Group Captive vs Third-Party Open Access PPAs in India: 2026 Cost Guide

By Sudarshan Karweer · 25 August 2026 · growthifye.com

A 2026 practitioner guide to group captive vs third-party open access PPAs in India: charges, banking, RPO, CFA and landed power cost.

Open access procurement is no longer a niche option for a handful of large industrials. In 2026, it is a mainstream sourcing route for Indian commercial and industrial consumers trying to reduce landed electricity cost, manage tariff volatility, meet RE100 and supply-chain decarbonisation requirements, and hedge against future compliance obligations. Yet the core structuring choice still creates confusion: should a consumer contract under a third-party open access PPA, or should it move into a group captive structure?

This article focuses on that choice. It is intentionally different from a general open access solar playbook. The objective here is to help energy managers, CFOs, developers, lenders and policy teams evaluate the practical difference between third-party and group captive procurement in India in 2026, with specific attention to cross-subsidy surcharge, additional surcharge, wheeling and transmission charges, banking treatment, RPO implications, captive compliance and delivered power economics.

Why the structure matters more in 2026

In most states, the difference between a viable and a non-viable open access transaction is no longer module cost or inverter efficiency. It is the policy stack. A project that looks attractive at an ex-bus tariff of Rs 3.00-3.40/kWh can become marginal or highly profitable depending on whether the offtaker pays cross-subsidy surcharge (CSS), additional surcharge (AS), wheeling charges, state transmission charges, losses, banking charges and demand-related standby costs.

The economic spread between a third-party and group captive arrangement is often driven by one simple point: group captive users typically seek exemption from CSS and AS, subject to compliance with captive rules and state-level implementation. That single distinction can change landed cost by Rs 1.50-3.50/kWh in high-tariff states.

In 2026, this matters even more for five reasons:

- Several state discoms have revised retail tariffs upward for HT industrial and commercial consumers.
- More regulators are scrutinising banking, settlement periods and captive compliance.
- Consumers are signing larger RTC, FDRE and hybrid portfolios, making annual cost leakage from charges much more material.
- Scope 2 accounting and buyer decarbonisation targets are pushing procurement beyond plain vanilla rooftop.
- Lenders are more sensitive to legal-structural risk in open access portfolios, especially where captive status underpins project viability.

Third-party open access PPA: who should use it

Under a third-party model, the generator sells power to the consumer without the consumer holding equity in the generating SPV. This is structurally simpler for many buyers. The consumer signs an energy offtake contract, avoids equity commitment and governance responsibilities, and typically expects the developer to

manage project execution, scheduling, forecasting, SLDC interface and operating performance.

This model works best where:

- The consumer wants no balance-sheet exposure to project equity.
- Contracted load is moderate or distributed across multiple facilities.
- Internal approvals for shareholding and related-party reviews are cumbersome.
- State-level surcharge economics are still acceptable.
- The buyer values operational simplicity over absolute tariff minimisation.

But third-party open access is exposed to a broader charge stack. Depending on the state, third-party users may face:

- CSS
- AS
- Wheeling charges
- State transmission charges
- SLDC charges
- Losses at transmission and distribution levels
- Banking charges, if banking is allowed
- Standby or balancing exposure if the buyer needs firming from the discom

For an industrial consumer paying a grid tariff of Rs 8.00-10.50/kWh, third-party solar or wind-solar hybrid may still be attractive. But the margin of savings narrows significantly in states with high CSS and restrictive banking.

As a broad 2026 illustration, consider a daytime solar open access case:

- Ex-bus solar tariff: Rs 3.10/kWh
- Wheeling and transmission charges plus losses impact: Rs 0.70-1.20/kWh equivalent
- CSS: Rs 1.20-2.80/kWh depending on state and category
- AS: Rs 0.00-1.50/kWh depending on state and applicability
- Banking and other system costs: Rs 0.10-0.60/kWh equivalent

That can push landed cost to roughly Rs 5.10-8.20/kWh before considering curtailment or mismatch losses. In a high-retail-tariff state, savings remain meaningful. In a lower-tariff industrial state, the economics may be too thin unless the profile is well matched and the contract is carefully designed.

Group captive open access: lower charges, higher discipline

A group captive structure is attractive because it can materially reduce open access charges, especially through exemption from CSS and AS where the legal and regulatory conditions are met. But it is not a free pass. It requires strict compliance with the Electricity Rules governing captive generating plants.

