

Bhopal Dated : 18th February, 2019

No. /2019/MPERC.- In exercise of the powers conferred by Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, the Madhya Pradesh Electricity Regulatory Commission hereby proposes to make amendments to the Madhya Pradesh Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) Regulations, 2018, which was notified on 20.04.2018, namely:

**First amendment to the Madhya Pradesh Electricity Regulatory Commission
(Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of
Wind and Solar generating stations) Regulations, 2018.**

1. Short title, extent and commencement

- i. These Regulations shall be called the Madhya Pradesh Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) (First amendment) Regulations, 2018. {AG-44(i) of 2019}
- ii. They shall extend to the whole of the State of Madhya Pradesh.
- iii. They shall come into force from the date of publication of this notification in the Madhya Pradesh Gazette.

2. Amendment to Regulation 2--In the Madhya Pradesh Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) Regulations, 2018 hereinafter called the 'Principal Regulations', the following shall be amended, namely—

- (i) In the Principal Regulations, the Regulation 2(b), (e) and (u) are deleted.
- (ii) In the Principal Regulations, the Regulation 2(g) shall be substituted as under:-
“ (g) ‘Deviation’ in a time block for a Seller means its total actual injection minus its total scheduled generation.”

(iii) In the Principal Regulations, under Regulation 2(j) the word ‘declared’ shall be substituted by the word ‘available’.

(iv) In the Principal Regulations, under Regulation 2(q) the words ‘**Pool Account**’ shall be substituted by the words ‘**State Deviation Pool Account**’.

(v) In the Principal Regulations, under Regulation 2(s) the words ‘metering, data collection / transmission, communication’ shall be substituted by the words ‘metering & AMR, data collection / transmission, telemetry & communication’.

3. Amendment to Regulation 3--In the Principal Regulations, the Regulation 3 shall be amended as under:-

(i) In the Principal Regulations, the Regulation 3(1) shall be substituted as under:-

“ (1) The objective of these Regulations is to maintain grid discipline and grid security as envisaged under the Grid Code through the commercial mechanism for Deviation Settlement through injection of electricity by the users of the grid.

(ii) In the Principal Regulations, the Regulation 3(2) shall be substituted as under:-

“ (2) These Regulations shall be applicable to Seller(s) involved in the transactions facilitated through short-term open access or medium-term open access or long-term open access in intra-state transmission or distribution of electricity (including intra-state wheeling of power), as the case may be, in respect of all wind power generators having a combined installed capacity of 10 MW & above and solar power generators having installed capacity of 5 MW & above including those connected via pooling stations and selling power within the State.

Provided that these Regulations shall also be applicable to all wind & solar generators selling power outside the State under open access and having combined installed capacity of 1 MW and above.”

4. Amendment to Regulation 4--In the Principal Regulations, the Regulation 4 shall be amended as under:-

(i) In the Principal Regulations, under Regulation 4 the words ‘and drawal’ shall be deleted.

(ii) In the Principal Regulations, the Regulation 4(7) shall be substituted as under:-

“(7) All State Entities shall make necessary arrangements for putting up suitable meters, capable of recording energy flows at 15-minutes intervals, at the points of injection and providing AMR facility for data downloading remotely at SLDC.”

(iii) In the Principal Regulations, the following shall be inserted:-

“(8) All wind or solar generators including those connected via pooling station shall have to appoint a common QCA which may be one of the generator or mutually agreed agency. If generators fails to appoint a common QCA within a period of one month from the date of issue of notice by SLDC, then SLDC shall advise the concerned licensee for disconnection of pooling station / feeder from the grid. The licensee shall disconnect the pooling station / feeder from the Grid under intimation to SLDC.

(9) In case more than 50% wind or solar generators including those connected via pooling station have consented for a particular QCA, then remaining generators shall have to appoint same agency as a QCA. In case of non-compliance of SLDC instructions, SLDC shall advise the concerned licensee to disconnect the defaulting generators from the Grid The licensee shall disconnect the pooling station / feeder from the Grid under intimation to SLDC.”

