REGULATORY • CENTRAL ELECTRICITY REGULATORY COMMISSION

CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

Updated 31 Aug 2026 — now incorporating the Third Amendment Regulations, 2026

2024–25

Principal + First Amendment

In force 16 Sep 2024; Clause 8 & First Amendment from 23 Dec 2024

Jul 2025 – Mar 2026

Second Amendment + X-Factor Order

Infirm power (thermal); WS deviation trajectory to 2031

25 & 31 Aug 2026

Third Amendment

WS parity, PSP rate, ESS infirm power, payment timelines

22 source documents (20 principal set + 2 Third Amendment instruments) • Coverage: 5 Aug 2024 – 31 Aug 2026 • Gazette of India, Part III—Section 4

WHY IT MATTERS

The Third Amendment is prospective, not retrospective — it reaches new WS projects and standalone ESS operators, and shifts the effective date to 31 Aug 2026 to align with weekly accounting periods.

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Executive Overview

What the full document set — principal text, three amendments, and one order — establishes

PRINCIPAL FRAMEWORK

A commercial mechanism penalising/rewarding deviation from scheduled drawal and injection, to protect grid reliability, security and stability.

FIRST AMENDMENT (23 DEC 2024)

Refined Clause 8 commencement and settlement-charge mechanics; brought Clause 8 into force after two deferrals.

SECOND AMENDMENT (1 JUL 2025)

Introduced capped, predictable infirm-power pricing (₹2.86/kWh) for thermal generating stations on trial run.

X-FACTOR ORDER (31 MAR 2026)

Set a year-by-year phase-out (2026–2031) of the favourable WS-seller deviation denominator.

THIRD AMENDMENT (25/31 AUG 2026) — NEW

Adds WS-seller/General-seller parity for new projects, a PSP deviation rate, ESS infirm-power compensation, and payment-timeline flexibility.

DEFICIT POOL

A waterfall recovers any regional pool shortfall — first from surplus elsewhere, then from drawee entities on a defined allocation basis.

WHY IT MATTERS

Five instruments now govern this framework — always read the principal text together with all three amendments and the X-Factor order before relying on a single provision.

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Regulatory Timeline

Six instruments, five effective dates — Clause 8 alone moved three times



The Third Amendment's effective date was pushed from a proposed 1 Jul 2026 to 31 Aug 2026, specifically to align with weekly deviation-accounting periods.

WHY IT MATTERS

Verify the commencement date you cite — “23 Dec 2024” for Clause 8/First Amendment and “31 Aug 2026” (not 1 Jul 2026) for the Third Amendment are the operative dates.

Key Operational Reference

The quick-lookup table — now updated for the Third Amendment

Topic	Details
Scope	Grid-connected regional entities; inter-State purchase/sale participants (Reg. 4).
Deviation calculation	By seller type — General Seller, WS Seller, RoR/MSW, Energy Storage, Buyer (Reg. 6, 8).
Normal Rate (NR)	Highest of weighted IDAM ACP, weighted RTM ACP, or 1/3 IDAM + 1/3 RTM + 1/3 AS charge.
Payment discipline	10-day window (or alternative timeline per Commission-approved Detailed Procedure — NEW); 0.04%/day surcharge; LC at 110% of average weekly liability.
Infirm power	Thermal: ₹2.86/kWh ceiling. Standalone ESS: ₹2.00/kWh ceiling, first sync to trial-run completion — NEW.
WS/General Seller parity	New WS projects (bid ≥ 1 Jan 2027, or COD ≥ 1 Jan 2029 for non-bid routes) get General-Seller deviation treatment — NEW.
Standalone PSP (Sec. 62)	Deviation charge computed at the energy charge rate under Reg. 66(3), CERC Tariff Regulations, 2024 — NEW.

WHY IT MATTERS

Four of these seven rows changed or were added by the Third Amendment — bookmark this slide as the single place that reflects the current, consolidated position.

Objective & Scope

Regulations 2 & 4

OBJECTIVE

Through a commercial mechanism, ensure that grid users do not deviate from and adhere to their schedule of drawal and injection of electricity, in the interest of reliability, security and stability of the grid.

SCOPE

Applicable to grid-connected regional entities and participants in inter-State purchase/sale of electricity.

LEGISLATIVE BASIS

Section 178 read with Section 79(1)(c) & (h) of the Electricity Act, 2003.

INTRA- VS. INTER-STATE

State-level (intra-State) deviation settlement is governed separately by the concerned SERC; this framework covers inter-State/regional entities only.

WHY IT MATTERS

Don’t assume this framework governs intra-State DSM — check the relevant State regulation for entities operating wholly within one State.

