Ancillary Services from BESS in India 2026: Revenue, Regulation and Project Bankability

By Sudarshan Karweer · 27 August 2026 · growthifye.com

How ancillary-service revenues from BESS are evolving in India in 2026, with regulation, tariffs, dispatch logic and bankability implications.

India's battery storage discussion has moved beyond capex per MWh and simple energy-arbitrage math. In 2026, one of the most important questions for developers, utilities, lenders and large power buyers is whether battery energy storage systems can earn stable revenue from ancillary services, and if yes, under what dispatch, regulatory and contractual conditions those revenues become bankable.

That question matters because India's grid is now managing a very different operating profile than it did even three years ago. Higher solar penetration, growing wind-solar hybrids, deeper evening ramps, tighter frequency-control requirements, and congestion across key nodes have increased the value of fast-response flexibility. A battery can shift energy, but it can also provide rapid injection or absorption, regulate frequency, support ramping, and in some cases defer network stress. The problem is that technical capability alone does not automatically translate into financeable cash flow.

For many project sponsors, ancillary services are still treated as a merchant upside line. For lenders, that usually means discounting it heavily or excluding it from the base case. For DISCOMs and system operators, the challenge is to procure reliability services at transparent prices without overpaying for poorly defined products. For commercial and industrial consumers considering co-located storage, the issue is whether ancillary-value stacking can materially reduce effective storage cost. In practice, the answer in 2026 depends on market design, scheduling rules, availability obligations, state-level implementation and the battery's primary use case.

This article explains where ancillary-service revenues from BESS stand in India in 2026, what products matter, how revenue modelling should be approached, and what makes these projects more or less bankable.

Why ancillary services are moving to the centre of BESS economics

Historically, India relied on conventional thermal and hydro fleets for balancing, reserves and frequency support. That model is becoming less efficient as variable renewable generation grows. Coal plants can provide balancing support, but many units are not designed to ramp frequently at low technical minimums without heat-rate penalties, maintenance impacts and cycling costs. Hydro remains highly valuable, but it is limited by basin conditions, competing water uses and geography. Gas-based peaking remains constrained by fuel economics.

That leaves BESS as one of the most operationally flexible assets on the grid.

A grid-scale battery can typically respond in milliseconds to seconds, sustain output for 1-4 hours depending on design, and shift between charge and discharge rapidly. For ancillary services, that response speed is particularly valuable. Unlike pure energy shifting, ancillary value is often tied to availability, precision and speed rather than only net MWh delivered.

In India's 2026 context, three structural drivers are pushing ancillary services higher on the agenda:

- Renewable penetration is increasing balancing requirements, especially during morning pickup and evening decline periods.
- Transmission constraints and regional imbalances are increasing the need for local flexibility.
- The market is slowly moving toward more explicit procurement and pricing of balancing products rather than relying only on embedded flexibility from thermal fleets.

For BESS developers, this means ancillary services can no longer be ignored in modelling. But it also does not mean they should be treated as easy money. The right position is between those extremes.

What ancillary-service products matter for BESS in India

In practitioner discussions, ancillary services are often spoken about as if they are a single revenue stream. They are not. Different products have different technical requirements, dispatch patterns and payment logic.

For India in 2026, the most relevant categories for batteries are:

- Frequency regulation and fast-response balancing
- Contingency reserves and capacity held available for system support
- Ramping support during steep net-load changes
- Reactive-power and voltage-support functions, where technically enabled and commercially recognised
- Congestion-relief or local-grid support where procurement structures permit

From a project-finance perspective, the critical distinction is between:

- Capacity-style payments for being available
- Performance-linked payments for accurate response
- Energy-linked payments for actual dispatched charge/discharge

This distinction matters because a 100 MW / 200 MWh battery participating in fast-response regulation may reserve a portion of capacity without cycling its full energy content every day. In that case, degradation and augmentation assumptions look very different from a battery used mainly for energy arbitrage or evening peak shifting.

