15 October, 2025

To,
The Secretary,
Central Electricity Regulatory Commission,
3rd and 4th Chanderlok Building,
36, Janpath Road,
New Delhi - 110001

Subject: Comments and Suggestions on the proposal by CERC in its Suo-Motu Order issued on 10th September 2025, for implementing changes in various provision of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

Dear Sir,

This is in reference to the public notice issued by CERC dated 10th September, 2025 seeking comments and suggestion on the proposal by CERC in its Suo-Motu Order issued on 10th September 2025, for implementing changes in various provision of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024.

We would like to introduce ourselves as "SEPL Energy Private Limited" (SEPL), backed by Edelweiss Infrastructure Yield Plus fund. We own and operate high quality assets across the Indian power sector in the segments – renewable energy, Inter-state power transmission, etc. In our Renewable energy portfolio, we have around 2 GW of solar projects installed across multiple states in the country having tariffs discovered through competitive bid process. We have a mix of Inter and Intra-State Projects, being subjected to Deviation Settlement Mechanism as per the Central and the State level DSM Regulations, respectively. We are keen to expand our renewable energy portfolio in the coming years through investment in Greenfield renewable energy projects, thereby contributing to the Country's capacity addition target of 500 GW by 2030.

We understand that the present Draft Proposal and its provisions proposed by the Hon'ble CERC through its Suo-Motu Order, shall pose significant commercial implication on the existing and upcoming renewable energy projects, which ultimately questions the viability of existing RE projects as well as have a bearing on the investment decisions and RE tariffs to be discovered, in future. In this context, we would like to present our comments and suggestion on the Proposal, for kind perusal and consideration of Hon'ble CERC.

We thank for giving us an opportunity to submit our suggestions, which are placed in Annexure-1.

Yours' faithfully,

Encl.: Comments and Suggestion on proposal by CERC in its Suo-Motu Order issued on 10th September 2025 for effecting changes in the prevailing DSM Regime for RE projects.

SEPL Energy Private Limited
(formerly known as Sekura Energy Private Limited)
Corporate Identity Number: U74999MH2018PTC307666
Registered Office: 504 & 505, Windsor, 5th Floor, Off CST Road, Kalina, Santacruz (E), Mumbai - 400098
E: contact@energy-sel.com **T:** +91 22 6841 7000 **F:** +91 22 6841 7077

Submission on Impact of DSM and recently proposed regime changes on Solar/RE Industry

1. Introduction and Context

India's renewable energy (RE) sector acknowledges and fully supports the Central Electricity Regulatory Commission's (CERC) overarching objective of maintaining grid discipline, reliability, and frequency stability. The Deviation Settlement Mechanism (DSM) introduced under the 2014 Regulations was designed as a grid discipline tool, ensuring accountability in scheduling and dispatch.

However, over successive iterations — 2019 Amendments, CERC (DSM and related matters) Regulations, 2022, and the proposed 2024–25 revisions — the regime has progressively become more stringent and complex. These changes include:

- Tightening of tolerance/volume bands for sellers from ±15% initially to ±10% and now a proposed ±5%.
- Introduction of the "X-factor", shifting the reference from available capacity to scheduled generation.

Collectively, these measures significantly increase the frequency and magnitude of DSM liabilities for renewable generators, many of whom operate under fixed long-term tariffs and limited revenue buffers.

While the industry supports the intent of ensuring system reliability, the recent proposals are excessively punitive and disproportionate, risking the financial sustainability of existing projects and jeopardizing India's 500 GW renewable energy target by 2030.

2. Revenue Impact of Narrowing the Tolerance Band & introduction of x-factor

An impact assessment based on a 350 MW ISTS Solar Project indicates the material effect of the proposed tightening of tolerance bands from ±10% to ±5%.

Scenario	Tolerance Band	% Time Within Band	% Time Beyond Band	DSM Penalty (% of Annual Revenue)
Existing (2024 Regime)	±10%	88%	12%	3.9%
Proposed (2025 Draft) with x-factor	±5%	76%	24%	11.0%

This clearly shows that halving the tolerance band doubles the frequency of deviation events and nearly triples the DSM penalty burden on projects. For operational plants with fixed PPAs and thin margins, this would directly erode debt service capability, potentially pushing several assets toward financial distress.

3. Sudden and unforeseen weather changes are beyond Generator's Control and to be treated as Force Majeure and not to be subject to penalties:

A detailed analysis of deviation data from May 2024–May 2025 of a 350 MW Solar Power Plant in the state of MP, indicates that 95% of DSM penalties result from abrupt weather changes — primarily sudden cloud cover or wind speed variation. These fluctuations are entirely beyond human control and cannot be eliminated even with advanced forecasting. **Annexure-1** shows some of the instances of cloud coverage affect on a 350 MW Solar project across various months, which render generation forecasts haywire & attracting huge penalties in the prevailing DSM regime.

