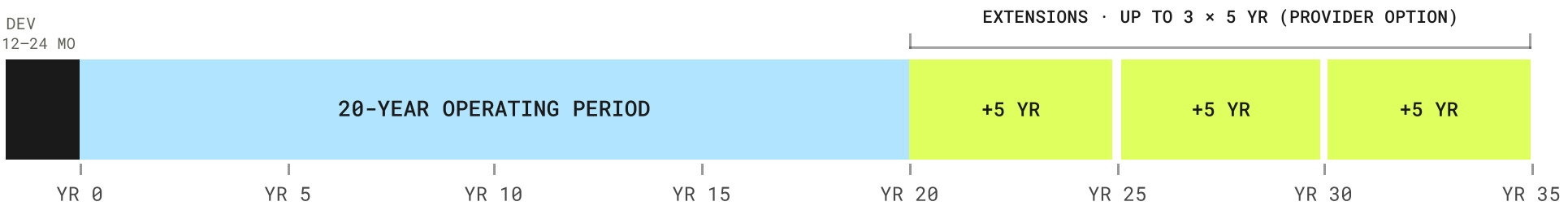
Lease term length.

The total commitment you'll find in solar leases today, broken into three distinct periods, each with its own mechanics.

A solar lease term is composed of three distinct periods. The development period is defined in months from lease signing — typically 12 to 24 months — by which either the system is in operation or the Provider begins to pay operating-period rent whether or not the system is operating. The operating period is typically 20 years.

THE THREE PERIODS, TO SCALE

20 + 3 × 5 MAXIMUM · UP TO 35 YEARS COMMITTED



Periods drawn to scale. The term a Host signs is the operating period plus the maximum provider-option extension exposure.

Because extensions are usually at the Provider's exclusive option, the term a Host actually signs is not the operating period — it's the operating period plus the maximum extension exposure. A 20+1×5 structure is a 25-year maximum commitment; a 25+3×5 structure is a 40-year maximum. Where extensions are at the Provider's option, we recommend negotiating for fewer extension periods or mutual approval rights, so the back-end optionality isn't one-sided.

Where we see "the fairway" of lease term landing in early 2026

Standard on the Lumen platform is a 20-year operating period + 1 × 5-year extension at Provider option — a 25-year maximum term that most Hosts can underwrite. More aggressive 20 + 3 × 5 structures (a 35-year maximum) we don't recommend without compressing the extension count or converting to mutual approval. Best-in-class: 20 + 1×5 with mutual approval, or with a Host buyout option at the start of the extension at a fair-market price.

NEGOTIATING TIP

Whether you plan to sell in 3 years or hold long-term, the total term with extensions may matter more than the initial operating term. Negotiate fewer extensions or shift extension approval to mutual — and consider a Host buyout right at the start of any extension.

DEAL TERM · 02

Rent timing and escalation.

The rent structure (when rent starts, the annual escalator, payment frequency, and how rent resets at extension) drives value well beyond the headline rate.

What solar rent is

Rent is the compensation paid to the Host for leasing the rooftop to the Provider. Payments typically start during the operating period, after the system is constructed and energized. Some Providers include a reduced development-period rent — beginning at lease signing or after the first 12 months — to encourage faster approvals and construction. Annual escalators apply during the operating period, typically 2% per year, and payment frequency ranges from monthly to quarterly to annually.

