Open Access PPA Contracting in India 2026: Scheduling, DSM and SLDC Risk

By Sudarshan Karweer · 05 September 2026 · growthifye.com

A 2026 practitioner guide to scheduling, DSM, forecasting and SLDC risk in Indian open access PPAs for C&I buyers and developers.

India's open access market in 2026 is increasingly decided not only by headline energy price, CSS, AS, wheeling and banking, but by operating discipline after the PPA is signed. For many corporate buyers, the biggest underappreciated variable is scheduling and deviation management: who forecasts generation, who submits schedules, how revisions are handled, who pays DSM or state deviation charges, what happens during SLDC curtailment, and how settlement data is reconciled.

This is a different question from third-party versus group captive structure, banking reform, captive compliance or site selection. Even when those choices are correct, poorly drafted scheduling and DSM provisions can erode 20-60 paise/kWh from expected savings, trigger monthly disputes, and complicate lender underwriting. In states with tighter renewable scheduling enforcement, volatile ToD loads, or weak metering reconciliation, the impact can be larger.

For Indian C&I consumers, developers, lenders, utilities and policymakers, 2026 is the year to treat scheduling and SLDC-operability risk as a first-order commercial issue.

Why scheduling risk matters more in 2026

Three market changes are making this topic material.

- Banking has become less generous in many states, with monthly settlement, tighter carry-forward rules, or weak peak-hour treatment. That means real-time mismatch matters more.
- C&I load profiles are becoming more complex, especially for data centres, auto, chemicals, textiles, FMCG and commercial campuses with mixed weekday-weekend demand.
- State load dispatch centres and discoms are applying scheduling, revision windows, meter data validation and imbalance settlement with greater scrutiny.

The result is simple: a solar or wind-open-access PPA that looked attractive at a quoted Rs 3.10-4.20/kWh ex-bus can land very differently once schedule mismatch, balancing energy, banking restrictions and DSM-style penalties are layered in.

For a 20 MW solar open access portfolio supplying a buyer consuming 3.0-3.5 million units per month, even a 4-6% avoidable mismatch between scheduled and actual usable energy can alter monthly economics materially. If replacement power during under-supply is drawn at Rs 6.5-9.0/kWh industrial tariff, while surplus spill or low-value settlement happens at a much lower realized value, the effective cost of poor scheduling quickly becomes visible.

The key risk buckets in open access scheduling and DSM

Practitioners should separate five issues that are often mixed together in negotiation.

- Forecasting risk: error in day-ahead or intra-day generation forecast for solar, wind or hybrid assets.
- Load scheduling risk: mismatch between buyer's scheduled drawal and actual consumption, including plant shutdowns, maintenance and ToD shifts.

- Procedural SLDC risk: missed schedule submission, revision deadlines, standing-clearance issues, metering data disputes and approval delays.
- Regulatory settlement risk: changes in state deviation framework, treatment of renewable deviations, balancing energy rules and pass-through of related charges.
- Curtailment-versus-deviation interaction: whether a shortfall is due to generator forecast error, grid curtailment, transmission outage or backing down directed by system operators.

Each risk bucket should be allocated explicitly in the PPA, the power sale agreement, scheduling agency agreement and operating protocol. Too many Indian deals still use a generic clause stating that “grid-related charges shall be to buyer’s account as applicable,” which is commercially dangerous.

How scheduling actually works in a typical corporate OA setup

In a standard third-party or group captive open access arrangement, the generator or a qualified scheduling coordinator submits generation schedules to the relevant SLDC, and in some cases coordinates with RLDC or STU/CTU interfaces depending on project configuration and injection point. The buyer separately nominates expected drawal or relies on established open access scheduling mechanisms under state procedures.

From a contracting standpoint, there are at least eight decisions to lock down:

- Who is the formal scheduling entity before the SLDC?
- Who pays scheduling coordinator fees?
- What day-ahead forecast methodology is used?
- How many intra-day revisions are contractually expected and by what cut-off time?
- Is the buyer obligated to provide load forecasts by plant, feeder or aggregate level?
- How are outages, shutdowns and force majeure events communicated?
- Who bears deviation or imbalance charges caused by generator-side error versus buyer-side error?
- What metering hierarchy governs settlement if SLDC, discom and seller data differ?

