India Data Centre Renewable Energy Wheeling 2026: OA Charges, Banking and Scheduling

By Sudarshan Karweer · 29 August 2026 · growthifye.com

A 2026 practitioner guide to open-access wheeling for Indian data centres: charges, banking, scheduling, DSM risk and BESS-backed delivery.

India's data-centre market is scaling into a far more power-intensive phase in 2026. New campuses in Mumbai Metropolitan Region, Chennai, Hyderabad, NCR, Bengaluru and Pune are no longer evaluating renewable energy only as a sustainability line item. The core issue is delivered MWh at the IT load, with bankable reliability, manageable imbalance risk and acceptable all-in cost after open-access charges, losses, standby costs and scheduling penalties.

That makes renewable-energy wheeling a board-level topic.

For data centres, the commercial question is not whether solar, wind or hybrid generation can be contracted at a low headline tariff. It is whether energy can be wheeled from project busbar to data-centre meter through the state or interstate network with economics that remain viable after transmission charges, wheeling charges, cross-subsidy surcharge where applicable, additional surcharge, banking limits, time-of-day settlement and deviation risk. In several Indian states, the gap between headline generation tariff and actual landed power cost can still exceed INR 1.5-3.5/kWh depending on voltage level, contract structure and timing profile.

This article focuses on a topic distinct from standard 24/7 CFE and procurement discussions: how wheeling architecture itself should be designed for Indian data centres in 2026, and what developers, lenders, utilities and C&I buyers should underwrite before signing term sheets.

Why wheeling design matters more for data centres than for typical C&I loads

Data centres differ from most industrial and commercial consumers in four practical ways.

- Load factor is high and relatively flat, often 0.75-0.95 at the facility level once stabilised
- Outage tolerance is close to zero, even when backup systems exist
- Demand is driven by rack utilisation and cooling, not daylight generation patterns
- CFOs and operations teams care about settlement volatility because monthly power bills are large and visible

A textile mill or foundry can sometimes absorb renewable intermittency, curtail load, or optimise shift timing around tariffs. A hyperscale or colocation facility generally cannot. Even when UPS and BESS support ride-through, the energy procurement stack must still deliver predictable monthly landed cost.

This is why wheeling provisions deserve the same diligence as generator CUF, inverter sizing or module degradation. For many data-centre projects, weak wheeling design destroys the expected value of open access more quickly than a modest increase in PPA tariff.

The 2026 open-access wheeling stack: what actually determines landed power cost

In boardroom discussions, teams often compare grid supply tariff with renewable PPA tariff and assume the difference is savings. In practice, landed cost for wheeled renewable energy in 2026 typically includes the

following elements:

- Generator tariff at delivery point
- State transmission charges or interstate transmission charges, depending on route
- Wheeling charges on distribution network where relevant
- Transmission and distribution losses in kind or by accounting adjustment
- SLDC scheduling and system operation charges
- Open-access application and standing charges
- Cross-subsidy surcharge for third-party open access where applicable
- Additional surcharge if imposed and not exempted
- Banking charges and banking loss adjustments if banking is allowed
- DSM or imbalance settlement costs where schedule and actual diverge
- Standby power or demand charges for balancing residual load from discom/grid
- Cost of BESS or balancing power procured to shape supply to the data-centre load

For data-centre buyers, the most important metric is effective delivered cost per useful MWh consumed at the facility, separated by time block where possible. In states with tight banking rules or expensive balancing power, a solar PPA at INR 2.60-3.20/kWh can still translate into delivered cost above INR 6.0/kWh during certain hours once top-ups and settlement adjustments are included. By contrast, a hybrid or firmed contract with BESS can look expensive at the source but produce lower total delivered cost variance.

This is especially relevant in Maharashtra, Tamil Nadu, Karnataka, Telangana and Uttar Pradesh, where state-level structures, voltage connection points and banking treatment can materially change project viability.

State policy friction points in 2026: banking, surcharges and time-of-day settlement

The biggest wheeling variable for data centres is still state policy asymmetry.

Banking has tightened in many jurisdictions over the last few years. In 2026, buyers should not assume annual banking with liberal adjustment windows. In several state frameworks, banking may be monthly, limited to solar hours, subject to peak-hour exclusion, or charged at a percentage of banked energy. For a 24x7 load such as a data centre, that matters because unused daytime solar injection no longer automatically translates into economical evening consumption.

