Evren

Ref: ABC CT/CERC/Comments DSM/17102025 **Date:**17/10/2025

To,
Shri Harpreet Singh Pruthi,
Secretary, Central Electricity Regulatory Commission,
6th, 7th & 8th Floors, Tower B, World Trade Centre,
Nauroji Nagar, New Delhi- 110029

Sub: Submissions on the proposed determination of value of 'X' and DSM framework for Wind and Solar Sellers

Respected Sir,

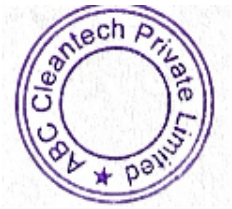
We are writing on behalf of ABC Cleantech Private Limited to submit our comments on the proposed determination of value of 'X' and DSM framework for Wind and Solar Sellers.

We appreciate the opportunity to contribute our perspectives towards the development of this guideline. Our comments aim to highlight practical issues in procedure & bring more uniformity/ clarity for the benefit of all stakeholders.

We trust that our submission will receive your positive consideration. We are available to provide any further clarification or information.

Yours sincerely
For **ABC Cleantech Pvt. Ltd.**





Prashant Kanaujia
Authorized Signatory

Evren

Comments on CERC Draft Order in Petition No. 9/SM/2025 (Suo-Motu)-Submissions on the Proposed Determination of Value of 'X' and DSM Framework for Wind and Solar Generators

Against the backdrop of the proposed changes under the CERC Draft Order dated 10 September 2025, the following submissions are respectfully made. These comments are based on a detailed review of the draft order, supported by empirical data on generation behaviour and supplemented with policy recommendations to promote a balanced, data-driven, and market-oriented approach to grid stability.

1. Overview of Concerns

The proposed trajectory for reducing the 'X' factor—from 100% in 2026 to 0% by 2031—and the simultaneous tightening of tolerance bands (Solar/Hybrid: ±10% to ±5%; Wind: ±15% to ±10%) raise significant concerns. The underlying assumption that forecasting accuracy has materially improved is not supported by actual operational experience. Moreover, the proposed approach does not account for the economic and technical realities of renewable generation, particularly wind, which remains inherently variable and difficult to forecast.

The DSM formula itself remains under judicial scrutiny, with the Hon'ble Delhi High Court granting interim protection to affected stakeholders. Proceeding with new determinations while the matter is sub-judice undermines regulatory certainty and the judicial process.

Further, the methodology adopted for determining the value of 'X' has not been explained in the draft order. In the absence of transparent, data-backed justification, the proposed values appear arbitrary and pre-judged rather than the outcome of an evidence-based, consultative exercise.

2. Economic and Operational Implications

The proposed changes carry severe financial implications. Even CERC's own study suggests that wind projects could experience revenue losses of up to 48.2%. Such impacts are unsustainable and could render several operating projects financially unviable, particularly those developed under earlier regulatory frameworks with fixed tariffs and limited scope for cost pass-through.

Forecasting challenges persist despite continuous improvements. Agencies such as IMD, CEA, and MNRE acknowledge that forecasting accuracy for wind generation remains limited. The IMD's *Vision 2047* report itself highlights the need for substantial enhancement of forecasting infrastructure. Expecting renewable generators to achieve the same level of precision as conventional, dispatchable plants is unrealistic and contrary to technical realities.

Aggregation of multiple renewable projects, while theoretically beneficial, offers only marginal improvements in deviation performance. Where projects are geographically concentrated, forecast errors are correlated, reducing the benefits of aggregation. The *Grid India* study relied upon by the Commission covers only 16 projects — too small a sample to represent the national RE capacity exceeding 175 GW.

Applying the same DSM rules to renewable and conventional generators disregards their fundamental differences. Renewable sources are weather-dependent and non-dispatchable, while conventional units can control output. Such uniform treatment undermines fairness and violates the principle of equality under Article 14 of the Constitution.

Existing projects, conceptualised and bid under different DSM regimes, cannot absorb the financial shock of retrospective application of tighter deviation norms. Imposing these changes on operating projects would violate the principle of regulatory certainty and erode investor confidence.

3. Empirical Analysis of Generation Variability

(a) Year-on-Year Deviation Trends

Range of Deviation	FY24	FY25
0–10%	65%	53%
10–20%	17%	19%
>20%	18%	28%

Data from a sample wind power plant shows that deviations exceeding 20% between consecutive time blocks increased from 18% in FY24 to 28% in FY25, indicating greater volatility. This reflects a systemic shift in generation patterns, possibly due to evolving wind regimes, rather than deficiencies in forecasting.

(b) Intra-Day Variability

In FY24, 34% of days exhibited at least 24 time blocks (6 hours) with deviations exceeding 20%. In FY25, this rose to 42%. This trend demonstrates growing intra-day volatility and highlights the increasing difficulty of maintaining schedule adherence within narrow deviation limits.

(c) DSM Penalty Concentration

An analysis of DSM penalties reveals that more than 50% of the monthly penalty burden arises from just 4–5 high-deviation days each month. These spikes are unpredictable and typically caused by sudden meteorological events rather than persistent operational inefficiencies. Penalising entire months for such outlier events is disproportionate and misaligned with actual grid performance.

Together, these findings underscore the need for a more nuanced DSM framework—one that differentiates between predictable patterns and random volatility, and focuses corrective measures on high-impact events.

4. Recommendations for a Market-Based Framework

While grid stability is a legitimate regulatory goal, it should be pursued through incentive-aligned, market-based measures rather than punitive mechanisms. The following reforms are proposed:

1. **Right to Buy in Real-Time Market (RTM):**
   Allow RE generators to purchase power in RTM to offset deviations, consistent with global best practices.
2. **Reduced RTM Gate Closure:**
   India's current gate closure (4 time blocks) should be gradually reduced to 2 blocks or less to enhance flexibility.
3. **Restoration of Schedule Revision Flexibility:**
   Permit schedule revisions up to the 4th time block to enable dynamic response to real-time variations.
4. **Enhanced Aggregation Mechanisms:**
   Permit aggregation at portfolio or regional levels rather than limiting it to pooling stations.
5. **Grandfathering for Existing Projects:**
   Apply the new DSM framework prospectively to protect regulatory certainty and investor confidence.
6. **Post-Delivery Market Settlement:**
   Enable ex-post settlement of deviations through market mechanisms, as practised in advanced electricity markets.

5. Conclusion

The proposed DSM tightening and reduction of the 'X' factor rest on unsubstantiated assumptions and, if implemented, would jeopardize the financial viability of renewable energy projects. The inherent

intermittency of wind and solar power, coupled with the limitations of current forecasting systems, make it impractical to impose narrower deviation bands and higher penalties.

CERC is urged to adopt a market-driven, transparent, and equitable DSM framework that promotes both grid reliability and the continued growth of India's renewable energy sector.