Public Hearing on

Draft CERC (Indian Electricity Grid Code) (Second Amendment) Regulations, 2026

Presentation on the Draft Amendment (Notification dated 21.09.2026) with RLDCs/NLDC (GRID-INDIA) comments and suggested revisions

Regulation 19: Extension of period for inter-change of power by REGS / ESS

Draft provision.

- Conditions for extension [Reg. 19(3)(a)]:
  - (i) Reasons for delay and likely date of request;
  - (ii) Request at least **10 days** before start date;
  - (iii) Multiple extensions, **3 months** in total;
  - (iv) **Monthly** progress update to RLDC.

GRID-INDIA comments

- No timeline for reasons, **no report format**, **no RLDC decision timeline** – specify by procedure:

(v) The timeline for furnishing the information under sub-clause (i), the format of the monthly report under sub-clause (iv) and the timeline for the decision of RLDC on the request for extension shall be as specified in the Detailed Procedure issued by NLDC.

Regulation 21: Notice period for trial run and Regulation 22(3)(a) : Trial run of solar

Draft provision

- Trial run notice reduced from **seven (7) to three (3) days** [Reg. 21(1)].

Issues observed

- Trial runs are often **rescheduled** – technical issues, low wind / irradiation, weather, tripping, RoW.
- Unclear whether this is a **rescheduled** run (fresh notice) or a **repeat** run (no fresh notice).
- Reg. 21(2) still requires **7 days** for transmission elements.

GRID-INDIA proposals

- **Revised Clause (1)** – extra proviso to cover rescheduled trial runs:

(1) ….Provided further that where the trial run is not commenced on the date first proposed in the notice, for whatsoever reason, it shall be treated as a failed trial run for the purpose of the first proviso; such treatment shall be available only once.

- **Uniform 3-day notice** for generation and transmission:

The word and number "seven (7)" shall be substituted with "three (3)" in Clauses (1) and (2) of Regulation 21 of the Principal Regulations.

22(3)(a) Draft provision: Solar trial run

- 50–250 MW: balance in max **4 instalments**, min 5 MW.
- Below 50 MW: for GNA 4.1(e) / 4.1(f) / 4.4 entities.
- 250 MW or more: instalments of min 50 MW, no limit on number.
- **CON-TD-4 limit below 50 MW** despite Connectivity of 50 MW or more:

Provided also that where CTU has granted Connectivity of 50 MW or more but the applicable CON-TD-4 restricts injection or drawal to less than 50 MW, the trial run may be permitted for the capacity allowed under the prevailing CON-TD-4 in one go, and for the complete capacity upon issue of a revised CON-TD-4 by CTU.

Regulation 22(3)(c): Trial run of wind projects – instalments and Regulation 22(3)(e): Trial run of ESS

22(3)(c) Draft provision: Wind trial run

- Above 50 MW: batches of not less than **5 MW**.
- Below 50 MW: for GNA 4.1(e) / 4.1(f) / 4.4 entities.

Issues observed

- **No limit on instalments** for wind, unlike solar.
- Developers seek trial runs of only **2–3 WTGs** at a time.

GRID-INDIA proposal – substitute first proviso to (c)

Provided that in the case of a wind power project having a capacity of more than 50 MW and less than 250 MW, the trial run for the balance capacity shall be performed with a minimum capacity of 20 MW:

22(3)(e) Draft provision: ESS (excluding PSP)

- Standalone ESS: minimum **50 MW**.
- 50–250 MW: balance in max **3 instalments**, min 5 MW.
- Below 50 MW: for GNA 4.1(e) / 4.1(f) / 4.4 entities.
- 250 MW or more: instalments of min 50 MW, no limit.

GRID-INDIA comments

- **All ESS:** delete "standalone" – cover ESS in co-located too.
- **4 instalments**, as for solar; each with one full cycle at rated MW and MWh.
- **Also cover** BESS under GNA Reg. 4.1(a) and 5.2.
- **Partial demonstration:** certify capacity demonstrated; balance in a fixed time.
- **Re-rating** after restoration (de-rating already in 22(3)(h)).
- **48-hour window** for all blocks of a lot (also solar, wind).

Regulation 22(3)(f): Trial run of PSP and Regulation 22(3)(j): Rated capacity under transmission constraint

(f) Draft provision: Pumped Storage Plant

- Trial run per unit of PSP.
- Interruptions allowed with extended test; **average load ≥ MCR**.
- Cumulative interruption **> 4 hours** → repeat trial run.
- Low reservoir: COD allowed, capability shown later; else **repeat or de-rate**.

GRID-INDIA comments – to be specified

- **Test duration** in generating and pumping modes; whether **each unit in both modes**.
- Meaning of **"MCR" in pumping** for fixed-speed units.
- **Variable-speed units** to demonstrate rated pumping range.
- Turbine and pump runs are often **hours or days apart** – current criteria hard to apply.

(j) Draft provision – new sub-clause

- Transmission constraint: rated capacity within **1 year of GNA effectiveness or COD, whichever is later**.

Issues observed

- **Duration** of demonstration not specified (SCADA / meter data used now).
- Level unclear: **WTG, inverter block or whole plant**.

