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To,

Date: October 06, 2021

The Secretary,
Central Electricity Regulatory Commission,
Chandralok Building,
Janpath, New Delhi

Subject: Comments on the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021

Respected Sir,

At the outset, we would like to congratulate CERC for notifying the draft Deviation Settlement Mechanism (DSM) and Related Matters Regulation. With a regular increase in the inter-regional capacity, specially the renewable ones, these regulations shall guide all inter-regional entities in optimizing their generation and demand, thereby contributing in better grid management.

REConnect Energy, over the years, has been contributing to the best of its abilities as the largest Forecasting and Scheduling agency in the country with more than **14,000 MW** capacity of wind and **7,000 MW** capacity of solar farms across **10 States** in India under its portfolio. We are the largest Qualified Coordinating Agency (QCA) in the states of Karnataka, Rajasthan, Madhya Pradesh. We have been successfully delivering our Forecasting services to all major private IPPs and PSUs having renewable energy assets. Many of these IPPs also have assets connected to the ISTS network and shall fall under the proposed regulation.

We hereby submit our comments on the draft regulation. We are hopeful that our inputs shall be considered while finalizing the regulation.

With Regards,

Vibhav Nuwal
Director

Our submission on the draft regulations are as listed below:.

Clause 5: Adherence to schedule and deviation

While it is understood that for better grid management and stability, the entities should adhere to the schedules submitted by them. However, in case of wind and solar generation, this is practically not possible as the generation is highly intermittent. Also, while the ancillary market addresses the concerns of the inter-regional entities on a real-time basis, it is requested that unless the market matures in a year or so, a trial period of six months should be provided to make all concerned stakeholders understand the market, deviation bands and energy settlement in a better way.

Clause 7: Normal Rate of Charges for Deviations

As stated for the initial one year from the date of effect of these regulations, the normal rate of charges for deviation shall be the highest of:

- Weighted average ACP of Day-Ahead Market of all Power Exchanges
- Weighted average ACP of real-time markets of all Power Exchanges
- Weighted Average Ancillary Service Charge of all the regions

It is again requested that an initial trial period of six months should be provided before implementing the changes as these regulations will have a direct commercial impact on the concerned stakeholders.

Clause 8: Calculation of Deviation

Original Clause: (1) Charges for deviation in a time block by a seller shall be payable by such seller as under:

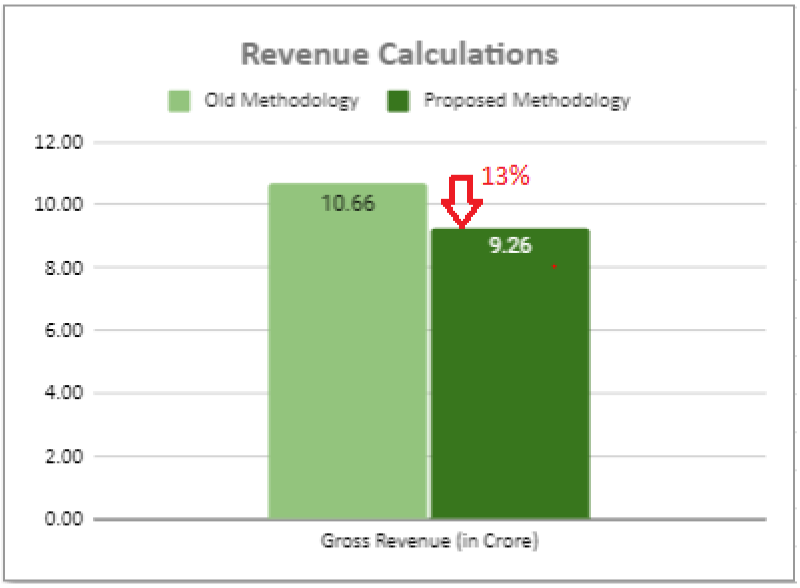
Entity	**Charges for deviation payable to Deviation and Ancillary Service Pool Account**	
Seller	**Deviation by way of over injection**	**Deviation by way of under injection**

For WS (Wind or Solar) seller	Zero	(i) Zero up to 10% Deviation-WS seller (in %); (ii) @ 10% of the normal rate of charges for deviation beyond 10% Deviation-WS seller (in %): Provided that such seller shall pay back to the Deviation and Ancillary Service Pool Account for the total shortfall in energy against its schedule in any time block due to under injection, (a) at the contract rate at which it has been paid based on schedule, or (b) in the absence of a contract rate at the rate of the Area Clearing Price of the Day Ahead Market for the respective time block.

