

# CENTRAL ELECTRICITY REGULATORY COMMISSION

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WHEREAS the Central Electricity Regulatory Commission has published Regulation in the Central Electricity Regulatory Commission Gazette on different dates the following, namely:-

(Deviation Settlement Mechanism and related matters) Regulations, 2014;  
(Notification No. : L-1/132/2013/CERC, Dated: 06.01.2014)

- A. (Deviation Settlement Mechanism and related matters) Regulations, 2014, (First Amendment), 2014;  
(Notification No. : L-1/132/2013/CERC, Dated: 18.12.2014)
  - B. (Deviation Settlement Mechanism and related matters) Regulations, 2014, (Second Amendment), 2015;  
(Notification No. : L-1/132/2013/CERC, Dated: 07.08.2015)
  - C. (Deviation Settlement Mechanism and related matters) Regulations, 2014, (Third Amendment), 2016;  
(Notification No. : L-1/132/2013/CERC, Dated: 06.05.2016)
  - D. (Deviation Settlement Mechanism and related matters) Regulations, 2014, (Fourth Amendment), 2018;  
(Notification No. : L-1/132/2013/CERC, Dated: 20.11.2018)
  - E. (Deviation Settlement Mechanism and related matters) Regulations, 2014, (Fifth Amendment), 2019;  
(Notification No. : L-1/132/2013-CERC, Dated: 28.05.2019)
- Inserted/ Replaced matter is shown as [ ]<sup>1</sup> at appropriate place; wordings inserted/ replaced shown within square brackets;
  - In both of above cases; <sup>A</sup> ; superscript A implies that change is caused by Amendment '1'.
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## NOTIFICATION

New Delhi, the 6th January, 2014

**No. L-1/132/2013/CERC.**—In exercise of the powers conferred under Section 178 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations, namely:—

### 1. Short title and commencement:

- (1) These regulations may be called the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2014.
- (2) These regulations shall come into force on 17.2.2014.

## 2. Definitions and Interpretation:

(1) In these regulations, unless the context otherwise requires,—

(a) **'Act'** means the Electricity Act, 2003 (36 of 2003);

<sup>B</sup>[<sup>1</sup> (aa) **"Absolute Error"** shall mean the absolute value of the error in the actual generation of wind or solar generators which are regional entities with reference to the scheduled generation and the 'Available Capacity' (AvC), as calculated using the following formula for each 15 minute time block:

$$\text{Error (\%)} = 100 \times [\text{Actual Generation} - \text{Scheduled Generation}] / (\text{AvC})^B$$

(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;

<sup>D</sup>[<sup>2</sup> (ca) **"Area Clearing Price (ACP)"** means the price of a time block electricity contract established on the Power Exchange after considering all valid purchase and sale bids in particular area(s) after market splitting, i.e. dividing the market across constrained transmission corridor(s).]<sup>D</sup>

(d) **'beneficiary'** means a person purchasing electricity generated from a generating station;

(e) **'buyer'** means a person, including beneficiary, 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;

(f) **'Connectivity Regulations'** means the Central Electricity Regulatory Commission (Grant of Connectivity, Long Term Access and Medium Term Access in Inter-State Transmission) Regulations, 2009 as amended from time to time and shall include any subsequent amendment thereof,

(g) **'Commission'** means the Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act;

<sup>D</sup>[<sup>3</sup> (ga) **"Day Ahead Market (DAM)"** means a market where physical delivery of electricity occurs on the next day (T+1) of the date of transaction (T) and is governed by the Central Electricity Regulatory Commission (Power Market) Regulations, 2010 (as amended from time to time), the Rules and Bye-Laws of the Power Exchanges as approved by the Commission.]<sup>D</sup>

<sup>E</sup>[<sup>4</sup>(gb) **"Daily Base DSM Charge"** means the sum of charges for deviations for all time blocks in a day payable or receivable as the case may be, excluding the additional charges under Regulation 7.]<sup>E</sup>

(h) **'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.

<sup>1</sup> Inserted a new sub-clause (aa) after sub-clause (a) of clause (1) of Regulation 2, vide Second amendment (B), 2015.

<sup>2</sup> Inserted a new sub-clause (ca) after sub-clause (c) of clause (1) of Regulation 2, vide Fourth amendment (D), 2018.

<sup>3</sup> Inserted a new sub-clause (ga) after sub-clause (g) of clause (1) of Regulation 2, vide Fourth amendment (D), 2018.

<sup>4</sup> Inserted a new sub-clause (gb) after sub-clause (ga) of clause (1) of Regulation 2, vide Fifth amendment (E), 2019.

<sup>c</sup>[<sup>5</sup> *Provided that deviation shall be calculated for the Regional Entities by the concerned RLDC/RPC which shall be attributed to various entities embedded within the State by SLDC.*]<sup>c</sup>

- (i) **'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;
- (j) **'Grid Code'** means the Grid Code specified by the Commission under clause (h) of sub-section (!) of Section 79 of the Act,
- (k) **'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.
- (l) **'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;
- (m) **'Open Access Regulations'** means the Central Electricity Regulatory Commission (Open Access in later-State Transmission) Regulations, 2008 as amended front time to time and shall include any subsequent amendment thereof,

<sup>c</sup>[<sup>6</sup> **(m-i) Renewable Rich State** means a State whose minimum combined installed capacity of wind and solar power is 1000 MW or more.

*Note: Combined installed capacity shall be reckoned on the basis of the capacity installed as on the last day of the month for the purpose of deciding the installed capacity for the next month.*<sup>c</sup>

- (n) **'Scheduled generation'** at any time or for a time block or any period means schedule of generation in MW or MW ex-bus given by the concerned Load Despatch Centre;
- (o) **'Scheduled drawal'** at any time or for a time block or any period time block means schedule of despatch in MW or MW ex-bus given by the concerned Load Despatch Centre;
- (p) **'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 access;
- (q) <sup>D</sup>[<sup>7</sup> ~~**'time-block'** means a time block of 15 minutes, for which specified electrical parameters and quantities are recorded by special energy meter, with first time block starting at 00.00 hrs;~~

**"Time Block"** means the time block as defined in the CERC (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time;<sup>j</sup><sup>D</sup>

<sup>E</sup>[<sup>8</sup>(qa) **"Time Block DSM Charge"** means the charge for deviation for the specific time block in a day payable or receivable as the case may be, excluding the additional charges under Regulation 7.]<sup>E</sup>

<sup>5</sup> Inserted a proviso after sub-clause (h) of clause (1) of Regulation 2, vide Third amendment (C), 2016.

<sup>6</sup> Inserted a sub-clause (m-i) after clause (m) of clause (1) of Regulation 2, vide Third amendment (C), 2016.

<sup>7</sup> Omitted and inserted sub-clause (q) of clause (1) of Regulation 2, vide Fourth amendment (D), 2018.

<sup>8</sup> Inserted a sub-clause (qa) after clause (q) of clause (1) of Regulation 2, vide Fifth amendment (E), 2019.