However, India’s procurement frameworks are still evolving. Product definitions, telemetry requirements, dispatch instructions, settlement rules and metering architecture are not always uniform across procurers and jurisdictions. Developers should therefore avoid using generic “ancillary revenue” placeholders in financial models. Each revenue line should be tied to a clearly identified procurement route or market mechanism.

The 2026 regulatory and market backdrop

By 2026, the broader regulatory direction is favourable for storage participation, but implementation remains uneven. The Electricity Act framework, central regulations, market-coupling debates, scheduling-and-dispatch evolution, and storage-specific procurement efforts are all shaping how ancillary revenues can be monetised.

The central policy signal is clear: storage is no longer being treated only as a pilot technology. It is being integrated into resource adequacy planning, hybrid tenders, firm and dispatchable renewable supply structures, and system-balancing conversations. Agencies such as SECI, NTPC, NHPC, SJVN, state utilities and transmission-linked entities have all contributed to the maturation of storage procurement. Yet bankable ancillary monetisation still depends on the exact contract design.

For practitioners, the following 2026 realities are important:

- Pure merchant ancillary-service exposure remains difficult to finance on a non-recourse basis.
- Contracted storage under utility tenders may include explicit or implicit system-support obligations, but developers must check whether compensation is separately payable or embedded in the tariff.
- Market-based ancillary participation is improving, but historical revenue visibility is still limited compared with mature markets.
- State-level utility readiness, SLDC capability, telemetry compliance and dispatch discipline vary significantly.

This means a project in Gujarat, Maharashtra, Tamil Nadu, Karnataka or Rajasthan may face different practical operating conditions even where high-level regulations appear aligned.

Another issue is whether a battery is treated operationally as:

- A standalone storage asset
- A co-located renewable-plus-storage asset
- A network-support asset
- A contracted FDRE or RTC support asset

The ancillary opportunity changes across these categories. A battery committed to firm supply obligations cannot freely chase every balancing signal if doing so risks PPA non-compliance.

How developers should model ancillary-service revenue

In 2026, one of the biggest mistakes in BESS valuation is double counting. The same MW cannot simultaneously be fully committed to energy arbitrage, peak-shaving, firm renewable shaping and fast frequency response unless dispatch windows, state of charge and contractual priorities are rigorously modelled.

A credible ancillary-service model should start with operational constraints, not revenue assumptions.

At minimum, developers should define:

- Rated MW and usable MWh
- Round-trip efficiency, usually in the 84% to 90% range depending on AC block assumptions
- Degradation curve and augmentation schedule
- Minimum and maximum state-of-charge bands reserved for service participation
- Dispatch response times and telemetry compliance
- Cycling limits consistent with warranty terms
- Contractual priority among services

For example, a 50 MW / 100 MWh battery paired with open access solar for a C&I portfolio may use most of its stored energy for evening peak reduction between 18:00 and 22:00. In that configuration, ancillary participation may only be feasible during daytime or shoulder periods, and perhaps only with 10-15 MW of reserved headroom. The resulting annual ancillary income could be meaningful, but it is unlikely to justify capex on its own.

By contrast, a 250 MW / 500 MWh utility-scale battery with a fixed-capacity payment and centralised dispatch may reserve a meaningful share of its operating envelope for balancing support if the contract permits it. In such cases, ancillary income may be best treated as either:

- Embedded in the contracted tariff, if obligations are bundled, or
- Supplemental merchant upside, if separately settled

Indicative revenue expectations should also be conservative. In the Indian market today, it is generally risky to underwrite large fixed annual ancillary incomes without a specific offtake or visible settlement record. If a sponsor is quoting an IRR uplift based heavily on ancillary services, lenders will usually ask:

- Which product is being sold?
- Who is the counterparty?
- What is the payment basis?
- What historical price series supports the assumption?
- What curtailment or dispatch-priority risks apply?
- How will degradation affect availability?

Those are the right questions.

What bankability looks like in practice

Bankability of ancillary-service revenue is not binary. It sits on a spectrum.