GRID-INDIA proposal

(j) … the plant/inverter block/WTG may demonstrate the rated capacity for one time block (15 minutes) within one year from the date of effectiveness of the GNA or one year from the date of COD, whichever is later.

- Also demonstrate **reactive power capability** at rated capacity, with intimation to RLDC.

Regulation 24(2): Automatic Generation Control (AGC) for pumped storage and ESS

Draft provision in 24(2)

- AGC enablement extended to **PSP > 25 MW** and **ESS ≥ 25 MW** [Reg. 24(2)].

GRID-INDIA comments

- **Both modes:** ESS in charging and discharging; variable-speed PSP in pumping too; fixed-speed PSP exempt in pumping.
- **CEA threshold is 50 MW:** may apply 25 MW to new ESS only.

Suggested words for Clause (2)

", pumped storage plants and ESS (excluding Pumped Storage Plant) having a capacity of 25 MW and above, in generating/discharging mode, and also in pumping/charging mode in the case of ESS (excluding Pumped Storage Plant) and variable speed units of Pumped Storage Plant,"

New Regulation 25A: Scheduling of infirm power

Draft provision – Regulation 25A

- **(1)** Only after **trial-run certificate** (Reg. 25).
- **(2)** Contract has pre-COD terms → schedule **as per contract**.
- **(3)** No such terms → offer to buyers with **7 days'** notice; agreed tariff; no reply = **deemed refusal**, free to sell to third party.

GRID-INDIA proposal – Clause (1)

- Also require documents under **Reg. 45(5)(a)** – GNA, deemed T-GNA, contracts.

(1) The scheduling of infirm power shall be permitted only after issuance of a certificate of successful trial run in accordance with Regulation 25 of these Regulations and upon fulfilment of the documentary requirements specified under Clause (5)(a) of Regulation 45 of these Regulations.

Gaps in the draft

- **PPA disagreement:** RLDC cannot adjudicate contractual disputes.

GRID-INDIA proposals

- Treat disagreement as **deemed refusal** [Clause (3) and (3)(c)]:

(3) … or in case of disagreement with the buyer on any provision of the contract regarding the offer of infirm power:

(c) … or if the buyer does not agree on the offer of infirm power as per the provisions of the contract, it shall be considered as a deemed refusal and in such a case the generating station shall be free to sell such power to any of the third party outside the Contract.

Regulation 27: Commercial Operation Date (COD) and Regulation 30: Primary response – droop and Table 4

Draft provision

- "Subject to fulfilment of other conditions, if any, as per PPA" replaced by a proviso:
  - Contract conditions to be met **before supply under that contract**;
  - COD under the Grid Code declared after **successful trial run**.

GRID-INDIA comments

- Today, COD follows the RLDC trial-run certificate **and** contract conditions (e.g. buyer / REIA certificate).
- Once de-linked, COD may come **before** PPA conditions are met.
- Draft is silent on scheduling in this gap – **infirm power (Reg. 25A) or firm power to a third party?**
- A **framework** may be devised to clarify the treatment of such power.

Draft provision: Droop for ESS and PSP

- ESS (excluding PSP): like thermal – **3 to 6%**. PSP: like hydro – **0 to 10%**.
- Table 4 – two new rows:

PSP – **25 MW and above**; & ESS (excluding PSP)**10 MW and above, at 33 kV and above**.

GRID-INDIA comment

- BESS responds **very fast** – apply **0–10%** droop, as for hydro.
- ESS primary response depends on **SoC** – needed in **both directions**.
- **Variable-speed PSP** can respond in pumping mode too.
- CEA values for ESS / PSP not yet notified – **interim arrangement** needed.

Suggested clause: Omit Para 10(2); revise Para 10(3) as:

The words "and ESS (including Pumped Storage Plant)" shall be added after the words "(for hydro generating units" in sub-clause (g) of Clause (10) of Regulation 30 of the Principal Regulations.

Proposal: Note below Table 4

1. ESS shall maintain state of charge such that the specified primary response is available in both directions; variable speed PSP units shall also provide primary response in pumping mode.

2. Till the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2026 are notified, droop and response for ESS and PSP shall be as per the Detailed Procedure issued by NLDC.

Regulation 30: Secondary and tertiary reserve – regional entity bulk consumers and Regulation 45(8)(a): High inflow period and peak / off-peak Declared Capacity

Draft provision – Regulation 30(11)

- Bulk consumers added in sub-clauses **(q) and (t) only**.

GRID-INDIA proposals

- RLDC / NLDC must also compute **ACE and reserve requirement** for them.
- **Secondary reserve** – add "and regional entity bulk consumer" in:
  - (d) ACE calculation; (n) All-India estimate;
  - (o) allocation; (r) re-assessment.
- Assess **Frequency Bias Coefficient (Bf)** for them [(e)].
- **Tertiary reserve** – extend obligation [Reg. 30(12)]:

The words "and regional entity bulk consumer" shall be inserted after "State control area" in sub-clauses (a) to (f), and "or regional entity bulk consumer, as the case may be," after "State" in sub-clause (h) of Clause (12) of Regulation 30.

