



Open Access Charges Stack in India 2026: CFA, CSS, Wheeling and Landed Cost

By Sudarshan Karweer · 18 September 2026 · growthifye.com

A practitioner guide to India's 2026 open access charges stack: CFA, CSS, wheeling, losses, duties and landed cost strategy.

Indian corporate buyers often anchor on the PPA tariff and then discover that the real economics are being determined elsewhere: cross-subsidy surcharge, wheeling charge, transmission charge, losses, additional surcharge, standby, banking treatment, electricity duty, and the fine print on scheduling and settlement. In 2026, that mistake is expensive.

For most commercial and industrial consumers, open access savings are no longer a simple comparison between a solar or hybrid tariff and the discom retail tariff. The right question is: what is the fully loaded landed cost at the meter, by time block, after every applicable charge, loss and compliance assumption? That answer differs sharply by state, voltage level, contract demand, load shape, consumer category, and whether the structure is third-party or group captive.

This article focuses on a different angle from the usual third-party versus captive debate: the open access charges stack itself. Specifically, how to read the CFA and related charge build-up in 2026, where projects lose competitiveness, and what serious buyers, developers and lenders should model before signing a term sheet.

Why the charge stack matters more than the tariff headline

In 2026, utility-scale solar open access tariffs in stronger resource states may still be quoted around Rs 2.65-3.20/kWh for plain vanilla profiles, with wind and hybrid structures varying higher depending on seasonality, RTC shaping, storage support, and interstate delivery assumptions. But a buyer paying a retail tariff of Rs 7.50-9.50/kWh does not automatically save the difference.

The delivered open access cost often includes:

- Energy tariff under the PPA

n- State transmission charges, where applicable

- State transmission losses
- Wheeling charges
- Wheeling losses
- Cross-subsidy surcharge or similar surcharge category, if applicable
- Additional surcharge, if applicable
- SLDC charges and scheduling-related fees
- Standby or balancing costs
- Banking charges or banking disallowance cost
- Electricity duty and taxes, depending on state treatment
- Deviation, forecasting and scheduling cost allocation
- Metering, connectivity and one-time approval costs amortised into delivered cost



A PPA quoted at Rs 3.00/kWh can easily become a landed cost of Rs 4.60-6.20/kWh depending on state and structure. In some high-surcharge states, third-party open access may become marginal or uneconomic while the same consumer under group captive remains viable. In other states, losses and wheeling alone are manageable, but restrictive banking or month-end settlement erodes value more than the surcharge line item.

That is why advisory work in 2026 has shifted from tariff comparison to charge-stack engineering and Landed-cost management.

What “CFA” typically means in 2026 open access discussions

In market conversations, “CFA” is often used loosely to mean the cost framework or charge framework applicable to an open access consumer rather than one single statutory charge. Buyers should not assume that every counterparty uses the acronym identically. In practice, the relevant exercise is to map the full cost allocation framework state by state.

For a serious bid evaluation, Growthifye would typically ask five preliminary questions before quoting a savings number:

- Is the consumer intra-state or cross-state from a delivery perspective?
- Is the structure third-party sale, captive, or group captive?
- What is the sanctioned load, billing demand and voltage level?
- What is the 15-minute demand profile, especially day versus evening and seasonal variation?
- Which charges are fixed by regulation, which are utility-administered, and which are contractually pass-through under the draft PPA?

This is not academic. A single misread on surcharge applicability can shift project IRR by 150-300 basis points for the developer and erase 8-20% of projected savings for the buyer.

The seven charge buckets that decide landed cost

1) Energy tariff under the PPA

This is the most visible number and often the least sufficient number. Buyers should test whether the tariff is:

- Fixed or escalated
- Single-part or split by generation source in a hybrid supply
- Net of losses or delivered-at-injection-bus
- Inclusive or exclusive of scheduling, forecasting, and compliance costs
- Paired with must-run assumptions that may not hold in practice

In 2026, hybrid and shaped products may look more expensive on tariff but lower on total landed cost if they reduce balancing purchases during high ToD retail periods.