<sup>B[9]</sup> (r) **'Available Capacity (AvC)'** for wind or solar generators which are regional entities is the cumulative capacity rating of the wind turbines or solar inverters that are capable of generating power in a given time-block.]<sup>B</sup>

- (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.

### 3. Objective:

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 drawal and injection of electricity by the users of the grid.

### 4. Scope:

These regulations shall be applicable to sellers and buyers involved in the transactions facilitated through short-term open access or medium-term open access or long-term access in inter-State transmission of electricity.

### 5. Charges for Deviations:

- (1) The charges for the Deviations 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 <sup>B[10]</sup> ~~and over injection by the seller and shall be worked out on the average frequency of a time-block at the rates specified in the table below as per the methodology specified in clause (2) of this regulation~~ and over-injection by the seller, except for wind and solar generators which are regional entities, and shall be worked out on the average frequency of a time-block at the rates specified in the table below as per the methodology specified in clause (2) of this regulation ]<sup>B</sup>:

<sup>D[11]</sup> Average Frequency of tie time block(Hz)		Charges for Deviation
Below	Not Below	Paise/kWh
	50.05	0.00
50.05	50.04	35.60
50.04	50.03	71.20
50.03	50.02	106.80
50.02	50.01	142.40

<sup>9</sup> Inserted a new sub-clause (r) after sub-clause (q) of clause (1) of Regulation 2, vide Second amendment (B), 2015.

<sup>10</sup> Omitted and inserted words in clause (1) of Regulation 5, vide Second amendment (B), 2015.

<sup>11</sup> Omitted and inserted table along with note of clause (1) of Regulation 5, vide Fourth amendment (D), 2018.

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	532.21
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
49.7S	49,77	657.32
49.77	49.76	678.16
49.76	49.75	699.00
49,75	49.74	719.S4
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 50.05-50.00 Hz, and 20.84Paise/kWh in frequency range 'below 50 Hz' to 'below 49.70 Hz')

<b>Average Frequency of the time block (Hz)</b>		<b>Charges for Deviation (Paise/kWh)</b>
<b><i>Below</i></b>	<b><i>Not Below</i></b>	
	50.05	0.0
50.05	50.04	<b><i>Slope determined by joining the price at Not Below 50.05 Hz and identified price at 50.00 Hz, and as detailed in the note below this Regulation</i></b>
50.04	50.03	
50.03	50.02	
50.02	50.01	
50.01	50.00	
50.00	49.99	<b><i>Slope determined by joining the price identified at 50.00 Hz and price at below 49.85 Hz, and as detailed in the note below this Regulation</i></b>
49.99	49.98	
49.98	49.97	
49.97	49.96	
49.96	49.95	
49.95	49.94	
49.94	49.93	
49.93	49.92	
49.92	49.91	
49.91	49.90	
49.90	49.89	
49.89	49.88	
49.88	49.87	
49.87	49.86	

49.86	49.85	
49.85		<b>800.00</b>

Note:-

- i. *The Deviation Settlement Mechanism (DSM) rate vector will have a dynamic slope determined by joining the identified price points at 50 Hz. (daily simple average ACP), frequency of 49.85 Hz (Rs. 8 per unit) and 50.05 Hz (zero) on a daily basis.*
- ii. *The maximum ceiling limit applicable for average Daily ACP discovered in the DAM segment of Power Exchange at 50.00 Hz shall be 800 Paise/kWh.*
- iii. *Charges for deviation for each 0.01 Hz step shall be equivalent to the Slope determined by joining the price at 'Not below 50.05 Hz' and 'identified price at 50.00 Hz' in the frequency range of 50.05-50.00 Hz, and to the Slope determined by joining the 'price identified at 50.00 Hz' and price at 'below 49.85 Hz' in frequency range 'below 50 Hz' to 'below 49.85 Hz'.*
- iv. *The daily simple average ACP of the Power Exchange having a market share of 80% or more in energy terms on a daily basis shall be taken into consideration for linking to the DSM price vector. If no single Power Exchange is having a market share of 80% or more, the weighted average day-ahead price shall be used for linking to the DSM price.*
- v. *Daily simple average Area Clearing Prices (ACP) in the day-ahead market (exclusive of any transmission charges and transmission losses) shall be used as the basis for market linked DSM price at 50 Hz.*

*Provided that based on a review of the above mechanism within one year or in such time period as may be decided by the Commission, if the Commission is satisfied that the market conditions permit, the basis for market linked DSM price shall be substituted, by the time-block-wise ACP in the day ahead market or as and when the real time market is introduced, by the hourly ACP or the ACP of such periodicity as may be considered appropriate by the Commission.*

- vi. *In case of non-availability of daily simple average ACP due to no-trade on a given day, daily simple average ACP of the last available day shall be considered for determining the DSM charge.*
- vii. *Deviation price shall be rounded off to nearest two decimal places.*
- viii. *An illustration to the DSM price vector specified in table above, is provided as Annexure-I*
- ix. *The National Load Despatch Centre (NLDC) shall act as the Nodal Agency to declare the daily DSM rates and shall display all relevant information on its website.<sup>12</sup>*

Provided that—

- (i) ~~<sup>D</sup>[<sup>12</sup> the charges for the Deviation for the generating stations regulated by 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~~

<sup>12</sup> Omitted and inserted proviso (i) of clause (1) of Regulation 5, vide Fourth amendment (D), 2018.

exceed the Cap Rate of 303.04 Paise/kWh as per the methodology specified in clause (3) of this regulation:

*the charges for the deviation for the generating stations whose tariff is determined by the Commission, when actual injection is higher or lower than the scheduled generation, shall not exceed the Cap Rate as per the methodology specified in clause (3) of Regulation 5 of the Principal Regulations.]<sup>D</sup>*

- (ii) ~~<sup>D</sup>[<sup>13</sup> Provided that no cap rate shall be applicable with effect from <sup>A</sup>[<sup>14</sup> 1.4.2014 the date of revision of price of APM gas by the Government of India]<sup>A</sup> on the charges for the Deviation for the generating stations regulated by consumer using gas supplied under Administered Price Mechanism (APM) as the fuel.~~

*the charges for the deviation for the generating stations other than those covered under proviso (i) of this Regulation, irrespective of the fuel source, when actual injection is higher or lower than the scheduled generation, shall not exceed the Cap Rate of 303.04 Paise/kWh.]<sup>D</sup>*

- (iii) ~~<sup>C</sup>[<sup>15</sup> the charges for the Deviation for the under drawals by the buyer in a time block in excess of 12% of the schedule or 150 MW, whichever is less, shall be zero.~~

*The charges for the deviation for under-drawals by the buyer (except Renewable Rich State) in a time block in excess of 12% of the schedule or 150 MW, whichever is less, shall be zero.*

*Provided that in case schedule of a buyer (except Renewable Rich State) in a time block is less than or equal to 400 MW, the charges for the deviation for the under-drawal in excess of 48 MW shall be zero.*

