Data Centre Energy Procurement in India 2026: RTC Tendering, SLAs and Risk Allocation

By Sudarshan Karweer · 25 August 2026 · growthifye.com

A practical guide to RTC tendering, SLAs, pricing, curtailment, change-in-law and lenderable risk allocation for Indian data centres in 2026.

India's data-centre market in 2026 is no longer asking whether renewable power can support hyperscale and colocation growth. The live question is how to procure round-the-clock power through contracts that are bankable, operationally realistic and aligned with grid constraints, uptime commitments and cost targets. For developers, operators, lenders and utilities, the centre of gravity has shifted from broad decarbonisation intent to the hard mechanics of RTC tendering, service-level design, scheduling discipline, settlement risk and change-in-law protection.

This article focuses on that commercial and contractual layer. It is intentionally different from discussions on grid connectivity, captive structures, ISTS-waiver economics, PUE strategy or 24/7 CFE frameworks. The practical issue for 2026 is this: if a data-centre operator in India wants firmed renewable supply or high-renewable RTC power, what should the tender look like, what risks should sit with the supplier versus the buyer, and what commercial architecture is most likely to clear internal approvals and external financing?

Why RTC procurement has become a board-level issue in 2026

Data-centre loads are not just large; they are unforgiving. A 25 MW IT load with a PUE of 1.4 implies a facility demand of about 35 MW. At 90% annual load factor, that translates into roughly 276 GWh per year. For a 60 MW IT load campus at the same PUE, delivered energy demand can cross 660 GWh per year. Even a tariff miss of Rs 0.50/kWh therefore has material EBITDA impact.

At the same time, procurement teams are balancing five parallel realities:

- retail utility tariffs for HT consumers in major data-centre states can still range broadly from about Rs 7.0 to Rs 10.5/kWh depending on demand level, ToD treatment, voltage, electricity duty and state-specific surcharges
- renewable open-access supply can be cheaper on an average-energy basis, but hourly firmness is not guaranteed unless backed by storage, balancing power and strong scheduling discipline
- captive and group-captive structures can reduce cross-subsidy surcharge exposure in eligible cases, but they create their own governance, equity and compliance burden
- state and central regulations on banking, deviation settlement, scheduling and forecasting continue to evolve, affecting delivered economics
- internal ESG targets increasingly demand more than annual MWh matching, yet operations teams still prioritise uptime, power quality and contractual accountability over headline renewable percentages

This is why RTC procurement has become a board-level issue rather than a pure sourcing exercise. If the contract architecture is weak, the buyer may secure an attractive quoted tariff but still end up with imbalance costs, curtailment losses, fallback utility purchases and disputed invoices.

What "RTC" means in Indian data-centre tenders

In the Indian market, RTC is used loosely, and that ambiguity causes avoidable disputes. One buyer may mean 100% hourly contracted supply for all 8,760 hours. Another may mean a fixed annual CUF-backed

profile with a tolerated shortfall corridor. A third may simply mean dispatchable supply backed by renewables plus market purchases.

For data-centre procurement, the tender should define RTC across at least six dimensions:

- contracted capacity in MW and whether it is linked to N-1 operations, critical load or average draw
- annual energy commitment in MWh and monthly minimum delivery obligations
- hourly or 15-minute availability standard, aligned to Indian metering and scheduling practice
- permissible shortfall band, for example 3% to 7% below contracted schedule in a settlement month
- source stack, such as solar plus wind plus BESS plus market balancing power
- treatment of force majeure, grid curtailment, transmission unavailability and state load-despatch instructions

In current market practice, many suppliers offer “renewable RTC” through a hybrid portfolio using wind, solar, storage and exchange purchases. For a data centre, that can work if and only if the contract makes clear whether exchange power is allowed, whether non-renewable balancing is permitted, and how attribute claims are treated if the buyer is also making sustainability disclosures.

In 2026, a practical tender definition for a 20 MW to 100 MW data-centre requirement often includes:

- 15-minute scheduling granularity
- monthly availability commitment of 95% to 99% against contracted quantum, excluding defined grid events
- annual renewable contribution target, for example 70% to 95% of delivered MWh depending on budget and technical design
- a clear fallback supply hierarchy: contracted renewable generation, BESS discharge, contracted balancing portfolio, power exchange purchase, then utility backup

Without these specifics, quoted tariffs are not comparable.

Pricing structures: fixed tariff, indexed tariff and tolling hybrids

The Indian market in 2026 broadly shows four pricing approaches for data-centre RTC or near-RTC procurement.

