

QCELLS · FINANCIAL MODEL

QCELLS Parcel 9 BESS Lease — Financial Model

For Fano review

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This document models the dollar economics of the QCELLS Parcel 9 lease across multiple scenarios. The math is shown explicitly so the assumptions can be challenged. Numbers carry to the nearest thousand dollars where appropriate; rounding is not material at this scale.

Inputs and assumptions

The deal has four payment streams: option payments, a one-time construction bonus, base operating rent, and the escalator applied to base rent each year. The escalator is a flat 2.25% per year — not a CPI floor, not the greater-of construct that SunVest uses. This is a structural disadvantage relative to SunVest because realized inflation above 2.25% does not flow through to Landlord.

For modeling purposes I use the contractual flat 2.25% as the base case, 2.25% with no upside as the realistic case (since the lease does not include a CPI mechanism), and a 3.0% counterfactual to illustrate what a CPI-equivalent lease would have paid. Discount rates of 3%, 5%, and 7% capture the range from a low-risk treasury benchmark to a more reasonable hurdle for a long-dated illiquid land lease. Most institutional analysis of land leases uses 5% to 6%.

The Basic Rent is fixed at \$50,000 in Year 1 of the operating term (no sliding capacity premium of the kind SunVest has — QCELLS is a flat-rent lease).

Year-by-year nominal rent (2.25% flat escalation)

The geometric series formula gives rent in year n as $\$50,000 \times 1.0225^{(n-1)}$. Selected years:

Year	Annual rent
1	\$50,000
5	\$54,635
10	\$61,037

15	\$68,189
20	\$76,179
25	\$85,107
30	\$95,082
35	\$106,225

Twenty-year cumulative rent (Initial Term operating period): \$1,243,925.

Thirty-five-year cumulative rent (with all three 5-year renewals exercised): \$2,605,775.

Add option payments of \$30,000 across the three-year option period and a \$25,000 one-time construction bonus paid within thirty business days after Lease Commencement Date, and the lease delivers between \$1,298,925 and \$2,660,775 in nominal pre-tax revenue across its full possible life.

Sensitivity to escalator rate

The 2.25% flat structure in the draft means inflation above 2.25% does not accrue to Landlord — every basis point of realized CPI above the contractual rate is value retained by Tenant. To illustrate the structural cost of accepting a flat escalator instead of a CPI floor:

Escalator	20-year cumulative	35-year cumulative
2.00% (lower counterfactual)	\$1,215,668	\$2,505,179
2.25% (contractual, base case)	\$1,243,925	\$2,605,775
2.50%	\$1,272,729	\$2,710,330
3.00% (CPI-equivalent — what SunVest provides via the floor)	\$1,344,338	\$2,975,323

A 75-basis-point shift in the average escalator across the 35-year life moves total revenue by approximately \$370,000. This is the structural cost of accepting a flat 2.25% instead of the CPI-floor pattern SunVest uses. In the amendment letter the flat-vs-CPI-floor language is listed as a smaller item rather than a critical one because BESS land-lease escalator norms in the McHenry County market are not yet established empirically — but if Qcells will accept a CPI-floor structure (greater of 2.25% or realized CPI-U), the deal economics improve materially.

Sensitivity to project size

Unlike the SunVest draft (which has a \$75K base for the first 5 MW plus \$15K per MW above), the QCELLS draft is flat \$50,000 regardless of project size. The lease does not specify a megawatt rating for the BESS facility. This is a meaningful asymmetry — if Qcells ultimately builds a larger project (e.g., 8 MW) than what was implicitly contemplated, Landlord receives no upward adjustment. Conversely if Qcells builds smaller, the rent does not drop either.

Recommended amendment (in the smaller-items list): insert a per-MW premium structure analogous to SunVest's, e.g., \$50K base for the first 5 MW + \$10K per MW above 5 MW. This is a discretionary ask — Qcells may decline because the project size is not yet finalized. If declined, accept the flat rent.

Present value at multiple discount rates

Nominal totals over thirty-five years are large but distant. Present value (the amount of money today that would be equivalent to the lease's payment stream, given a chosen discount rate) is the cleaner number for decision-making.

The formula for the present value of a growing annuity is:

$$PV = C \times (1 - ((1 + g) / (1 + r))^n) / (r - g)$$

where C is the year-one cash flow, g is the growth rate, r is the discount rate, and n is the number of periods.

Applied to the QCELLS Parcel 9 deal at 2.25% escalation, Basic Rent only (excluding option payments and construction bonus):

Discount rate	20-year PV	35-year PV
3%	\$880,000	\$1,357,000
5%	\$702,000	\$935,000
7%	\$572,000	\$691,000

At a 5% discount rate, which is in the range a real-estate investor would typically use for a long-dated land lease, the Basic Rent is worth approximately \$702K to \$935K today depending on whether HQCA exercises the renewals. Add approximately \$50K in present-value option payments and construction bonus (collected near the front of the timeline so minimally discounted) and the all-in present value at 5% is approximately \$752K to \$985K.

