NATIONAL SOLAR ENERGY FEDERATION OF INDIA
Regd. No. 362 / IV of 8 May, 2013
भारतीय सौर ऊर्जा महासंघ
पंजीकरण नं 362 / IV - 8 मई, 2013
MAKING SOLAR ENERGY AFFORDABLE

Ref no: NSEFI/CERC/2026-27/0091
Date: 28/05/2026

To,

The Secretary,
Central Electricity Regulatory Commission (CERC)
6th, 7th & 8th Floors, Tower B, World Trade Centre,
Nauroji Nagar, New Delhi- 110029

Subject: **Submission of comments and suggestions on Shortening the scheduling Timeline for Real Time Markets in India.**

Reference: **Hon'ble Commission's staff paper on Shortening the scheduling Timeline for Real Time Markets in India**

Respected Sir,

Greetings from National Solar Energy Federation of India (NSEFI)!

NSEFI is a non-profit organization with the objective of Renewable power development. It is an umbrella organization representing Renewable Energy companies active along the whole photovoltaic value chain: project developers, manufacturers, engineering companies, financing institutions and other stakeholders. The organization was founded in 2013 with the vision to promote renewable energy. Our members have executed Solar as well as Wind power projects across the country, under the State and Central Schemes across India.

This is with reference to the Hon'ble Commission's staff paper on Shortening the scheduling Timeline for Real-Time Markets in India. In this regard, we are pleased to submit our comments for the kind consideration of the Commission. For ease of reference and clarity, NSEFI's comments on the staff paper have been provided in a tabular format and enclosed as an **Annexure** to this communication.

NSEFI remains committed to working closely with the Hon'ble Commission in this consultative process and would be pleased to provide any further clarifications or participate in discussions, as may be required.

With Best Regards,



Subrahmanyam Pulipaka
Chief Executive Officer
National Solar Energy Federation of India

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Annexure-

Comments on the Discussion Paper on "Shortening the Scheduling Timeline for Real Time Markets in India" Central Electricity Regulatory Commission — April 2026

We thank the Commission for the opportunity to comment on the Discussion Paper. We support the objective of bringing the Real-Time Market closer to delivery to better integrate variable renewable energy, reduce forecasting error and minimise deviation charges. Our clause-wise comments and suggestions are set out below.

S. No.	Clause / Para of Discussion Paper	Existing / Proposed Provision	Comment / Suggestion	Rationale
1	Para 4.1 read with Para 4.3 & 4.4 *(scheduling timeline / end of Revision of Schedule)*	Reduction of the timeline between the end of 'Revision of Schedule' and delivery from 75 minutes to 50 minutes, with the end of revision moving to 50 minutes (≈ 3rd–4th time block) before the delivery time block.	We strongly support the proposed reduction from 75 to 50 minutes and welcome that the end of 'Revision of Schedule' effectively moves to about the 3rd–4th time block before delivery — a long-standing ask of RE developers. As a phased roadmap, we urge the Commission to adopt a defined glide path to a 30-minute timeline (≈ 2 time blocks before delivery), with an interim review checkpoint after a stated period of stable operation at 50 minutes. – Phase 1: 75 → 50 minutes (as proposed). – Phase 2: 50 → 30 minutes, subject to a published performance review and	Solar and wind output can change materially within a 50-minute window; bringing gate closure closer to delivery reduces forecasting error and demand–supply mismatch. International practice supports a shorter timeline: – Germany (EPEX SPOT continuous intraday, within control area): trading up to ~5 minutes before delivery. – EU single intraday coupling: cross-zonal gate closure reduced to not more than 30 minutes before real time, binding from 1 January 2026 (Art. 8, Regulation (EU) 2019/943 as amended by Reg (EU) 2024/1747; ACER Decision 11/2025). – Great Britain: continuous intraday runs close to delivery; system gate closure (handover to the Balancing Mechanism) is ~1 hour before delivery.

135-137, 1st Floor Rectangle-1, D-4, Saket District Center New Delhi-110017
Email: chairman@nsefi.in, pulipaka@nsefi.in, Call: 011-41554149, +91-7045524937
www.nsefi.in

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			Grid-India concurrence.	A defined phase-out with a review checkpoint provides regulatory certainty while respecting the Commission's system-security concerns recorded in Para 69 of the Order dated 31.03.2026 in Petition No. 9/SM/2025.
2	Para 4.3 *(Revision of Schedule – IEGC Reg. 49(4))*	The revision framework is presently expressed for 'buyers which are GNA grantee' (IEGC Regulation 49(4)), with revision effective from the 7th/8th time block.	The shortened revision window should apply symmetrically to RE generators' injection schedules, and not only to drawal-side revision by buyers/DISCOMs. We also request an event-triggered revision facility for wind and solar generators within a short window following a verified weather event, subject to telemetry or satellite validation.	RE sellers face the same intra-window variability as buyers; symmetric revision rights are necessary for generators to align injection with actual weather and grid conditions. Event-triggered revision was sought by several stakeholders (e.g. InWEA, Greenko) in Petition No. 9/SM/2025 and directly addresses sudden weather shifts where on-ground radar is unavailable.
3	Para 4.2 *(RTM bidding window 15 → 5 minutes)*	Reduction of the RTM bidding window from 15 minutes to 5 minutes, on the basis that automated bidding makes a 5-minute window sufficient.	We support the 5-minute bidding window, conditional on the following safeguards being mandated and operational in advance: – Standardised, automated bidding capability mandated across all Power Exchanges (IEX and PXIL). – Open, standard API-based bidding interfaces made available to all	Automation is the express pre-condition the Commission itself identified for shortening RTM timelines (Statement of Reasons, Framework for Real Time Market). Mandating standard API access ensures the efficiency gains of a 5-minute window are available to all participants and do not create a structural disadvantage for smaller RE generators.