Without clarity, both sides believe the other is responsible when monthly invoices show shortfall, balancing purchase, or unutilized scheduled energy.

An example illustrates the issue. Suppose a Maharashtra or Karnataka C&I buyer contracts 15 MW solar open access with expected annual CUF around 22-24%. Contracted annual energy may be roughly 28.9-31.5 MU. If actual plant generation is normal, but the buyer’s load drops 25% on several weekend shifts and during maintenance shutdowns, unused scheduled energy may either be banked subject to state rules, sold at a lower realization, or effectively wasted depending on timing and policy. If revisions are not made quickly, the buyer may still pay contract energy charges while also losing savings against retail tariff.

Conversely, if the generator persistently overstates available generation during monsoon cloud variability or underperforms due to module outages, the buyer may need high-cost replacement power. In 2026, where HT industrial tariffs in several states can still sit in the Rs 7-10/kWh range including duty and demand-linked impacts, this under-delivery risk is not theoretical.

Contract design: what a bankable PPA should say

A robust open access PPA should not merely state delivered tariff and term. It should include a dedicated operating schedule and settlement schedule covering forecasting, revisions, data, invoices and exceptions.

The most effective PPAs usually address the following:

- Seller forecast obligation: define required forecast accuracy standards where state rules permit and specify whether “reasonable endeavours” is sufficient or whether service-level thresholds apply.
- Buyer load visibility: require the buyer to share day-ahead and intra-day load expectation, especially where multiple plants or variable process loads exist.
- Revision protocol: specify cut-off times, communication channels, responsible personnel and deemed acceptance rules.
- Deviation allocation matrix: distinguish generator-caused deviation, buyer-caused deviation, grid curtailment, evacuation outage, and meter/data error.
- Replacement power principle: state whether seller has any make-good duty, liquidated damages, deemed generation relief or no-fault treatment.
- Banking interaction: if energy is banked, define whether schedule mismatch first adjusts against same-month banking before any compensation is computed.
- Curtailment evidence standard: define what documentation from SLDC/STU/discom qualifies as curtailment and how energy impact is estimated.
- Change-in-law pass-through: capture future changes in deviation regulations or scheduling charges separately from energy tariff.

A sophisticated drafting approach uses a “waterfall of settlement.” First reconcile meter data, then identify physical generation, then scheduled injection, then actual drawal, then banking adjustment, then deviation allocation, then invoice true-up. This prevents double counting.

Lenders increasingly prefer this clarity because unexplained monthly volatility in collections can weaken DSCR visibility, particularly for small and mid-sized C&I portfolios.

The economics: how much DSM and scheduling mistakes can cost

In boardroom discussions, scheduling is often treated as an O&M detail. In reality it changes landed cost.

Consider a 10 MW solar OA deal generating about 1.6-1.8 MU per month on average across the year. Assume ex-bus tariff Rs 3.35/kWh and landed cost after OA charges of Rs 4.45/kWh in the base case. Now layer operating effects:

- Forecast/schedule mismatch causing 2% energy replacement at Rs 7.25/kWh marginal retail alternative adds about 7-8 paise/kWh on the OA portfolio.
- Another 1.5% surplus settled or absorbed at low value can reduce realized savings by 4-7 paise/kWh.
- Scheduling coordinator, forecasting vendor and reconciliation overhead may add 2-4 paise/kWh for smaller portfolios.
- Unresolved meter and invoice disputes can create working-capital drag equivalent to another 2-5 paise/kWh.

That means a nominal Rs 4.45/kWh landed arrangement can behave like Rs 4.60-4.70/kWh if operating design is weak. For buyers comparing OA to utility supply or green tariff alternatives, this is enough to alter payback and management confidence.

For wind and wind-solar hybrid deals the spread can be wider because generation variability is higher, night-time scheduling may matter, and balancing power needs can become more expensive in specific ToD blocks.

This is why Growthifye's [Demand & ToD analysis](/coreservices/greenenergyppa/demandandtodanalysis) and Landed-cost management work should not stop at static charge modelling. The operational settlement layer needs to be built into bid evaluation and PPA drafting from the start.