First is a fixed delivered tariff. This is easiest for budgeting and often most attractive to CFOs. A supplier quotes an all-in rate, usually at delivery point, with pass-throughs limited to specified taxes, duties and statutory levies. Depending on state, wheeling path, storage component and contract tenor, current quoted ranges for high-renewable RTC structures can vary widely, but many live discussions cluster around approximately Rs 5.8 to Rs 8.5/kWh delivered. The lower end generally assumes scale, favourable transmission treatment and balanced offtake profile; the higher end reflects more storage, more stringent availability, congested corridors or shorter tenure.

Second is an indexed tariff. Here a base tariff covers renewable generation and project return, while balancing energy, market purchases, deviation charges or selected network charges are indexed or pass-through. This usually yields a lower initial quote but transfers more volatility to the buyer.

Third is a capacity-plus-energy model. The buyer pays a fixed monthly capacity charge for reserved firming capability, often linked to BESS or dispatch rights, and a variable energy charge for actual delivery. This can suit campuses with ramping loads, phased fit-outs or a high difference between contracted demand and average draw.

Fourth is a tolling or sleeve-style hybrid. The buyer secures generation assets or long-term capacity rights while a supplier or intermediary performs scheduling, dispatch optimisation and market balancing for a fee. This is commercially sophisticated and can produce good outcomes for large portfolios, but it requires stronger in-house energy management and treasury discipline.

For lenderability, long-tenor fixed or semi-fixed structures remain easier to finance than aggressively indexed contracts. However, overly rigid fixed tariffs become fragile when regulations change materially. The best 2026 contracts therefore combine price certainty with well-defined pass-through baskets and hard caps on selected exposures.

Key SLA and risk-allocation clauses buyers should negotiate

The biggest mistakes in Indian RTC tenders are not about tariff. They are about SLA design and hidden risk transfer.

A robust data-centre power agreement should address the following.

- Availability metric: define whether availability is measured at generator bus, injection point, state perimeter, delivery point or consumer meter. For data centres, delivered-meter logic is preferable, but the supplier will seek carve-outs for grid outages beyond its control.
- Shortfall compensation: specify liquidated damages or tariff rebates if the supplier misses committed quantum. A common structure is compensation linked to the buyer's replacement cost, subject to a cap. A weak contract that only refunds the energy tariff leaves the buyer exposed if exchange power spikes.
- Curtailment treatment: distinguish between economic curtailment, backing down by SLDC/RLDC, transmission congestion and plant unavailability. Compensation should not be identical across all categories.
- Deviation charges: define who bears DSM, forecasting error penalties and unscheduled interchange costs. If the supplier controls scheduling, it should bear most of this risk except where the buyer materially deviates from declared load profile.
- Ramp-rate obligations: data-centre demand can change due to cooling loads, redundancy tests or tenant growth. The contract should specify notification windows and allowable ramp bands.
- Power quality support: while open-access or RTC contracts may not guarantee utility-grade power quality by themselves, they should coordinate with the facility's HT connection, BESS, UPS and EMS setup. Contract language should avoid implying technical performance that only on-site systems can deliver.
- Force majeure: include weather, transmission failure, cyber events affecting scheduling systems and change in dispatch protocol, but avoid overbroad clauses that excuse normal seasonal underperformance.
- Termination and step-in rights: lenders and large buyers will expect cure periods, step-in rights and substitution rights for project-level defaults.

For mission-critical offtakers, compensation formulas should be tied to actual replacement power cost. If utility fallback or exchange purchases during shortage periods cost the buyer Rs 8.5 to Rs 12/kWh while the contract tariff is Rs 6.2/kWh, then mere refund of Rs 6.2/kWh is inadequate. That gap should be contractually addressed, usually with monthly and annual liability caps to preserve financeability.

Change-in-law, policy uncertainty and who should bear what

In India, no long-term power contract is complete without a disciplined change-in-law framework. Data-centre buyers often underestimate how much delivered economics can move because of regulatory actions rather than plant performance.

The most relevant 2026 risk categories include:

- changes in open-access charges, including wheeling, transmission, SLDC and related fees
- changes in cross-subsidy surcharge or additional surcharge where applicable
- restrictions or dilution in banking provisions at state level
- changes in ISTS treatment or exemptions where relevant to project structure
- introduction or revision of scheduling, forecasting and DSM frameworks
- new electricity duty, cess or other state fiscal imposts
- curtailment protocols or must-run interpretation affecting renewable generators

A workable principle is that risks under the supplier's operational control should stay with the supplier, while sovereign or regulatory changes should be shared or passed through according to a pre-agreed formula. Buyers should resist blanket pass-through language. Instead, contracts should classify change-in-law events by type and set thresholds, documentation standards and adjustment mechanics.

