

**(DRAFT) MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
(DEVIATION, SETTLEMENT MECHANISM AND RELATED
MATTERS) REGULATIONS, 2018**

_October, 2018

DRAFT NOTIFICATION

No. ___/___/2018/MERC- In exercise of the powers conferred under sub-section (3) of Section 32, sub-section (4) of Section 33, Sections 66, Clauses (b) and (h) of sub-section (1) of Section 86, and Clauses (g) and (zp) of Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers hereunto enabling, the Maharashtra Electricity Regulatory Commission hereby makes the following regulations, namely:

1. Short Title and Commencement

- 1 These Regulations may be called the Maharashtra Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.
- 2 These Regulations except commercial arrangements, Deviation Charges, Additional Charges for Deviation and penal action shall come into force on the date of notification in these Regulations in the official Gazette.

Provided that the commercial arrangements specified under Clause (9) and (10) of these Regulations, and the related provisions regarding Deviation Charges, Additional Charge for Deviation and penal actions if any, shall come into force from date to be notified separately through Order, which shall not be later than 1 April 2020.

Provided further that until notification of such date as referred hereinabove under first proviso, the Final Balancing and Settlement Mechanism (FBSM) as approved by Commission under Order in Case 42 of 2006 along with relevant amendments from time to time shall be in operation for the purpose of energy accounting and deviation settlement.

2. Definitions and Interpretation

- 1 In these Regulations, unless the context otherwise requires -
 - a. ‘**Act**’ means the Electricity Act, 2003 (36 of 2003);
 - b. ‘**Actual drawal**’ in a time-block means electricity drawn by a Buyer, as the case may be, measured by the interface meters;
 - c. ‘**Actual injection**’ in a time-block means electricity generated or supplied by the Seller, as the case may be, measured by the interface meters;
 - d. ‘**Buyer**’ means a person, including distribution licensee or open access consumer, purchasing electricity through a transaction scheduled in accordance with the

regulations applicable for short-term open access, medium-term open access and long-term access;

- e. **'Connectivity Regulations'** means the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 as amended from time to time and shall include any subsequent amendment thereof;
- f. **'Commission'** means the Maharashtra Electricity Regulatory Commission referred to in sub-section (1) of section 82 of the Act;
- g. **'Deviation'** in a time-block for a Seller means its total actual injection minus its total scheduled generation and for a Buyer means its total actual drawal minus its total scheduled drawal and shall form part of the State Energy Accounts to be prepared by the State Load Despatch Centre.
- h. **'Deviation Settlement Mechanism'** shall mean and include the framework for energy accounting, deviation accounting, rules for pricing of deviation(s) payable and receivable by the State entities and other design parameters as specified under Regulation 6 of these Regulations.
- i. **'Final Balancing and Settlement Mechanism'** shall mean and include the framework for energy accounting, imbalance (increment/decrement) accounting and deviation accounting, rules for pricing of increment(s)/decrement(s) and deviation(s) payable and receivable by the State entities/State pool participants and other design parameters as stipulated under Commission's Order in Case 42 of 2006 including amendments thereof from time to time;
- j. **'Full Open Access Consumer'** shall mean Open Access Consumer connected to transmission system or distribution system but not having any contract demand with the distribution licensee within the state;
- k. **'Gaming'** in relation to these Regulations, shall mean an intentional mis-declaration of declared capacity by any Seller in order to make an undue commercial gain through Charge for Deviations;
- l. **'Grid Code'** means the Grid Code specified by the Commission under clause (h) of sub-section (1) of Section 86 of the Act.
- m. **'Indian Electricity Grid Code' (or 'IEGC')** shall mean the Grid Code specified by the Central Electricity Regulatory Commission under Section 79(1)(h) of the Act;
- n. **'Interface Meters'** means interface meters as defined by the Central Electricity Authority under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time.
- o. **'Load Despatch Centre'** means National Load Despatch Centre, Regional Load Despatch Centre or State Load Despatch Centre, as the case may be, responsible for

coordinating, scheduling of the Buyers and the Sellers in accordance with the provisions of Grid Code;

- p. **‘MoD Guidelines’** means the Guidelines for operation of Merit Order Despatch and amendments thereof, as approved by the Commission from time to time.
 - q. **‘Open Access Regulations’** means the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 as amended from time to time and shall include any subsequent amendment thereof;
 - r. **‘Partial Open Access Consumer’** shall mean Open Access Consumer connected to transmission system or distribution system and having part of his contract demand with the distribution licensee within the state;
 - s. **‘Scheduled Generation’** at any time or for a time block or any period means schedule of generation in MW or MWh *ex-bus* given by the concerned Load Despatch Centre;
 - t. **‘Scheduled Drawal’** at any time or for a time block or any period time block means schedule of despatch in MW or MWh *ex-bus* given by the concerned Load Despatch Centre;
 - u. **‘Seller’** means a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the regulations applicable for short-term open access, medium-term open access and long-term open access;
 - v. **‘State Deviation Pool Account’** means the State Account for receipts and payments on account of deviations by Buyers and Sellers;
 - w. **‘State Entity’** means such person who is in the SLDC control area and whose metering and energy accounting is done at the state level;
 - x. **‘Time-Block’** means a time block of 15 minutes or any such shorter duration as may be notified by Central Commission and State Commission, for which specified electrical parameters and quantities are recorded by special energy meter, with first time block starting at 00.00 hours;
- 2 Save as aforesaid and unless repugnant to the context or the subject-matter otherwise requires, words and expressions used in these Regulations and not defined, but defined in the Act, or the Grid Code or any other Regulations of this Commission shall have the meaning assigned to them respectively in the Act or the Grid Code or any other regulation as the case may be.

