

## **Indian Chamber of Commerce Comments on CERC DSM Regulations 2024**

Kind Attn: **Mr Harpreet Singh Pruthi**

Secretary, CERC

Dear Mr Pruthi,

Greetings!

In reference to the draft CERC regulations issued on 30th April 2024, suggestions from the Indian Chamber of Commerce on the draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 (“DSM Regulations, 2024”) have been mentioned as “comments” below for your kind consideration.

### **BACKGROUND**

1. CERC notified the DSM Regulations 2014 with the objective to maintain grid discipline and grid security through control mechanism of settlement of deviations from the schedule by the users. The deviation charge was linked to grid frequency. These Regulations were amended on five occasions from 2014 to 2019. By the 4th Amendment in the year 2018, the deviation charge was linked to the ACP of Day Ahead Market and frequency.

2. The DSM Regulations 2022 made effective from 5.12.2022, aimed at ensuring that all grid connected entities adhere to the schedules and that the deviations should only be inadvertent to be managed by the system operator through deployment of Ancillary Services. The DSM was delinked to the grid frequency and the normal rate of charges for deviation was made equal to the Weighted Average Ancillary Service Charge. However, for a period of one year from the date of effect of the regulations, the charge would be equal to the highest of the weighted average ACP of Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary

Service Charge of all regions for that time block. For a general seller other than RoR generating station a margin of 2% in deviation was permitted within which the DSM rate was zero for over injection and reference charge rate for under injection. Margins for deviation for Wind Solar ("WS") Seller were also tightened. For buyers also the margins for deviation were tightened.

3. Difficulties were experienced after the implementation of the DAM Regulations,2022. The Deviation Charge Rates shot up, going up to Rs 40/kWh in some time blocks due to high cost of ancillary services deployed. The frequency regime deteriorated due to availability of limited reserves capacity and no passive control available due to delinking of DSM rate to frequency. The frequency regime of the grid also deteriorated. Modifications in the DSM rates were made by CERC by interim orders by exercising its powers to remove difficulties under the regulations.

4. By order dated 26.12.2022, CERC imposed a cap of Rs 12 per kWh on the Normal Rate of Charges for Deviations. Certain incentives/disincentives were introduced for over-injection/under-drawal at grid frequency at 50.05 Hz and above and for over injection at 49.90 Hz or below in a time block. By order dated 6.2.2023, CERC made further relaxations in the DSM Regulations 2022. The Normal Rate of Charges for Deviations was made equal to the higher of weighted average ACP of DAM and weighted average ACP of RTM of all Power Exchanges for that time block subject to a ceiling of Rs 12/kWh. The margins for deviations for the sellers were increased and some incentives/disincentives for the buyers and sellers were introduced when frequency in a time block was below 49.95 Hz or above 50.03 Hz to encourage participation of the buyers and sellers in controlling frequency.

5. In the draft DSM Regulations,2024 the difficulties experienced by DSM Regulations,2022 have been addressed by linking the charges for deviation to frequency and giving appropriate financial incentives/disincentives to the sellers and buyers to assist in maintenance of frequency and minimizing deviation from the schedule.

## SALIENT FEATURES OF DRAFT DSM REGULATIONS 2024 AND COMMENTS

6. A new term “Integrated Day Ahead Market” has been defined as a market where Day Ahead Contracts are transacted on the power exchanges, including Day Ahead Market (DAM), Green Day Ahead Market (GDAM) and High Price Day Ahead Market (HP-DAM).

7. The existing regulations define the Renewable Rich State as a State whose combined installed capacity of solar and wind generating stations under the control area of State is 1000 MW or more. It has now been proposed that RE rich State would be a State whose combined installed capacity of solar and wind generating stations under the control area of the State is 1000 MW and more but less than 5000 MW. A RE Super Rich State would be a State whose combined installed Capacity of solar and wind generating capacity is 5000 MW or more. The purpose of create a new category of RE Super Rich State is to allow higher volume limit for deviation to such States. This seems to in order as such States are likely to experience more variability in generation.

8. “Reference Charge Rate” has been defined as i) in respect of a general seller whose tariff is determined under section 62 or section 63 of the Act, Rs/kWh energy charge as determined by the Appropriate Commission, or ii) in respect of a general seller whose tariff is not determined u/s 62 or 63, the daily weighted average ACP of DAM segments of all the Power Exchanges, as the case may be.

Comments: Clause 13 of Regulation 8 stipulates that in case of multiple contracts, the contract rate or reference rate referred to in the Regulation shall be weighted average of the contract rates of all such contracts. It may be clarified how the untied capacity of a general seller which is partly or fully scheduled in DAM segments or RTM or Ancillary Services market will be accounted for calculation of the Reference Rate of such general seller.

9. It has been proposed that the Normal Rate (NR) of Charges for deviation for a time block shall be equal to the sum of 1/3rd of weighted average ACP of Integrated DAM segments of all Power Exchanges, 1/3rd of weighted average ACP of RTM segments of all power exchanges and 1/3rd of Ancillary service charge computed based on the total quantum of Ancillary Services deployed and net charges payable to Ancillary Service Providers of all the Regions. However, if there is no dispatch of

ancillary services in a time block or where net charges for ancillary services are receivable in the Deviation and Ancillary Service Pool Account, the Ancillary Service Charge shall not be considered for computation of NR and 50% weightage each shall be considered for ACP of Integrated DAM and ACP of RTM segments of all power exchanges.

Comments: Considering equal weightage to Integrated DAM, RTM and Ancillary Services for calculating the NR of charge for deviation appear to be a balanced approach. It is suggested that till the ancillary services market becomes stable and predictable, the weighted average ACP of Integrated DAM and RTP with equal weightage may only be considered for calculating the Normal Rate.