Despite this there is sustained, technology-driven efforts by RE generators to minimize the impact of weather-induced variability on generation and scheduling accuracy. Most utility-scale solar and wind projects now maintain dedicated in-house forecasting and scheduling teams, equipped with advanced meteorological tools and real-time SCADA data analytics to refine day-ahead and intra-day forecasts. These efforts are complemented by round-the-clock control room operations, where trained engineers continuously monitor generation patterns, cloud movement, and grid instructions to ensure immediate schedule revisions and coordination with SLDCs and RLDCs. Further, project owners engage Qualified Coordinating Agencies (QCAs) and reputed third-party forecasting service providers to enhance prediction accuracy. However, even with such robust systems, certain short-term weather phenomena remain unpredictable, reinforcing the need for a DSM framework that acknowledges physical limitations while supporting continued technological improvements.

Penalizing generators for such uncontrollable events contradicts principles of fairness and risk allocation. Globally, such deviations are recognized as Force Majeure or system-level balancing events, not generator liabilities. Accordingly, weather-related deviations should be exempted from DSM penalties. Providing exemptions from penalties under Force Majeure conditions would not undermine the construct or intent of the existing DSM Regulations; rather, it would serve as a critical measure to uphold regulatory fairness, reinforce investor confidence, and strengthen long-term trust in the renewable energy framework.

4. Inappropriateness of Treating RE Projects at Par with Thermal Generators

The introduction of the "X-factor" aims to align renewable deviation treatment with that of conventional generators. This approach is fundamentally flawed.

- Thermal and hydro stations are dispatchable and can control generation by adjusting fuel input or water flow.
- Solar and wind projects are non-dispatchable and depend entirely on ambient weather conditions — solar irradiance, temperature, and wind velocity — factors entirely beyond human control.

Expecting the same level of schedule adherence from variable renewable generators as from thermal plants ignores the physical realities of generation. Even state-of-the-art forecasting cannot account for second-to-second fluctuations such as cloud movement or wind ramping. Penalizing generators for these natural variations is not a measure of discipline — it is a penalty on physics. Hence, equating variable sources with dispatchable ones through the X-factor will be detrimental to RE growth, discourage investment, and contradict global integration models.

5. Need for Grandfathering of Existing Projects

Any tightening of the DSM framework must be implemented prospectively and not retrospectively applied to operational projects. Existing renewable projects were bid, financed, and contracted under a different regulatory regime, often with fixed PPAs and without provisions to pass through DSM penalties.

If new, stringent penalties are applied retrospectively:

- Financial models will be destabilized.
- Projects will face cash flow shortfalls and risk turning into non-performing assets (NPAs).
- Investor and lender confidence in India's renewable market will be severely eroded.

Prospective implementation ensures that future projects can transparently factor DSM provisions into their bids and tariffs, while protecting the financial stability of existing investments — a cornerstone of regulatory certainty and contractual sanctity.

6. Narrowing tolerance band will increase the tariff of future renewable energy projects and would be contrary to the intent of consumer protection:

By narrowing the tolerance bands for permissible deviations, the DSM regulations unfairly penalize renewable generators for natural and unavoidable variability in wind and solar generation. Even with the most advanced forecasting tools, weather-driven fluctuations cannot be eliminated, and holding generators to artificially tight limits sets them up for failure. The resulting penalties expose projects to extreme and unpredictable revenue risks, undermining the very financial models on which they were built. Investors and lenders, in turn, factor these risks into higher cost of capital, which directly raises the tariff of future renewable energy projects. This exposes projects to extreme revenue risks, raises financing costs, and ultimately translates into higher consumer tariffs, contrary to the intent of consumer protection. This is counterproductive to India's goal of delivering affordable green power and, paradoxically, burdens consumers with higher costs in the name of protecting them. Instead of achieving fairness, stringent bands shift systemic balancing costs onto individual developers, making projects economically fragile and discouraging new investment. A balanced approach with wider, realistic tolerance bands would maintain grid discipline while ensuring financial sustainability, investor confidence, and consumer affordability.

7. Limited Basis of Impact Assessment

The impact analysis presented in support of the proposed DSM revision appears to rely on only 41 weeks of data (16 Sept 2024 – 29 June 2025) and excludes the monsoon months, which are the most challenging for solar and wind generation due to frequent weather disturbances.

Such limited analysis does not represent the true variability and operational challenges faced by RE projects. A comprehensive, year-round dataset including the monsoon period must be analyzed before implementing any tightening of DSM norms to ensure the regulations reflect realistic operational conditions.