3. Objective

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

4. Applicability

These Regulations shall apply to the transactions of conveyance of electricity through short-term open access or medium-term open access or long-term open access using intra-state transmission system (InSTS) or distribution system of electricity (including inter-state wheeling of power), subject to the following conditions:

- (A) Deviation Settlement Mechanism under these Regulations shall be applicable for all Seller(s), including open access generators, captive generators (excluding in-situ captive generators) connected to intra-state transmission system but excluding wind and solar generating station(s).

Provided that, forecasting, scheduling and deviation settlement related matters regarding wind and solar generation shall be governed as per the provisions of “Maharashtra Electricity Regulatory Commission (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2018” and its amendments thereof.

- (B) Deviation Settlement Mechanism under these Regulations shall be applicable for all Buyer(s) including distribution licensee(s), deemed distribution licensee(s) located in the state and full open access consumers connected to intra-state transmission system.

Provided that, Deviation Settlement of partial open access consumers connected to intra-state transmission system and all open access consumers connected to distribution network shall be in accordance with the provisions of Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 and its amendment thereof.

5. Duties of State Load Despatch Centre and State Entities

These Regulations aim to govern the functioning of various State entities in a way that discipline is maintained with regards to the injection and drawal of energy by such State entities and the reliability and integrity of power system is maintained.

To meet these objectives, necessary preconditions and covenants for participation by the State entities shall be as under:

- (1) The State entities shall inform the SLDCs of all contracts they have entered into for exchange of energy.
- (2) The State entities shall operate their equipment and loads in a manner that is consistent with the provisions of the Indian Electricity Grid Code and the Maharashtra State Grid Code.
- (3) The State entities shall enter into Connection Agreement/Open Access Agreement with the concerned transmission licensee, which shall specify physical and operational requirements for reliable operation and gain physical access and connection to the intra-

State transmission system (InSTS) or enter into Connection Agreement/Open Access Agreement with concerned Distribution Licensee for use of distribution system, as the case may be in accordance with Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016, and its amendment thereof. The State Transmission Utility shall make necessary arrangements for putting up suitable meters, capable of recording energy flows at 15-minute intervals or any other time interval as specified by the Commission, at the points of injection and drawal. The time synchronisation of metering system shall be through Global Positioning System with counter check from the State Energy Accounting Centre which is the SLDC.

- (4) SLDC shall take all decisions regarding the despatch of stations after evaluating all the possible network parameters, constraints, congestions in the transmission network and in the eventuality of any such network aberration, the instructions by the SLDC relating to despatch and drawal shall be binding on all State entities.

SLDC shall publish all such information as required for all other State entities to be aware of the energy exchanges taking place within the pool as well as exigency conditions, if any with regard to despatch of power.

6. Principles for Operationalising Deviation Settlement Mechanism

The framework for Deviation Settlement Mechanism shall cover the following key design parameters, viz., (a) Scheduling Period (b) Guiding Principles for Scheduling and Despatch (c) Operating Range of Frequency (d) Deviation (e) Settlement Period (f) Measurement Unit for State Deviation Pool Account (g) Deviation Pool Price Vector (h) Deviation Volume Limit (i) Premise for Allocation of Losses.

(A) Scheduling Period: The scheduling period shall comprise of 96-time blocks, each of 15-minute 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 or such other period as the Commission may stipulate.

(B) Guiding Principles for Scheduling and Despatch: All the Sellers and Buyers under these Regulations shall be guided by the scheduling and despatch procedure to be formulated by the SLDC in accordance with the provisions of Maharashtra State Grid Code and amendment thereof. The MoD Guidelines and the scheduling and despatch process thereon shall be governed by following principles:

- i. For the purpose of load generation balance, Buyer/Utility-wise MoD principle shall be followed with opportunity for inter-se exchange of un-requisitioned surplus available power amongst Buyer(s)/Distribution Licensee(s) to optimise their cost of power procurement.

- ii. The rate for settlement of such inter-se exchange of un-requisitioned surplus power shall be linked to their respective marginal cost of power procurement (Utility-wise MoD) as applicable for the relevant monthly period.
- iii. SLDC shall maintain and publish separate account of such exchange of surplus power capacity amongst the Buyers/Distribution licensees and also publish monthly report indicating incidences where Distribution Licensee failed to contract available cheaper surplus power. The Commission shall verify and ascertain the efficacy of power procurement/sale vis-à-vis un-availed cheaper surplus capacity while undertaking scrutiny and approval of annual revenue requirement of the distribution licensee.
- iv. During real time operation, in case the grid parameters including frequency, voltage parameters and transmission line loading and substation loading conditions deviate beyond permissible operating range, SLDC shall take suitable measures in the interest of reliable and safe grid operations and issue necessary despatch or curtailment instructions in accordance with Centralised MoD principles for the state as whole, as per approved MoD Guidelines so as to maintain the load-generation balance and comply with conditions stipulated under IEGC and State Grid Code.
- v. wheeling transactions of captive users and open access consumers shall be despatched as contracted subject only to transmission constraints and system emergency conditions

(C) Operating Range for Frequency: The normal operating range for average grid frequency for time block shall be in line with the range stipulated under the IEGC and Maharashtra State Grid Code from time to time. No deviation shall be allowed beyond the specified operating range of frequency band by the Commission from time to time.