5. Amendment to Regulation 5 and 6--In the Principal Regulations, the Regulation 5 and 6 shall be substituted as under:-

“5. Principles for Operationalising Deviation Settlement Mechanism:

The framework for Deviation Settlement Mechanism shall cover the following key design parameters, viz. (a) Scheduling period (b) Deviation (c) Settlement period (d) Measurement unit for State Deviation Pool Account (e) Deviation Pool Price Vector

(a) **Scheduling Period:** The scheduling period shall comprise of 96 time blocks, each of 15-minutes duration starting from 00:00 hours (IST) ending with 24:00 hours (IST). The first time block of scheduling period shall commence from 00:00 hours (IST) to 00:15 hours (IST), second time block of scheduling period shall commence from 00:15 hours (IST) to 00:30 hours (IST) and so on.

Provided that from the date to be notified by the Commission, the scheduling period

shall be revised to 288 time blocks, each of 5-minutes duration starting from 00:00 hours (IST) ending with 24:00 hours (IST). Accordingly, the Interface Metering, Energy Accounting and Deviation Settlement should be capable to undertake transactions with 5-minutes duration. All future resource planning, IT and communication system requirement and infrastructure development shall be undertaken to cater to this requirement.

Provided that wheeling transactions of captive users and open access consumers shall be despatched as contracted subjected to transmission constraints and system emergency conditions.

(b) **Deviation:** For the purposes of Deviation settlement amongst qualified Wind and Solar Generators, the SLDC shall work out the 'Deviation Pool Accounts' comprising over-injection and under-injection for each qualified Wind and Solar Pooling Station, or solar/wind generators, as the case may be, corresponding to each Scheduling period in accordance with the provisions of these Regulations.

(c) **Settlement Period:** Preparation and settlement of 'Deviation Pool Accounts' shall be undertaken on weekly basis coinciding with mechanism followed for regional energy accounts. Till such time, but not later than three months from the date of the notification, the complete weekly ABT meter data is received through AMR System or manual data download by MRI, the State Load Despatch Centre shall prepare and issue Deviation Charges Account on monthly basis.

(d) **Measurement Unit for Deviation Pool Account:** The measurement unit for Deviation Pool Volume (Over-injection/under-injection) preparation shall be kiloWatt hours (kWh). Measurement unit for Deviation Pool Value (Payable and Receivable) preparation shall be Indian Rupees (INR). The decimal component of the energy unit (kWh) and amount (INR) shall be rounded off to nearest integer value.

(e) **Deviation Pool Price Vector:** The charges for Deviation shall be in accordance with the Deviation Price Vector to be notified by the Commission from time to time. Separate treatment for pricing of Deviation of Wind/Solar Generators, as specified under Regulation 6 shall be applicable.”

6. Forecasting, scheduling and elimination of gaming

Procedure :-The provisions of the Grid Code and the M.P. Electricity Regulatory

Commission (Terms and Conditions for intra-state open access in Madhya Pradesh) Regulations, 2005 as amended from time to time, shall be applicable for declaration of capacity, scheduling and elimination of gaming. The detailed operating procedure for implementation of these Regulations is annexed as Annexure-I.”

6. Amendment to Regulations 7,8 and 9: In the Principal Regulations, the Regulations 7,8 and 9 are deleted.

7. Amendment to Regulation 10: In the Principal Regulations, the Regulation 10(1) is substituted as under:

“(1) Within two months from the date of notification of these Regulations, the State Load Despatch Centre shall formulate “a State Power Committee and its functions” and submit to the Commission for approval.”