At the stronger end of the spectrum are projects where ancillary obligations and compensation are embedded in a long-term contract with a credible utility, central agency or well-structured intermediary. In those cases, the lender may not need to isolate ancillary income as a separate speculative line, provided the payment mechanism, performance regime and dispatch rights are clearly defined.

At the weaker end are merchant batteries assuming significant revenues from future balancing markets without long-term visibility. Those projects may still attract equity interest, but debt sizing will be conservative.

As a rule of thumb in 2026:

- Contracted fixed payments are most financeable.
- Availability-linked payments can be partly bankable if operating obligations are measurable and settlement history exists.
- Performance-linked revenues may receive partial recognition with suitable downside cases.
- Fully merchant ancillary revenues are usually haircut sharply or excluded from base-case debt sizing.

This has direct implications for project structuring.

Developers seeking better bankability should focus on:

- Clear technical design matching the target service
- High-quality EMS and dispatch controls
- Metering and telemetry architecture acceptable to SLDC/RLDC requirements
- Warranty terms that permit the expected cycling and response profile
- Robust augmentation budgeting
- Conservative revenue stacking assumptions
- Explicit treatment of auxiliary consumption, charging energy cost and availability penalties

For lenders and investors, due diligence should test whether ancillary participation increases operational complexity to the point that contracted obligations elsewhere become harder to meet. A battery that is

over-optimised across too many use cases often looks good in a spreadsheet and poor in real dispatch.

What this means for C&I consumers, utilities and policymakers

For Indian C&I consumers, ancillary-service value is real but usually indirect. A manufacturing group or data-centre operator installing storage behind the meter or through open access should not assume ancillary revenues will dominate economics. The primary value drivers are still likely to be demand optimisation, backup-quality improvement, time-of-day savings, RE firming and tariff-risk management. Any ancillary monetisation should be considered an incremental upside unless a specific participation path exists.

For utilities, batteries can reduce balancing costs if procured correctly. But tender design matters. If the procurement objective is frequency response, the bid parameter should not be framed as if the battery were only an energy-shifting asset. Service definitions, availability windows, response obligations, state-of-charge management and compensation rules need to align with system need.

For policymakers and regulators, the next step is not simply to declare storage important. It is to standardise how fast-response services are defined, measured and settled. India does not need to replicate other power markets exactly, but it does need enough transparency for capital to price the opportunity. Without that, ancillary services will remain technically valuable but financially discounted.

Three policy priorities stand out in 2026:

- Improve clarity on product definitions and settlement methodologies for storage-based balancing services.
- Enable interoperable telemetry, metering and dispatch protocols across utilities and system operators.
- Support procurement structures that separate dependable availability from speculative energy-market upside.

If these areas improve, ancillary services can become a meaningful pillar of BESS economics rather than only a modelling afterthought.

The practical outlook for 2026 and beyond

In India today, ancillary services are best understood as an important but selective revenue stream for batteries. They are not a universal cure for weak project economics, and they are not yet uniformly bankable across project types. But they are increasingly relevant to how storage should be sized, dispatched and financed.

The near-term winners are likely to be projects with one or more of the following characteristics:

- Strong counterparties and contracted payment structures
- Locations where grid flexibility has measurable value
- Technical configurations designed for fast response, not retrofitted for it later
- Sophisticated dispatch systems that can prioritise among competing use cases
- Conservative financing assumptions that treat merchant balancing revenue as upside, not certainty

For sponsors bidding utility-scale storage, the central question is whether ancillary capability improves competitiveness in tenders and supports better long-term revenue quality. For C&I-oriented developers, the question is whether ancillary participation can enhance project IRR without undermining the core value proposition. For lenders, the task is to distinguish realistic service-linked cash flow from aggressive stacking assumptions.

That is where serious advisory work matters. Storage value in India is now multidimensional: energy, capacity, flexibility, network support and firming. Ancillary services sit at the intersection of all five.

If you are evaluating a BESS, FDRE or hybrid project and need independent support on sizing, dispatch assumptions, revenue stacking, technical diligence or lender-facing bankability analysis, contact Growthifye's advisory desk.

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