(D) Deviation: For the purposes of deviation settlement amongst the State entities, the SLDC shall work out deviation for ‘State Deviation Pool Account’ comprising over-drawal/under-drawal and over-injection and under-injection for each State Entity corresponding to each scheduling period. Charges for Deviation shall be in accordance to regulation 9 and 10 of these regulations.

(E) Settlement Period: Preparation and settlement of ‘State Deviation Pool Account’ shall be undertaken on weekly basis coinciding with the mechanism followed for regional energy accounts.

(F) Measurement Unit for State Deviation Pool Account: The measurement unit for State Deviation Pool Account Volume preparation shall be kilowatt hours (kWh). Measurement unit for State Deviation Pool Account Value (payable and receivable) preparation shall be in Indian Rupees (INR). The decimal component of the energy unit (kWh) and amount (INR) shall be rounded off to the nearest integer value. In addition, the interface meters and the state energy account shall capture the reactive energy

exchange over interface points, however, the reactive energy pricing framework and compensation for reactive energy exchange shall be dealt with separately.

- (G) Deviation Pool Price Vector:** The pricing of deviation of Buyers/Sellers shall be in accordance with the Deviation Price Vector as specified in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 and its amendments thereof.

Provided that deviation of wind and solar generators, shall be treated as per the provisions of “Maharashtra Electricity Regulatory Commission (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2018”.

Further, additional condition for a change in sign of the deviation shall be met once every 12-time blocks by Buyer/Seller, failing which, additional charges @10% of the Deviation Charges applicable shall be levied for the duration of continuance of violation.

- (H) Deviation Volume Limit:** To ensure grid discipline and grid security, conditions for Deviation Volume Limit and consequences of exceeding such Deviation Volume Limit by way of levy of Additional Deviation Charges as specified under Regulation 10 shall be applicable.

- (I) Premise for Allocation of Losses:** For scheduling purposes, intra-state transmission system losses as approved by the Commission shall be allocated amongst the State entities in proportion to the schedule drawal by each State Entity.

Provided that State Load Despatch Centre shall maintain account of actual intra-state transmission system loss for each time block and publish reconciliation statement of 52 weekly average loss vis-à-vis approved loss by the Commission on its website.

7. Declaration of Capacity and Scheduling

- (1) The provisions of the Maharashtra State Grid Code and Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 as amended from time to time, shall be applicable for declaration of capacity and scheduling.
- (2) The generating station, as far as possible, shall generate electricity as per the day-ahead generation schedule finalized by the SLDC in accordance with the Maharashtra Electricity Grid Code.

Provided that the revision in generation schedule on the day of operation shall be permitted, in accordance with the procedure specified under the Maharashtra State Grid Code and Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission

(Distribution Open Access) Regulations, 2016 as amended from time to time, as the case may be.

8. Treatment for Gaming

- (1) The Commission, either suo-motu or on a Petition made by the SLDC, or any affected party, may initiate proceedings against any generating company or Seller on charges of gaming and if required, may order an enquiry to be made by such officer of the Commission or such other party as the Commission may deem fit. The enquiry officer so appointed shall submit his findings within such time as may be fixed by the Commission and such investigating officer or authority shall exercise all powers as envisaged under Section 128 of the Act.
- (2) If in the proceeding initiated by the Commission or in the enquiry made in this regard under Clause (1) above, it is proved that any generating company or Seller has indulged in gaming, the Commission may without prejudice to any other action under the Act or Regulation made thereunder, disallow any Charges for Deviation to such Seller or generating company during the period of such gaming.

9. Charges for Deviations

(A) Deviation Charges for Sellers and Buyers:

- (1) The Charges for Deviation for all the time-blocks shall be payable for over-drawal by the Buyer and under-injection by the Seller and receivable for under-drawal by the Buyer and over-injection by the Seller, which are State entities, and shall be worked out on the average frequency of a time-block by considering the Price Vector for Deviation Charges as specified in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 and its amendments thereof considering the methodology specified in **Annexure 1** of these Regulations and subject to the conditions stipulated under Clause (2) to (8) of this Regulation:

Provided that, a change in sign of the deviation shall be made once every 12-time blocks, failing which additional charges @10% of the Deviation Charges applicable shall be levied for the duration of continuance of violation.

Provided further that the applicability of above prescribed additional charges for such failure by Buyer(s)/Distribution Licensee(s) shall be applicable from date to be notified separately.