Key Definitions — I

Regulation 3: the building blocks of every deviation calculation

DEVIATION

The difference between actual injection/drawal and scheduled injection/drawal by a seller or buyer, in a time block.

AREA CLEARING PRICE (ACP)

The market clearing price for a bid area in the Day-Ahead or Real-Time Market.

NORMAL RATE (NR)

The reference rate for valuing deviations — see Reg. 7 (Slide 10).

CONTRACT RATE

The rate specified in the relevant PPA/contract for the sale of electricity by the seller.

REFERENCE CHARGE RATE (RR)

A resource- and case-specific reference rate used in place of Contract Rate where none exists.

AVAILABLE CAPACITY

The declared capability of a generating station available for scheduling in a time block.

WHY IT MATTERS

Contract Rate and Reference Charge Rate are not interchangeable — mixing them up misstates the charge, especially for WS and RoR sellers.

Key Definitions — II

Regulation 3: seller categories and State classifications

GENERAL SELLER

A seller of electricity generated from non-renewable resources (thermal, hydro other than RoR, etc.).

WS SELLER

A seller of electricity from wind, solar, or wind-solar hybrid generation, with or without co-located storage.

MSW SELLER

A seller of electricity generated from a Municipal Solid Waste-based generating station.

QUALIFIED COORDINATING AGENCY (QCA)

The entity coordinating scheduling on behalf of a pool of generators (commonly renewable).

RE-RICH STATE

A State with 1,000–5,000 MW of combined installed solar + wind capacity.

RE SUPER-RICH STATE

A State with 5,000 MW or more of combined installed solar + wind capacity.

WHY IT MATTERS

A seller's category determines both its applicable charge table (Slides 11–14) and, for new WS projects, whether the Third Amendment's parity rule reaches it at all.

Computation of Deviation — General Sellers & Buyers

Regulation 6(1) & 6(3)

GENERAL SELLER — MWH

Deviation (MWh) = Actual Injection − Scheduled Injection, per time block.

GENERAL SELLER — %

Deviation (%) = Deviation (MWh) ÷ Available Capacity for that time block × 100.

BUYER — MWH

Deviation (MWh) = Actual Drawal − Scheduled Drawal, per time block.

BUYER — %

Deviation (%) = Deviation (MWh) ÷ Scheduled Drawal for that time block × 100 (buyer logic mirrors seller logic).

READING THE SIGN — SELLER

Positive = over-injection (amount receivable). Negative = under-injection (amount payable).

READING THE SIGN — BUYER

Positive = over-drawal (amount payable). Negative = under-drawal (amount receivable).

WHY IT MATTERS

The percentage form — not the absolute MWh figure — is what determines which volume-limit band and charge rate applies.

Computation of Deviation — WS Sellers

Regulation 6(2): the denominator changes at 1 April 2026

PRE-1 APRIL 2026

Deviation (%) = Deviation (MWh) ÷ Available Capacity for that time block × 100 — same denominator as a General Seller.

FROM 1 APRIL 2026

Deviation (%) computed on an X-weighted blend of Available Capacity and Scheduled Generation — X sourced from the 31 Mar 2026 order (Slide 21).

WHO THIS AFFECTS

Existing WS sellers and any WS project outside the Third Amendment’s parity trigger (Slide 13) continue on this formula, tightening annually as X falls.

NOT TOUCHED BY THE THIRD AMENDMENT

Clause 6(2)'s formula itself is unchanged by the 25 Aug 2026 amendment — the Third Amendment instead adds a parity route out of WS treatment entirely for qualifying new projects.

WHY IT MATTERS

This formula still applies to every WS seller that doesn’t meet the Third Amendment’s bid-date/COD parity trigger — most operating fleet, for now.

Normal Rate of Charges for Deviation

Regulation 7

NR = HIGHEST OF —

(A)

Weighted average Integrated Day-Ahead Market (IDAM) Area Clearing Price for the time block.

(B)

Weighted average Real-Time Market (RTM) Area Clearing Price for the time block.

(C)

1/3 × IDAM ACP + 1/3 × RTM ACP + 1/3 × Ancillary Service charge rate, for the time block.

FALLBACK & ROUNDING

Where ACP is unavailable for a time block, the last available ACP applies; NR is rounded to the nearest two decimal places.

WHY IT MATTERS

NR rewards accurate scheduling — it is the reference point every charge table in this deck (Slides 11–15) scales up or down from.