*Provided further that Deviation for the under-drawal by the Renewable Rich State in excess of the limits specified in Annexure-III shall be zero.]<sup>C</sup>*

- (iv) ~~<sup>B</sup>[<sup>16</sup> the charges for the Deviation for the over-injection by the seller in a time block in excess of 12% of the schedule or 150 MW, whichever is less, shall be zero, except in case of injection of infirm power, which shall be governed by the clause (5) of this Regulation,~~

~~<sup>C</sup>[<sup>17</sup> the charges for the Deviation for the over-injection by the seller in a time block in excess of 12% of the schedule or 150 MW, whichever is less, shall be zero, except in case of injection of infirm power, which shall be governed by the clause (5) of this Regulation, and except for wind and solar generators which are regional entities, which shall be governed by sub-clauses (v) to (vii) below:]<sup>B</sup>~~

*The charges for the deviation for the over-injection by the seller (except Renewable Rich State) in a time block in excess of 12% of the schedule or 150 MW, whichever is less, shall be zero, except in case of injection of infirm power, which shall be governed by clause (5) of this regulation:*

*Provided that in case schedule of a seller (except Renewable Rich State) in a time block is less than or equal to 400 MW, the charges for the deviation for the over-injection in excess of 48 MW shall be zero:*

<sup>13</sup> Omitted and inserted proviso (ii) of clause (1) of Regulation 5, vide Fourth amendment (D), 2018.

<sup>14</sup> Omitted and inserted letter and figure in proviso (ii) of clause (1) of Regulation 5, vide First amendment (A), 2014.

<sup>15</sup> Omitted and inserted proviso (iii) of clause (1) of Regulation 5, vide Third amendment (C), 2016.

<sup>16</sup> Omitted and inserted proviso (iv) of clause (1) of Regulation 5, vide Second amendment (B), 2014.

<sup>17</sup> Omitted and inserted proviso (iv) of clause (1) of Regulation 5, vide Third amendment (C), 2016.



*Provided further that charges for deviation for over-injection by a Renewable Rich State in a time block in excess of limits as specified in Annexure-III shall be zero. ]<sup>c</sup>*

*Provided also that charges for deviation for wind and solar generators which are regional entities, shall be governed by sub-clauses (v) to (vii) of this regulation.*

<sup>B[18</sup> (v) *The wind or solar generators which are regional entities shall be paid as per schedule. In the event of actual generation being less than the scheduled generation, the deviation charges for shortfall in generation shall be payable by such wind or solar generator to the Regional DSM Pool as given in Table – 1 below:*

*Table – I: Deviation Charges in case of under injection*

<b>Sr. No.</b>	<b>Absolute Error in the 15-minute time block</b>	<b>Deviation Charges payable to Regional DSM Pool</b>
1.	< = 15%	At the Fixed Rate for the shortfall energy for absolute error upto 15%
2.	>15% but <= 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 <=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%

*Where the Fixed Rate is the PPA rate as determined by the Commission under section 62 of the Act or adopted by the Commission under section 63 of the Act. In case of multiple PPAs, the weighted average of the PPA rates shall be taken as the Fixed Rate. The wind and solar generators shall furnish the PPA rates on affidavit for the purpose of Deviation charge account preparation to respective RPC supported by copy of the PPA.*

*Fixed Rate for Open Access participants selling power which is not accounted for RPO compliance of the buyer, and the captive wind or solar plants shall be the Average Power Purchase Cost (APPC) rate at the National level, as may be determined by the Commission from time to time through a separate order. A copy of the order shall be endorsed to all RPCs.*

(vi) *The wind or solar generators which are regional entities shall be paid as per schedule. In the event of the actual generation being more than the scheduled generation, the Deviation Charges for excess generation shall be payable to the wind or solar generators which are regional entities from the Regional DSM Pool as given in Table – II below:*

<sup>18</sup> Inserted new provisos (v), (vi) and (vii) after sub-clause (iv) of clause (1) of Regulation 5, vide Second amendment (B), 2014.

*Table – II: Deviation Charges in case of over injection*

<b>Sr. No.</b>	<b>Absolute Error in the 15-minute time block</b>	<b>Deviation Charges payable</b>
1	< = 15%	At the Fixed Rate for excess energy upto 15%
2	>15% but <= 25%	At the Fixed Rate for excess energy upto 15% + 90% of the Fixed Rate for excess energy beyond 15% and upto 25%
3	>25% but <=35%	At the Fixed Rate for 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 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%

*Where the Fixed Rate is the PPA rate as determined by the Commission under section 62 of the Act or adopted by the Commission under section 63 of the Act. In case of multiple PPAs, the weighted average of the PPA rates shall be taken as the Fixed Rate. The wind and solar generators shall furnish the PPA rates on affidavit for the purpose of Deviation charge account preparation to respective RPC supported by copy of the PPA.*

*Fixed Rate for Open access participants selling power which is not accounted for RPO compliance of the buyer, and the captive wind or solar plants shall be the Average Power Purchase Cost (APPC) rate at the National level, as may be determined by the Commission from time to time through a separate order. A copy of the order shall be endorsed to all RPCs.*

- (vii) *In reference to clauses (v) and (vi) of this Regulation, for balancing of deemed renewable purchase obligation (RPO) compliance of buyers with respect to schedule, deviations by all wind and solar generators which are regional entities shall first be netted off for the entire pool on a monthly basis and any remaining shortfall in renewable energy generation must be balanced through purchase of equivalent solar and non-solar Renewable Energy Certificates (RECs), as the case may be, by NLDC by utilising funds from the Pool Account. For positive balance of renewable energy generation, equivalent notional RECs shall be credited to the DSM Pool and carried forward for settlement in future.]<sup>B</sup>*

- (2) <sup>B[19]</sup> ~~The Charge for Deviation shall be determined in accordance with the following methodology~~

*The Charge for Deviation, except for wind and solar generators which are regional entities, shall be determined in accordance with the following methodology: ]<sup>B</sup>*

<sup>19</sup> Omitted and inserted wordings of clause (2) of Regulation 5, vide Second amendment (B), 2015.