- (2) The Charges for Deviation of generating stations regulated by the Commission using coal or lignite or gas supplied under Administered Price Mechanism (APM) as fuel, when actual injection is higher or lower than the scheduled generation, shall

not exceed the ¹Cap Rate to be determined by the Commission from time to time ²[394.3]Paise/kWh.

- (3) The Charges for Deviation of under-drawal by the Buyer in a time block in excess of 12% of the schedule or [X]MW, whichever is less, shall be zero; wherein limit of [X] MW shall be determined as per the methodology specified under Clause (B) of the regulation 10 of these Regulations;
- (4) The Charges for deviation of over-injection by the Seller in a time block in excess of 12% of the schedule or [10]MW, whichever is less, shall be zero, except in case of injection of infirm power, which shall be governed by Clause (8) of this Regulation;
- (5) The Charges for Deviation shall be zero at grid frequency of 50.05 Hz and above.
- (6) The Charges for Deviation may be reviewed by the State Commission from time to time and as and when the Deviation Price Vector is revised by the Central Commission and shall be re-notified accordingly.
- (7) The infirm power injected into the grid by a generating unit of a generating station during testing, prior to COD of the unit shall be paid at Charges for Deviation for infirm power injected into the grid, consequent to testing, for a period not exceeding six months or the extended time allowed by the Commission in the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016, as amended from time to time, subject to ceiling of Cap Rates corresponding to the ³[main fuel] as determined by the Commission used for such injection are as specified below:

Domestic coal/ Lignite/Hydro	[342.5 ⁴] Paise/kWh sent out
APM gas as fuel	[232.4 ⁵]Paise/kWh sent out <i>up to the date of revision of price of APM gas by the Government of India and thereafter, at the rate to be notified by the Commission separately</i>
Imported Coal	[394.3 ⁶]/kWh sent out
RLNG	[705.3 ⁷]/kWh sent out

¹Applicable Tariff Rate for imported coal as determined by Commission

² Present Tariff Rate for imported coal as determined by Commission

³ to be linked to variable cost for imported coal price as determined by Central Commission

⁴Equiv. to highest approved ECR within state for domestic coal as per MTR Order i.e. [MSPGCL Nasik TPS] Case 196 of 2017 Table-8-14/Page 221

⁵Equiv. to highest approved ECR for APM Gas within state as per MTR Order [i.e. TPC-G Unit-5] Case 65 of 2018, Table-289, Pg 280

⁶Equiv. to highest approved ECR for imported coal within state as per MTR Order [i.e. TPC-G Unit-8] Case 65 of 2018, Table-289, Pg 280

⁷Equiv. to highest approved ECR for RLNG within state as per MTR Order [i.e. TPC-G Unit-7] Case 65 of 2018, Table-289, Pg 280

10. Limits on Deviation Volume and Consequences of Crossing Limits

(A) The over-drawal or under-drawal of electricity by any Buyer during a time block shall not exceed 12% of its scheduled drawal or [X] MW, the limit arrived as per clause (B) of this Regulation, whichever is lower, when grid frequency is between the range of '49.70 Hz and above to below 50.05 Hz.'

(B) The Volume Limit of [X] MW for distribution licensee(s) and Buyers shall be determined as under:

- i. Minimum of (12% of schedule, (Peak Demand of Distribution Licensee or Buyer / \sum NCPD) x State Volume Limit)

Where, NCPD (Non-Coincident Peak Demand) represents the sum of Peak Demand of Distribution Licensee(s) and Buyer(s) subject to the condition stipulated under the following sub-clause (iii).

- ii. State Volume Limit shall be linked to Volume Limit (⁸L) applicable to the State as per the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014 and its amendments thereof;
- iii. Where Peak Demand of the Distribution Licensee shall be recorded as Peak Demand in the previous Financial Year or Projected Peak Demand of Buyer in ensuing Financial Year, whichever is higher;

Provided that no over-drawal of electricity by any Buyer shall be permissible when grid frequency is "below 49.70 Hz" and no under-drawal of electricity by any Buyer shall be permissible when grid frequency is "50.05 Hz and above".

(C) The under-injection or over-injection of electricity by Seller shall not exceed the following when grid frequency is "49.70 Hz or above and below 50.05 Hz";

- i. 12% of the scheduled injection or [10] MW, whichever is lower for a Seller;

Provided that in case schedule of a Seller, in a time block, is less than or equal to [40] MW, under-injection/over-injection in a time-block shall not exceed [5] MW, when grid frequency is "49.70 Hz or above and below 50.05 Hz".

(D) In addition to the Charges for Deviation as stipulated under Regulation 9 of these Regulations, Additional Charges for Deviation shall be applicable for over-drawal as well as under-injection of electricity for each time block in excess of the volume limit specified in Clause (B) and (C) of this Regulation, when average grid frequency of the time block is "49.70 Hz and above" at the rates specified in **Table I of Annexure-II** in accordance with the methodology specified in Clause (H) of this regulation:

(E) Additional Charges for Deviation for under-injection of electricity, during a time-block in excess of the volume limit specified in Clause (C) of this Regulation when grid

⁸For Maharashtra State Volume Limit (L) is 250 MW

frequency is "49.70 Hz and above", by the generating stations regulated by the Commission using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel shall be at the rates specified in **Table II of Annexure-II** in accordance with the methodology specified in Clause (J) of this Regulation;

- (F) In addition to the Charges for Deviation as stipulated under Regulation 9 of these Regulations, Additional Charges for Deviation shall be applicable for over-injection/under-drawal of electricity for each time block by a Seller or Buyer, as the case may be; when grid frequency is "50.05 Hz and above" at the rates equivalent to the charges of deviation corresponding to the grid frequency of "below 50.01 Hz but not below 50.0 Hz".
- (G) In addition to the Charges for Deviation as stipulated under Regulation 9 of these Regulations, Additional Charges for Deviation shall be applicable for over-drawal or under-injection of electricity when grid frequency is "below 49.70 Hz" in accordance with the methodology specified in Clause (I) of these Regulations".