8. International Best Practices in Managing Variability

Globally, the responsibility of managing renewable variability rests primarily with the system operator, not individual generators. Advanced power systems in Europe, North America, and Australia handle deviations through:

- Ancillary service markets,
- Flexible generation, and
- Grid-scale storage mechanisms,

rather than punitive settlement regimes. This collective, system-level approach ensures grid stability while supporting continued renewable investment. India's DSM reforms should therefore focus on strengthening ancillary services and flexibility mechanisms, not penalizing individual projects for uncontrollable fluctuations.

9. Sudden and unforeseen weather changes to be treated as Force Majeure and not to be subject to penalties:

Sudden and unforeseen weather changes — such as abrupt cloud cover, wind speed fluctuations, or cyclonic disturbances — are entirely beyond the control of renewable energy generators and cannot be accurately predicted even with state-of-the-art forecasting tools. Treating such events as deviations liable for DSM penalties unfairly punishes generators for natural phenomena over which they have no operational influence. In line with established principles of contract law and risk allocation, these events should be recognized as force majeure conditions, and renewable projects should be exempt from the application of penalties during such periods. This approach not only reflects fairness but also preserves the financial viability of projects, ensures investor confidence, and aligns India's regulatory framework with global best practices, where uncontrollable weather-related deviations are treated as system-level balancing responsibilities rather than generator liabilities.

10. Need for Immediate implementation of Revised Schedules During Force Majeure Events

Under the present DSM framework, a revised schedule becomes effective only from the 8th time block (two hours later). For renewable projects, this rule is impractical. During sudden weather events, output changes instantly, and generators promptly inform the system operator. However, maintaining the old schedule for two additional hours causes unavoidable penalties for uncontrollable deviations.

It is proposed that, during Force Majeure or weather-related events, the revised schedule take effect from the immediately succeeding time block. This modification would:

- Align with operational realities of variable RE generation;
- Encourage transparent and timely communication with load despatch centres; and
- Harmonize India's DSM framework with global best practices (e.g., ENTSO-E, AEMO, CAISO), which permit real-time or next-interval schedule revisions.

9. Conclusion and Recommendations

The renewable energy sector remains committed to maintaining grid reliability and discipline. However, the proposed DSM tightening risks undermining that very objective by introducing disproportionate financial stress on variable renewable projects.

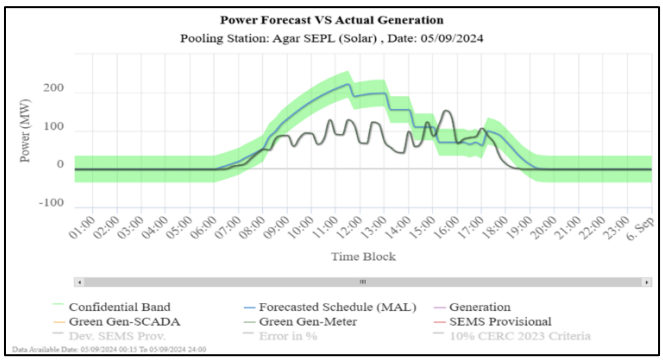
To ensure a fair, sustainable, and globally aligned DSM framework, the following measures are strongly recommended:

1. Wider tolerance bands reflecting the natural variability of RE generation.
2. Capped penalties to prevent excessive financial impact.
3. Prospective implementation for new projects only.
4. Comprehensive impact study covering all seasons, including monsoon months.
5. Explicit exemptions for uncontrollable weather and Force Majeure events.
6. Immediate applicability of revised schedules during Force Majeure events.
7. System-level management of variability through ancillary services and flexibility markets.

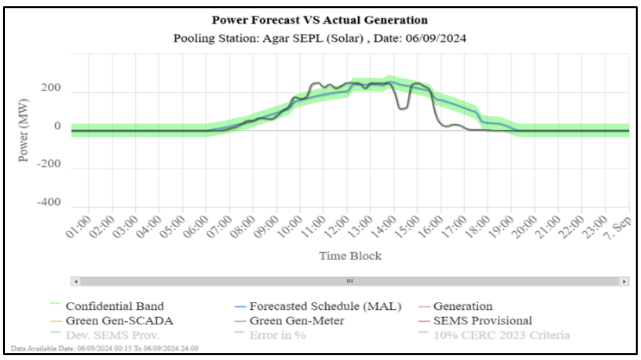
Adopting this balanced approach will safeguard project viability, maintain investor confidence, and ensure affordable consumer tariffs, while keeping India firmly on course toward its clean energy goals of 500 GW renewable capacity by 2030.

Anenxure-1: Instances of cloud coverage on a 350 MW Solar plant and impact on forecasting.

