

CRef. No.-MAL/DEL/2024/0018

Dated: 24th May, 2024

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

**Subject:** Comments and Suggestions on the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 (hereinafter referred to as "**Draft Regulation**").



Respected Sir,

We, Manikaran Analytics Limited, are engaged in providing the services of Forecasting, Scheduling and Deviation Settlement Mechanism in various states and are acting as a QCA for major renewable energy generators including both wind and solar, all across the country. Further, we are also involved in providing forecasting services for CTU connected renewable energy projects, accordingly, we have few comments and suggestion on the Draft Regulation provided on your web-site.

This is in reference to the above cited subject and we as a concerned party and a stake holder have few comments and suggestion on the Draft Regulation provided on your web-site. Accordingly, please find the Comments and Suggestions on the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024.

We shall be grateful if this Hon'ble Commission considers our succinctly drafted comments and suggestions in this regards and the same are attached herewith for your perusal.

Thanking You,  
For and on behalf of **Manikaran Analytics Limited**  
Regards,

  
  
(Authorized Signatory)

**Comments and suggestions on the Central Electricity Regulatory  
Commission (Deviation Settlement Mechanism and Related Matters)  
Regulations, 2024:**

**1. In reference to Regulation 3(J) (Contract Rate) of Draft Regulation:**

‘Contract rate’ means the tariff for sale or purchase of power, as determined under Section 62 or adopted under Section 63 or approved under Section 86(1)(b) of the Act by the Appropriate Commission or the price as discovered in the Power Exchange, as the case may be; and in the absence of a tariff or price as above, contract rate shall mean the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block;

**Comments and suggestions:**

- A. The definition of Contract Rate as in Regulation 3 (J) creates confusion as it is mentioned that tariff discovered as per Section 62 or adopted under Section 63 or approved under Section 86(1)(b) of the Act by the Appropriate Commission or the price as discovered in the Power Exchange will be considered as Contract Rate but it is also mentioned that in the absence of a tariff or price, contract rate shall mean the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block. As Power Exchange has a uniform clearing price for different market segments, we would like to seek clarity on which price Hon’ble Commission is referring here.

**Suggested clause:**

*‘Contract rate’ means the tariff for sale or purchase of power, as determined under Section 62 or adopted under Section 63 or approved under Section 86(1)(b) of the Act by the Appropriate Commission; and in the absence of a tariff or price as above, contract rate shall mean the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block;*

**2. In reference to the table provided under Regulation 8(4) (charges for deviation) of Draft Regulation:**

**Comments and suggestions:**

- B. As mentioned the charges for the Deviation with respect to WS Seller or Hybrid of wind-solar resources will be settled through QCA but at regional level registration procedure of QCA or procedure of aggregation has not been

established yet. Therefore it is requested to Hon'ble Commission that to implement the Aggregation at ISTS level after the procedure is finalized and then bring the QCA in the ecosystem of settlement of deviation charges at regional level.

- C. We would like to apprise that as per Explanatory Memorandum the Hon'ble Commission has stated that as IEGC, 2023 has provided for aggregation at the pooling station for inter-state wind and solar generating stations, the Hon'ble Commission felt the need to modify the tolerance band for wind and solar generating stations. But there is no clarity regarding the imposition of DSM charges if any particular Wind or Solar project does not wish to be a part of aggregation. In such case we seek clarity about the implementation of DSM band for that particular project because commission's analysis of reduction of deviation percentage in case of aggregation does not seem to be viable in this case.
- D. We would like to apprise that as per Explanatory Memorandum the Hon'ble Commission has stated that another reason behind shrinking the deviation band is the tendency on the part of WS sellers to over-schedule and under-inject due to asymmetrical nature of the existing deviation bands. To address this concern, the Hon'ble Commission recommended symmetrical deviation charges within the recommended volume limits. But this sudden shrinking of deviation bands is having higher impact on Wind and Solar Generators in terms of revenue. As explained in Annexure I and II. On this context we would like to suggest a more neutral Deviation band which will address the asymmetry of the existing Deviation band and reduce the impact of Deviation on revenue. It will also address our concern for the Wind and Solar Projects which does not form part of Aggregation. Please refer Annexure III and IV for the suggested bands and their impact.
- E. We would like to bring your kind attention to regulation 8(4)(a) and 8(4)(c) and point 8 (k) of draft of 'Detailed Procedure for aggregation of pooling station for the purpose of combined scheduling and deviation settlement through Qualified Co-ordinating Agency (QCA) for wind or solar or renewable hybrid generating stations that are regional entities' which explains the de-pooling mechanism of deviation charges among the generators. As understood the DSM at ISTS level is not an isolated component rather it is a part of overall payable/receivable amount. Hon'ble commission has not given any clear directives on how the total payable or receivable amount will be calculated in case of aggregation and how that amount will be de-pooled among the generators at their individual level if there are multiple contract rates.