Provided that Additional Charges for Deviation for under-injection of electricity by a Seller, during the time-block when grid frequency is "below 49.70 Hz", by the generating stations whose tariff is determined or adopted by the Commission using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel in accordance with the methodology specified in Clause (J) of this Regulation shall be equivalent to 100% of the Cap Rate of main fuel (imported coal) as determined by the Commission for deviations.⁹[394.3] Paise/kWh.

- (H) The Additional Charges for Deviation for over-drawal and under-injection of electricity for each time block in excess of the volume limit specified in Clause (B) and (C) of this regulation when grid frequency is "49.70 Hz and above" shall be specified by the Commission as a percentage of the charges for the deviation corresponding to average grid frequency of the time block with due consideration to the behaviour of the Buyers and Sellers towards grid discipline:

Provided that the Commission may specify different rates for additional Charges for Deviation for over-drawal and under-injection depending upon different percentage of deviation from the schedule in excess of the volume limit specified in Clause (B) and (C) of this Regulation.

- (I) The additional Charges for Deviation of over-drawals and under-injection of electricity for each time block when grid frequency is "below 49.70 Hz" shall be as specified by the Commission as a percentage of the Charges for Deviation corresponding to the average grid frequency of the time block with due consideration to the behaviour of the Buyers and Sellers towards grid discipline:

⁹ Present Tariff Rate for imported coal as determined by Commission

Provided that the Commission may specify different rates for Additional Charges for Deviation of over-drawls and under-injections and for different ranges of frequencies “below 49.70 Hz”.

- (J) The Additional Charges for Deviation of under-injection of electricity during the time-block in excess of the volume limit specified in Clause (C) of this Regulation, when the grid frequency is “49.70 Hz and above”, by the generating stations whose tariff is determined or adopted by the Commission using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel shall be as specified by the Commission as a percentage of the Cap Rate or the Charges for Deviation corresponding to the grid frequency of the time block, or both with due consideration to the behaviour of the generating stations regulated by the Commission towards grid discipline:
- (K) In the event of sustained deviation from schedule in one direction (positive or negative) by any state entity, such State Entity (Buyer or Seller) shall have to make sign of their deviation from schedule changed, at least once, after every 12 time blocks.

To illustrate, if a state entity has positive deviation from schedule, i.e., from 07.30 hours to 10.30 hours, sign of its deviation from schedule shall be changed in the 13th time block, i.e., 10.30 hours to 10.45 hours either from positive to negative or from negative to positive; as the case may be.

11. Treatment of Infirm Power and Start Up Power Prior to COD

- (1) No under-injection of electricity by a Seller shall be permissible when the grid frequency is “below 49.70 Hz” and no over-injection of electricity by a Seller shall be permissible when the grid frequency is “50.05 Hz and above”.
- (2) Any infirm injection of power by a generating station prior to the COD of a unit during testing and commissioning activities shall be exempted from the volume limit as and when specified by the Commission for a period not exceeding six months or the extended time allowed by the Commission in accordance with the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 and Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 as amended from time to time.
- (3) Any drawal of power by a generating station prior to the COD of a unit for the start-up activities shall be exempted from the volume limit as and when specified by the Commission when the grid frequency is “49.70 Hz and above”.
- (4) Any drawal of power by a generating station prior to the COD of a unit for the start-up activities shall be exempted from the levy of Additional Charges for Deviation.

12. Framework for Operationalisation and Monitoring of Deviation Settlement Mechanism

- (1) The SLDC shall develop and publish on its website procedures and methodologies for

the computation of Charges for Deviation and Additional Charges for Deviation for each state entity for crossing the volume limits specified for under-drawal/over-injection and for over-drawal and under-injection respectively.

- (2) Payment of Charges for Deviation under Regulation 9 and the Additional Charges for Deviation under Clauses (G), (H), and (I) of Regulation 10, shall be levied without prejudice to any action that may be considered appropriate by the Commission under Section 142 of the Act for contravention of the limits of over-drawal/under-drawal or under-injection/over-injection, for each time block or violation of provision of Clause (K) of Regulation 10.
- (3) The charges for over-drawal/under-injection and under-drawal/over-injection of electricity shall be computed by the SLDC in accordance with the methodology used for preparation of "State Energy Accounts."
- (4) The SLDC shall, on weekly basis, prepare and publish on its website the records of the Deviation Accounts, specifying the quantum of over-drawal/under-injection and the corresponding amount of Charges for Deviation payable/receivable for each Buyer and Seller for all the time-blocks when the grid frequency is "49.70Hz and above" and "below 49.70" Hz separately.