A simple example illustrates the issue. Consider a 25 MW data-centre load with average monthly energy demand of roughly 18 million units at high utilisation. If contracted solar oversupplies by 2 million units in daytime blocks but banking credit is haircut by 8-12% and peak-period draw must still be purchased from the grid at elevated tariffs, the economic value of that solar profile declines sharply. The nominal renewable share may look attractive, but the monetised benefit does not.

Cross-subsidy surcharge and additional surcharge remain equally important. Captive and group captive structures can avoid some surcharge exposure if correctly structured and operated, but compliance discipline is critical. Equity pattern, annual consumption thresholds and proportionality tests still need ongoing monitoring. A data-centre operator relying on group captive economics should evaluate not only year-one eligibility but also whether future load ramp, investor transfers or generator portfolio reshuffling could undermine that position.

Time-of-day pricing is another underappreciated factor. Where state supply tariffs and balancing procurement costs vary sharply by time block, the value of every wheeled MWh must be assessed against the avoided tariff in that block, not just average monthly tariff. For facilities with evening cooling peaks, this can alter the preferred mix between solar, wind, hybrid and BESS-backed shaping.

Scheduling and DSM: the hidden P&L line in renewable wheeling

For many data centres, the largest avoidable surprise in wheeling-based procurement is not the access charge stack. It is scheduling and deviation settlement.

Variable renewable projects almost never match scheduled delivery perfectly. Wind generation swings, cloud transients and curtailment instructions can all create deviations. If the contract structure passes scheduling risk downstream or leaves balancing responsibilities unclearly allocated, the offtaker may face monthly settlement noise that is difficult to budget.

This issue becomes more serious for data centres because load is comparatively inelastic. If generation under-delivers in a 15-minute block, the facility still consumes power. The shortfall must be made up from the grid, merchant balancing source or storage, often at a higher marginal cost. If generation over-delivers and banking or settlement treatment is poor, value is lost at the export side.

In 2026, prudent contracts therefore define with precision:

- Scheduling responsibility and forecasting standards
- Allocation of DSM cost and gain between generator, trader and buyer
- Curtailment classification: grid unavailability, force majeure, must-run breach, local evacuation issue or project underperformance
- Backdown compensation methodology
- Replacement power obligations, if any
- Data-sharing cadence for day-ahead and intra-day schedules
- Metering hierarchy and reconciliation process

For higher-load campuses, integrating a trader or RTC aggregator can reduce administrative complexity, but only if risk transfer is real and settlement transparency is robust. Otherwise, the buyer may simply pay an extra margin without meaningful protection.

This is where Growthifye's [24/7 clean power contracting](/coreservices/datacentersenergymanagement/247cleanpowercontracting) and [Load & reliability engineering](/coreservices/datacentersenergymanagement/loadandreliabilityengineering) capabilities are relevant. In practice, the right answer is not only a cheaper PPA. It is a procurement-and-delivery structure whose schedule quality, balancing logic and failure modes align with data-centre uptime expectations.

Choosing the right wheeling architecture: intra-state, interstate, captive, third-party or hybrid

There is no universal template for all Indian data centres. The right structure depends on state tariff design, load scale, commissioning timeline, corporate structure and lender appetite.

Broadly, buyers in 2026 are evaluating five patterns.

- Intra-state third-party open access
- Intra-state captive or group captive

- Interstate supply under ISTS-connected projects where benefits remain available and practical
- Hybrid portfolios combining state and interstate sources
- Firmed and shaped supply through trader-led RTC or near-RTC products with storage support

Intra-state sourcing can simplify settlement and reduce some transmission complexity, but local project availability, state policy and banking conditions may be limiting. Interstate supply can provide access to better renewable resource and portfolio diversity, but buyers must assess the actual availability of transmission corridor, scheduling quality and future treatment of charges and waivers over project tenor.

Captive and group captive routes can be economical if load is large and shareholding structure is stable. However, data-centre operators with fast-changing capacity additions should model whether future sites and SPVs can continue to consume enough power to preserve captive compliance. If not, apparent savings may be overstated.

Hybrid sourcing is often the most resilient route. For example:

- Daytime solar-heavy intra-state supply to offset high daytime draw
- Night-biased wind or hybrid interstate procurement
- On-site or near-site BESS to reduce imbalance and demand spikes
- Grid supply retained for residual balancing and contingency

This approach can improve delivered cost stability and reduce dependence on any one state-policy construct. It also aligns better with phased campus expansion, where power demand may rise from 15 MW to 60 MW across multiple years.