**Other Suggestions:**

a) Hon'ble Commission suggested to keep the deviation band for wind-solar hybrid projects as per the deviation band of solar generation but in case of wind solar hybrid because of its wind components deviation is higher which is why the deviation band of wind generation should be applied.

Or

Hon'ble Commission can also consider to calculate DSM as per the deviation band of source (Wind or Solar) which has higher installed capacity. For the sake of clarity, in case in a wind-solar hybrid project the installed capacity of Wind component is more than the Solar component then deviation band of Wind shall be considered for calculation of deviation error and vice versa.

### **3. In reference to the sub clauses and table provided under Regulation 8(6) (charges for deviation) of Draft Regulation:**

#### **Rationale:**

We would like to apprise this Hon'ble Commission that one of the purposes of installing energy storage system ("ESS") which is co-located with WS sellers is to reduce the variability of the wind-solar technology and make the grid more stable. Now if, these two technologies are treated separately then this use case of installing an ESS will be lost.

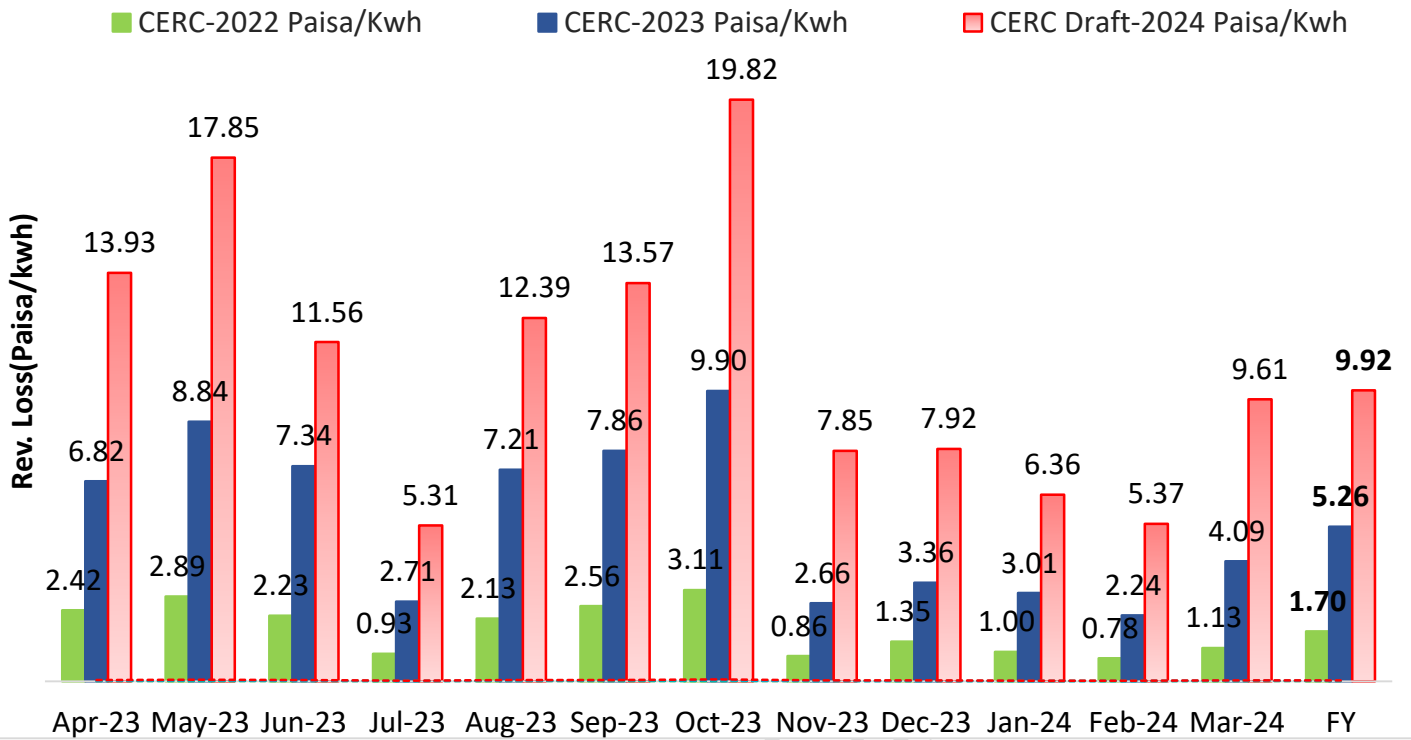
Moreover, as hon'ble commission has proposed for separate schedule for wind solar technology and ESS, as the case may be, we humbly apprise that if during real time generation in night hours, battery is providing real time support to meet the load and actual energy injection at injection point is remaining same and grid stability is being maintained, then there should not be any necessity of treating their deviation separately. And avoiding penalizing the generators without any disturbances at inject point.

