

From  
Chief Engineer,  
APSLDC,  
Vidyut Soudha,  
Gunadala  
Vijayawada- 520 004.

To  
The Secretary,  
Central Electricity Regulatory Commission  
7th floor, Tower B, World Trade Center  
Nauroji Nagar, New Delhi-110029  
Ph: 91-11-23353503,  
Email: info@cercind.gov.in

LrNo.CE/SLDC/SE/GO/DEPPMO/DEE3/AEE/F.DSM/D.No. 215 /24,Dt. 22 .05.2024

Sir,

**Sub:** APSLDC – Comments on Draft regulations in Deviation Settlement Mechanism (DSM) & related matters specified in Draft Notification published by the Hon'ble CERC, 2024 – Regarding.

**Ref. :**1) No. L-1/260/2021/CERC, Dt. 30.04.2024.

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With reference to Draft Notification published by CERC, APSLDC is hereby submitting the comments as below:-

**1. There shall be only one category for Renewable Energy Rich State:**

**APSLDC proposes that the deviation limit for Under drawl /Over drawl limit shall be 100MW+5% of RE installed capacity of state = VL**

Reason: There are many States having REs more than 40 to 50% of their installed capacity and their installation dispersed to large geographical area. Hence, the generation from Intra State RE sources are intermittent and unpredictable for the State. Therefore, it is very difficult to manage within in  $\pm 250$  MW due to intermittent RE generation.

**6. Computation of Deviation:**

In 6.2, the Deviation-WS seller (DWS) (in %) shall be as under:

Deviation-WS seller (DWS) (in %) =  $100 \times \frac{[(\text{Actual Injection in MWh}) - (\text{Scheduled Generation in MWh})]}{[100\% \text{ of scheduled generation in Mwh}]}$

Reason: India aims for 500 GW of renewable energy installed capacity by 2030. Hence, Grid Security is the major concern in respect of deviations in variable renewable energy generation. Schedule generation is the only criteria to be concerned for grid security irrespective of installed capacity.

## **7. Normal Rate of Charges for Deviations:**

In Normal rate of charge, there is need to provide cap. Hence, the following proviso shall be added:

***"Further provided that the normal rate is subject to a ceiling of 10 Rs per kWh".***

**Rationale:** In petition 04/SM/2023 (para 6), Hon'ble commission in public interest, directs all the Power Exchanges to re-design their bidding software for the period from 04.04.2023 until further orders, in such a way that the members can quote the price in the range of (a) Rs.0/kWh to Rs.10/kWh for all contracts, viz., DAM(including GDAM), RTM, Intra-day, Day Ahead Contingency and Term-Ahead (including GTAM); and (b) Rs.0/kWh to Rs.20/kWh in the HP-DAM segment. This in our view would reduce the cost of power for the buyers, while providing an opportunity to the high cost generators and the willing buyers to participate in the HP-DAM market.

## **2. Declaration of Duration of Force majeure event (To be added):**

**Declaration of Duration of Force majeure event** shall be decided by the Operation Coordination Committee of respective Regional Power Committee of CEA upon request of State LDC.

As per the IEGC-2010, the "Force Majeure" means:

Any event which is beyond the control of the persons involved which they could not foresee or with a reasonable amount of diligence could not have foreseen or which could not be prevented and which substantially affects the performance by person such being the following including but not limited to :-

- a) Acts of God, natural phenomena, floods, droughts, earthquakes and epidemics;
- b) Enemy acts of any Government domestic or foreign, war declared or undeclared, hostilities, priorities, quarantines, embargoes;
- c) Riot or Civil Commotion;
- d) Grid's failure not attributable to the person.
- e) ***Grid disturbance beyond control due to natural calamities such as cyclones, earthquakes etc. as decided by RPC***

In "Force majeure" event, it is very difficult to adhere the net drawl schedule strictly. In such condition, the deviations from net drawl schedule is uncontrollable despite of taking various measures. In IEGC – 2010 and its subsequent amendments or in the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014, there is no provision of declaration of "Force majeure" event as a grid disturbance, which leads to heavy penalties to the concern State subsequently to the State Discoms.

During such event, there is need to replace the drawl schedule of the affected entities with actual drawl to avoid penalty under DSM for the affected period.

### Comments in Normal Rate of Charges for Deviations:

The Andhra Pradesh State having installed RE capacity more than 8000 MW and their installation dispersed to large geographical area. The generation from Intra State RE sources are intermittent and unpredictable for the State. Therefore, it is very difficult to manage deviation within in  $\pm 250$  MW.

Further, all major RE rich States are having 40% portfolio of ISGS and 25 to 30% installation of RE. The regional entities are very much dependent on effect of change in revision in ISGS facilitated by RLDC for controlling the drawl. Because of introduction of Real Time Market and implementation of LPS rule, the flexibility of regulating Intra / Inter State generators are depleting.

Considering the above facts, APSLDC believes that the volume limits of buyer shall be as follows for RE rich State:

Buyer (being <b>RE rich state</b> )	$VL_B(1) = 100 + 5\%$ of RE installed capacity of state $VL_B(2) =$ Deviation beyond $VL_B(1) + 100$ MW $VL_B(3) =$ Deviation beyond $VL_B(2)$ MW
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Also, APSLDC suggest the following changes in the Charges for Deviation in respect of a Buyer:

#### Under drawl by the buyer::

1. For  $VL_B(3)$  limit, the under drawl by the buyer shall be receivable @ 50% of NR when  $f$  is between  $50.05 \text{ Hz} < f \leq 50.10 \text{ Hz}$ .
2. For  $VL_B(3)$  limit; the under drawl by the buyer shall be receivable @ 25% of NR when  $f$  is  $> 50.10 \text{ Hz}$ .

**Deviation by way of over drawl (Payable by the Buyer):**

Volume limit	Frequency range	Proposed provision in regulation	APSLDC suggestion
VL <sub>B</sub> (1)	49.90 Hz ≤ f < 50 Hz	for every decrease in f by 0.01 Hz, charges for deviation for such buyer shall be increased by 5% of NR so that charges for deviation become 150% of NR when f = 49.90Hz.	for every decrease in f by 0.01 Hz, charges for deviation for such buyer shall be increased by <b>2%</b> of NR so that charges for deviation become <b>120%</b> of NR when f = 49.90Hz.
VL <sub>B</sub> (2)	f ≤ 50.00 Hz;	@ 150% of NR	<ol style="list-style-type: none"> <li>1. 120% of NR when f in the range of 49.90 Hz ≤ f &lt; 50 Hz</li> <li>2. 150% of NR when f &lt; 49.90 Hz</li> </ol>
VL <sub>B</sub> (3)	f < 50.00 Hz	@ 200% of NR	<ol style="list-style-type: none"> <li>3. 200% of NR when f &lt; 49.90 Hz</li> <li>4. 150% of NR when f in range of 49.90 Hz ≤ f &lt; 50 Hz</li> <li>5. 75% of NR when f in range of 50.00 Hz ≤ f &lt; 50.05 Hz</li> <li>6. 50% of NR when f in range of 50.05 Hz ≤ f &lt; 50.10 Hz</li> <li>7. Nil when f ≥ 50.10 Hz</li> </ol>
	f ≥ 50.00 Hz	@ 110% of NR	

This is submitted for consideration.

Yours faithfully,

  
**Chief Engineer/APSLDC**