For example:

- taxes directly levied on sale of electricity may be pass-through in full
- changes in network charges may be pass-through only if evidenced and only to the extent not offset by reductions elsewhere
- adverse banking-rule changes may trigger tariff reset, profile revision or capacity restructuring rather than immediate uncapped pass-through

This matters because data-centre investment committees prefer predictability. A contract with a cheap starting tariff but open-ended policy pass-throughs can become non-competitive within two regulatory cycles.

Procurement design: how to run an RTC tender that produces comparable bids

Many tenders fail because bidders are responding to different assumptions. Growthifye's practical recommendation for 2026 is to issue a structured RfP with a common data room and mandatory bid template.

At minimum, the buyer should provide:

- 12 to 24 months of interval load data or a realistic ramp-up curve for greenfield sites
- contracted demand, redundancy philosophy and expected annual utilisation
- target COD, contract tenure and preferred supply start phasing
- preferred delivery structure: utility interface, open access, captive, third-party PPA or hybrid
- whether non-renewable balancing power is permitted and to what extent
- treatment required for energy attributes and sustainability reporting
- expected SLA, compensation and liability structure

The bid form should force suppliers to quote the same components:

- base energy tariff
- capacity or firmness charge, if any

- pass-through charges list
- assumed network route and injection-delivery points
- minimum offtake and take-or-pay conditions
- annual renewable share assumption
- storage size and duration, if used
- balancing-power strategy
- outage assumptions and excluded events

Commercial evaluation should go beyond levelised tariff. Buyers should score at least seven dimensions:

- expected delivered cost under base, stress and peak-price scenarios
- firmness and replacement-cost risk
- regulatory resilience by state and transmission path
- supplier balance-sheet strength and lenderability
- COD certainty and land-permit readiness of generation assets
- operational visibility, including metering, EMS integration and settlement reporting
- claim integrity for sustainability and customer disclosures

For large campuses, a split-award strategy can also reduce concentration risk. For example, 60% of demand may be covered by a long-term hybrid renewable contract, 20% by utility supply, and 20% by short- to medium-duration flexible arrangements including storage and market procurement. This lowers single-counterparty exposure and provides room for future optimisation.

What lenders, developers and utilities are looking for now

Lenders in 2026 want clarity on merchant exposure, curtailment risk, receivables discipline and enforceability of replacement-cost compensation. If the supply plan depends heavily on spot-market purchases during seasonal deficits, debt providers will haircut the perceived firmness of cash flows.

Developers want tariff structures that reflect actual cost of firmness. A pure solar-wind quote without adequate balancing margin may win on paper but underperform in delivery. Hybrid portfolios with 1 to 3 hours of BESS, diversified wind regimes and disciplined scheduling are increasingly favoured for mission-critical buyers, even if the headline tariff is modestly higher.

Utilities, for their part, are adapting to a market where data centres want both reliability and procurement flexibility. In several states, the conversation is moving toward coexistence rather than binary substitution: utility supply remains the backbone for fault-level support and last-resort reliability, while open-access and contracted hybrid power reduce average energy cost and emissions intensity.

For policymakers, the message is straightforward. Data centres are strategic digital infrastructure. They need transparent open-access processes, timely approvals, predictable surcharge frameworks, better visibility on corridor congestion and regulatory consistency on storage and hybrid dispatch. A market that rewards firm clean power through precise contracts will attract more bankable investment than one dependent on ad hoc exemptions or ambiguous operating rules.

The practical takeaway for 2026

The most effective data-centre energy procurement strategy in India today is not simply “buy renewable power.” It is to run a contract-led sourcing process where tariff, firmness, fallback energy, SLA design,

change-in-law allocation and settlement mechanics are negotiated together.

If buyers define RTC loosely, they will compare incomparable bids. If suppliers underprice balancing risk, performance disputes will follow. If lenders do not see disciplined risk allocation, financing costs rise. And if utilities and regulators face opaque contracting structures, system planning becomes harder.

The winners in 2026 will be those who treat power procurement as critical infrastructure contracting, not commodity purchasing. For a data centre, the right question is not just what the tariff is. It is what happens in every 15-minute block when wind drops, markets spike, the grid curtails, demand ramps or policy shifts.

If your team is evaluating RTC tenders, hybrid renewable sourcing, storage-backed supply agreements or lenderable risk allocation for a data-centre project in India, contact Growthifye's advisory desk for project-specific support on structuring, bid evaluation, contracting and commercial diligence.

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