2) Transmission and wheeling charges

For intra-state open access, wheeling charges remain a critical determinant. Many state orders continue to differentiate by voltage level and network usage. High-voltage consumers can materially outperform lower-voltage users on delivered economics.

Illustratively, wheeling plus transmission cost can range from below Rs 0.60/kWh equivalent in relatively favourable structures to well above Rs 1.50/kWh in tougher cases once losses are grossed up. For buyers



with medium and high tension connections, this needs meter-level modelling, not broad assumptions.

3) Technical losses

Losses are often underestimated because teams discuss charges in paise per unit but forget that losses increase the effective cost of every unit delivered. If cumulative applicable loss is 8%, a buyer must contract approximately 1.087 units to receive 1 unit at the consumption point. At a Rs 3.20/kWh source tariff, that alone lifts effective energy cost to about Rs 3.48/kWh before other charges.

For interstate supply, ISTS assumptions should be validated carefully, especially where waiver eligibility, connectivity timelines, or source configuration change the delivered position.

4) Cross-subsidy surcharge

CSS remains one of the most decisive variables in third-party open access. In several states, CSS can move third-party supply from highly attractive to borderline. The issue is not only current quantum but predictability over the tenor.

A buyer should ask:

- What is the current CSS applicable to this consumer category and voltage?
- Is there a trajectory or review pattern visible from recent tariff orders?
- Does the draft PPA treat CSS change as pass-through?
- What is the cure if CSS rises beyond a defined savings threshold?

In broad market terms for 2026, CSS can range from low or moderate levels in more open-access-active states to well above Rs 1.50-2.50/kWh in restrictive contexts. The difference between a viable and non-viable project can sit entirely in this line item.

5) Additional surcharge

Additional surcharge is frequently mishandled in early-stage savings decks. Even when a developer says the current value is nil or not applicable, buyers should ask whether that position is under challenge, under periodic review, or consumer-category specific. In some cases, additional surcharge emerges later and materially reduces savings.

For lenders, this is a classic downside item in revenue sensitivity analysis. If the project's debt sizing assumes stable offtaker savings, unmodelled additional surcharge can weaken payment resilience.

6) Banking and settlement cost

Even where banking is available, the commercial outcome depends on banking charges, cap limits, settlement period, and treatment of unutilised banked energy. Month-end forfeiture or low-rate purchase by the discom can sharply reduce the value of excess day generation. This is especially relevant for solar-heavy profiles serving flat or night-shift demand.

Many 2026 buyers now compare two cases:

- Lower PPA tariff with weaker banking and higher balancing purchases
- Slightly higher shaped or hybrid tariff with lower residual procurement during peak periods

Without detailed [Demand & ToD analysis](/coreservices/greenenergyppa/demandandtodanalysis), the lower quoted tariff can be the wrong decision.

7) Duties, standby and balancing



Electricity duty treatment differs meaningfully by state and category. Standby supply charges, demand ratchet effects, and balancing purchases from the discom or exchange can also change the annual cost picture. These are often not shown clearly in top-sheet commercial summaries.

For plants with process-critical loads, the reliability value of standby design should be explicitly priced rather than treated as incidental.

Third-party versus captive: charge-stack consequences, not just compliance consequences

The market usually frames third-party versus group captive as a legal and compliance choice. In practice, it is also a charge-stack optimisation choice.

Third-party structures may be simpler for some buyers operationally, but CSS and additional surcharge can materially increase landed cost. Group captive can reduce or eliminate some surcharge burden where rules are properly met, but that benefit comes with equity participation, annual consumption discipline, and continued compliance on ownership and consumption thresholds.

What matters in 2026 is not generic preference but state-specific arithmetic.