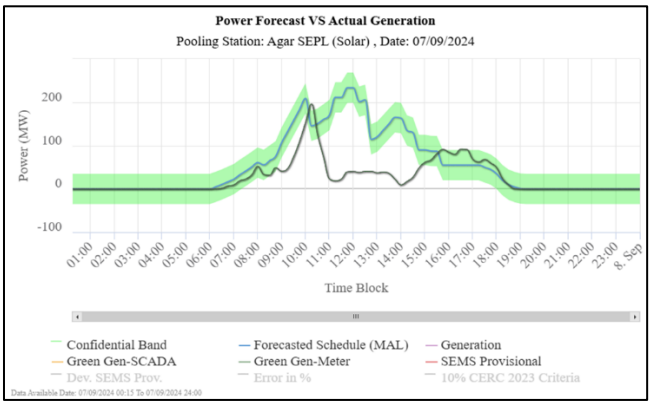
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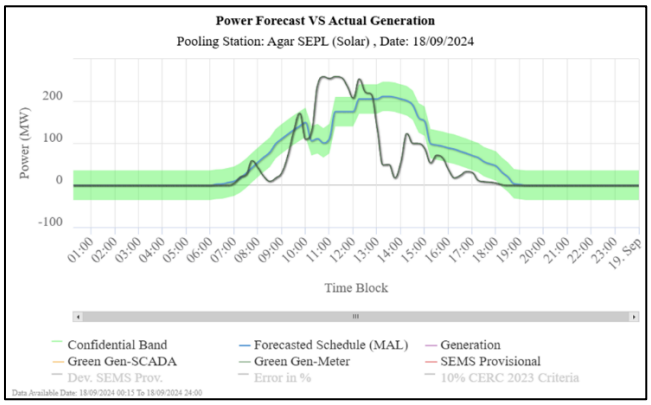
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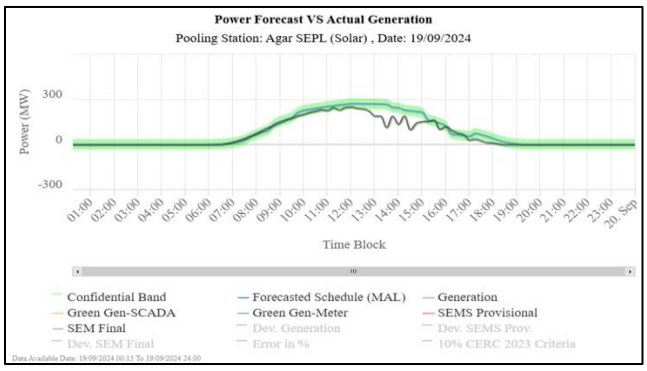
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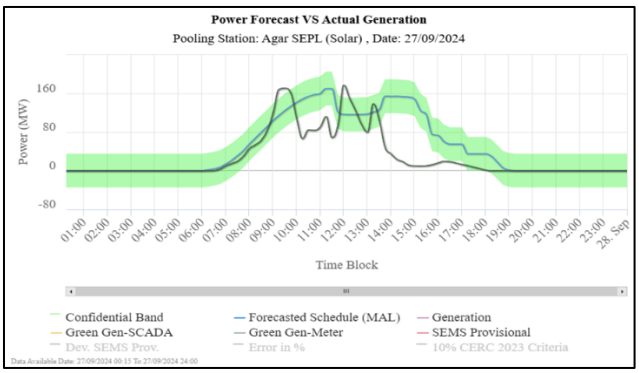
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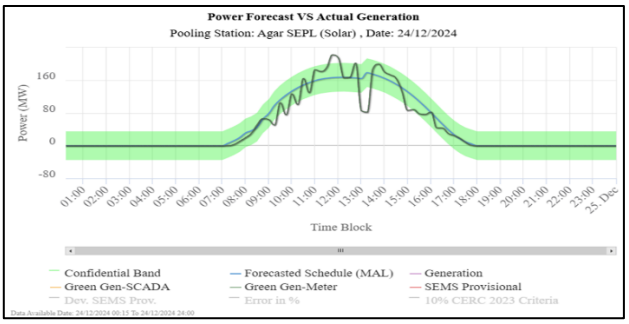


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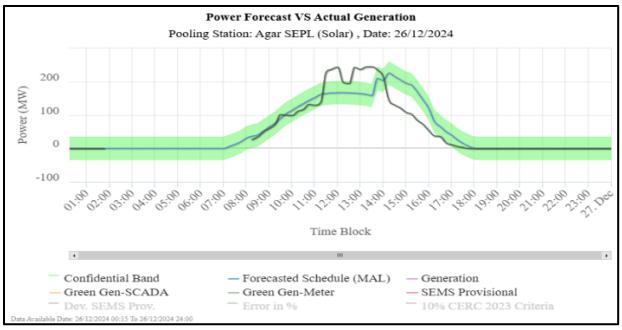