By order of the Commission

(Shailendra Saxena)
Commission Secretary

Schedule- : Deviation Charges for Wind/Solar Generating Stations

Table – I: Deviation Charges in case of under injection by Wind/Solar Generating Stations as State Entities undertaking Inter-state transactions

S. No.	Absolute Error in the 15-minute time block	Deviation Charges <u>payable to</u> State Deviation Pool Account
1.	$\leq 15\%$	At the Fixed Rate for the shortfall energy for absolute error upto 15%
2.	$>15\%$ but $\leq 25\%$	(At the Fixed Rate for the shortfall energy for absolute error upto 15%) + (110% of the Fixed Rate for balance energy beyond 15% and upto 25%)
3.	$>25\%$ but $\leq 35\%$	(At the Fixed Rate for the shortfall energy for absolute error upto 15%) + (110% of the Fixed Rate for balance energy beyond 15% and upto 25%) + (120% of the Fixed Rate for balance energy beyond 25% and upto 35%)
4.	$>35\%$	(At the Fixed Rate for the shortfall energy for absolute error upto 15%) + (110% of the Fixed Rate for balance energy beyond 15% and upto 25%) + (120% of the Fixed Rate for balance energy beyond 25% and upto 35%) + (130% of the Fixed Rate for balance energy beyond 35%)

**Table – II: Deviation Charges in case of over injection by Wind/Solar
Generating Stations as State Entities undertaking Inter-state transactions**

S.No.	Absolute Error in the 15-minute time block	Deviation Charges <u>payable from</u> State Deviation Pool Account
1.	$\leq 15\%$	At the Fixed Rate for the excess energy upto 15%
2.	$>15\%$ but $\leq 25\%$	(At the Fixed Rate for the excess energy upto 15%) + (90% of the Fixed Rate for excess energy beyond 15% and upto 25%)
3.	$>25\%$ but $\leq 35\%$	(At the Fixed Rate for the excess energy upto 15%) + (90% of the Fixed Rate for excess energy beyond 15% and upto 25%) + (80% of the Fixed Rate for excess energy beyond 25% and upto 35%)
4.	$>35\%$	(At the Fixed Rate for the excess energy upto 15%) + (90% of the Fixed Rate for excess energy beyond 15% and upto 25%) + (80% of the Fixed Rate for excess energy beyond 25% and upto 35%) + (70% of the Fixed Rate for excess energy beyond 35%)

**Table – III: Deviation Charges in case of under-injection or over injection, by
Wind/Solar Generating Stations commissioned after date of Notification of these
Regulations for sale of power within State**

S.No.	Absolute Error in the 15-minute time block	Deviation Charges <u>payable to</u> State Deviation Pool Account
1.	$\leq 10\%$	None
2.	$>10\%$ but $\leq 20\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 10% and upto 20%)
3.	$>20\%$ but $\leq 30\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 10% and upto 20%) + (At the Rs 1.00 per unit for balance energy beyond 20% and upto 30%)
4.	$>30\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 10% and upto 20%) + (At the Rs 1.00 per unit for shortfall or excess energy beyond 20% and upto 30%) + (At the Rs 1.50 per unit for balance energy beyond 30%)

**Table – IV: Deviation Charges in case of under-injection or over injection by
Wind/Solar Generating Stations commissioned prior to date of Notification of these
Regulations, for sale of power within State**

S.No.	Absolute Error in the 15-minute time block	Deviation Charges <u>payable to</u> State Deviation Pool Account
1.	$\leq 15\%$	None
2.	$>15\%$ but $\leq 25\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 15% and upto 25%)
3.	$>25\%$ but $\leq 35\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 15% and upto 25%) + (At the Rs 1.00 per unit for balance energy beyond 25% and upto 35%)
4.	$>35\%$	(At the Rs 0.50 per unit for shortfall or excess energy for Absolute Error beyond 15% and upto 25%) + (At the Rs 1.00 per unit for shortfall or excess energy beyond 25% and upto 35%) + (At the Rs 1.50 per unit for balance energy beyond 35%)