Charges for Deviation — General Seller

Regulation 8(1): frequency-linked bands (excl. RoR and MSW stations)

Frequency Band	Over-injection (Receivable)	Under-injection (Payable)
49.97–50.03 Hz (within band)	@ NR (100%)	@ NR (100%)
50.03–50.05 Hz	50% of NR	150% of NR
49.90–49.97 Hz	150% of NR	50% of NR
50.05–50.10 Hz (outside band)	0% (zero)	200% of NR
f < 49.90 Hz	200% of NR	0% (zero)
Beyond 10% DGS / 100 MW	0% regardless of frequency	200% of NR regardless of frequency

WHY IT MATTERS

Correction is cheapest within the 49.90–50.05 Hz band — outside it, the penalty side of the table snaps to zero receivable / 200% payable.

Charges for Deviation — RoR & MSW Stations

Regulation 8(2) & 8(3): no linkage to grid frequency

RUN-OF-RIVER (ROR) — WITHIN LIMIT

Up to 15% DGS or 150 MW (whichever lower): charged/paid @ RR, both directions.

RUN-OF-RIVER (ROR) — BEYOND LIMIT

Over-injection beyond 15%/150 MW: zero. Under-injection: 105–110% of RR depending on band.

MSW — WITHIN LIMIT

Up to 20% DGS: charged/paid @ Contract Rate, both directions.

MSW — BEYOND LIMIT

Over-injection beyond 20%: zero. Under-injection beyond 20%: 110% of Contract Rate.

WHY IT MATTERS

These two categories are frequency-independent by design — reflecting that RoR hydro and MSW output is resource-driven, not dispatch-driven.

Charges for Deviation — WS Seller

NEW • 2026

Regulation 8(4); volume-limit bands, contract-rate based

Band	Over-injection	Under-injection
Within VLwS (1)	@ Contract Rate	@ Contract Rate
VLwS (1) – VLwS (2)	90% of Contract Rate	110% of Contract Rate
Beyond VLwS (2)	0% (zero)	200% of Contract Rate

Volume Limits (to 31.3.2026): Solar / Wind-Solar Hybrid — VL(1) 10%, VL(2) 10–15%. Wind — VL(1) 15%, VL(2) 15–20%. Bands tighten from 1 Apr 2026 as the X-factor falls (Slide 21).

THIRD AMENDMENT — New Clause 4A, Regulation 8: WS/General-Seller parity

A WS Seller is charged/paid for deviation exactly as a General Seller (Slide 11's frequency-linked table, not this contract-rate table) where either: (i) the project's bidding/tendering process opened on or after 1 Jan 2027 (bid route); or (ii) for non-bid routes, the project achieves commercial operation on or after 1 Jan 2029. Existing/prior-vintage WS projects continue on this table and the X-factor-adjusted formula (Slides 9, 21) until they are individually captured by a future trigger.

WHY IT MATTERS

Check bid/tender date and COD against 1 Jan 2027 / 1 Jan 2029 before assuming a new WS project gets the favourable contract-rate table — it may already be a General Seller for deviation purposes.

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Charges for Deviation — Energy Storage

NEW • 2026

Regulation 8(5) & 8(6): standalone ESS and WS+ESS at the same point

STANDALONE ESS — BASE RULE

General-Seller rules apply, with direction reversed for charging (drawal) versus discharging (injection).

WS SELLER WITH CO-LOCATED ESS

Solar/wind/hybrid injecting: WS-seller rules. Only ESS injecting, or ESS drawing: standalone-ESS rules. Special Energy Meter (SEM) required to attribute flows correctly.

THIRD AMENDMENT — NEW CLAUSE 2A: ESS INFIRM POWER

Standalone ESS is compensated for infirm power injected from first synchronisation through successful trial-run completion, at the Normal Rate of Charges for Deviations (Slide 10) per time block, capped at ₹2.00/kWh.

THIRD AMENDMENT — NEW NOTE AFTER CLAUSE 5: PUMPED HYDRO (PSP)

A standalone Pumped Hydro Storage Project regulated under Section 62 computes its deviation charge at the energy charge rate specified in Clause 3 of Regulation 66 of the CERC (Terms and Conditions of Tariff) Regulations, 2024 (≈₹0.20/kWh), in place of a contract rate it does not otherwise have.

WHY IT MATTERS

The applicable rule can switch minute-to-minute at the same connection point — SEM data, not the asset's nameplate, is what a dispute or audit will rely on.