The two principles that matter operationally are widely understood in the market:

- Captive users, collectively, must hold not less than 26% of the ownership in the captive generating plant.

- Captive users must collectively consume not less than 51% of the electricity generated on an annual basis, in proportion to ownership, subject to the applicable legal interpretation and state-level implementation practice.

For group captive, the ownership and consumption tests must be monitored carefully across all captive users. A compliance failure can trigger severe consequences, including retrospective loss of captive benefit and levy of CSS and AS, often with carrying cost or interest exposure depending on the regulatory outcome.

This is why lenders, serious developers and sophisticated C&I buyers now treat captive compliance as a live annual governance item, not a one-time structuring exercise.

Group captive is generally most suitable where:

- Annual consumption is large enough to justify equity participation.
- The consumer has stable load and reasonable forecasting visibility.
- The buyer is comfortable with SPV-level documentation, shareholder arrangements and annual compliance tracking.
- The state has meaningful CSS and/or AS, making surcharge exemption economically valuable.
- The procurement horizon is medium to long term, typically 12-25 years.

A typical 2026 group captive daytime solar example may look like this:

- Ex-bus solar tariff: Rs 3.05/kWh
- Wheeling and transmission charges plus losses impact: Rs 0.70-1.20/kWh equivalent
- CSS: generally nil if captive benefit is valid
- AS: generally nil if captive benefit is valid, subject to state practice
- Banking and system costs: Rs 0.10-0.60/kWh equivalent
- Captive compliance and SPV administration overhead: usually modest on a per-unit basis, but real

This may yield landed cost of around Rs 4.00-5.20/kWh in many workable cases. Against grid tariffs of Rs 8.00-10.50/kWh, that can create savings of Rs 3.00-5.00/kWh, especially for high-load-factor industrial users.

The charge stack: what actually changes between the two models

A lot of market discussions oversimplify the comparison as “third-party expensive, captive cheap.” In practice, each charge needs to be tested state by state and voltage level by voltage level.

1) Cross-subsidy surcharge

CSS is often the single largest differentiator. It is generally applicable where a consumer procures power through open access from a source other than the area discom, unless an exemption applies. Group captive structures are usually designed to avail that exemption.

In 2026, CSS for HT industrial and commercial consumers in some states can still range broadly from below Re 1/kWh to above Rs 3/kWh. The same PPA can therefore have entirely different outcomes across Maharashtra, Karnataka, Tamil Nadu, Haryana, Uttar Pradesh, Rajasthan or Andhra Pradesh.

2) Additional surcharge

AS is meant to compensate the discom for stranded fixed cost in certain contexts. It may or may not apply depending on state orders and consumer category. In some states it is nil, in others it is material. Group captive users often seek exemption, but implementation must be checked against the latest regulatory order

and case law position.

3) Wheeling and transmission charges

These apply more neutrally across structures, though exact incidence depends on whether the transaction uses intra-state transmission, distribution wheeling or both. Voltage level, connectivity point and approved route matter. Losses also need to be grossed up. A stated wheeling charge of, say, Rs 0.80/kWh does not capture the full impact if technical losses require additional injected energy.

4) Banking charges and settlement treatment

Banking has become one of the biggest hidden swing factors in open access economics. Questions to test include:

- Is banking allowed for solar, wind or hybrid?
- Is settlement monthly, quarterly or annual?
- Is banked energy returned at 100%, net of charges, or after discounting?
- Is drawal limited to off-peak or specific time blocks?
- Is unutilised banked energy purchased by the discom, lapsed, or settled at APPC or another rate?

A project model built on generous annual banking can collapse if the state shifts to monthly banking with time-block restrictions. In 2026, buyers should be conservative and model banking value at a discount, especially for pure solar serving two-shift or night-heavy loads.

5) SLDC, scheduling, deviation and forecasting costs

For variable renewable open access, scheduling and forecasting compliance can create small but recurring costs. These are usually manageable, but for multi-site portfolios and hybrid structures they should not be ignored.

Banking, load shape and the real landed cost of power

The biggest mistake in C&I renewable procurement is comparing the PPA tariff directly with the discom tariff. The right comparison is landed delivered cost versus avoided grid power cost for the specific time profile.

