India Data Centre Open Access Strategy 2026: Banking, CSS and Scheduling Risk

By Sudarshan Karweer · 17 September 2026 · growthifye.com

A practitioner guide to open access power for Indian data centres in 2026: banking, CSS, scheduling, SLDC processes and BESS-led risk control.

India's data-centre market is scaling fast, but the power-procurement conversation is becoming more complex than a simple comparison between DISCOM tariff and solar or hybrid PPA price. In 2026, the real determinant of energy cost and reliability for a data centre is how well it structures open access around state policy, surcharge stack, scheduling discipline, banking rules, grid-access timelines and flexibility assets such as battery storage.

This article focuses on a topic distinct from PUE, 24/7 matching, energy hedging and captive structures: how open access actually works for Indian data centres in 2026, where value is created or lost, and what investors, operators and utilities should underwrite before committing to a procurement path.

For data centres, the question is not whether open access looks cheap on a spreadsheet. The question is whether delivered, compliant and financeable power remains cheaper after all network charges, banking limits, scheduling deviations, curtailment exposures and backup integration costs are included.

Why open access has become central to the data-centre energy stack

Large colocation, hyperscale and enterprise data centres in India increasingly sit in the 10 MW to 100 MW connected-load range, often with phased expansion. At these consumption levels, even a Re 0.50/kWh error in procurement design can move annual cost by several crores. A 50 MW average load running at about 90% load factor consumes roughly 394 million kWh a year. On that base:

- Re 0.25/kWh cost leakage means about Rs 9.8 crore per year
- Re 0.50/kWh cost leakage means about Rs 19.7 crore per year
- Re 1.00/kWh cost leakage means about Rs 39.4 crore per year

That is why open access matters. In many states, utility HT tariffs for high-reliability urban supply to C&I consumers can still land in the broad range of Rs 7.0 to Rs 10.5/kWh after energy charge, demand charge, wheeling-related components, duty and time-of-day effects. Meanwhile, contracted renewable supply under third-party open access may look substantially lower at generator busbar level, but the delivered number depends on a full stack of charges and operating assumptions.

For a data centre, open access can create value through:

- Lower variable energy cost versus grid supply
- Long-term price visibility under fixed or indexed PPAs
- Better ESG and customer procurement alignment
- Portfolio diversification across utility, market and contracted renewable sources
- Optionality to layer BESS and advanced dispatch control later

But it can also destroy value if the transaction is designed poorly.

The 2026 open-access cost stack data centres must model correctly

One of the most common mistakes in the market is comparing DISCOM tariff with headline renewable PPA tariff. That is not the relevant benchmark. The relevant number is delivered cost at the data-centre incomer, adjusted for reliability and balancing.

A proper 2026 open-access model for a data centre should include:

- Generator tariff: solar, wind, hybrid or FDRE/RTC contract price
- Transmission charges: CTU or STU as applicable
- Transmission losses
- Wheeling charges
- Wheeling losses
- Cross-subsidy surcharge or CSS
- Additional surcharge, where applicable
- SLDC scheduling and system-operation charges
- Banking charges, if banking is permitted
- Standby or backup supply costs from the DISCOM
- DSM or imbalance-related costs if scheduling discipline applies through portfolio structures
- Curtailment assumptions, including compensation mechanics if any
- Cost of balancing power procured from exchange or utility
- BESS capex/opex if used to reduce expensive drawal periods or shape mismatch

In 2026, the surcharge stack remains highly state-specific. For data-centre locations in markets such as Maharashtra, Tamil Nadu, Telangana, Karnataka, Uttar Pradesh, Haryana and Gujarat, economics can differ sharply even when the renewable resource and base PPA tariff are similar.

As a directional framework, third-party open-access delivered renewable cost for a large C&I consumer can still end up in a broad range of about Rs 4.5 to Rs 7.5/kWh depending on source, state, voltage level, banking treatment and surcharge structure. That spread is too wide for rule-of-thumb decision-making. It requires project-specific modelling.

For lenders, this means one thing: underwriting should focus on landed cost resilience under adverse assumptions, not only base-case savings.