Charges for Deviation — Buyer

Regulation 8(7): volume-limit bands by buyer category

Buyer Category	VLB (1)	VLB (2)	VLB (3)
Standard (≥400 MW, non-RE-rich)	@ NR	up to 150% NR	up to 150% NR beyond
Schedule ≤400 MW	@ NR	wider band than standard	up to 150% NR beyond
RE-rich State buyer	@ NR	wider still	up to 150% NR beyond
RE Super-rich State buyer	@ NR	widest band	up to 150% NR beyond

WHY IT MATTERS

Bands widen progressively for RE-rich and RE Super-rich State buyers — recognising that higher renewable penetration makes precise drawal scheduling harder.

Special Cases

Regulation 8(9)–(14): exceptions to the standard charge tables

START-UP / AUXILIARY POWER

Special pre-COD/shutdown charge treatment distinct from normal operating deviation.

INTER-REGIONAL DEVIATION

Notional Normal Rate treatment applies across regional boundaries.

CROSS-BORDER TRANSACTIONS

NR plus category-specific volume limits apply to cross-border scheduling.

FORCED / PARTIAL OUTAGE

Relief limited to a maximum of 8 time blocks, or requires a schedule revision beyond that.

HP-DAM CLEARED SELLERS

Weighted average HP-DAM Area Clearing Price used for under-injection valuation.

INFIRM POWER

See dedicated Second Amendment (Slide 17) and Third Amendment (Slide 19) provisions.

WHY IT MATTERS

It's the seller/buyer's net position in the time block that determines which table applies — not the entity's general category.

Second Amendment — Infirm Power (Thermal)

Effective 1 July 2025; refines thermal-station treatment, Regulation 8(8)

PRE-TRIAL RUN

₹2.86/kWh ceiling price; Normal Rate of Charges applies from first synchronisation until successful trial-run completion.

AFTER SUCCESSFUL TRIAL RUN

Deviation reverts to the applicable seller treatment — General Seller rules for a thermal station (Slide 11).

HIGH-FREQUENCY EXEMPTION

Zero charges apply when system frequency exceeds 50.05 Hz for infirm-power injection/over-injection.

DISTINCT FROM THE ESS RULE

This slide covers thermal stations only. Standalone ESS infirm power is a separate, newer rule under the Third Amendment (Slide 19, ₹2.00/kWh ceiling) — don't apply the thermal ceiling to storage assets.

WHY IT MATTERS

Two different infirm-power ceilings now coexist — ₹2.86/kWh for thermal (2025) and ₹2.00/kWh for standalone ESS (2026). Match the ceiling to the asset type.

WS-Seller Parity & Pumped Hydro Deviation Rate

Notified 25 Aug 2026 • Effective 31 Aug 2026 • Amends the CERC (DSM & Related Matters) Regulations, 2024

NEW CLAUSE 4A, REGULATION 8 — WS SELLER PARITY TRIGGER

A WS Seller is treated as a General Seller for deviation charges (i.e., Slide 11's frequency table applies, not Slide 13's contract-rate table) if: bidding/tendering opened on/after 1 Jan 2027 (bid route); or COD is on/after 1 Jan 2029 (non-bid route).

WHY THIS DATE, NOT THE MARCH 2026 ORDER'S DATES

The 31 Mar 2026 order (Slide 22) had floated 1 Apr 2026 / 1 Apr 2031 as proposal dates for full parity. The Commission adopted materially different, generally later dates (1 Jan 2027 / 1 Jan 2029) in the final Third Amendment — always cite the Amendment, not the earlier proposal.

RATIONALE (STATEMENT OF REASONS)

RE now supplies over half of India's generation (51.5% as of Jul 2025); forecasting, storage and aggregation have matured enough to support uniform standards; the rule is prospective so bidders can price the obligation into new project economics.

NEW NOTE AFTER CLAUSE 5, REGULATION 8 — PUMPED HYDRO (PSP)

A standalone Pumped Hydro Storage Project regulated under Section 62 (no conventional PPA contract rate) computes its deviation charge at the energy charge rate under Regulation 66(3) of the CERC Tariff Regulations, 2024 (≈₹0.20/kWh) — addressing a gap the principal Regulations left open.

WHY IT MATTERS

This rule is prospective only — it does not retroactively reclassify any WS project already bid or commissioned before its trigger dates.

Standalone ESS Infirm Power & Payment-Timeline Flexibility

Notified 25 Aug 2026 • Effective 31 Aug 2026

NEW CLAUSE 2A, REGULATION 8 — ESS INFIRM-POWER PAYMENT

Standalone Energy Storage Systems are paid for infirm power injected from first synchronisation through successful trial-run completion, at the Normal Rate of Charges for Deviations per time block, capped at ₹2.00/kWh.