#### **Suggestions:**

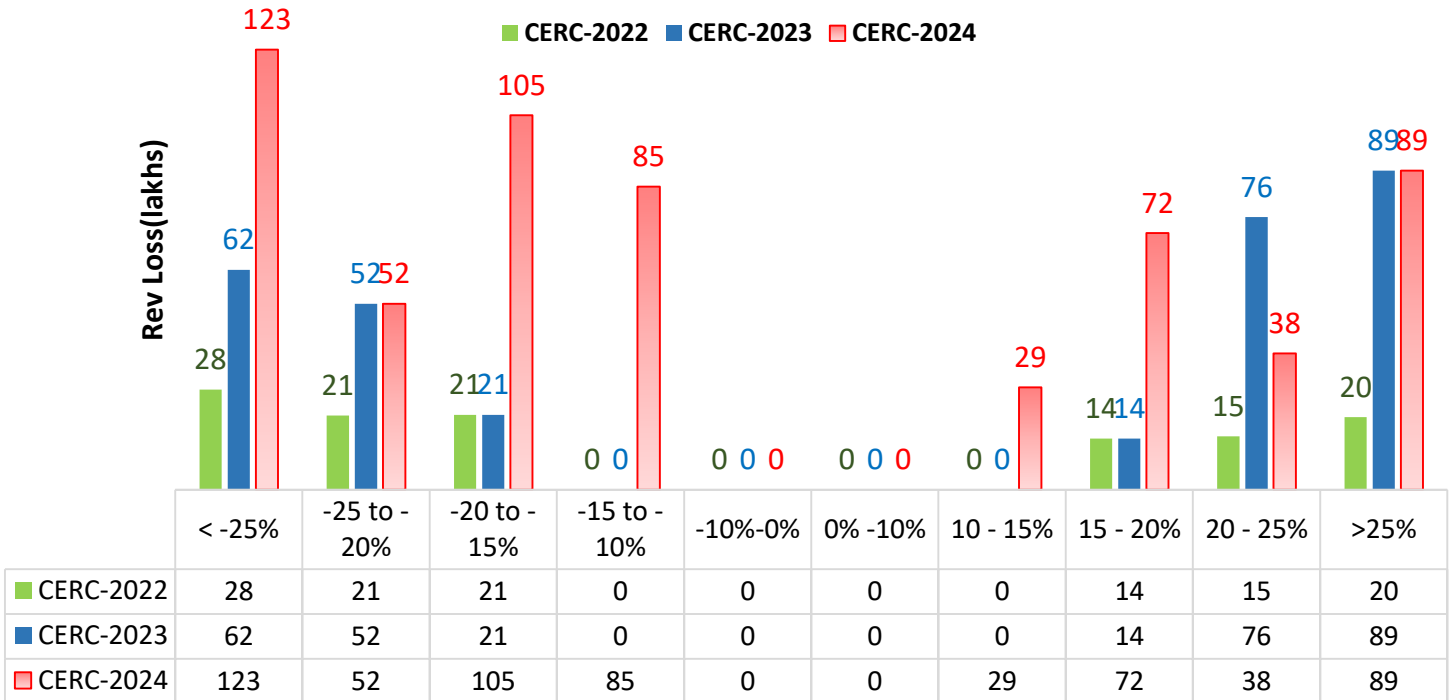
So the deviation of ESS co-located with WS sellers should be at par with WS deviation band.