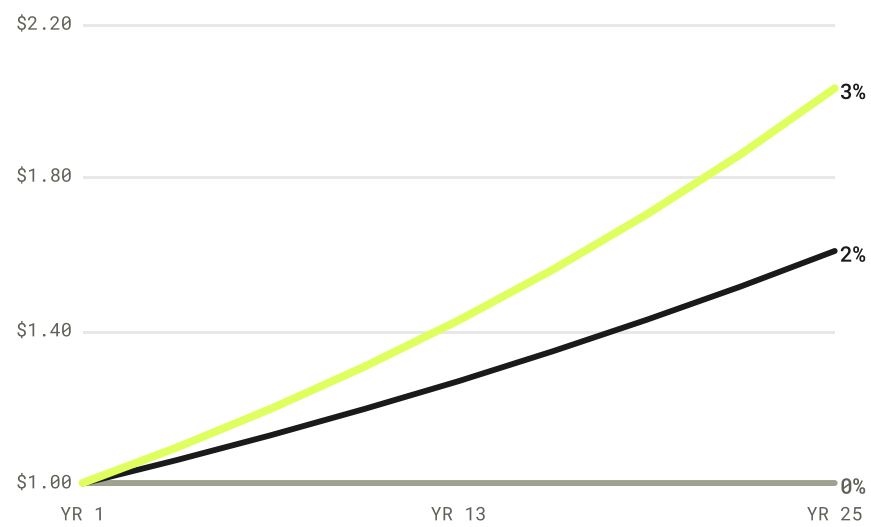
Why it matters

Most Providers price offers against an investment-return hurdle, so higher development-period rent typically comes at the cost of lower operating rent. The escalator choice shapes the entire rent stream: a 0% escalator with a higher base front-loads income; a 3% escalator back-loads it. Two offers with identical year-one rent can produce materially different lifetime totals.

If near-term cash is the priority, ask for development rent and a high first-year operating rent with a 0% escalator. If demonstrating increasing NOI over time matters more, ask for a 2–3% annual escalator to be priced in.

ANNUAL RENT UNDER DIFFERENT ESCALATORS

INDEXED TO $1.00 AT YEAR 1



YEAR-25 RENT PER $1.00 OF YEAR-1 RENT:
0%: $1.00
2%: $1.61
3%: $2.03

2026 STANDARD: 2% ESCALATOR · MONTHLY OR QUARTERLY

NEGOTIATING TIP

Providers price to a target return. Asking developers to provide development-period rent typically comes out of operating-period rent, not just the headline rate. Solicit two offers: one optimized for early cash, one for growth, and compare lifetime totals.

04

On the near horizon.

Quarterly crystal-ball. What's coming next, and what could move the index for leasing space to power the grid.

CRYSTAL BALL · Q2 2026

New income from front-of-the-meter battery leasing.

A new opportunity is taking shape for commercial landlords: leasing ground space to developers building front-of-the-meter (FTM) battery energy storage systems (BESS). These FTM batteries take up underutilized ground space onsite, yet electrically “face” the grid. They provide much-needed local capacity to soak up energy during periods of weak demand, then discharge it back to the grid during peak times -- typically the early evenings. They are nearly silent. The tenant’s electrical meter and billing remain entirely separate.

Insurance is a largely retired risk today

The market has matured faster than most landlords realize. Major property carriers — Travelers, Liberty Mutual, FM Global, Zurich — now have explicit underwriting provisions and rate schedules for landlords to host on-site lithium-ion systems, and developers carry their own dedicated policies covering the asset, third-party liability, and environmental cleanup. Modern containerized systems are built to NFPA 855 with thermal runaway detection, deflagration venting, and integrated fire suppression — materially de-risking the host property profile relative to two or three years ago.

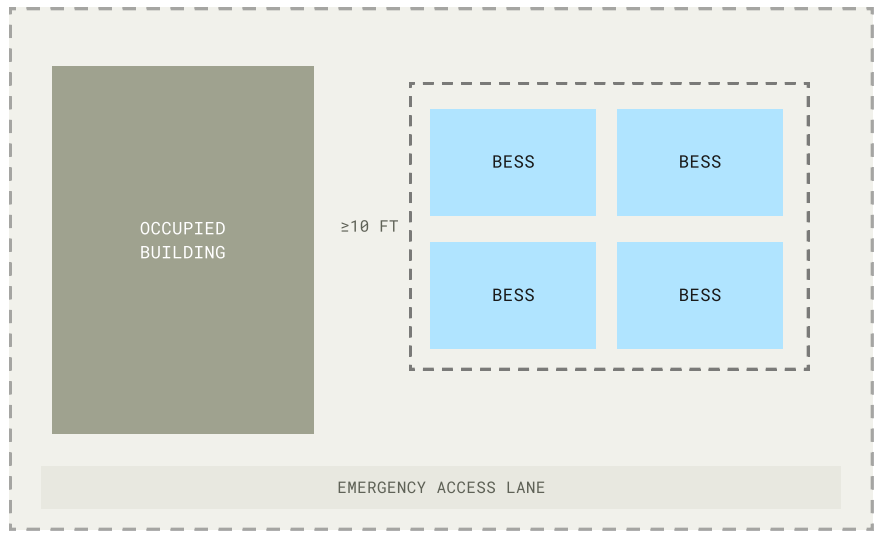
Policy is pulling capacity forward

Illinois, under the Climate and Equitable Jobs Act, and New Jersey, through the BPU’s Garden State Energy Storage program, have opened multi-billion-dollar procurements to deploy thousands of megawatts by 2030. These programs create the contracted revenue that lets developers sign real ground leases today. If you own property within roughly a mile of suitable transmission or distribution in either state, you are almost certainly already on a developer’s site list.