Consider a simplified illustration for a high-tension industrial buyer:

- Retail discom tariff: Rs 8.40/kWh blended
- Open access solar PPA tariff: Rs 3.00/kWh
- Grossed-up effect of losses: Rs 0.28/kWh
- Wheeling and transmission: Rs 0.90/kWh
- SLDC, metering, scheduling and admin: Rs 0.12/kWh
- Banking and settlement impact: Rs 0.30/kWh
- CSS in third-party case: Rs 1.65/kWh
- Additional surcharge in third-party case: Rs 0.55/kWh

Illustrative landed cost in third-party case: about Rs 6.80/kWh

If the same case is validly structured as group captive and surcharge exposure is materially reduced, landed cost may fall closer to Rs 4.60-5.10/kWh, subject to banking and other state-specific terms. That difference is why developers, lenders and corporate buyers spend so much time on structure before commercial close.

But captive is not a free option. If annual captive compliance fails, the retrospective cost impact can be severe. The right decision is therefore a combined legal, commercial and load-shape decision, not simply a tariff decision.

A 2026 diligence checklist for offtakers, developers and lenders

Before issuing an LOI or accepting a term sheet, buyers should insist on a state-specific charge memo and scenario model covering at least the following:

- Current charge stack with regulatory source references
- Consumer-category applicability of CSS and additional surcharge
- Voltage-level assumptions and metering point
- Loss assumptions at every network layer
- Banking rules, caps, settlement timing and treatment of surplus



- ToD profile and balancing purchase requirement
- Forecasting, scheduling and deviation cost allocation in the PPA
- Change-in-law treatment for each charge bucket
- Curtailment compensation interaction with landed cost
- Electricity duty applicability and pass-through treatment
- Exit rights or tariff reopener triggers if charges move beyond threshold levels

For developers, this diligence improves bankability and reduces post-signing disputes. For lenders, it helps identify whether the project economics are dependent on optimistic regulatory interpretations. For policymakers and utilities, it highlights where non-transparent charge application is slowing credible market growth.

How serious buyers reduce cost leakage in 2026

The best-performing open access portfolios in 2026 are not always those with the lowest source tariff. They are the ones with the most disciplined procurement design. In practice, that means:

- Matching generation profile to actual demand shape rather than annual energy volume alone
- Choosing delivery state and structure based on total landed cost, not headline tariff
- Negotiating clear pass-through language charge by charge
- Stress-testing downside under CSS, banking and surcharge change scenarios
- Using phased procurement instead of a one-shot volume lock if regulatory visibility is weak
- Evaluating hybrid, seasonal shaping, or partial merchant balancing where it lowers total power cost

This is where [Sourcing strategy](/coreservices/greenenergyppa/sourcingstrategy) and [PPA structuring & negotiation](/coreservices/greenenergyppa/ppastructuringandnegotiation) create measurable value. A 20-40 paise/kWh improvement in landed cost through better structuring often matters more than chasing a 5-10 paise/kWh lower tariff from the wrong project configuration.

The policy takeaway for utilities and regulators

If the policy objective is to expand renewable procurement by C&I consumers without undermining system stability, the charge framework must be legible and predictable. Corporate buyers can price high charges; what they struggle to price is opaque application, shifting interpretations, or delayed approvals.

Transparent publication of charge applicability, voltage-wise matrices, banking treatment, and standardised settlement mechanics would reduce disputes and improve investability. Developers and lenders are more comfortable with a higher but clear charge than with a lower charge vulnerable to abrupt reinterpretation.

For 2026, the practical message is simple: open access competitiveness in India is no longer determined by PPA tariff alone. It is determined by the full charge stack and how well that stack is modelled, negotiated and monitored through the project life.

If your team is evaluating open access procurement, a group captive migration, or a multi-state charge comparison, contact Growthifye's advisory desk for a state-specific landed cost review and transaction support.

Explore Growthifye's related capabilities



This analysis connects directly to our advisory practice: [Demand & ToD analysis](/coreservices/greenenergyppa/demandandtodanalysis) · [Sourcing strategy](/coreservices/greenenergyppa/sourcingstrategy) · [Competitive developer selection](/coreservices/greenenergyppa/competitivedeveloperselection) · [PPA structuring & negotiation](/coreservices/greenenergyppa/ppastructuringandnegotiation).

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