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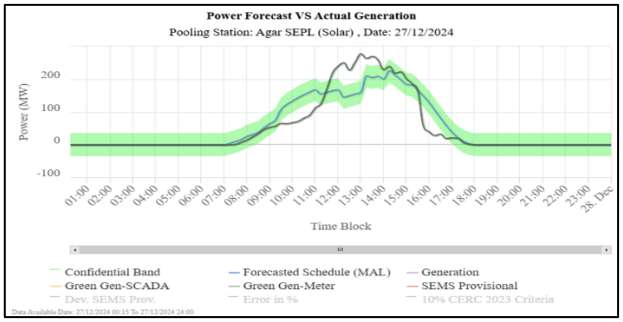
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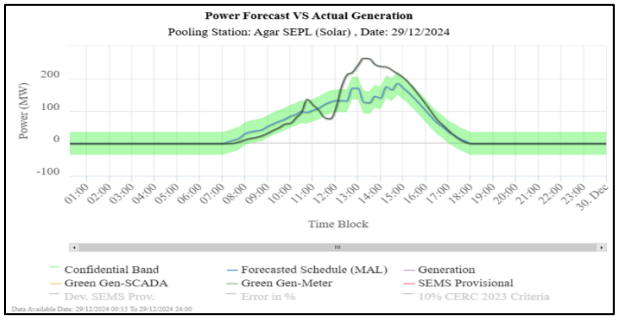
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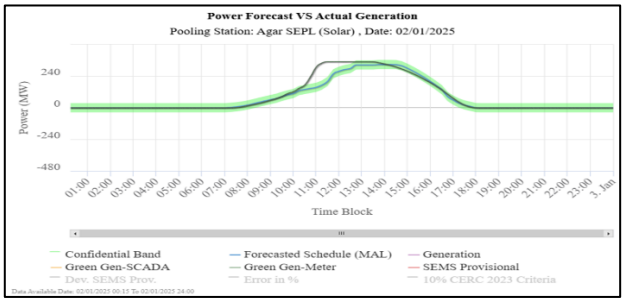


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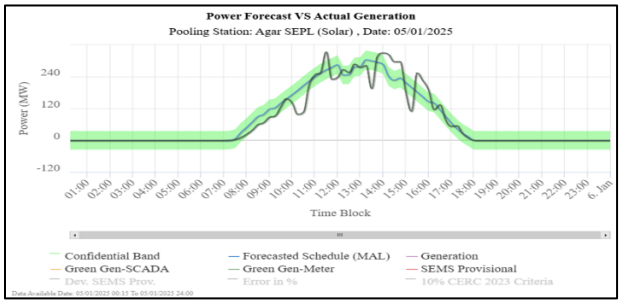