This is complementary cash flow. Rooftop solar uses the roof; an FTM battery uses otherwise-dead ground. Because the developer market is still competing for interconnection-adjacent sites, lease rates today are compelling — often well above standard ground-lease comps and structured with healthy escalators. Pricing is still finding its level.

TYPICAL FTM BESS SITE LAYOUT

OUTDOOR BESS · NFPA 855 SETBACKS



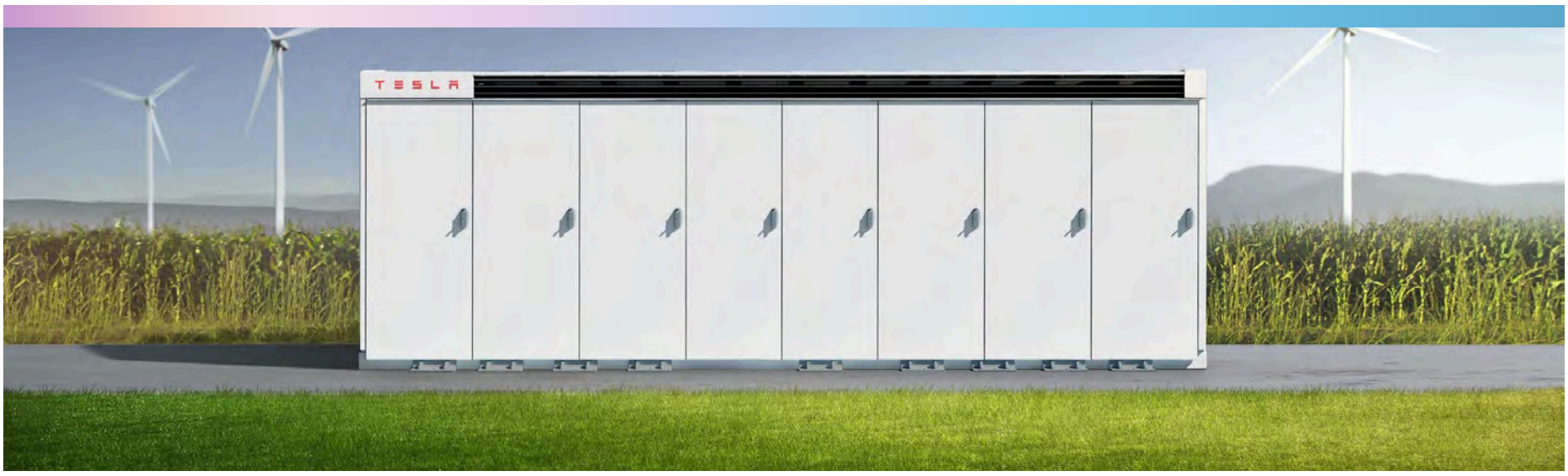
SOURCE: LUMEN ENERGY. ILLUSTRATIVE; DEVELOPER IS RESPONSIBLE FOR A CODE-COMPLIANT, INSURED BESS SYSTEM.