### Annexure I -For Wind PSS, Installed Capacity 250 MW, Southern India

#### DSM impact of CERC regulations

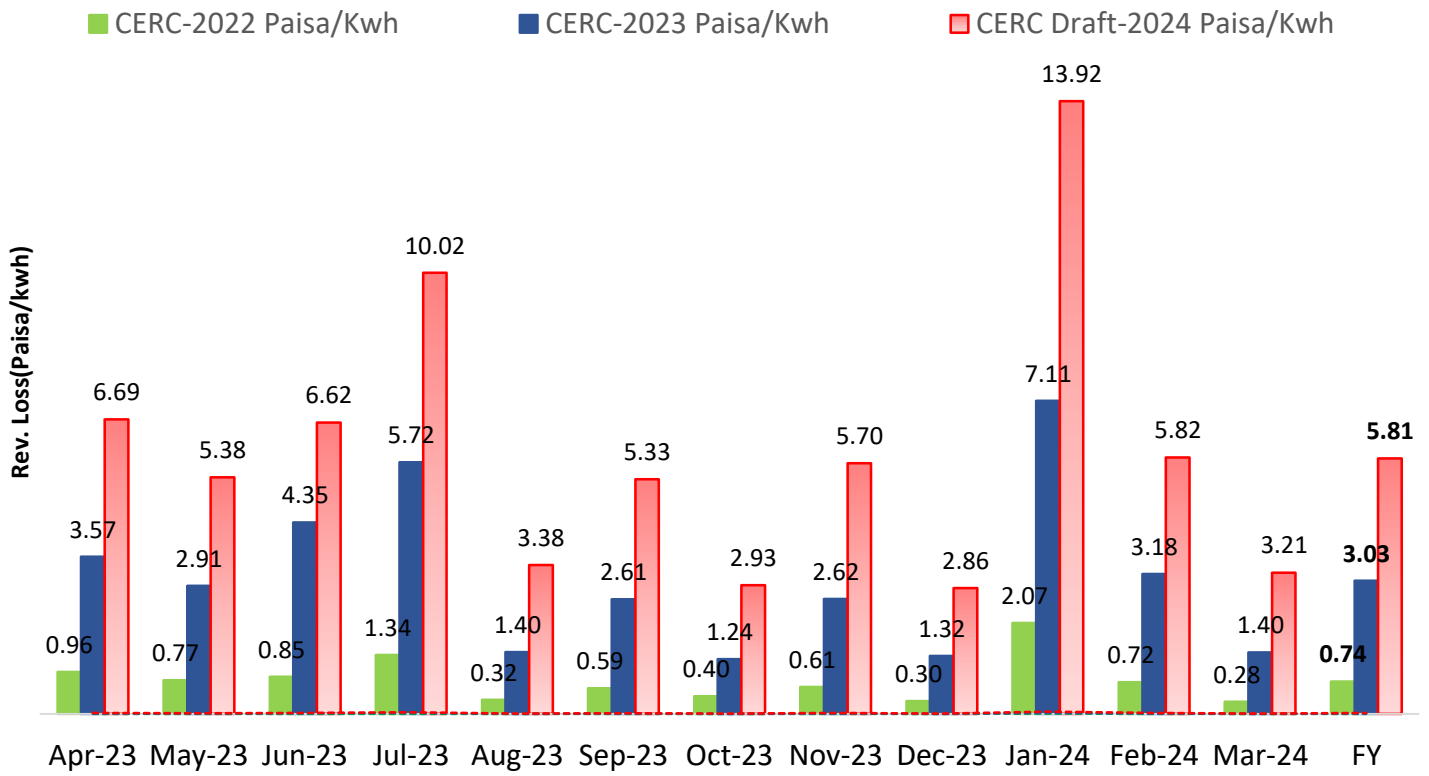


#### Deviation level comparison

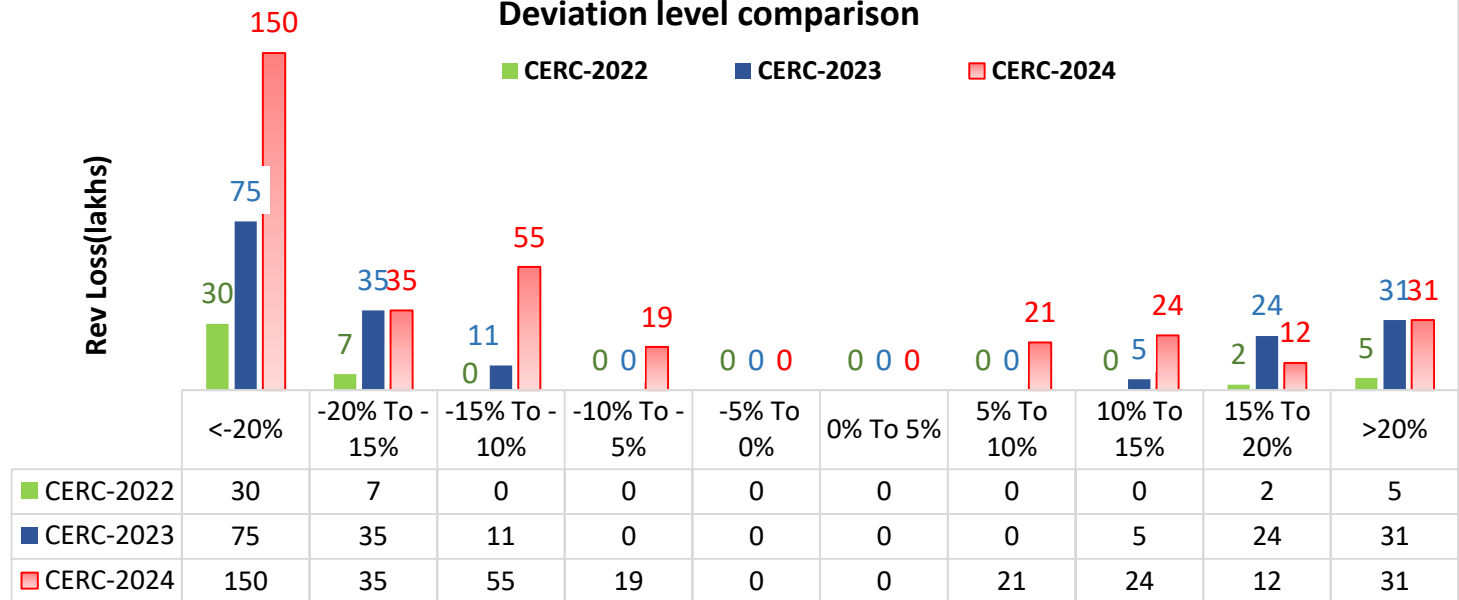