These deterministic numbers are the conditional best-case. They assume HQCA exercises the option, builds, and operates uneventfully through full term. The probabilistic Monte Carlo simulation in

QCELLS_PARCEL9_MONTE_CARLO_REPORT_2026_05_13.md re-weights these by the actual probability of each path and produces a lower expected NPV (approximately \$560K under the as-drafted lease, \$660K under the fully-amended lease).

Combined SunVest plus QCELLS

SunVest BESS pays \$150,000 per year at 10 MW with a CPI-floor escalator (greater of 2% or realized CPI) over a 25-year operating term plus two 5-year renewals reaching 35 years maximum.

Combined SunVest + QCELLS nominal totals:

Period	SunVest 10 MW (CPI floor @ 2%)	QCELLS Parcel 9 (2.25% flat)	Total
20-year	\$4,032,300	\$1,243,925	\$5,276,225
25-year	\$4,804,500	(renewal years 21-25 add ~\$402K) → \$1,646,000	~\$6,450,500
35-year (max)	\$7,512,300	\$2,605,775	\$10,118,075

Plus option payments and construction bonuses of approximately \$107,500 across both deals (SunVest \$52,500 + QCELLS \$30,000 + QCELLS \$25,000 construction bonus).

Combined deterministic present value at 5% discount rate, 35-year horizon:

- SunVest (best-path, deterministic): approximately \$3,188,000
- QCELLS (best-path, deterministic): approximately \$985,000
- Total: approximately \$4,173,000 deterministic best-case

Combined probabilistic expected NPV at 5% discount rate (Monte Carlo, 10,000 paths per deal):

- SunVest expected NPV (as drafted): \$1.36M
- QCELLS expected NPV (as drafted): approximately \$560K
- Total expected NPV as drafted: approximately \$1.92M

Under the fully-amended configuration for both deals:

- SunVest expected NPV (fully amended): \$1.42M
- QCELLS expected NPV (fully amended): approximately \$660K
- Total expected NPV fully amended: approximately \$2.08M

After-tax economics

Lease income on raw land is generally treated as ordinary income for federal and Illinois state purposes. Whether it qualifies as passive activity income depends on the entity structure and whether the landowner materially participates — a question for your accountant. For a rough estimate, use a combined effective marginal rate of 30% to 40% (24-32% federal at typical brackets plus 4.95% Illinois state).

Applied to the combined SunVest plus QCELLS 35-year expected NPV of approximately \$2.08M (fully-amended basis):

Effective tax rate	After-tax expected NPV
30%	\$1,456,000
35%	\$1,352,000
40%	\$1,248,000

Holding structures (single-member LLC, S-corp election, family limited partnership) can change the effective rate at the margins but generally don't move the after-tax PV by more than a few hundred thousand dollars across this range. Real depreciation benefits accrue to HQCA / Qcells, not to Landlord, since Tenant owns the equipment.

This is where your accountant earns their fee — entity structure, basis treatment, and timing of income recognition can all be optimized.

What this is worth to you, in plain language

If both deals close and run to their full thirty-five-year possible terms, you and Steve collect somewhere between \$10.1M and \$13.5M in nominal cumulative rent across the two parcels (depending on inflation), plus \$107.5K in option payments and construction bonuses along the way. After tax that's roughly \$6.1M to \$9.5M.

In present-value terms, the deals together are worth about \$2.1M today on a probabilistically-weighted basis before tax, or \$1.2M to \$1.4M after tax. This is what you should be comparing against the alternative use of the parcels (continuing current ag/open-space use, selling the land outright, developing differently, or leaving the parcels undeveloped).

The QCELLS deal alone is a smaller addition (~\$560K-\$660K expected NPV) but it is on a separate parcel from SunVest, so there is no opportunity cost. Both leases run with the land — your descendants inherit them, the equipment must be removed at end-of-term, and the surface restored to pre-project condition.

Downside cases (covered separately)

The numbers above assume HQCA exercises the option, completes construction, and operates through full term. Many of those assumptions can fail. Risk-scenario analysis is in QCELLS_PARCEL9_RISK_SCENARIOS_2026_05_13.md. The short version: the lease as currently drafted does not adequately protect you in several important downside cases — the largest gap is the absence of any decommissioning bond — which is why the eight critical amendments matter.

Methodology: present-value calculations use the closed-form growing-annuity formula. The QCELLS draft uses a flat 2.25% escalator with no CPI mechanism — sensitivity to higher realized inflation is captured in the 3.0% counterfactual row only. Discount rates are not adjusted for inflation — these are nominal-dollar discounts applied to nominal-dollar cash flows. After-tax estimates are illustrative only; consult your accountant for actual entity-level analysis. Cross-reference: deterministic deal sizing here, probabilistic expected value in the Monte Carlo report.