Draft provision – Regulation 45(8)(a)

- RPC may revise an already declared high inflow period.
- Thermal: peak-hour DC not below off-peak DC, except forced / partial outage; else the lower DC is used for fixed charges.

Issues observed

- **Flash floods** may need DC above 100% MCR outside the RPC-notified period – else **spillage**.
- **Peak / off-peak hours** not defined in the Grid Code.
- Stations cite partial outage but **do not furnish records**.

GRID-INDIA proposals

- **High inflow** – new proviso:

Provided further that RLDCs shall allow hydro generating stations to declare ex-bus DC above 100% MCR less auxiliary consumption, limited to overload capability, during flash flood or on other justification in real time, to avoid spillage of water, for a day outside the period notified or revised by the RPC. Such details shall be submitted by RLDCs to the concerned RPCs.

- **Peak vs off-peak DC:**
  - Compare **average** peak-hour DC with **average** off-peak DC;
  - Peak / off-peak hours **as declared by RLDCs**;

New Regulation 30A: Congestion charge

Draft provision – Clauses (3) to (8)

- Notice: **2 blocks** to apply; **1 block** to withdraw – by RLDC.
- Payment in **10 days**; interest **0.04% per day**.
- Release within **2 working days** of receipt, **with interest**.

GRID-INDIA proposals

- **Notice:** cover **NLDC** also; withdraw only after flow is within ATC for **two time blocks**:

(4) … has come down to the ATC at least for two time blocks … Provided that notice of one time block shall be given by the National Load Despatch Centre or Regional Load Despatch Centre …

- **Payment:** no interest is paid out of pools; common settlement avoids circular money flow:

(7) The RLDCs shall release the amount payable to the Regional Entity entitled to receive congestion charge as per the Detailed Procedure for implementation, maintenance and operation of the National Deviation and Ancillary Services Pool Account.

New Regulation 45(16): Regulation of access to defaulting entities and Regulations 48 & 49 (RTM timelines)

Draft provision – Clause 45 (16)

- Unpaid **DSM, congestion, reactive** charges or payment security, after the default trigger date:
  - (i) **T-GNA** short-term contracts regulated entirely;
  - (ii) After **2 months**: short-term contracts under **GNA** too;
  - (iii) Other contracts: cut rises by **5% per month**;
  - (b) Access restored within **1 day** of payment.

GRID-INDIA comments

- **Scope:** cover all charges of the Deviation & AS Pool and National Pool (SCED) – AS, SCUC, deficit recovery, etc.
- **Generating stations:** applicability under injection GNA / deemed T-GNA to be clarified.
- **QCAs:** on part payment, regulate only stations with unpaid dues, **as confirmed by the QCA**.
- **Procedure** by NLDC for notifying defaulters and implementation.

Draft provision – RTM timelines (48 & 49)

- **Phase I** (from notification): gap between RTM clearing and delivery cut by **15 minutes**.
  - Time for RTM, SCED, SCUC, TRAS schedules: **30 → 15 min**.
- **Phase II** (from 01.04.2027): bidding + clearing **30 → 15 min** (5 min bid, 10 min clear).

GRID-INDIA comment and proposal

- Needs **system changes, testing and stakeholder coordination**.
- Allow **two months** from notification for Phase I:

Annexure-4: Reactive energy accounting and Annexure-9 (Scheduling of units identified for decommit)

Payment timelines in the Pool Account

- Pool covers **deviation & AS**, **reactive energy** and **congestion**.
- Reactive energy paid in **12 days**, others in **10 days. This leading to circular flow of money**.

GRID-INDIA proposal

- **Harmonise** timelines of all weekly statements.
- Settle all through the **National Deviation & AS Pool Account procedure** (submitted to CERC).

Reactive energy pool deficit

- **IEGC 2010 (Cl. 14):** in a deficit, pay-outs cut pro-rata to money available – **not carried forward**.
- Clause **omitted in IEGC 2023**; weekly deficit now carried forward leading to **pool deficit**.
- Commission apprised vide letter dated **24.04.2026**.

GRID-INDIA proposal – restore Clause 14 of IEGC 2010

"… if the regional reactive account has no balance to meet the deficit, the pay-outs shall be proportionately reduced according to the total money available in the above account."

Draft provision – Annexure-9 (decommit)

- **Para 3:** off-bar blocks – schedules revised **downwards only**.
- **Para 4:** schedules adjusted by **SCUC-Down / SCUC-Up** before SCED.

GRID-INDIA comments and proposals

- **Para 3:** no pre-filled requisition, so no reference for "downward only" – specify the reference schedule or delete.
- **Para 4:** sequence – SCUC → SCED (keeping NLDC reserve) → TRAS → AGC.

(4) … adjusted through SCUC in real time prior to running SCED under Regulation 49(2)(a)(iv). SCED shall be run on the schedules so adjusted, while maintaining the reserve requirement assessed by NLDC.

(a) SCUC-Down will be provided for the stations decommitted by NLDC in the time blocks in which such generating station is required to be off-bar.

THANK YOU