13. State Energy Account

- (1) The SLDC shall prepare statement of State Energy Account for each time block for the Buyers and Sellers on monthly basis. Data required for the billing of partial open access consumers shall be passed on to the billing centre of the distribution licensee by the SLDC. The billing centre of the distribution licensee shall be responsible for energy accounting, raising and settlement of bills with partial open access consumers. Payments of capacity and energy charges by the Buyers to the Sellers shall be as per the provisions in the respective Power Purchase Agreements or Agreement(s) with respect to transactions through power exchange and through Short Term Open Access, as the case may be.
- (2) Energy Account Statement for Deviation Settlement of Partial Open Access Consumers connected to the InSTS and all open access consumers connected to the distribution network shall be in accordance with the provisions of MERC (Transmission Open Access) Regulations, 2016 and its amendments thereof and MERC (Distribution Open Access) Regulations, 2016 and its amendment thereof.
- (3) The SLDC shall be responsible for preparation of weekly Deviation Charges statement to all pool participants and billing and collection of Deviation Charges from the pool participants in accordance with Regulation 12 of these Regulations.

Provided that Provisional State Energy Account and Statement for Deviation Account Settlement should be available for scrutiny and verification by concerned State Entity for specified time period. The same would be finalised within stipulated time period upon addressing comments/discrepancies (if any) in time bound manner.

Provided further that the State Energy Account and Deviation Account Statements shall be available for third party verification and audit on periodic basis and such third party verification and audit shall be carried out at least once a year.

- (4) A detailed energy accounting procedure shall be prepared by the SLDC and submitted to the Commission for approval.

Provided that, SLDC shall undertake stakeholder consultation by uploading the draft procedure on SLDC's website before submission of procedure to the Commission for approval.

14. Compliance with the Instructions of State Load Despatch Centre

Notwithstanding anything specified in these Regulations, the Sellers and the Buyers shall strictly follow the instructions of the SLDC on injection and drawal in the interest of grid security and grid discipline.

15. Accounting of Charges for Deviation

- (A) A statement of Charges for Deviations including Additional Charges for Deviation levied under these Regulations shall be prepared by the SLDC on weekly basis by the Thursday of the week and shall be issued to all constituents by next Tuesday, for seven-day period ending on the penultimate Sunday mid-night.
- (B) All payments on account of Charges for Deviation including Additional Charges for Deviation levied under these Regulations and Interest, if any, received for late payment shall be credited to the funds called the "State Deviation Pool Account", which shall be maintained and operated by the SLDC in accordance with the provisions of these Regulations.

Provided that –

- i. The Commission may by Order direct any other entity to operate and maintain respective "State Deviation Pool Account".
 - ii. Separate books of accounts shall be maintained for the Principal component and Interest component of Charges for Deviation and Additional Charges for Deviation by the SLDC.
 - iii. The State entities shall comply with statutory requirements for payment of applicable statutory levies, including but not limited to Goods and Service Tax (GST), Tax deduction at source (TDS);
 - iv. The State entities shall facilitate SLDC in meeting with the reporting requirements of Statutory Authorities, as necessary.
- (C) All payments received in the "State Deviation Pool Account" shall be considered in the following sequence:

- i. Any cost or expense or other charges incurred on recovery of Charges for Deviation.
- ii. Over dues or penal Interest, if applicable.
- iii. Normal interest.
- iv. Regional Deviation Pool Account.
- v. Charges for Deviation and Additional Charges for Deviation.

(D) An amount of surplus funds in the State Deviation Pool Account at the end of the financial year shall be utilised for the purpose of improvements in power system operations, for undertaking such measures and studies for improvement in reliability, security and safety of grid operations, undertaking capacity building and training programs related to system operations and market operations and for such other purposes or for other schemes as may be devised in consultation with National Load Despatch Centre, or Regional Load Despatch Centre, with prior approval of the Commission.

Provided that MSLDC shall prepare scheme(s) and shall submit annual plan for utilisation of surplus funds and implement the scheme(s) only upon approval of the Commission.

16. Schedule of Payment of Charges for Deviation

- (A) The payment of Charges for Deviation shall have a high priority and the concerned State Entity shall pay the indicated amount within 10 days of the issue of statement of Charges for Deviation including Additional Charges for Deviation by the SLDC into the “**State Deviation Pool Account**”.
- (B) If payment against Charges for Deviation including Additional Charges for Deviation are delayed by more than two days, i.e., beyond 12 days from the date of issue of the statement by the SLDC, the defaulting State Entity shall pay simple Interest @ 0.04% for each day of delay.
- (C) All Payment to the entities entitled to receive any amount on account of Charges for Deviation shall be made within two working days of the receipt of payments in the “State Deviation Pool Account”.

Provided that –

- i. In case of delay in the payment of Charges for Deviations into the State Deviation Pool Account and Interest there on if any, beyond 12 days from the date of issue of the Statement of Charges for Deviations, the State entities receiving payment for Deviation or Interest thereon shall be paid from the balance available in the State Deviation Pool Account. In case the balance available is not sufficient to meet the payment to the State Entities, the payment

from the State Deviation Pool Accounts shall be made on pro rata basis from the balance available in the State Deviation Pool Account.