Banking rules are often the difference between apparent savings and real savings

For data centres, round-the-clock consumption does not automatically make banking irrelevant. Banking still matters because renewable generation shape rarely matches the hourly load curve, especially where the portfolio includes solar-heavy supply.

In 2026, state banking frameworks continue to vary on four critical dimensions:

- Whether banking is allowed at all for the consumer category
- Monthly versus annual settlement structure
- Banking charge level, often as a percentage of banked energy or monetary fee
- Treatment of unutilised banked units at month-end or year-end

A solar-dominant open-access contract may appear attractive on levelised tariff, but if surplus daytime generation cannot be economically banked and night drawal must be bought at utility or market rates, the effective cost can rise materially.

For example, consider a 20 MW data-centre load with relatively flat 24-hour demand. If it signs a plain solar open-access arrangement sized to cover a large part of annual consumption, daytime over-injection may be substantial while nighttime demand remains uncovered. Without favourable banking, the operator effectively sells low-value surplus and buys back higher-value evening and night power. The result is shape-cost leakage.

This is why data centres in 2026 increasingly evaluate not just solar or wind, but combinations such as:

- Wind-solar hybrid

n- Hybrid plus short-duration BESS

- RTC or FDRE supply with defined availability bands
- Daytime solar under open access plus utility nighttime supply
- Partial open access sized below annual energy requirement to avoid inefficient surplus

The best answer depends on local tariffs and policy. In states with restrictive banking or expensive additional surcharge, an aggressively sized open-access portfolio may underperform a more modest share of renewable procurement combined with targeted storage or market purchases.

Scheduling, SLDC process and operational discipline are now board-level issues

As data centres move from simple grid procurement to contracted renewable portfolios, scheduling discipline becomes an operational issue, not a back-office issue. This is especially true where multiple feeders, backup generators, BESS and exchange purchases interact.

Key 2026 operational risks include:

- Schedule-versus-actual mismatch leading to balancing cost escalation
- Metering hierarchy errors between generator, pooling station, substation and consumer end
- Curtailment events without robust event logging and claim protocols
- Misalignment between IT load growth and contracted quantum under phased build-outs
- Delay in open-access approvals or revisions from SLDC/STU entities
- Inadequate change-management when utility outages, maintenance windows or DG testing occurs

For data centres, internal governance should define clear responsibility across energy procurement, electrical operations, finance and legal teams. If no one owns the full scheduling chain, losses accumulate in small but persistent ways.

A robust operating model usually includes:

- Day-ahead and intraday load forecasting discipline
- Contracted rules for schedule revision and deviation handling
- Automated meter data acquisition at 15-minute or finer granularity where feasible
- Exception dashboards for drawal spikes, over-injection and outage events
- Monthly landed-cost reconciliation against model assumptions

- Clear protocols for switching between OA supply, utility supply, BESS and DG during contingency conditions

This is where capabilities such as [Energy management systems](/coreservices/datacentersenergymanagement/energymanagementsystems) and [Load & reliability engineering](/coreservices/datacentersenergymanagement/loadandreliabilityengineering) become commercially important, not just technically desirable. For a mission-critical facility, procurement value depends on operational execution.

Open access for data centres: third-party versus captive-like alternatives

Although this article is not about captive strategy, data-centre buyers evaluating open access in 2026 still need to compare third-party OA with equity-linked structures because the surcharge implications can be materially different.

At a high level:

- Third-party open access may be simpler from a governance standpoint but can carry CSS and additional surcharge exposure depending on state policy
- Captive or group captive structures may reduce certain surcharge burdens if legal tests and consumption thresholds are met, but they introduce equity participation, compliance and governance complexity
- Merchant-plus-contract structures can offer flexibility but expose buyers to price volatility and liquidity considerations

For data centres with rapid ramp-up or uncertain occupancy, third-party OA may initially appear safer because of simpler entry. However, if the project scales quickly and load remains sticky, not assessing alternative structures can leave substantial savings unrealised over a 10- to 15-year horizon.

The practical takeaway is that open access should be modelled as a staged pathway, not a one-time decision. A facility may begin with partial third-party OA, then migrate to a more optimised portfolio once load stabilises, land use for on-site assets is confirmed, and operational data improves.