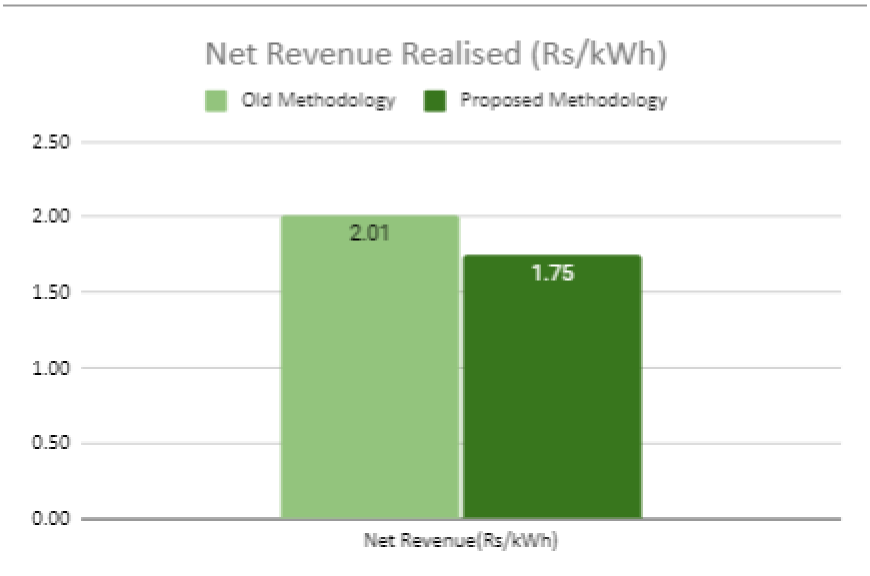
In case of under-injection, the band has been revised to 10% (from the current +/- 15% permissible) where the wind or solar generators are exempted from paying the deviation charges. While the forecasting tools and models have evolved over the last 5-6 years and there has been significant improvement in terms of accuracy, it has been observed that there are still many instances of weather-related events in a year, which are very short-lived and despite being taken care of by way of introducing intra-day revisions, result in deviation, thereby impacting the revenue of the generators. Hence, it is requested that the permissible band for wind and solar projects should be allowed to continue at +/- 15% only. Also, in the next 2-3 years, there will be significant capacity addition of wind and solar ISTS projects, thereby helping both the Forecasters and developers further optimize their models. The 10% band can be implemented in the next stage then.

To understand the impact better, we have created a case study taking the data of an ISTS wind project [Current Capacity= 200 MW] for a period of one year and normal rate of deviation based on the IEX Area Clearing Price (ACP) of Day Ahead Market (DAM) & Real-Time Market (RTM) for the same period.

On comparing the results for the existing and the proposed methodology, we observed that the proposed methodology will have a significant impact on the revenue of the renewable projects and will make the projects unviable. A brief analysis of the impact is depicted in the graphs below:



As visible in the above graph there is a significant drop in the Gross revenue generated for the plant, the approximate reduction in Gross Revenue is about 13%.



The PPA rate for the current project is Rs. 2.03/kWh, as per the old methodology the Net Realized Revenue was @Rs. 2.01/kWh and for new methodology Net Realized Revenue reduces further to @Rs. 1.75/kWh, which would make most of the projects unviable for operation.

Also, this will promote the RE generators to over-schedule as there is no incentive to over-generate but the generators will have a lesser DSM impact in such cases. Thus, this will have a major impact on the overall grid stability.

In case more data to support the impact on renewable projects is required, we shall be happy to work with the CERC Team on the same.

Clause 9 (7): Deficit in Deviation and Ancillary Service Pool Account of a region

It is mentioned that in such a case, the surplus amount in the Deviation and Ancillary Service Pool Account of other regions shall be used for payment as per Clause 6 of the regulation. It is requested that clarification be provided that the inter-regional entity will receive payment from its nodal /RLDC or from some other.

Clause 12 Power to Remove Difficulty

It is requested that in case of an application filed by an affected party, a tentative timeline for addressing the difficulties faced shall be provided as the deviation charges have a direct impact on the revenue of any generator.