

# CENTRAL ELECTRICITY REGULATORY COMMISSION

## Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2024

### EXPLANATORY MEMORANDUM

Date: 02.10.2024

#### Contents

|  |   |
|--|---|
| 1. Background: .....   | 2 |
| 2. Definition of Available Capacity for WS Seller .....                          | 2 |
| 3. Definition of 'Contract Rate' and 'Reference Rate' for third party sale ..... | 3 |
| 4. Treatment of infirm power : Regulation 8(8) .....                             | 4 |

## **1. Background:**

1.1 The Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 (DSM Regulation, 2022) were notified on 5<sup>th</sup> August 2024, keeping in view the mandate of the Act and the submissions of the stakeholders on the draft Regulations. Subsequently, the Commission notified the date of implementation of the DSM Regulations 2024 as 16<sup>th</sup> September 2024, except Regulation 8(8). For provision with respect to injection of infirm power, the Commission notified that Regulation 8(8), unless notified otherwise, will come into effect from 01.11.2024 and until 31.10.2024, para 37(3) (a) of the Order dated 06.02.2023 in Petition No. 01/SM/2023 shall continue to be in operation.

1.2 The Commission received representations from the RE association seeking clarity on the treatment of deviation for infirm power and in respect of certain other provisions in the Regulations such as Available Capacity, Contract Rate in case of third-party sale under open access etc. Accordingly, the Commission decides to issue amendments to the said regulations for better clarity and aligning the same with the Indian Electricity Grid Code and its subsequent amendments. The following section details the amendment proposed in the DSM Regulations.

## **2. Definition of Available Capacity for WS Seller**

2.1 The DSM Regulations 2024 define ‘Available Capacity’ (AvC) in the case of WS Seller as the cumulative capacity rating of wind turbines or solar inverters that are capable of generating power in a given time block. The Commission received communications seeking clarification on the declaration of AvC by the WS seller having installed capacity higher than the connectivity granted under CERC (Connectivity and General Network Access) Regulations, 2022.

2.2 It was highlighted that CERC (Connectivity and General Network Access) Regulations, 2022, and its subsequent amendment provide that net injection by a generating entity at any point of time should not exceed the quantum of total connectivity granted. Thus, it was

requested that the AvC of the WS seller be restricted by the connectivity granted in case AvC exceeds the connectivity granted to such generating entity.

2.3 The Commission observes that AvC plays an important role in the computation of deviation in percentage (%) for WS sellers. The Commission is of the opinion that the term ‘cumulative capacity rating of wind turbines or solar inverters that are capable of generating power in a given time block’ means the capability of WS sellers to generate electricity in a time block. There could be instances where the cumulative capacity rating of wind or solar inverter may exceed the connectivity granted. In such cases, using AvC (not restricted by connectivity granted) for computation of deviation for WS seller in percentage terms may be misleading and give unintended and undue benefits to such sellers. The Commission believes that the connectivity granted determines the evacuation infrastructure built for such a seller, and at any moment, WS sellers should not evacuate power beyond the connectivity granted. Hence, while calculating the deviation error in instances where a cumulative capacity rating of wind turbines or solar inverters that are capable of generating power in a given time block should not be more than the connectivity granted. Accordingly, the Commission decides to bring clarity to the definition of AvC and has proposed the amendment as:

“2.1 The following words shall be inserted after the words “that are capable of generating power in a given time block” in sub-clause (g) of clause (1) of Regulation (3) of the Principal Regulations:

*“and shall be limited to the quantum of connectivity granted”*

### **3. Definition of ‘Contract Rate’ and ‘Reference Rate’ for third party sale**

3.1 The Commission observes that the definition of contract rate or reference rate in the final regulations has inadvertently missed out on the cases involving the *sale of power through third parties or open access*. Hence, the Commission has proposed amendments to the definition of ‘contract rate’ and ‘reference rate’ as follows:

“2.2 The following words shall be inserted before the words ‘in case of captive consumption of a captive generating plant based on renewable energy

sources' in sub-clause (j) of clause (1) of Regulation (3) of the Principal Regulations:

*“in respect of a WS seller or a MSW seller or such other entity as applicable, selling power through open access to a third party or”*

2.3 The following words shall be inserted before the words ‘in case of captive consumption of a captive generating plant based on resources other than renewable energy sources’ in sub-clause (y) of clause (1) of Regulation (3) of the Principal Regulations:

*“in respect of a general seller selling power through open access to a third party or”*

#### **4. Treatment of infirm power: Regulation 8(8)**

4.1 Regulation 8(8) of the DSM Regulations 2024 provides for treatment for infirm power being injected into the grid as follows:

*“Regulation 8(8): The charges for deviation by way of injection of infirm power shall be zero:*

*Provided that if infirm power is scheduled after a trial run as specified in the Grid Code, the charges for deviation over the scheduled infirm power shall be as applicable for a general seller or WS seller, as the case may be.”*

4.2 . The above regulations specify that the injection of infirm power shall not be paid for before the trial run as specified in the grid code. However, if a general seller or WS seller decides to schedule such infirm power after a trial run, the charges for deviation applicable to the respective category of the seller would be applicable.

4.3 The Commission received communication from the RE developers to bring clarity on the treatment of infirm power, especially before the trial run. It was requested that the WS seller be allowed to schedule infirm power before the trial run, considering the possibility of delay in receiving certification of successful completion of the trial run. It was also requested to provide clarity on the charges for deviation in respect of infirm power without any schedule.

4.4 The Commission would like to reiterate that the objective of the DSM regulations is to ensure, through a commercial mechanism, that the grid users adhere to and do not deviate from their

schedule of drawal and injection of electricity in the interest of security and stability of the grid. The infirm power is akin to over injection and would lead to an imbalance in the system, which is not desirable from the system point of view. Accordingly, the regulations provide that the payment towards injection of infirm power would be zero, as this is generally for testing and for a trial run to establish the characteristics of a seller for interchange with the grid.

4.5 In view of the ambitious target set by the Government, renewable capacity is getting commissioned rapidly into the grid. It has been pointed out by the NLDC/RLDCs that the injection of infirm power by RE generators before the commissioning of the project has posed challenges in real time grid operations, especially for the period prior to a successful trial run. It was also highlighted that verification of installed capacity, available capacity, and other parameters is difficult before the successful trial run, and hence, any injection of infirm power, especially before the trial run needs to be discouraged. There have also been instances of unbridled and prolonged over-injection by the generators before commissioning and prior to the date of commercial operation, leading to a state of over frequency in the system. There is an urgent need to stem such behaviour in the interest of grid security, more so in view of the large scale of RE penetration in the near future. Accordingly, the Commission reiterates the spirit of the provision contained in Regulation 8(8) of the DSM Regulations, 2024 in respect of the treatment of infirm power, with further clarification and strengthening as follows:

*“(8) The charges for injection of infirm power shall be zero:*

*Provided that if infirm power is scheduled after a trial run as specified in the Grid Code, the charges for deviation over the scheduled infirm power shall be as applicable for a general seller or WS seller, as the case may be:*

*Provided further that when the system frequency,  $f > 50.05\text{Hz}$ , the charges for deviation of scheduled infirm power by way of over injection by a general seller or WS seller, as the case may be, shall be zero.”*

4.6 In view of the above, the Commission seeks comments from the stakeholders by 1<sup>st</sup> November, 2024.

\*\*\*\*\*