Where on-site BESS changes the open-access equation

In 2026, on-site battery storage is not automatically economic for every Indian data centre, but it can materially improve open-access performance under the right tariff and scheduling conditions.

BESS can create value in five open-access use cases:

- Reducing peak grid draw during expensive time blocks or demand-charge periods
- Absorbing surplus renewable energy that would otherwise be poorly banked or spilled economically
- Smoothing transitions during feeder events, reducing DG starts and improving power quality response
- Managing short-duration shape mismatch between contracted supply and actual load
- Supporting reliability commitments where utility and OA supply handover needs tighter control

A typical current-market range for front-of-meter or behind-the-meter lithium-ion BESS economics in India still depends heavily on duration, cycling profile, augmentation assumptions and financing cost. For many data-centre applications, the strongest business case is not pure arbitrage. It is stacked value: reliability support, diesel avoidance, demand optimisation and better utilisation of contracted renewable power.

For example, a 10 MW / 20 MWh BESS may not justify itself on tariff arbitrage alone in some states, but if it also reduces DG runtime, supports contractual reliability thresholds and trims expensive balancing purchases, the all-in business case can improve materially.

That is why [On-site generation & BESS](/coreservices/datacentersenergymanagement/onsitegenerationandbess) should be assessed together with OA power-flow design rather than as a standalone add-on.

What lenders, developers and utilities should diligence in 2026

Open access for data centres is now mature enough that counterparties must move beyond promotional assumptions. A financeable and durable structure should answer the following questions clearly.

For data-centre operators:

- What is the delivered cost under base case, downside case and policy-change case?
- What percentage of annual energy should come from OA versus utility to preserve reliability and flexibility?
- How will phased load growth affect contracted quantum, minimum offtake and imbalance costs?
- What are the exact implications of outage transfer, backup drawal and DG testing on billing and scheduling?

For renewable developers:

- Is the contracted profile genuinely suited to a flat or near-flat load, or will shape mismatch create customer dissatisfaction?
- Are curtailment and scheduling obligations clearly allocated?
- Is the interconnection robust enough for the contracted delivery standard?
- Can the offer remain competitive after all state-specific charges are transparently disclosed?

For lenders:

- Has the borrower modelled surcharge and banking sensitivity correctly?
- Is there concentration risk in one state policy regime?
- Are payment-security and change-in-law provisions strong enough?
- Does the sponsor have the operating capability to manage a complex OA portfolio?

For utilities and policymakers:

- Data centres are strategic digital infrastructure and need predictable, transparent access frameworks
- Delays in approvals and opaque surcharge treatment increase project cost and deter high-value investment
- Better alignment of OA, storage and reliability regulations can reduce diesel dependence and improve system efficiency

A credible 2026 policy stance is one that recognises data centres as long-duration, high-load-factor demand anchors that can support renewable integration if rules are stable and operationally workable.

A practical decision framework for Indian data-centre open access

Before signing an OA-based energy strategy, data-centre sponsors should run a disciplined screening process.

- Step 1: Benchmark current and projected utility tariff by time block, demand charge and outage performance
- Step 2: Build an hourly load model reflecting occupancy ramp, cooling seasonality and redundancy philosophy
- Step 3: Map state-specific OA charges, banking treatment, approval timelines and standby conditions
- Step 4: Compare supply structures: solar, wind, hybrid, FDRE, partial OA and OA plus BESS
- Step 5: Stress-test delivered cost for curtailment, policy revision, low-wind months and reduced banking value
- Step 6: Define control architecture for metering, scheduling, switching and monthly reconciliation
- Step 7: Lock contract language on curtailment, change in law, outage coordination, compensation and termination rights

The winning structure is usually not the cheapest tariff on day one. It is the one that preserves savings after frictional losses, maintains uptime discipline, and remains adaptable as load grows and regulation evolves.

In India's 2026 data-centre market, open access is a powerful tool, but only when engineered as a full-stack commercial and operational system. The firms that succeed will be the ones that treat procurement, connectivity, storage and controls as one integrated design problem rather than separate workstreams.

If your team is evaluating open access, banking risk, surcharge exposure or BESS-backed delivery for a new or existing facility, contact Growthifye's advisory desk. We help data-centre sponsors, developers and investors convert policy complexity into bankable, executable energy strategy.

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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