WHY ₹2.00/KWH, NOT HIGHER

ESS developers sought ₹2.86–4.00/kWh citing round-trip efficiency losses (60–75%), charging cost and auxiliary consumption. The Commission held infirm injections are “occasional, not continuous,” and kept the cap to limit cost pass-through to other grid participants.

REGULATION 10, CLAUSES 1 & 3 — PAYMENT-TIMELINE FLEXIBILITY

The statutory 10-day payment window is retained as the default, but payment may also follow “such timeline as stipulated in the Detailed Procedure for implementation, maintenance and operation of the National Deviation and Ancillary Services Pool Account, as approved by the Commission.”

WHAT DIDN'T CHANGE

The late-payment surcharge remains 0.04% per day, and the Letter of Credit requirement (110% of average weekly liability, Slide 20) is untouched by the Third Amendment.

WHY IT MATTERS

The 10-day rule isn't gone — it's now a default that a future Commission-approved Detailed Procedure can vary. Check the current Detailed Procedure, not just the Regulation text, for the operative deadline.

Deficit Pool Recovery & Payment Discipline

Regulations 9(7) & 10

DEFICIT RECOVERY WATERFALL — STEP 1

Surplus from other regions' Pool Accounts is used first to cover any regional shortfall.

DEFICIT RECOVERY WATERFALL — STEP 2 (TO 31.3.2026)

Residual shortfall recovered from drawee DICs: 50% by ISTS-periphery share, 50% by General Network Access (GNA) share.

DEFICIT RECOVERY WATERFALL — STEP 3 (FROM 1.4.2026)

Residual shortfall recovered by an NLDC-allocated reserve-shortfall ratio, per an NLDC procedure.

PAYMENT DISCIPLINE

High-priority payment obligation; default 10-day window, or an alternative Commission-approved timeline (Third Amendment, Slide 19); 0.04%/day late surcharge; Letter of Credit at 110% of average weekly liability.

WHY IT MATTERS

Track your NLDC-allocated reserve-shortfall share from 1 April 2026 onward — and separately confirm which payment timeline currently applies under the approved Detailed Procedure.

X-Factor Order for WS Sellers

31 March 2026 — Petition No. 9/SM/2025: phasing the deviation formula to 2031

Period	Solar / Hybrid — X (%)	Wind — X (%)
01.04.2026 – 31.03.2027	100%	100%
01.04.2027 – 31.03.2028	90%	95%
01.04.2028 – 31.03.2029	75%	85%
01.04.2029 – 31.03.2030	55%	65%
01.04.2030 – 31.03.2031	30%	35%
01.04.2031 onwards	0%	0%

NLDC consultation required to fix the post-31.03.2031 DWS% computation method. This X-factor schedule governs the Slide 9 / Slide 13 formulas for any WS seller NOT captured by the Third Amendment's Clause 4A parity trigger (Slide 18).

WHY IT MATTERS

Wind's glide path is gentler than solar/hybrid's mid-schedule — both converge to full General-Seller treatment (X = 0%) by 1 April 2031, ahead of most Clause 4A parity triggers.

Additional Directions & Litigation Status

NEW • 2026

From the 31 March 2026 order — now partly superseded by the Third Amendment

WHAT THE MARCH 2026 ORDER PROPOSED

Existing WS projects at par with General Sellers from 1 April 2031; new WS projects (bid on/after 1 April 2026) at par immediately; no over-injection payment when frequency ≥ 50.05 Hz.

WHAT THE THIRD AMENDMENT ACTUALLY ADOPTED — CORRECTION

The final Clause 4A dates are 1 Jan 2027 (bid route) and 1 Jan 2029 (COD route) — not 1 April 2026. Treat the March 2026 order's dates as superseded proposals, not current law, for the parity trigger.

LITIGATION STATUS — CRITICAL CAVEAT

Enforcement of the X-factor trajectory remains subject to the outcome of pending Delhi High Court Writ Petitions. No coercive action while the Court's interim orders remain in effect.

WHAT TO VERIFY BEFORE RELYING ON THIS

(1) Current Delhi High Court status on the X-factor writ petitions; (2) whether any further Commission order has adjusted Clause 4A's trigger dates since 25 Aug 2026.

WHY IT MATTERS

Don't cite the March 2026 order's proposed dates as final — the Third Amendment replaced them with later, different dates. Always check for the most recent instrument first.

The DSM 2024 framework, consolidated through the Third Amendment Regulations, 2026

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WHY IT MATTERS

Bookmark this deck as your DSM quick-reference — confirm seller category, bid/COD date against Clause 4A, frequency band, volume limit, and the applicable X-factor year before you dispute or forecast a deviation charge.