- (a) The Charge for Deviation shall be zero at grid frequency of 50.05 Hz and above.
- (b) <sup>D</sup>[<sup>20</sup> ~~The Charge for Deviation corresponding to grid frequency interval of 'below 50.01 Hz and not below 50.0 Hz' shall be based on the median value of the average energy charge of coal/lignite based generating stations regulated by the Commission for any six month period preferably from July to December of previous year or from January to June for the year or any other six month period if deemed necessary and suitably adjusted upward to coincide with the Deviation Price Vector.~~

*The Charge for Deviation corresponding to grid frequency interval of 'below 50.01 Hz and not below 50.0 Hz' shall be daily average Area Clearing Price discovered in the Day-Ahead Market (DAM) segment of Power Exchange. The daily simple average ACP of the Power Exchange having a market share of 80% or more in energy terms on a daily basis shall be used for linking to the DSM price. If no single Power Exchange is having a market share of 80% or more, the weighted average daily simple average ACP shall be considered.]<sup>D</sup>*

- (c) The Deviation Price Vectors shall accordingly, be in steps for a frequency interval of 0.01 Hz between grid frequency of (i) 50.05 Hz and 'below 50.01 Hz and not below 50.0 Hz' and (ii) 'below 50.01 Hz and not below 50.0 Hz' and <sup>D</sup>[<sup>21</sup> ~~'below 49.70 Hz below 49.85 Hz.'~~]<sup>D</sup>
- (d) <sup>D</sup>[<sup>22</sup> ~~The Charge for Deviation at grid frequency "below 49.70 Hz" shall be based on the highest of the average energy charges of generating stations regulated by Commission on RLNG for any six month period preferably from July to December of previous year or from January to June for the year or any other six month period if deemed necessary and suitably adjusted upward to coincide with the Deviation Price Vector.~~

*The Charge for Deviation at grid frequency 'below 49.85 Hz' shall be 800 Paise/KWh.]<sup>D</sup>*

<sup>E</sup>[<sup>23</sup>(e) *The charges for inter-regional deviation and for deviation in respect of cross border transactions shall be computed on the basis of the unconstrained market clearing price in Day Ahead Market.*

(f) *The charges for deviation in respect of an entity falling in different bid areas, shall be computed on the basis of the daily average ACP of the bid area in which such entity has largest proportion of its demand.]<sup>E</sup>*

- (3) <sup>D</sup>[<sup>24</sup> ~~The Cap rate for the charges for the Deviation for the generating stations regulated by GERC using coal/lignite or gas supplied under Administered Price Mechanism (APM) as the fuel shall be the value coinciding with the energy charges on imported coal on Deviation Price Vector.~~

*The Cap rate for the charges for deviation for the generating stations whose tariff is determined by the Commission shall be equal to its energy charges as billed for the previous month.*

~~*Provided that no retrospective revision of DSM account shall be allowed even if*~~

<sup>20</sup> Omitted and inserted sub-clause (b) of clause (2) of Regulation 5, vide Fourth amendment (D), 2018.

<sup>21</sup> Omitted and inserted words and figures of sub-clause (2) of Regulation 5, vide Fourth amendment (D), 2018.

<sup>22</sup> Omitted and inserted sub-clause (2) of clause (3) of Regulation 5, vide Fourth amendment (D), 2018.

<sup>23</sup> Inserted new sub clauses (e) and (f) after clause (2) of Regulation 5, vide Fifth amendment (E), 2019.

<sup>24</sup> Omitted and inserted clause (3) of Regulation 5, vide Fourth amendment (D), 2018.

*the energy charges are revised at a later date.]<sup>D</sup>*

*<sup>E</sup>[<sup>25</sup>The Cap rate for the charges for deviation for the generating stations, irrespective of the fuel type and whether the tariff of such generating station is regulated by the Commission or not, shall not exceed 303.04 Paise/kWh.]<sup>E</sup>*

- (4) <sup>D</sup>[<sup>26</sup>~~The Charges for Deviation may be reviewed by the Commission from time to time and shall be re-notified accordingly.~~

*The linkage of deviation charges to frequency may be reviewed by the Commission, keeping in view the changing power market conditions.]<sup>D</sup>*

- (5) The infirm power injected into the grid by a generating unit of a generating station during the 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 6 months or the extended time allowed by the Commission in the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access and related matters") Regulations, 2009, as amended from time to time, subject to ceiling of cap rates corresponding to the main fuel used for such injection as specified below:

Domestic/Coal/Lignite/Hydro - Rs. 1.78 / kWh sent out

APM gas as fuel - Rs. 2.82/ kWh sent out <sup>A</sup>[<sup>27</sup> up to 31.3.2014 and thereafter, ~~Rs. 5.64/ kWh sent out~~ up to the date of revision of price of APM gas by government of India and thereafter, at the rate to be notified by the Commission separately.]<sup>A</sup>

Imported Coal - Rs. 3.03 / kWh sent out

RLNG - <sup>D</sup>[<sup>28</sup> ~~Rs. 8.24 / kWh sent out~~ Rs. 8.00/ kWh sent out]<sup>D</sup>

- (6) Charges for Deviation of Inter-regional Exchange between the two asynchronously inter-connected Regions shall be computed by the respective Regional Power Committee, based on Charges for Deviation as per the frequency of the respective Region. The amount to be settled for the inter-regional exchanges shall be average of the Charges for Deviation computed for the two regions by way of such inter-change.

## **6. Declaration, scheduling and elimination of gaming:**

- (1) The provisions of the Grid Code and the Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time, shall be applicable for declaration of capacity, scheduling and elimination of gaming.
- (2) The generating station, as far as possible, shall generate electricity as per the day-ahead generation schedule finalized by the Regional Load Despatch Centre in accordance with the Grid Code.

<sup>25</sup> Omitted and inserted clause (3) of Regulation 5, vide Fifth amendment (E), 2019.

<sup>26</sup> Omitted and inserted clause (4) of Regulation 5, vide Fourth amendment (D), 2018.

<sup>27</sup> Omitted and inserted words and figures of clause (5) of Regulation 5, vide First amendment (A), 2014.

<sup>28</sup> Omitted and inserted words and figures of clause (5) of Regulation 5, vide Fourth amendment (D), 2018.

Provided that the revision in generation schedule on the day of operation shall be permitted, in accordance with the procedure specified under the Grid Code and Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, as the case may be.

- (3) The Commission, either suo motu or on a petition made by RLDC, or any affected party, may initiate proceedings against any generating company or seller on charges of gaming and if required, may order an inquiry in such manner as decided by the Commission. When the charge of gaming is established in the above inquiry, the Commission may without prejudice to any other action under the Act or regulations there under, disallow any Charges for Deviation received by such generating company or the seller during the period of such gaming.

## 7. Limits on Deviation volume and Consequences of crossing limits:

- (1) <sup>A[29]</sup> ~~The over draws/ under draws of electricity by any buyer during a time block shall not exceed 12% of its scheduled drawal or 150 MW, whichever is lower, when grid frequency is '49.70' Hz and above :~~

~~Provided that no over drawal of electricity by any buyer shall be permissible when grid frequency is "below 49.70 Hz".~~

*The over drawal/under drawal of electricity by any buyer <sup>C[30]</sup> (except Renewable Rich States)]<sup>C</sup> during the time block shall not exceed 12% of its scheduled drawal or 150 MW, whichever is lower, when grid frequency is <sup>D[31]</sup> "49.70 Hz and above and below 50.10 Hz "49.85 Hz and above and below 50.05 Hz".<sup>F</sup>*

<sup>E 32</sup> [<sup>C[33]</sup> ~~Provided that over drawal/under drawal of electricity by any Renewable Rich State during the time block shall not exceed limits as specified in Annexure III, when grid frequency is <sup>D[34]</sup> "49.70 Hz and above and below 50.10 Hz "49.85 Hz and above and below 50.05 Hz".<sup>P</sup>]<sup>C</sup> <sup>J</sup><sup>E</sup>~~

*Provided that no over drawal of electricity by any buyer shall be permissible when grid frequency is <sup>D[35]</sup> "below 49.70 Hz" "below 49.85 Hz"<sup>D</sup> and no under drawal of electricity by any buyer shall be permissible when grid frequency is <sup>D[36]</sup> "50.10 Hz and above" "50.05 Hz and above"<sup>D</sup>.<sup>J</sup><sup>A</sup>*

<sup>D[37]</sup> *Provided also that from a date not earlier than one year as may be notified by the Commission, the total deviation from schedule in energy terms during a day shall not be in excess of 3% of the total schedule for the drawee entities and 1% for the generators and additional*

<sup>29</sup> Omitted and clause (1) of Regulation 7, vide First amendment (A), 2014.