Why BESS changes wheeling economics even when storage is not the primary supply source

Battery storage is often discussed only as a backup or diesel replacement tool, but in wheeling design it has a second role: converting weak renewable profile economics into stronger delivered-power economics.

For data centres in 2026, on-site or electrically close BESS can create value by:

- Absorbing daytime oversupply that would otherwise face weak banking realisation
- Reducing high-cost top-up purchases during evening ramps
- Limiting demand spikes and associated charges
- Improving adherence between contracted schedule and actual facility draw
- Providing power quality and short-duration resilience benefits alongside commercial optimisation

Indicative economics remain site-specific, but 1-2 hour BESS installations are increasingly being evaluated not only against outage protection value but also against avoided peak procurement cost and improved renewable utilisation. Where evening balancing power exceeds daytime renewable value by INR 2-4/kWh in critical blocks, a properly dispatched battery can materially improve blended cost.

The correct battery sizing, however, depends on actual interval load, tariff blocks, renewable profile correlation and grid support strategy. Oversizing storage against the wrong objective can destroy returns. This is why [On-site generation & BESS](/coreservices/datacentersenergymanagement/onsitegenerationandbess) and Energy management systems must be considered alongside wheeling contracts rather than after procurement closure.

What lenders, developers and discoms should diligence before approving data-centre wheeling structures

For lenders, the key issue is whether projected savings are robust under policy and dispatch stress. Financial models should include downside cases for:

- Reduction or withdrawal of banking benefits
- Higher-than-expected curtailment
- Increase in open-access charges
- Poor generator forecasting accuracy
- Load ramp delay at the data-centre site
- Captive compliance failure
- Standby tariff changes
- BESS dispatch underperformance or augmentation need

For developers, bankability depends on honest articulation of delivery risk. If a solar or hybrid project is being marketed into data-centre demand, the seller should not rely on generic C&I assumptions. Data-centre offtakers will increasingly ask for interval generation history, curtailment data, scheduling process maturity and replacement-power mechanics.

For utilities and policymakers, the rise of data-centre demand presents both challenge and opportunity. These loads are large, creditworthy and strategically important for digital infrastructure. A stable open-access and wheeling framework can attract investment while reducing friction in project approvals. Frequent policy reversals, opaque settlement and inconsistent treatment across categories push buyers toward excessive redundancy and costlier fallback arrangements.

A better state approach in 2026 is not indiscriminate subsidy. It is clarity: predictable open-access timelines, transparent surcharge logic, workable banking treatment, digital metering reconciliation and defined reliability standards for large continuous loads.

A practical 2026 checklist for data-centre buyers

Before signing any wheeling-linked renewable procurement, data-centre sponsors should ask:

- What is the all-in delivered cost by time block, not just average tariff?
- Which charges are fixed, variable, pass-through or indexed?
- Is banking actually valuable for our hourly load shape in this state?
- Who carries DSM and balancing risk?
- What happens in curtailment or transmission congestion events?
- How much firming should be contracted versus delivered through BESS?
- Does our captive structure remain compliant after future expansion?
- Are SLAs aligned with uptime requirements at the facility meter, not merely at generator interconnection?
- What is the fallback plan if state rules change mid-tenor?

For Indian data centres, renewable wheeling in 2026 is not a back-office settlement issue. It is a strategic design problem linking procurement, storage, grid access, reliability and finance. The winners will not be those who secure the lowest busbar tariff. They will be those who structure the cleanest delivered MWh with

the least settlement volatility and the most defensible uptime economics.

If your team is evaluating open-access strategy, hybrid renewable sourcing, balancing design or storage-backed delivery for a new or operating data-centre campus, contact Growthifye's advisory desk. We help sponsors, developers and investors structure practical power solutions across wheeling, reliability, commercial risk and execution.

Explore Growthifye's related capabilities

This analysis connects directly to our advisory practice: [Load & reliability engineering](/coreservices/datacentersenergymanagement/loadandreliabilityengineering) · [24/7 clean power contracting](/coreservices/datacentersenergymanagement/247cleanpowercontracting) · [Grid connectivity & redundancy](/coreservices/datacentersenergymanagement/gridconnectivityandredundancy) · [On-site generation & BESS](/coreservices/datacentersenergymanagement/onsitegenerationandbess).

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