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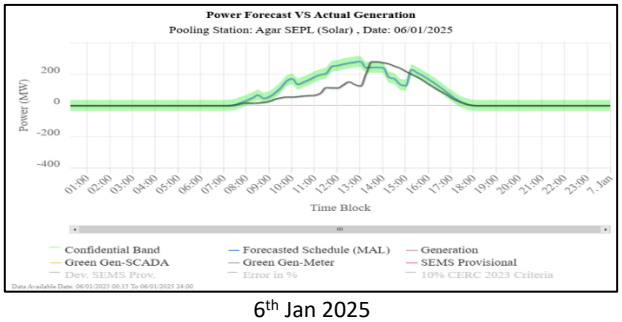
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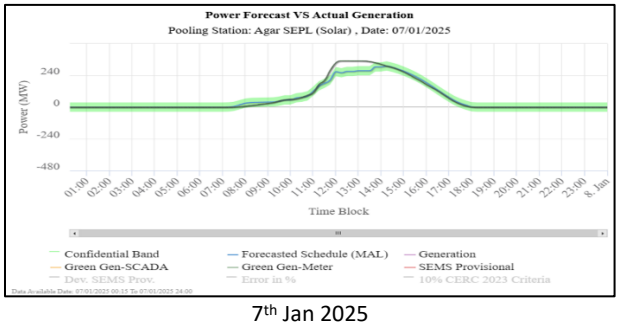
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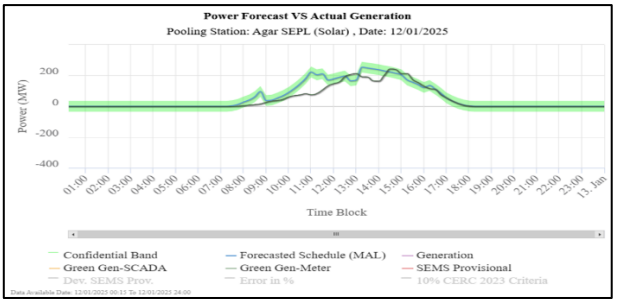
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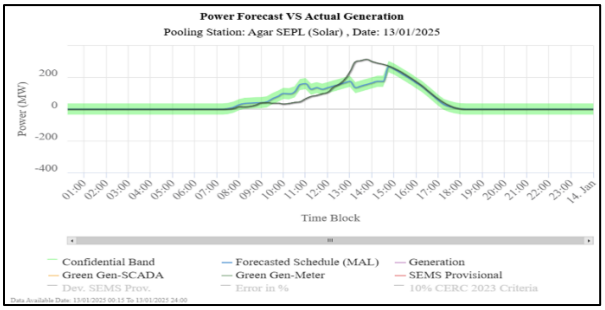
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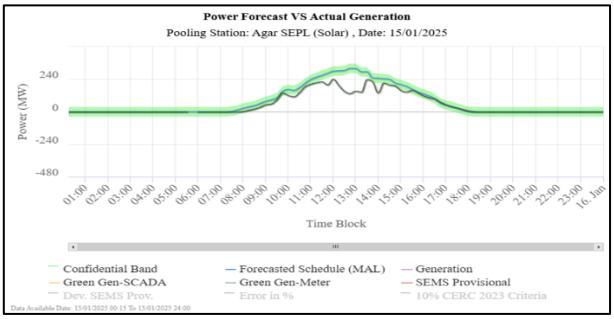
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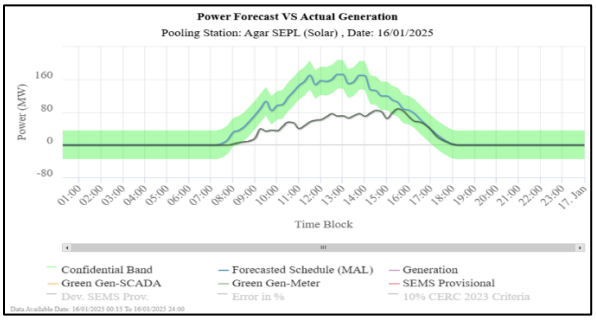
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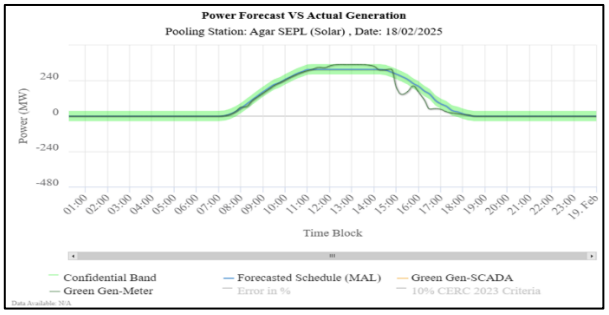


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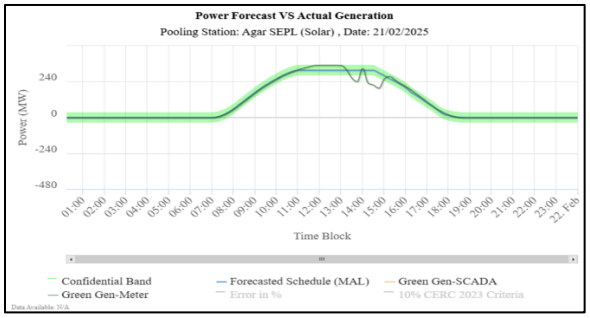


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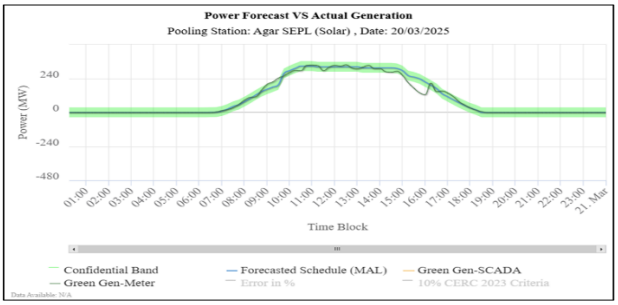


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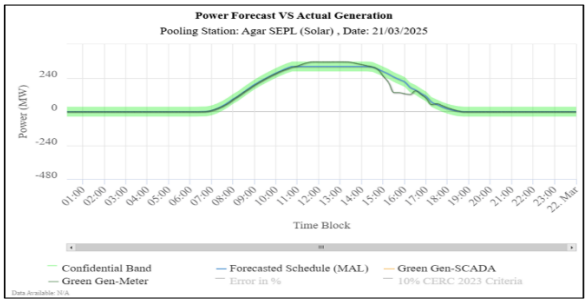