<sup>30</sup> Inserted words "except Renewable Rich States" after word "buyer" of clause (1) of Regulation 7, vide Third amendment (C), 2016.

<sup>31</sup> Omitted and inserted words and figures of clause (1) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>32</sup> Omitted first proviso of clause (1) of Regulation 7, vide Fifth amendment (E), 2018.

<sup>33</sup> Inserted a new proviso after first proviso of clause (1) of Regulation 7, vide Third amendment (C), 2016.

<sup>34</sup> Omitted and inserted words and figures of first proviso of clause (1) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>35</sup> Omitted and inserted words of second proviso of clause (1) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>36</sup> Omitted and inserted words of second proviso of clause (1) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>37</sup> Inserted a new proviso at the end of clause (1) of Regulation 7, vide Fourth amendment (D), 2018.

charge of 20% of the daily base DSM payable / receivable shall be applicable in case of said violation.]<sup>D</sup>

~~C<sup>[38]</sup> B<sup>[39]</sup> Provided that the limits on deviation volume and consequences for crossing these limits (including the additional charges for deviation) as stipulated under Regulation 7 shall not apply to wind and solar generators which are regional entities.]<sup>B</sup> C~~

**Explanation:** The limits specified in this clause shall apply to the sum total of over-drawal / <sup>C<sup>[40]</sup></sup> over drawal ]<sup>C</sup> by all the intra-State entities in the State including the distribution companies and other into-State buyers, and shall be applicable at the inter-State boundary of the respective State.

(2) <sup>A<sup>[41]</sup></sup> ~~The under injection / over injection of electricity by a seller during a time block shall not exceed 12% of the scheduled injection of such seller or 150 MW, whichever is lower when frequency is "49.70 Hz and above:~~

~~Provided that—~~

- ~~(i) no under injection of electricity by a sellers ball be permissible when grid frequency is "below 49.70 Hz" and no over injection of electricity by a seller shall be permissible when grid frequency is "50.10 Hz and above".~~
- ~~(ii) any infirm injection of power by a generating station prior to COD of a unit during testing and commissioning activities shall be exempted torn the volume limit specified above for a period not exceeding 6 months or the extended time allowed by the Commission in accordance with the Connectivity Regulations.~~
- ~~(iii) any drawal of power by a generating station prior to COD of a unit for the startup activities shall be exempted from the volume limit specified above when grid frequency is '49.70' Hz and above".~~

<sup>C<sup>[42]</sup></sup> ~~(2) The under injection / over injection of electricity by a seller during a time block shall not exceed 12% of the scheduled injection of such seller or 150 MW, whichever is lower when grid frequency is "49.70 Hz and above and below 50.10 Hz":~~

~~Provided that—~~

- ~~(i) No under injection of electricity by a seller shall be permissible when grid frequency is "below 49.70 Hz" and no over injection of electricity by a seller shall be permissible when grid frequency is "50.10 Hz and above".~~
- ~~(ii) Any infirm injection of power by a generating station prior to COD of a unit during testing and commissioning activities shall be exempted from the volume limit specified above for a period not exceeding 6 months or the extended time allowed by the Commission in accordance with Connectivity Regulations.~~

<sup>38</sup> Deleted last proviso of clause (1) of Regulation 7, vide Third amendment (C), 2016.

<sup>39</sup> Inserted a new proviso after existing proviso of clause (1) of Regulation 7, vide Second amendment (B), 2015.

<sup>40</sup> Inserted words "/over drawal" in Explanation of clause (1) of Regulation 7, vide Third amendment (C), 2016.

<sup>41</sup> Omitted inserted and clause (2) of Regulation 7, vide First amendment (A), 2014.

<sup>42</sup> Omitted and inserted clause (2) of Regulation 7, vide Third amendment (C), 2016.

~~(iii) Any drawal of power by a generating station prior to COD of a unit for the start up activities shall be exempted from the volume limit specified above when grid frequency is "49.70 Hz and above".]~~<sup>A</sup>

(2) The under-injection / over-injection of electricity shall not exceed following when grid frequency is <sup>D[43</sup> ~~"49.70 Hz or above and below 50.10 Hz"~~ **"49.85 Hz or above and below 50.05 Hz"**<sup>P</sup>:

(a) 12% of the scheduled injection or 150 MW, whichever is lower for a seller (except Renewable Rich State).

(b) Limits as specified in Annexure-III for Renewable Rich State.

Provided that:

(i) In case schedule of a seller, in a time block, is less than or equal to 400 MW, under-injection / over-injection in a time-block shall not exceed 48 MW, when grid frequency is <sup>D[44</sup> ~~"49.70 Hz or above and below 50.10 Hz"~~ **"49.85 Hz or above and below 50.05 Hz"**<sup>D</sup>

(ii) Provided that the limits on deviation volume and consequences for crossing these limits (including the additional charges for deviation) as stipulated under Regulation 7 shall not apply to wind and solar generators which are regional entities.

(iii) No under injection of electricity by a seller shall be permissible when grid frequency is <sup>D[45</sup> ~~"below 49.70 Hz"~~ **"below 49.85 Hz"**<sup>P</sup> and no over injection of electricity by a seller shall be permissible when grid frequency is <sup>D[46</sup> ~~"50.10 Hz and above"~~ **"50.05 Hz and above"**<sup>P</sup>

(iv) Any infirm injection of power by a generating station prior to COD of a unit during testing and commissioning activities shall be exempted from the volume limit specified above for a period not exceeding 6 months or the extended time allowed by the Commission in accordance with Connectivity Regulations.