State and implementation issues buyers should check before signing

Although central rules have expanded market access, implementation remains highly state-specific. Buyers should diligence the following before locking a PPA:

- Whether SLDC procedures are mature for corporate renewable scheduling in that state.
- How often meter data disputes occur and average timeline for final energy accounting.
- Whether scheduling is done plant-wise, consumer-wise or portfolio-wise for the transaction structure.
- Whether same-day revisions are practical in real operating conditions.
- Whether discom billing systems properly account for OA injection, banking and drawal across ToD blocks.
- Whether deviation charges are explicitly billed, netted elsewhere, or embedded in balancing treatment.
- Whether the generator already has an experienced scheduling agent for that state.

In some states, administrative friction matters nearly as much as formal regulation. A theoretically cheaper PPA in a difficult operating state can underperform a slightly more expensive PPA in a state with cleaner metering, faster approvals and predictable settlement.

This is particularly important for multi-site C&I buyers attempting to aggregate demand across plants. If one unit has highly stable base load and another has volatile seasonal demand, the portfolio may benefit from split contracting rather than a single undifferentiated OA block.

Practical mitigation strategies for buyers, developers and lenders

The best-performing open access portfolios in 2026 are using a combination of commercial, technical and operational controls.

For buyers:

- Map plant-level hourly demand for at least 12 months before contracting.
- Identify shutdown weeks, holiday dips and seasonal process changes.
- Create escalation protocols between energy managers, procurement and finance for schedule revisions.
- Negotiate settlement examples in the PPA annexure instead of relying only on legal definitions.

For developers and sellers:

- Use state-specific forecasting vendors and scheduling coordinators, not a generic national template.
- Provide buyers a monthly deviation dashboard showing forecast error, curtailment hours, unavailed energy and balancing impact.
- Align PPA guarantees with actual controllability; do not promise dispatch-like certainty from non-firm renewables.
- Where possible, structure hybrid supply or limited balancing arrangements for buyers with sensitive processes.

For lenders:

- Review state operating procedures as part of due diligence, not only tariff and title documents.
- Stress-test revenue under higher deviation and lower banking utilization assumptions.
- Check whether the portfolio has diversified offtakers with compatible load shapes.
- Examine historical invoice true-up cycle and receivable aging from similar assets in the same state.

For policymakers and utilities:

- Standardized digital scheduling and meter reconciliation can reduce disputes.
- Transparent publication of deviation settlements improves market confidence.
- Consistent treatment of curtailment evidence helps separate controllable from uncontrollable shortfall.
- Better integration of OA accounting with discom billing systems lowers friction for all parties.

What should be on the management checklist in 2026

Before approving any open access or corporate PPA, management teams should ask ten direct questions:

- What is the expected landed cost after all OA charges and operating losses?
- How much of projected savings assumes successful banking or schedule matching?
- Who bears generator forecast error?
- Who bears buyer load deviation?
- What is the replacement power cost if scheduled renewable supply under-delivers?
- How quickly can schedules be revised in practice?
- What data source is final for invoice settlement?
- What is the monthly working-capital impact of disputed energy accounting?
- How will future state deviation-rule changes be passed through?
- Has this exact operating model already been executed successfully in the same state?

If these questions do not have precise written answers, the PPA is not yet decision-ready.

The next phase of India's C&I renewable market will reward operationally bankable contracts, not just low quoted tariffs. As open access markets mature and easy arbitrage narrows, scheduling discipline, DSM allocation and SLDC process design will separate durable savings from disappointing execution. Buyers that treat these issues early can preserve the headline tariff advantage they negotiated; those that ignore them often discover the problem only after the first two billing cycles.

For companies evaluating corporate PPAs, Growthifye can support [Sourcing strategy](/coreservices/greenenergyppa/sourcingstrategy), [PPA structuring & negotiation](/coreservices/greenenergyppa/ppastructuringandnegotiation) and operating-risk diligence across state-specific open access frameworks. Contact Growthifye's advisory desk to assess your scheduling risk, landed cost and contract design before you sign.

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).

ABOUT THE AUTHOR

Sudarshan Karweer — Chief Executive Officer, Growthifye

Over 23 years in management consulting — concept to scale — building and scaling new-age digital and energy businesses. An EY alumnus, Sudarshan leads Growthifye's renewable energy & storage advisory, EPC, transmission engineering and green-financing practices for developers, utilities and C&I consumers across India.
Contact: info@growthifye.com · +91 84510 99371 · growthifye.com