## Annexure II- For Solar PSS, Installed Capacity 250 MW, Southern India

### DSM impact of CERC regulations



### Deviation level comparison

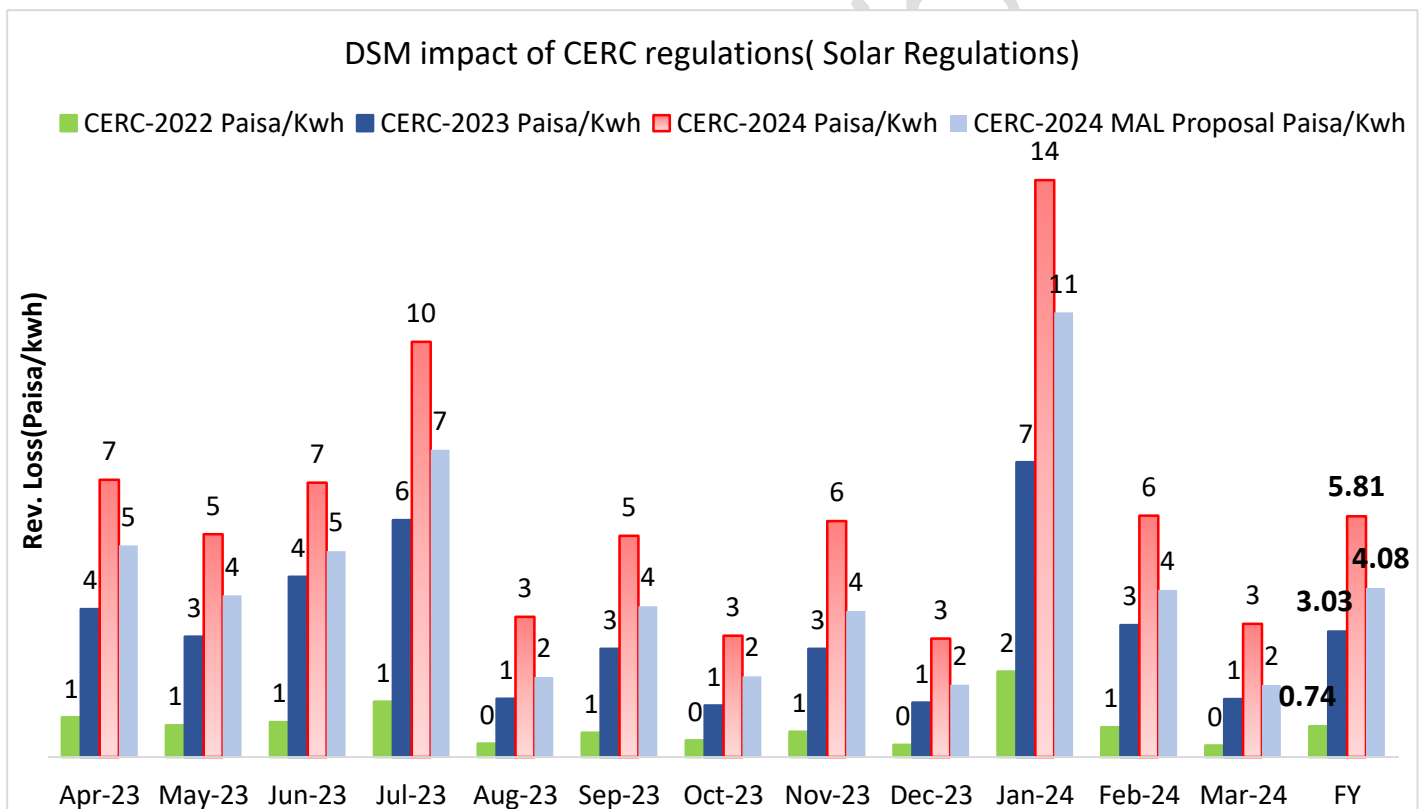


From the above analysis of last FY it can be seen that impact of the deviation on the revenue loss has been doubled in terms of paisa per unit calculation as compared to what it is in existing practice as per the suo-muto order published on 06/02/2023, which is going to create a huge financial loss for the RE generators.