(v) Any drawal of power by a generating station prior to COD of a unit for the start up activities shall be exempted from the volume limit specified above when grid frequency is <sup>D[47</sup> ~~"49.70 Hz and above"~~ **"49.85 Hz and above"**<sup>P]</sup><sup>C</sup>

(3) In addition to Charges for Deviation as stipulated under Regulation 5 of these regulations, Additional Charge 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 (1) and (2) of this regulation when average grid frequency of the time block is <sup>D[48</sup> ~~"49.70 Hz and above"~~ **"49.70 Hz and above"**<sup>D</sup> at the rates specified in the table I <sup>C[49</sup> ~~and table III as the case may be]~~<sup>C</sup> below in accordance with the methodology specified in clause (7) of this regulation:

<sup>43</sup> Omitted and inserted words and figures of clause (2) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>44</sup> Omitted and inserted words and figures of proviso (i) of clause (2) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>45</sup> Omitted and inserted words of proviso (iii) of clause (2) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>46</sup> Omitted and inserted letters of proviso (iii) of clause (2) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>47</sup> Omitted and inserted letters of proviso (v) of clause (2) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>48</sup> Omitted and inserted letters of clause (3) of Regulation 7, vide Forth amendment (D), 2018.

<sup>49</sup> Inserted words in clause (3) of Regulation 7, vide Third amendment (C), 2016.

<sup>c</sup> [ <sup>50</sup> ~~TABLE-I~~ **TABLE - I** for seller/buyer (except Renewable Rich State)]<sup>c</sup>

When 12% of Schedule is less than or equal to 150 MW		
(i)	For over drawal of electricity by any buyer in excess of 12% and up to 15% of the schedule in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(ii)	For over drawal of electricity by any buyer in excess of 15 % and up to 20% of the schedule in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(iii)	For' over drawal of electricity by any buyer in excess of 20 % of the schedule in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.
(iv)	For under injection of electricity by any seller in excess of 12% and up to 15% of the schedule in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(v)	For under injection of electricity by any seller in excess of 15 % and up to 20% of the schedule in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(vi)	For under injection of electricity by any seller in excess of 20 % of the schedule in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.
B When 12% of Schedule is more than 150 MW		
(i)	For over drawal of electricity by any buyer is above 150 MW and up to 200 MW in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(ii)	For over drawal of electricity by any buyer is above 200 MW and up to 250 MW in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(iii)	For over drawal of electricity by any buyer is above 250 MW in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.

<sup>50</sup> Inserted words "Table I for seller/buyer (except Renewable Rich State)" after Table title "Table-I" in clause (3) of Regulation 7, vide Third amendment (C), 2016.



(iv)	For under injection of electricity by any seller is above 150 MW and up to 200 MW in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(v)	For under injection of electricity by any seller is above 200 MW and up to 250 MW in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(vi)	For under injection of electricity by any seller is above 250 MW in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.

**TABLE-II**

	When 12% of Schedule is less than or equal to 150 MW	
(i)	For under injection of electricity by any seller in excess of 12% and up to 15% of the schedule	Equivalent to 20% of the Cap Rate for Deviations of 503.04Paise/kWh or the Charge .for Deviation corresponding to average grid frequency of the time block, whichever is less.
(ii)	For under injection of electricity by any seller in excess of 15 % and up to 20% of the schedule	Equivalent to 40% of the Cap Rate for Deviations of 303.04 Paise/kWh or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.
(iii)	For under injection of electricity by any seller in excess of 20 % of the schedule	Equivalent to 100% of the <sup>D</sup> [ <sup>51</sup> <del>Cap Rate for Deviations of 303.04 Paise/kWh</del> <sup>E</sup> [ <sup>52</sup> <del>Cap Rate being equivalent to the energy charges as billed for the previous month</del> <sup>D</sup> <del>Cap Rate for Deviation of 303.04 Paise/kWh</del> <sup>E</sup> ] or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.
	When 12% of Schedule is more than 150 MW	
(i)	For under injection of electricity by any seller is above 150 MW and upto 200 MW in a time block	Equivalent to 20 % of the Cap Rate for Deviations 303.04 Paise/kWh or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.

<sup>51</sup> Omitted and inserted sub-clause (iii) of Table-II of clause (3) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>52</sup> Omitted and inserted wordings of clause (iii) of table-II (both parts) of clause (3) of regulation 7, vide Fifth amendment (E), 2019.

(ii)	For under injection of electricity by any seller is above 150 MW and upto 250 MW in a time block	Equivalent to 40 % of the Cap Rate for Deviations 303.04 Paise/kWh or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.
(iii)	For under injection of electricity by any seller is above 250 MW in a time block.	Equivalent to 100 % of the <sup>D</sup> [Cap Rate for Deviations of 303.04 Paise/kWh <sup>E</sup> [Cap Rate being equivalent to the energy charges as billed for the previous month Cap Rate for Deviation of 303.04 Paise/kWh] <sup>D</sup> <sup>F</sup> or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.

<sup>C</sup>[<sup>53</sup> Provided that when the schedule is less than or equal to 400 MW, the additional charges for deviation shall be based on percentage of deviation worked out with reference to schedule of 400 MW as per Table-I and Table-II above.]<sup>C</sup>

<sup>C</sup>[<sup>54</sup> **TABLE-III: For a Renewable Rich State**

(i)	For over-drawal/under-injection of electricity above L MW and up to L+50 MW in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(ii)	For over-drawal / under-injection of electricity above L+50 MW and up to L+100 MW in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(iii)	For over-drawal / under-injection of electricity above L+100 MW in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.

Note: "L" shall be as specified in Annexure-III of the these Regulations.]<sup>C</sup>

Provided that-

- (i) Additional Charge for Deviation for under-injection of electricity, during a time-block in excess of the volume limit specified in clause (1) and (2) of this regulation when grid frequency is "49.70 Hz and above" by generating stations regulated by the CERC using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel shall be at the rates specified below in accordance with the methodology specified in clause (9) of this regulation;
- (ii) Any drawal of power by a generating station prior to COD of a unit for the start up activities shall be exempted from the levy of additional Charges of Deviation.

<sup>53</sup> Inserted a proviso after Table-II in clause (3) of Regulation 7, vide Third amendment (C), 2016.

<sup>54</sup> Inserted a new "Table-III" after "Table-II" in clause (3) of Regulation 7, vide Third amendment (C), 2016.

- (4) ~~E<sup>55</sup> In addition to Charges for Deviation as stipulated under Regulation 5 of these regulations, Additional Charge for Deviation shall be applicable for over injection/under drawal of electricity for each time block by a seller/buyer as the case may be when grid frequency is <sup>D<sup>56</sup></sup> "50.10 Hz and above" "50.05 Hz and above"]<sup>D</sup> at the rates equivalent to charges of deviation corresponding to the grid frequency of "below 50.01 Hz but not below 50.0 Hz".~~
- (4) *In addition to Charges for Deviation as stipulated under Regulation 5 of these regulations, Additional Charge for Deviation shall be applicable for over injection/ under-drawal of electricity for each time block by a buyer/seller as the case may be when grid frequency is '50.10 Hz and above' at the rates equivalent to charges of deviation corresponding to the grid frequency of 'below 50.01 Hz but not below 50.0 Hz', or cap rate for deviation of 303.04 Paise/kWh whichever is lower."*<sup>F</sup>
- (5) Methodologies for the computation of Charges for Deviation and Additional Charges for Deviation for each regional entity for crossing the volume limits specified for the under-drawal / over-injection and for over-drawal / under-injection in clause (3) of this regulation shall be as per <sup>C<sup>57</sup></sup> ~~Annexure-I and II~~ *Annexure I, Annexure I-A and Annexure-II, Annexure-II-A]*<sup>C</sup> of these Regulations respectively.
- (6) In addition to Charges for Deviation as stipulated under Regulation 5 of these Regulations, Additional Charge for Deviation shall be applicable for over-drawal or under-injection of electricity when the grid frequency is <sup>D<sup>58</sup></sup> ~~"below 49.70 Hz" in accordance with the methodology specified in clause (8) of this regulation and the same shall be equivalent to 100% of the Charge for Deviation of 824.04 Paise/kWh corresponding to the grid frequency "below 49.70 Hz"~~ *below 49.85 Hz in accordance with the methodology specified in clause (8) of this regulation and the same shall be equivalent to 100% of the Charge for Deviation of 800 Paise / kWh corresponding to the grid frequency of "below 49.85 Hz".]*<sup>D</sup>