Consider three common 2026 scenarios:

- Day-shift manufacturer with 70-80% daytime consumption
- Two-shift engineering plant with evening load extension
- Commercial campus with seasonal and weekend variability

The first user can often maximise value from solar open access, especially under group captive, because same-slot consumption reduces banking dependence. The second user may need solar plus banking, or a wind-solar hybrid, or a blended procurement stack including exchange power. The third user may find that contract demand, minimum charges and poor temporal matching erode apparent savings.

As a rule of thumb:

- If instantaneous or same-day self-consumption is high, group captive solar economics are strongest.
- If load extends into evenings, hybrid or wind-rich portfolios often outperform plain solar despite a higher headline tariff.
- If banking is weak, solar oversizing can destroy value.

- If the facility has large seasonal shutdowns, annual generation matching matters more than headline discount.

For many industrial users in 2026, a wind-solar hybrid group captive structure may deliver a landed cost in the Rs 4.50-6.20/kWh range, versus grid cost of Rs 8.50-10.50/kWh, provided policy conditions are supportive. A plain third-party solar structure in the same state might land closer to Rs 6.00-8.00/kWh after surcharges and banking friction.

RPO, CFA and policy compliance: what buyers should not overlook

RPO is often discussed as a discom or obligated-entity issue, but large consumers and market participants need to understand how renewable procurement interacts with state-level compliance architecture, captive treatment and accounting of renewable consumption.

For obligated entities, internal compliance teams should verify how open access procurement counts toward applicable renewable purchase obligations under the prevailing state framework. Regulators differ in how they operationalise reporting and compliance. Energy accounting, meter data integrity and invoice support matter.

CFA, or the cost of conventional/grid supply that the consumer would otherwise pay, remains the reference point for investment decisions. But in advisory practice, the more useful metric is avoided landed grid cost after adjusting for:

- Time-of-day tariff where applicable
- Demand charges and ratchet effects
- Power factor incentives or penalties
- Electricity duty and cess
- Reliability value of discom supply versus OA supply
- Cost of balancing residual demand
- Opportunity cost of captive equity capital

The equity question is especially important in group captive. Yes, group captive often saves CSS and AS. But that benefit comes with capital commitment. A serious comparison should test not just per-unit savings, but post-tax project IRR, equity lock-in implications, exit rights, share transfer restrictions, change-in-law allocation and downside cases if annual 51% consumption is missed.

For lenders, key diligence items now include:

- Shareholding waterfall and beneficial ownership clarity
- Captive consumption allocation methodology
- Cure mechanisms if one captive user under-consumes
- Consequences of user replacement
- Regulatory precedent in the relevant state
- Treatment of retrospective surcharge claims

For policymakers and utilities, the takeaway is equally clear. Stable, transparent rules on banking, surcharges and captive treatment reduce disputes and improve investment quality. Frequent mid-course changes create stranded pipelines, litigation and inefficient contracting behaviour.

A practical decision framework for 2026 buyers

If you are evaluating a corporate renewable PPA in India today, use this decision sequence instead of starting with tariff negotiation:

- Map hourly load for at least 12 months, ideally 15-minute interval data.
- Determine avoided grid cost by time block, including demand charge effects.
- Check state-specific applicability of CSS, AS, wheeling, transmission and banking rules.
- Test both third-party and group captive structures on a landed-cost basis.
- Quantify the value of surcharge exemption under realistic generation and consumption assumptions.
- Evaluate whether your organisation can own and govern captive equity responsibly.
- Run downside scenarios for banking curtailment, policy change and captive non-compliance.
- Align contract tenor with plant life, business continuity and plant-level load certainty.

In 2026, there is no universal winner between third-party and group captive open access. Third-party PPAs remain the right answer for buyers prioritising simplicity, speed and zero equity involvement, especially in states with moderate surcharge burden or for smaller loads. Group captive remains the superior economic structure for many large C&I users where CSS and AS are material and the consumer can manage ownership and compliance requirements.

The difference between a good decision and an expensive mistake lies in state-level charge mapping, hourly load matching, banking assumptions and legal structuring discipline. Open access value is created in the details, not in the headline tariff.

If your organisation is evaluating open access or corporate PPA options anywhere in India, contact Growthifye’s advisory desk for a state-specific assessment of group captive versus third-party structuring, charge impact, banking risk and landed power cost.

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