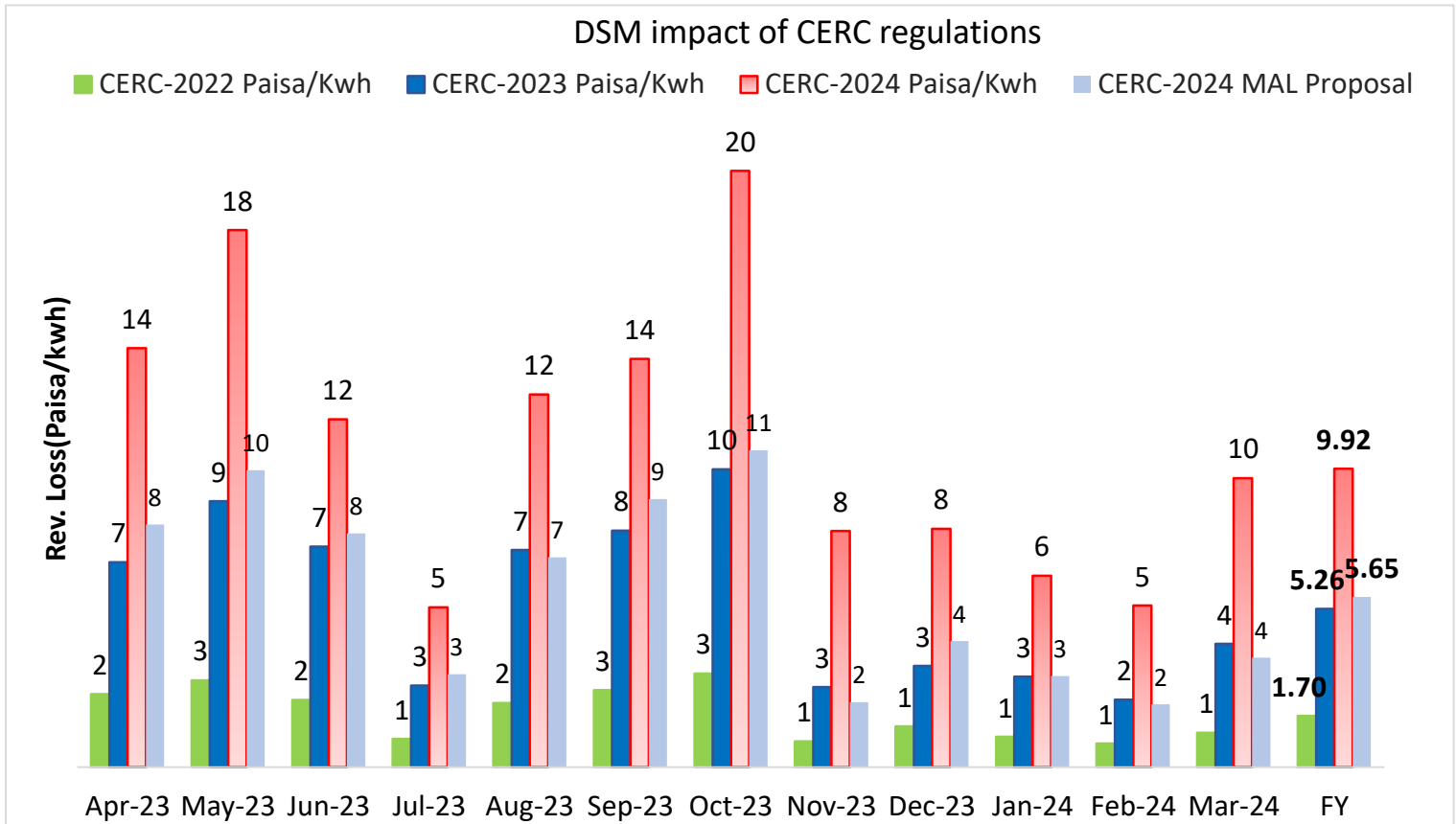
### Annexure III-

WS Seller	Volume Limit
A generating station based on solar or a hybrid of wind-solar resources or aggregation at a pooling station	VLwS (1) = Deviation up to 10 % DWS
	VLwS (2) = Deviation beyond 10% DWS and up to 15% DWS
	VLwS (3) = Deviation beyond 15% Dws and up to 20% DWS
A generating station based on wind resource	VLwS (1) = Deviation up to 15% DWS
	VLwS (2) = Deviation beyond 15% DWS and up to 20% DWS
	VLwS (3) = Deviation beyond 20% Dws and up to 25% DWS

For Solar PSS, Installed Capacity 250 MW, Southern India-



**Annexure IV-** For Wind PSS, Installed Capacity 250 MW, Southern India



From the above analysis it is pretty much evident that, if commission considers our suggestion, the impact on generators in terms of revenue will be lesser as compared to what commission has suggested in the draft regulation and also the symmetric nature of the deviation band will be maintained.