Provided further that Additional Charge for Deviation for under-injection of electricity by a seller, during the time-block when grid frequency is <sup>D<sup>59</sup></sup> ~~"below 49.70 Hz"~~ *"below 49.85 Hz"]<sup>D</sup>*, by the generating stations regulated by CERC using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel in accordance with the methodology specified in clause (8) of this regulation shall be equivalent to 100% of the <sup>D<sup>60</sup></sup> ~~[Cap Rate for Deviations of 303.04 Paise/kWh~~ <sup>E<sup>60</sup></sup> ~~Cap Rate equivalent to the energy charges as billed for the previous month. Cap Rate of 303.04 Paise/kWh]~~<sup>D</sup> <sup>E</sup>

**Explanation:** Additional Charges for 'Deviation shall not be applicable for net over draws by a region as a whole from other regions.

- (7) The Additional Charge for Deviation for over-drawal and under-injection of electricity for each time block in excess of the volume limit specified in clause (1) and (2) of this Regulation when grid frequency is <sup>D<sup>61</sup></sup> ~~"48.70 Hz and above"~~ *"48.85 Hz and above"]<sup>D</sup>* shall be

<sup>55</sup> Omitted and inserted clause (4) of Regulation 7, vide Fifth amendment (E), 2019.

<sup>56</sup> Omitted and inserted letters of clause (4) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>57</sup> Omitted and inserted words of clause (5) of Regulation 7, vide Third amendment (C), 2016.

<sup>58</sup> Omitted and inserted text of clause (6) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>59</sup> Omitted and inserted words and figures of proviso of clause (6) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>60</sup> Omitted and inserted wordings of clause (6) of Regulation 7, vide Fifth amendment (E), 2019.

<sup>61</sup> Omitted and inserted text of clause (7) of Regulation 7, vide Fourth amendment (D), 2018.

as 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 draws and under injections depending upon different % deviation from the schedule in excess of the volume limit specified in clause (1) and (2) of this Regulation.

- (8) The additional Charge for Deviation for over-drawals and under-injection of electricity for each time block when grid frequency is <sup>D[62</sup> ~~"below 49.70 Hz"~~ *"below 49.85 Hz"*<sup>D]</sup> shall be as 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 draws and under injections and for different ranges of frequencies <sup>D[63</sup> ~~'below 49.70 Hz'~~ *'below 49.85 Hz'*<sup>D]</sup>.

- (9) The Additional Charge for Deviation for under-injection of electricity during the time-block in excess of the volume limit specified in Clause (2) of this regulation when grid frequency is <sup>D[64</sup> ~~49.70 Hz~~ *49.85 Hz and above'*<sup>D]</sup>, by the generating stations regulated by CERC using coal/ 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 CERC towards grid discipline;
- (10) <sup>D[65</sup> ~~In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity, such regional 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 regional entity has positive deviation from schedule from 07.30 hrs to 10.30 hrs, sign of its deviation from schedule shall be changed in the 13th time block i.e. 10.30 to 1.0.45 hrs from positive to negative or negative to positive as the case may be.~~

*<sup>E[66</sup> In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity (buyer or seller), such regional entity shall have to change sign of their deviation from schedule, at least once, after every 6 time blocks. To illustrate, if a regional entity has positive deviation from schedule from 07.30 hrs to 09.00hrs, sign of its deviation from schedule shall be changed in the 7th time block i.e. 09.00hrs to 09.15hrs from positive to negative or vice versa as the case may be.*

*Provided that violation of the requirement under this clause shall attract an additional charge of 20% on the daily base DSM payable / receivable as the case may be.]<sup>D</sup>*

<sup>62</sup> Omitted and inserted letters of clause (8) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>63</sup> Omitted and inserted words of proviso of clause (8) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>64</sup> Omitted and inserted figures of clause (9) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>65</sup> Omitted and inserted clause (10) of Regulation 7, vide Fourth amendment (D), 2018.

<sup>66</sup> Omitted and inserted clause (10) of Regulation 7, vide Fifth amendment (E), 2019.

*In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity (buyer or seller), such entity shall correct its position in the manner as specified under clauses (a) and (b) of this Regulation.*

- (a) *For the period up to 31.03.2020: If the sustained deviation from schedule continues in one direction (positive or negative) for 12 time blocks, the regional entity (buyer or seller), shall correct its position by making the sign of its deviation from schedule changed or by remaining in the range of +/- 20 MW with reference to its schedule, at least once, latest by 13<sup>th</sup> time block, such range being a subset of volume limit as specified under Regulations 7(1) & 7(2) of these Regulations.*

*Provided that each violation of the requirement under this clause shall attract an additional charge of 10% of the time block DSM charge payable or receivable as the case may be.*

- (b) *For the period from 01.04.2020: If the sustained deviation from schedule continues in one direction (positive or negative) for 6 time blocks, the regional entity (buyer or seller), shall correct its position, by making the sign of its deviation from schedule changed or by remaining in the range of +/- 20 MW with reference to its schedule, at least once, latest by 7<sup>th</sup> time block such range being a subset of volume limit as specified under Regulations 7(1) & 7(2) of these Regulations.*

*Provided that violation of the requirement under clause (b) of this Regulation shall attract an additional charge as specified in the table below:*

<b>No. of violations in a Day</b>	<b>Additional Charge Payable</b>
<i>From first to fifth violation</i>	<i>For each violation, an additional charge@ 3% of daily base DSM charge payable or receivable</i>
<i>From sixth to tenth violation</i>	<i>For each violation, an additional charge @ 5% of daily base DSM charge payable or receivable</i>
<i>From eleventh violation onwards</i>	<i>For each violation, an additional charge @ 10% of daily base DSM charge payable or receivable</i>

*Provided further that counting of number of sign change violations under clauses (a) & (b) of this Regulation shall start afresh at 00.00 Hrs. for each day.*

*Provided also that payment of additional charge for failure to adhere to sign change requirement as specified under clauses (a) & (b) of this regulation shall not be applicable to:*