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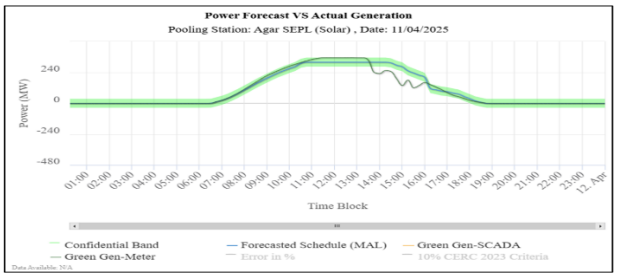


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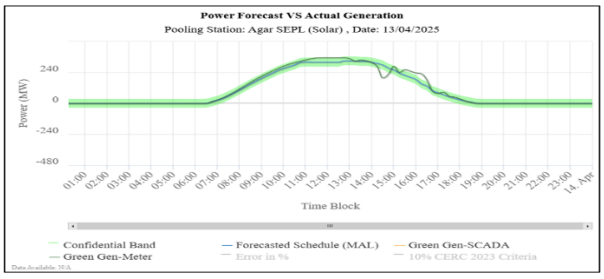


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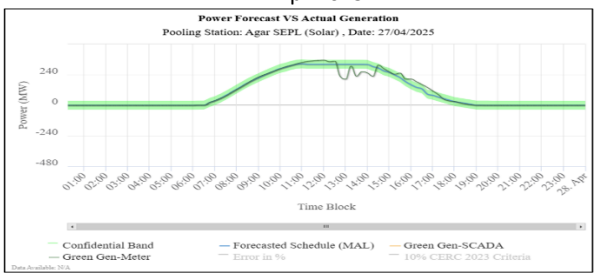
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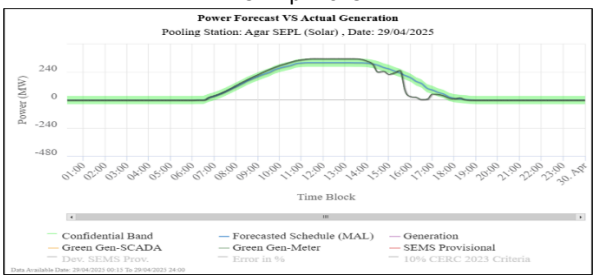
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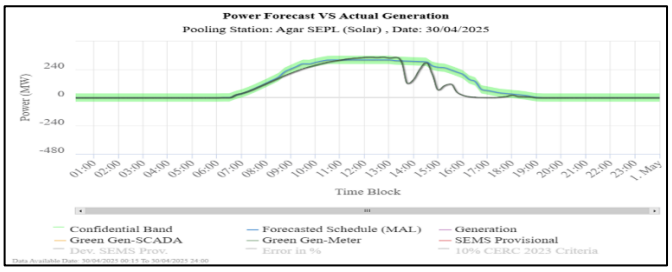
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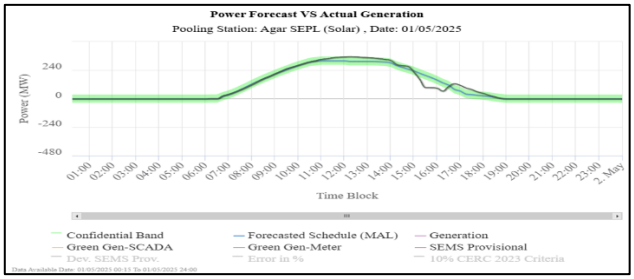


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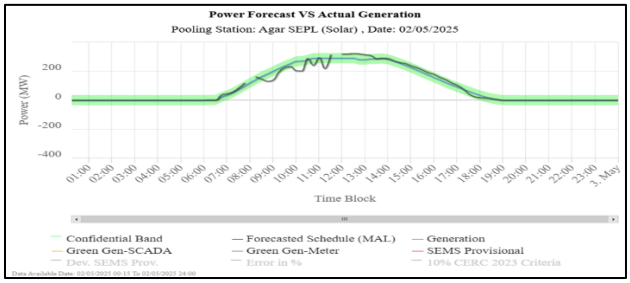


