

Telangana State Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulation, 2020

TSERC notified draft for Deviation Settlement Mechanism (DSM) on 28th December, 2020. This Regulation will come into picture from 1st March, 2021. Key facets of this Regulation are given below:

Objective – The objective of this regulation is to maintain grid discipline and grid security (Regulation 3).

Applicability – It includes Buyers & Sellers engaged in conveyance related transactions of electricity via open access utilising intra-state transmission system (In-STTS) and/or distribution system of electricity (including inter-state wheeling of power) (Regulation 4 (1)).

Principles for operationalizing DSM:

- a) Scheduling Period: It should comprise of 96 time blocks with 15-minute duration each, starting from 00:00 to 24:00 hrs (Regulation 6 (1) (a)).
- b) Guiding Principles for Scheduling and Despatch: Separate account of exchange of surplus power capacity amongst Buyers/Sellers to be maintained and published by SLDC (Regulation 6(1) (b (iii))).
- c) Operating range for average grid frequency to be in the range mentioned under IEGC & SEGC and no deviation is permissible beyond the stated range (Regulation 6(1) (c)).
- d) Deviation: SLDC to find out deviation for State Deviation Pool Account and its settlement to be done on weekly basis (Regulation 6(1) (d)).
- e) Settlement Period: Preparation & settlement of State Deviation Pool Account to be carried out every week matching with mechanism adopted for regional deviation settlement accounts (Regulation 6(1) (e)).
- f) Measurement Unit for State Deviation Pool Account: (kWh) to be the measuring unit for State Deviation Pool Account for volume and values for (payable and receivable) to be in (INR) (Regulation 6(1) (f)).
- g) Deviation Pool Price Vector: The deviation pricing of Buyers/Sellers to be in accordance with Deviation Price Vector as mentioned in CERC (DSM and related matters) Regulations, 2014 including subsequent amendments (Regulation 6(1) (g)).
- h) Deviation Volume Limit: Conditions for Deviation Volume Limit and impact of exceeding this limit via levy of Additional Charges for Deviation as specified under clause 10 will be applicable to ensure grid discipline and security (Regulation 6(1) (h)).
- i) Allocation of Losses: Intra-state transmission losses as approved by the Commission to be allocated amongst the State Entities (in proportion to the scheduled drawl by each State Entity) (Regulation 6(1) (i)).

Treatment for Gaming:

- a) Commission to initiate actions against any Buyer or Seller on gaming charges (Regulation 8(1)).
- b) In case the charges are proved, Commission may dismiss any sort of charges for deviation to such buyer or seller during the gaming tenure (Regulation 8(2)).

Charges for Deviations:

- ❖ Charges for Deviations for the Buyers and Sellers will be as given below (Regulation 9(2)-9(6)):

S.No.	Category	Charges for Deviations
1	For under-drawal by Buyer in time block in excess of 12% of the schedule or [X] MW (whichever is less)	Zero
2	For generating stations (irrespective of fuel type & whether tariff is regulated by Commission or not)	Shall not exceed Cap rate of deviation (Rs. 3.0304/kWh)
3	For over-injection by Seller in time block in excess of 12% of the schedule or 10 MW (whichever is less)	Zero
4	At grid frequency of 50.05 Hz and above	Zero
5	For grid frequency range of below 50.01 Hz and not below 50.00 Hz	Daily average of Area Clearing Price (ACP) found in Day Ahead Market (DAM) of Power Exchange

- ❖ Charges for Deviation for Infirm Power Injected into the Grid (Regulation 9 (7)):

S.No.	Category	Cap Rate (Rs./kWh)
1	Domestic/Coal/Lignite/Hydro	Rs.1.78/kWh sent out
2	Administered Price Mechanism (APM) gas as fuel	Rs.2.82/kWh sent out (up to the date of revision of price)
3	Imported Coal	Rs.3.03/kWh sent out
4	RLNG	Rs.8.00/kWh sent out

The regulation can be accessed [here](#).

CER Opinion –

CER **Need for an objective definition of ‘gaming’ (Regulation 2.1(p)):** The objective definition of ‘gaming’ should clearly identify the basis for assessing ‘intentional mis-declaration’ of the schedule. As an alternative, tightening of the deviation limit during the peak hours (when DSM prices are expected to be higher) can also reduce the incentive for gaming through over injection by the generators/under-drawl by the buyers.

CER **Volume Limit of Buyer (Regulation 10.2):** As per the draft regulation, Non-Coincident Peak Demand (NCPD) represents the sum of Peak Demand of Buyer(s). This

could be recorded Peak Demand in the current FY or the Projected Peak Demand in the ensuing FY, whichever is higher. However, in the absence of projected peak demand for the first day of a FY, the ‘Recorded Peak Demand for first day of the current financial year’ would also not be available. In such case, the regulation can provide for adoption of the NCPD recorded for the last day/last week of the previous FY.

CER Deviation Volume Limit (Regulation 10):

- The draft regulation sets the deviation volume limit as 12%, so it is advisable that 12% limit for peak hour should be lower in order to incentivize the generators to improve forecasting accuracy. This will also reduce incentive for gaming during peak hours, which witness higher price under DSM.
- As per CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 and subsequent amendments thereof, State Volume Limit shall be linked to Volume Limit (L), applicable to Telangana State. Since CERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 are available, the same may be referred to in the TSERC regulation.

CER Demand Response Program: Design and implementation of a demand response program at the intra-state level can help limit the deviations, particularly those arising of the changes in weather and generation of Variable Renewable Energy (VRE).

CER Role of Ancillary Services: The participation of the generators and utilities (including aggregator for demand response program) at the intra-state level in the market for ancillary services can help contain the deviation at the intra-state level. While this is currently falling within the purview of CERC, any development thereof, would be of significant relevance to the states.