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			participants well before implementation. Without these, small and mid-sized RE generators without sophisticated SCADA/EMS may be unable to bid reliably within 5 minutes.	
4	Para 4.1 / General *(Participation of RE generators in RTM)*	The proposed framework compresses the RTM timeline but does not expressly address the ability of RE generators to buy back power in the RTM to manage deviations.	Enable RE generators to buy back power in the Real-Time Market to meet schedule commitments and manage real-time deviations. – Expressly permit RE generators to place buy bids in RTM for this purpose. – Remove implicit barriers by clarifying the interaction with T-GNA drawal under Regulation 36.6 of the GNA Regulations, so a seller can secure drawal rights for buy-back.	A shorter timeline is most useful to RE if paired with the ability to correct shortfalls through the market rather than through DSM penalties. RE buy-back in RTM was proposed by Juniper, Evren and NSEFI in Petition No. 9/SM/2025 and is a market-based alternative to punitive deviation settlement.
5	Para 3.4–3.6 / General *(Interaction with the Deviation Settlement Mechanism)*	The Discussion Paper notes that the long gap between gate closure and delivery makes forecasting difficult and attracts DSM penalties, and links the reform to Petition No. 9/SM/2025.	The timeline reform should be read together with the DSM 'value of X' framework. As gate closure moves closer to delivery, forecasting accuracy improves; the deviation treatment ('X' trajectory) for wind and solar sellers should be calibrated to reflect this.	Every RE GNA grantee that is a wind/solar seller is a DSM-applicable entity; the 'X' determination (Order dated 31.03.2026) directly affects RE revenues. Shorter timelines structurally reduce forecasting error, which is the policy premise of the deviation band. Tying the two ensures the reform translates into real relief from imbalance charges rather than

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			We request that the Commission expressly recognise the timeline reform as a basis for a fairer and less punitive deviation regime for RE.	only operational change.
6	Para 4.4, Table-2 & Fig-4 *(Compression of SCUC / SCED / AS / TRAS)*	The proposal merges price discovery, real-time SCUC, SCED, AS clearing and TRAS dispatch into the X-2 block (T-30 to T-15), reducing the post-clearing window from 45 to 30 minutes.	We support the compression, subject to: (a) validation by Grid-India that system security and dispatch coordination are not compromised; and (b) a defined fallback to extend the timeline for specific blocks under stressed grid conditions. We also note an apparent drafting inconsistency: Table-2 retains 'to be finalized by T-60' for bidding, whereas the proposed bidding window is T-50 to T-45. This may be corrected for clarity.	Endorsing a security safeguard directly addresses the Commission's concern (Para 69, Order dated 31.03.2026) that gate-closure changes have system-wide implications for real-time balancing and reserve deployment. A clearly drafted timeline avoids ambiguity in implementation by Power Exchanges, NLDC and SLDCs.
7	Para 4.1, Table-2 *(Exigency T-GNA & corridor visibility)*	Processing of DC, schedule-revision requests and exigency T-GNA applications is compressed into the X-4 block (T-50 to T-45), alongside the 5-minute bidding window.	• Ensure that processing of exigency T-GNA applications and schedule-revision requests is not degraded by the compressed X-4 block. • Confirm that NLDC will continue to publish corridor-wise ATC margins with adequate lead time before gate closure, so	Exigency T-GNA for RTM is processed within a time block under the GNA Regulations; a compressed window must not reduce reliable access to short-term corridor for GNA grantees. Timely ATC visibility is a pre-condition for effective participation in a faster RTM.

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			participants can bid and revise (including buy-back) on an informed basis. • Additional pre-requisite – Exchange platforms to ensure that correct NOC limit (updated after revision if any) should be available before RTM bid placement. • Bidding by market participants in Power Exchange platform for RTM and RTM-AS segments – to be finalized by T- 40	
8	Para 1.2 / General *(RE curtailment)*	The Discussion Paper attributes rising RE curtailment largely to system-security concerns and seeks to reduce it through the timeline reform.	We support measures to reduce curtailment, but suggest decoupling curtailment targets from this timeline reform: – Recognize that the reform mainly reduces forecasting-error-driven imbalance, not transmission-constraint curtailment. – Separately institute a transparent curtailment monitoring and compensation framework, with periodic reporting of curtailment causes and	Most RE curtailment arises from grid/transmission constraints (curtailment order under the GNA Regulations: T-GNA first, then GNA pro-rata), which the timeline reform does not address. Decoupling avoids overstating the reform's effect on curtailment and gives the Commission a cleaner, monitorable basis for separate curtailment action.

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			volumes.	
9	Para 4 / General		Adequate testing and mock sessions should be conducted.	Reducing the RTM bidding window may create challenges for smaller market participants, Entities with limited automation. Therefore, to ensure that market liquidity and participation are not adversely affected a brief period should be provided for mock sessions so that challenges can be identified and addressed before implementation