- ii. The liability to pay Interest for the delay in payments to the “State Deviation Pool Account” shall remain till Interest is not paid; irrespective of the fact that constituents who have to receive payments, have been paid from the “State Deviation Pool Account” in part or full.
- (D) All the State entities which had at any time during the previous financial year failed to make payment of Charges for Deviation including Additional Charges for Deviation within the time specified in these Regulations shall be required to open a Letter of Credit (LC) equal to 110% of its average payable weekly liability for deviations in the previous financial year, in favour of the SLDC within a fortnight from the date these Regulations come into force.

Provided that –

- i. If any State entity fails to make payment of Charges for Deviation including Additional Charges for Deviation by the time specified in these Regulations during the current financial year, it shall open a Letter of Credit equal to 110% of weekly outstanding liability in favour of the SLDC within a fortnight from the due date of payment.
- ii. LC amount shall be increased to 110% of the payable weekly liability for Deviation in any week during the year, if it exceeds the previous LC amount by more than 50%.

Illustration

If the average payable weekly liability for Deviation of a State entity during [FY2016-17] is Rs. `2.0 Crore, the State entity shall open LC for Rs. 2.2 Crore in [FY2017-18]. If the weekly payable liability during any week in [FY 2017-18] is Rs. `3.5 Crore which is more than 50% of the previous financial year’s average payable weekly liability of Rs 3.0 Crore, the concerned State entity shall increase the LC amount to Rs. `3.85 Crore (1.1*3.50) by adding Rs. 1.65 Crore.

- (E) In case of failure to pay into the “State Deviation Pool Account” within the specified time of 12 days from the date of issue of the statement of Charges for Deviations, the SLDC shall be entitled to encash the LC of the concerned constituent to the extent of the default and the concerned constituent shall recoup the LC amount within three days.

17. Governance Structure

- (A) The Maharashtra State Power Committee (MSPC) constituted under FBSM framework shall continue to operate under these Regulations subject to the conditions outlined under these Regulations.

Provided that the composition of the MSPC shall be modified to include adequate representation of the group of State Entities representing Generators, renewable energy generators, deemed distribution licensee(s) and Transmission Open Access User(s) through invitation and subject to conduct of business rules to be formulated by MSPC with the approval of the Commission.

Provided further that the roles, powers and functions of MSPC as outlined under FBSM framework shall continue to be in operation only to the extent that the same is not inconsistent with the provisions under these Regulations. In such cases, the provisions of these Regulations shall apply.

Provided further that MSLDC shall prepare and publish provisional (weekly/monthly) State Energy Account and (weekly/monthly) State Deviation Pool Account Statement, which shall be published on its website for scrutiny and review by the State entities. The State entities shall provide comments and suggestions for rectification (if any) within the stipulated period as per the procedures to be formulated by MSLDC. Upon such scrutiny and rectification (if necessary), (weekly/monthly) State Energy Account and (weekly/monthly) State Deviation Pool Account Statement as prepared by the MSLDC shall be final and binding on all State entities.

(B) The Maharashtra State Power Committee shall:

- i. Co-ordinate and facilitate intra-state energy exchange for ensuring optimal utilisation of resources.
- ii. Monitor compliance of these Regulations by the State Entities and submit annual compliance report in the prescribed format within thirty days from close of financial year.
- iii. Guide the SLDC for modification of procedure(s) to address the implementation difficulties, if any.
- iv. Provide necessary support and advice to the Commission for suitable modifications/issuance of operating procedures, practice directions, and amendment to the provisions of this Regulations, as may be necessary upon due regulatory process.

18. Power to Amend

The Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations.

19. Power to Remove Difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

20. Power to Relax

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected by grant of relaxation, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

21. Power to Issue Directions

If any difficulty arises in giving effect to these Regulations, the Commission may on its own motion or on an application filed by any affected party, issue such directions as may be considered necessary in furtherance of the objective and purpose of these Regulations.

Secretary

Maharashtra Electricity Regulatory Commission

Date: XX October, 2018

Place: Mumbai

1. Deviation Charges for Sellers, Buyers, and Other Conditions

- 1) As specified in the Regulation 9 (A) of these Regulations, the Charges for Deviation for all the time-blocks shall be payable for over-drawal by the Buyer and under-injection by the Seller and receivable for under-drawal by the Buyer and over-injection by the Seller, which are State entities, and shall be worked out on the average frequency of a time-block by considering the Price Vector for Deviation Charges as specified in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 and its amendments as stipulated in the following table:

Average Frequency of Time Block (Hz)		Basic Rate of Charges for Deviation
Below	Not Below	(Paise/kWh)
	50.05	00.00
50.05	50.04	35.60
50.04	50.03	71.20
50.03	50.02	106.80
50.02	50.01	142.40
50.01	50.00	178.00
50.00	49.99	198.84
49.99	49.98	219.68
49.98	49.97	240.52
49.97	49.96	261.36
49.96	49.95	282.20
49.95	49.94	303.04
49.94	49.93	323.88
49.93	49.92	344.72
49.92	49.91	365.56
49.91	49.90	386.40
49.90	49.89	407.24
49.89	49.88	428.08
49.88	49.87	448.92
49.87	49.86	469.76
49.86	49.85	490.60
49.85	49.84	511.44
49.84	49.83	532.28
49.83	49.82	553.12
49.82	49.81	573.96
49.81	49.80	594.80
49.80	49.79	615.64
49.79	49.78	636.48
49.78	49.77	657.32

Average Frequency of Time Block (Hz)		Basic Rate of Charges for Deviation
Below	Not Below	(Paise/kWh)
49.77	49.76	678.16
49.76	49.75	699.00
49.75	49.74	719.84
49.74	49.73	740.68
49.73	49.72	761.52
49.72	49.71	782.36
49.71	49.70	803.20
49.70		824.04

(Charges for Deviation for each 0.01 Hz step is equivalent to 35.60 Paise/kwh in the frequency range of 50.05 to 50.00 Hz, and 20.84 Paise/kWh in frequency range 'below 50 Hz to 'below 49.70 Hz')

2. Deviation Charges Applicable for Inter-State Open Access Transactions of the State Entities

The Charges for Deviation including Additional Charges for Deviation for inter-state open access transactions of State entities shall be levied considering 95% of the rates as specified in above Table when these charges are receivable to the State entities, as per the Regulations 9 and 10. Similarly, the Charges for Deviation shall be levied considering 105% of the rates as specified in above Table, when the charges are payable by the State entities.

Annexure-II: Additional Deviation Charges

TABLE – I: Additional Deviation Charge (for Seller/Buyer)

(A) When 12% of the Schedule is less than or equal to [10] MW		
1	For over-drawal of electricity by any Buyer in excess of 12% and upto 15% of the schedule in a time block	Equivalent to 20% of Charge for Deviation corresponding to average grid frequency of the time-block
2	For over-drawal of electricity by any Buyer in excess of 15% and upto 20% of the schedule in a time block	Equivalent to 40% of Charge for Deviation corresponding to average grid frequency of the time-block
3	For over-drawal of electricity by any Buyer in excess of 20% of the schedule in a time block	Equivalent to 100% of Charge for Deviation corresponding to average grid frequency of the time-block
4	For under-injection of electricity by any Seller in excess of 12% and upto 15% of the schedule in a time block	Equivalent to 20% of Charge for Deviation corresponding to average grid frequency of the time-block
5	For under-injection of electricity by any Seller in excess of 15% and upto 20% of the schedule in a time block	Equivalent to 40% of Charge for Deviation corresponding to average grid frequency of the time-block
6	For under-injection of electricity by any Seller in excess of 20% of the schedule in a time block	Equivalent to 100% of Charge for Deviation corresponding to average grid frequency of the time-block
(B) When 12% of the Schedule is more than [10] MW		
1	For over-drawal of electricity by any Buyer is above X MW and upto X+[10] MW in a time block	Equivalent to 20% of Charge for Deviation corresponding to average grid frequency of the time-block
2	For over-drawal of electricity by any Buyer is above X+[10] MW and upto X + [20] MW in a time block	Equivalent to 40% of Charge for Deviation corresponding to average grid frequency of the time-block
3	For over-drawal of electricity by any Buyer is above X + 20 MW in a time block	Equivalent to 100% of Charge for Deviation corresponding to average grid frequency of the time-block
(C) When 12% of the Schedule is more than [10] MW		
4	For under-injection of electricity by any Seller is above [10] MW and upto[20] MW in a time block	Equivalent to 20% of Charge for Deviation corresponding to average grid frequency of the time-block
5	For under-injection of electricity by any Seller is above [20] MW and upto [25] MW in a time block	Equivalent to 40% of Charge for Deviation corresponding to average grid frequency of the time-block
6	For under-injection of electricity by any Seller is above [25] MW in a time block	Equivalent to 100% of Charge for Deviation corresponding to average grid frequency of the time-block

TABLE – II: Additional Deviation Charge for Under-Injection by Generating Stations Regulated by the Commission Using Coal or Lignite or Gas Supplied Under Administered Price Mechanism (APM)

(A) When 12% of the Schedule is less than or equal to [10] MW		
1	For under-injection of electricity by any Seller in excess of 12% and upto 15% of the schedule in a time block	Equivalent to 20% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.
2	For under-injection of electricity by any Seller in excess of 15% and upto 20% of the schedule in a time block	Equivalent to 40% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.
3	For under-injection of electricity by any Seller in excess of 20% of the schedule in a time block	Equivalent to 100% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.
(B) When 12% of the Schedule is more than [10] MW		
1	For under-injection of electricity by any Seller is above X MW and upto X+[10] MW in a time block	Equivalent to 20% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.
2	For under-injection of electricity by any Seller is above X+[10] MW and upto X + [20] MW in a time block	Equivalent to 40% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.
3	For under-injection of electricity by any Seller is above X + [20] MW in a time block	Equivalent to 100% of Cap Rate for Deviations of [394.3] Paise/kWh or Charge for Deviation corresponding to average grid frequency of the time-block, whichever is less.