20–25

YEAR GROUND LEASE

10 -15K sqft

FENCED IN PAD FOR 5 MW / 20 MWH



FROM LEASE INCOME TO SALE VALUE

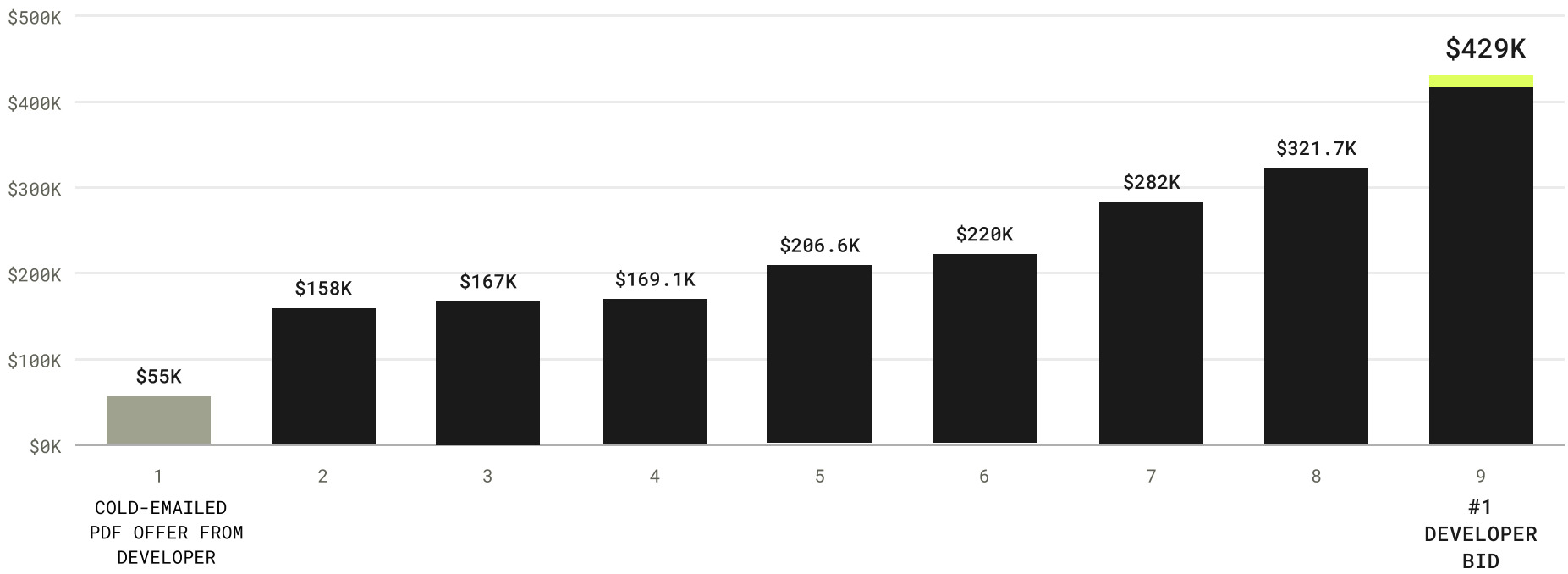
What are energy leases are worth at exit?

An onsite energy tenant adds new rental income, which flows directly into boosting net operating income (NOI) at the property level. So what's this new NOI worth at exit? The market is still figuring this out. Should this income be capped like other tenant income, or treated on its own NPV basis -- or did we even remember this income at time of building sale?

The latter is still all too common, as brokers and appraisers debate the former. Expect to hear more from us soon. For now, here's the difference between NPV and cap-rate math based on a recent solar transaction:

9 bids for solar lease income on the same rooftop ($/yr)

7.8× BID-PRICE SPREAD



WHAT IS THE TOP SOLAR LEASE, ONCE SIGNED, WORTH AT EXIT?

Industrial Warehouse

NEW JERSEY

300,000	3.5	$1.43
SQ FT	MW DC	$/ SQFT SOLAR LEASE

$429,000

/ YEAR SOLAR ROOF LEASE NEW TENANT INCOME

20 year

CONTRACTED TERM

2.5%

ANNUAL LEASE ESCALATOR

CAP RATE BASIS

÷ 7.0% EXIT CAP RATE =

$6.1M

NPV BASIS

@ 8.0% DISCOUNT RATE =

$5.1M

METHODOLOGY

How the index is built.

The Lumen Solar Index is built to be transparent, methodologically consistent, and citable. The notes below are the abbreviated version; the full methodology is published at lumen.energy/research/methodology.

DATA SOURCES

- Bids submitted on the Lumen platform during the reporting quarter.
- Four index markets — NJ, MA, MD, IL — the states with the deepest community-solar deal density; composite is capacity-weighted.
- Asset classes: industrial, warehouse, retail.
- Deals outside the four markets are noted in commentary but excluded from the composite this issue.

DEFINITIONS

- Composite capacity-weighted average of $/ft²/yr across NJ, MA, MD, and IL.
- Highest average market: the index market with the highest average NOI per ft² for the quarter.

LIMITATIONS

- Inaugural issue — data reconstructed from Lumen's archive; methodology held constant.
- Scoped to four markets by design; coverage may expand or add sub-indices.
- Forward-looking statements (Section 04) reflect Lumen's analytical view only.