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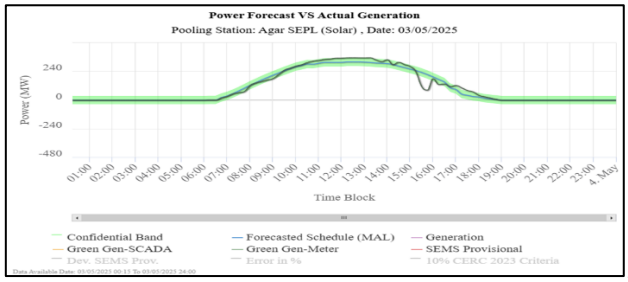
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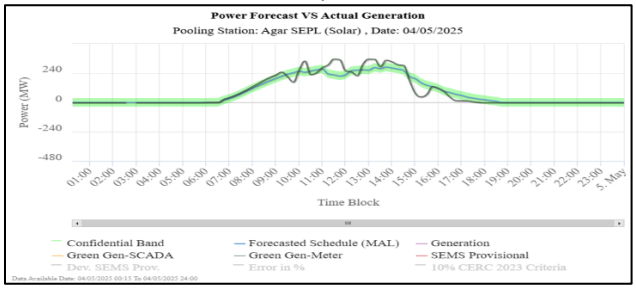
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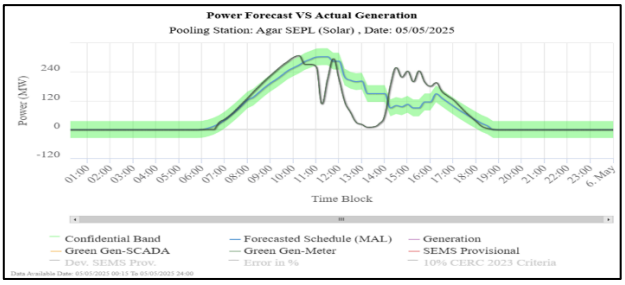
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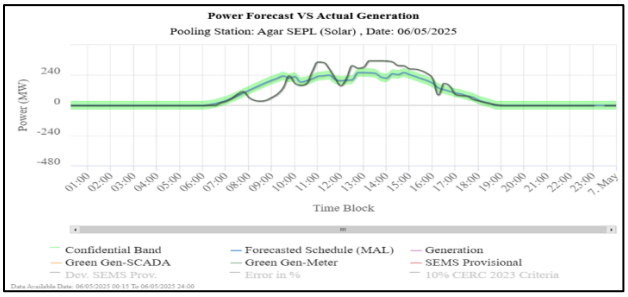
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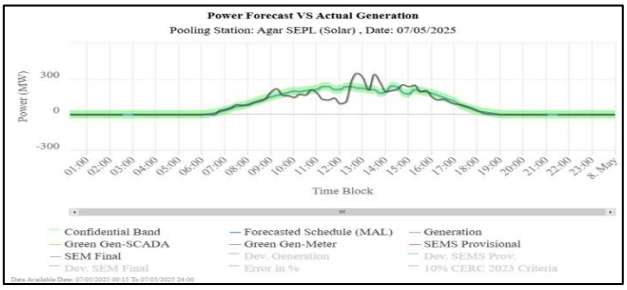
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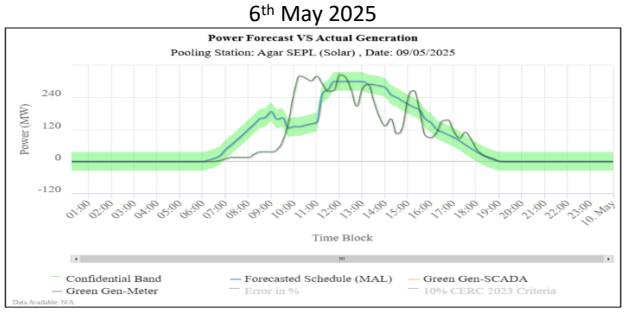
5th May 2025



6th May 2025



7th May 2025



9th May 2025

Table below summarises the impact of revenue loss **exclusively due to** above shown unpredicted cloud movement across several days in the pooling station of above referred 350 MW Solar project. *(Note: These instance are only select instances and DSM penalties on account of other events, monsoon season vagaries, outages etc., are over and above this revenue loss)*

Date	Existing revenue loss due to cloud cover (OI+DSM loss) (INR)
05-Sep-24	3,33,629
06-Sep-24	2,03,200
07-Sep-24	4,75,499
18-Sep-24	4,24,769
19-Sep-24	2,12,580
27-Sep-24	4,60,403
24-Dec-24	50,131
26-Dec-24	2,54,257
27-Dec-24	2,67,836
29-Dec-24	2,09,943
02-Jan-25	2,62,885
05-Jan-25	1,83,437
06-Jan-25	6,81,903
07-Jan-25	1,24,141
12-Jan-25	2,38,631
13-Jan-25	4,24,651
15-Jan-25	3,85,398
16-Jan-25	3,86,606
18-Feb-25	1,22,575
21-Feb-25	96,175

Date	Existing revenue loss due to cloud cover (OI+DSM loss) (INR)
20-Mar-25	71,042
21-Mar-25	86,668
11-Apr-25	2,19,508
13-Apr-25	50,081
27-Apr-25	1,24,758
29-Apr-25	2,55,083
30-Apr-25	6,35,606
01-May-25	78,044
02-May-25	38,360
03-May-25	91,223
04-May-25	2,87,368
05-May-25	8,62,727
06-May-25	5,90,989
07-May-25	3,33,574
09-May-25	9,23,723
11-May-25	12,83,208