10.Regulation 8 specifies the charges for deviation for different types of sellers viz., general seller (other than RoR generating station and generating station based on municipal solid waste), RoR generating station, generating station based on municipal waste, WS seller, Standalone ESS, ESS co-located with WS seller, and buyer.

11.For the general seller deviation charge for over injection and under injection have been specified for conditions when i) deviation is up to 10% of Dispatch Schedule or 100 MW whichever is less and system frequency ( $f$ ) is within frequency band of 49.90 Hz to 50.05 Hz ( $f$  band); ii) deviation is up to 10% of Dispatch Schedule or 100 MW whichever is less and frequency is outside the  $f$  band; iii) deviation is beyond 10% dispatch schedule or 100 MW whichever is less, and  $f$  is within and outside  $f$  band. For each of the above three conditions deviation charge is linked to grid frequency so as to encourage the seller to assist in control of frequency.

Comments: The linking of deviation charge to grid frequency will incentivize the general seller to over-inject within the permissible margin (10% of the dispatch schedule or 100 MW, whichever is less) when frequency is below 50.00 HZ and under inject within permissible margin when frequency is above 50.00 Hz. At the same time the general seller will be disincentivized to over- inject when frequency is above 50.00 Hz and under inject when the frequency is below 50.00 Hz.

12.Deviation Charges for RoR generator and generating station on municipal solid waste have no linkage to frequency.

13.Charges for deviation for WS Seller being a generating station based on wind or solar or hybrid of wind-solar resources, including such generating station aggregated at a Pooling Station have been specified without any linkage to grid frequency. Three slabs of percentage of deviation from the schedule have been made and rates for each slab have been specified so as to penalize more for higher deviation. For solar and hybrid of wind-solar the deviation up to 5% of dispatch schedule is permissible for which deviation charge is equal to the contract rate. For wind generating station, the permissible deviation is up to 10%.

Comments: Permissible Deviation tolerance limits have been tightened compared to the prevailing regulation as relaxed by order dated 6.2.2023.

14.Charges for deviation for a Standalone ESS shall be at par with the charges for deviation for general seller.

Comments: It is required to be clarified that the deviation charges specified for Standalone ESS are for generation mode when it is injecting power into the grid and not pumping/charging mode when it is drawing power from the grid. Also, for drawal of power for pumping/charging of the Standalone ESS, the deviation charges as applicable to buyer may be applicable.

15.Charges for deviation in respect of an ESS co-located with WS Seller connected to same interconnection point has been specified in clause (6) of the Regulation 8. The Seller will be required to provide a separate schedule for WS and ESS components through the lead generator or QCA at the interconnection point. Deviation corresponding to WS component shall be charged at the same rates as applicable for WS seller and deviation corresponding to ESS components shall be charged at the same rates as applicable to standalone ESS.

Comments: A table has been given under clause (6) of Regulation 8 which does not have any connect with the paragraphs 6 i), ii) and iii) above. This may be clarified.

16.Charges for deviation for a Buyer have been specified under Clause (7) of Regulation 8. Buyers have been classified in four categories viz., Buyer other than (the buyer with a schedule less than 400 MW and the RE Rich State), Buyer (with a

schedule up to 400 MW), Buyer (being RE Rich State) and Buyer (being Super RE Rich State). For each category except Buyer with schedule up to 400 MW, three volume limits have been specified VLB (1), VLB(2) and VLB(3). Deviation Charges have been specified for under drawal (Receivable by the Buyer) and over drawal (Payable by the Buyer). For Buyer with a schedule up to 400 MW only two volume limits viz., VLB(1) and VLB(2) have been specified.

17.Deviation Charges are with reference to the Normal Rate and linked to grid frequency and have been specified for different volume limits and frequency band viz., i) For VLB(1) and f within fband (49.9 Hz to 50.05 Hz); ii) For VLB(1) and outside fband; iii) For VLB(2) and f within and outside fband; and iv) for VLB(3) and f within and outside fband. Rates of deviation have been specified to disincentivize over drawal when frequency is lower than 50.00 Hz and under drawal when frequency is higher than 50.00 Hz and incentivize over drawal when frequency is higher than 50.00 Hz and under drawal when frequency is lower than 50.00 Hz.

Comments: Linking the deviation charge rate to Normal Rate of Charge and grid frequency will help in passive control by the buyers. They will be required to forecast demand more accurately and take proactive action to schedule power from DAM and RTM and also maintain reserves to maintain drawl closer to the schedule.

18.The charges for inter-regional deviation caused by way of over drawal or under drawal or over injection or under-injection shall be payable or receivable, as the case may be, at the normal rate of charges for deviation.

19.In case of forced outage of a seller, the charges for deviation shall be @ the reference charge rate for a maximum duration of eight time blocks or until the revision of its schedule, whichever is earlier.

20.For a Seller whose bids are cleared in the HP-DAM, the 'reference charge rate' for deviation by way of 'under-injection' for the quantum of power sold through HP- DAM shall be equal to the weighted average ACP of the HP-DAM Market segments of all the Power Exchanges for that time block.

21. The payment of charges for deviation shall have a high priority, and the concerned regional entity shall pay the due amounts within 7 (seven) days of the issue of the statement of charges for deviation by the Regional Power Committee, failing which late payment surcharge @ 0.04% shall be payable for each day of delay.

22. Any regional entity which at any time during the previous financial year fails to make payment of charges for deviation within the time specified in these regulations shall be required to open a Letter of Credit (LC) equal to 110% of their average payable weekly liability for deviations in the previous financial year in favour of the concerned Regional Load Despatch Centre within a fortnight from the start of the current financial year.

Warm regards,

Rajeev Singh

Director General

Indian Chamber of Commerce