- a. renewable energy generators which are regional entities*
- b. run of river projects without pondage*
- c. any infirm injection of power by a generating station prior to CoD of a unit during testing and commissioning activities, in accordance with the Connectivity Regulations.*
- d. any drawal of power by a generating station for the start-up activities of a unit.*
- e. any inter-regional deviations.*
- f. forced outage of a generating station in case of collective transactions on Power Exchanges.*

### **Illustrations:-**

i. *Illustration to 7(10)(a):-,*

*For the period up to 31.03.2020: A regional entity having a sustained deviation from time blocks  $t_1$  to  $t_{12}$ , shall correct its position either by changing the sign of its deviation (from positive to negative or negative to positive as the case may be) or come back in the range of +/- 20 MW with reference to its schedule latest by the end of time block  $t_{13}$ . In case, such sign change does not take place or it fails to come back in the range of +/- 20 MW by the end of time block  $t_{13}$ , but such correction of position takes place from time block  $t_{14}$  up to time block  $t_{24}$ , then the additional charge shall be levied equivalent to one violation. The above violation shall attract an additional charge at the rate of 10% of the time block DSM charge for  $t_{13}$ . Further, in case, sign change does not take place or it fails to come back to the range as aforesaid even latest by the end of  $t_{25}$ , but correction of position takes place from time block  $t_{26}$  up to time block  $t_{36}$ , then the additional charge shall be levied equivalent to two violations. The above violation shall attract an additional charge at the rate of 10% of the time block DSM for  $t_{13}$  and  $t_{25}$ , and so on.*

ii. *Illustration to 7(10)(b):-,*

*For the period from 01.04.2020: A regional entity having a sustained deviation from time blocks  $t_1$  to  $t_7$ , shall correct its position either by changing the sign of its deviation (from positive to negative or negative to positive as the case may be) or come back in the range of +/- 20 MW with reference to its schedule latest by the end of time block  $t_7$ . In case, such sign change does not take place or it fails to come back in the aforesaid range by the end of time block  $t_7$ , but such correction of position takes place from time block  $t_8$  up to time block  $t_{12}$ , then additional charge shall be levied equivalent to one violation. Further, in case, sign change does not take place or it fails to come back in the range as aforesaid latest by the end of  $t_{13}$ , but correction in position takes place from time block  $t_{14}$  up to time block  $t_{18}$ , then the additional charge shall be levied for two violations and so on. The additional charge shall be at the rate as specified in clause (b) of this Regulation.]<sup>E</sup>*

- (11) <sup>E</sup><sup>67</sup> ~~Payment of Charges for Deviation under Regulation 5 and the Additional Charges for Deviation under Clauses (3) and (4) of this regulation, 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 as specified in these regulations, for each time block or violation of provision of clause 10 of these regulations.~~

*Payment of Charges for Deviation under Regulation 5 and the Additional Charges for Deviation under Clauses (3), (4) and (10) of this regulation 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 provisions of the said regulations.]<sup>E</sup>*

~~<sup>E</sup><sup>68</sup> <sup>D</sup><sup>69</sup> 11a) The additional charge for violation of sign change stipulation shall be leviable for each such violation during a day.~~

<sup>67</sup> Omitted and inserted clause (11) of Regulation 7, vide Fifth amendment (E), 2019.

<sup>68</sup> Deleted sub-clause (11a) of clause (11) of Regulation 7, vide Fifth amendment (E), 2019.

<sup>69</sup> Inserted a new clause (11a) after clause (11) of Regulation 7, vide Fourth amendment (D), 2018.

~~To illustrate, the change of sign should take place at least once after every six time blocks. Accordingly, the entity, starting from time block  $t_1$ , should change the sign after time block  $t_6$ . In case, sign change does not take place immediately after time block  $t_6$ , but takes place from time block  $t_7$  upto time block  $t_{12}$ , additional charge shall be levied equivalent to one violation. In case, sign change does not take place immediately after time block  $t_{12}$ , but takes place from time block  $t_{13}$  upto time block  $t_{18}$ , additional charge shall be levied equivalent to two violations.~~

~~Provided that in case of run of river projects without pondage, payment of additional charge for failure to adhere to sign change requirement shall apply from such date as may be notified by the Commission. Such generators shall, however, be required to follow the sign change requirement and report to POSOCO the reasons for non-adherence to the requirement.]<sup>D</sup>~~

- (12) The charges for over-drawal/ under-injection and under-drawal/over-injection of electricity shall be computed by the respective Regional Power Committee in accordance with the methodology used for preparation of 'Regional Energy Accounts.
- (13) The Regional Load Despatch Centre shall on monthly basis, prepare and publish on its website the records of the Deviation Accounts, specifying the quantum of over-drawal/under-injection and corresponding amount of Charges for Deviation payable/receivable for each buyer and seller for all the time-blocks when grid frequency was "49.90 Hz and above" and "below 49,90" Hz separately."

## **8. Compliance with Instructions of Load Despatch Centre:**

Notwithstanding anything specified in these Regulations, the sellers and the buyers shall strictly follow the instructions of the Regional Load Despatch Centre on injection and drawal in the interest of grid security and grid discipline.

## **9 Accounting of Charges for Deviation:**

- (1) A statement of Charges for Deviations including Additional Charges for Deviation levied under these regulations shall be. prepared by the Secretariat of the respective Regional Power Committee on weekly basis based on the data provided by the concerned RLDC(s) 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,
- (2) 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 "Regional Deviation Pool Account Fund", which shall be maintained and operated by the concerned Regional Load Despatch Centre in each region in accordance with provisions of these regulations.

Provided that -

- (i) the Commission may by order direct any other entity to operate and maintain the respective "Regional Deviation Pool Account Fund";
- (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 Secretariat of the respective Regional Power Committee.

- (3) All payments received in the "Regional Deviation Pool Account fund" of each region shall be appropriated in the following sequence:
  - (a) First towards any cost or expense or other charges incurred on recovery of Charges for deviation.
  - (b) Next towards over dues or penal interest, if applicable.
  - (c) Next towards normal interest.
  - (d) Lastly, towards charges for deviation and additional charges for deviation.

**Explanation:** Any Additional Charge for Deviation collected from a regional entity shall be retained in the "Regional Deviation Pool Account fund" of the concerned region where the regional entity is located.

#### **10. Schedule of Payment of Charges for Deviation:**

- (1) The payment of charges for Deviation shall have a high priority and the concerned constituent shall pay the indicated amounts within 10 (ten) days of the issue of statement of Charges for Deviation including Additional charges for Deviation by the Secretariat of the respective Regional Power Committee into the "Regional Deviation Pool Account Fund" of the concerned region.
- (2) If payments against the Charges for Deviation including Additional Charges for Deviation are delayed by more than two days, i.e., beyond twelve (12) days from the date of issue of the statement by the Secretariat of the respective Regional Power Committee, the defaulting constituent shall have to pay simple interest @ 0.04% for each day of delay.
- (3) All payments to the entities entitled to receive any amount on account of charges for Deviation shall be made within 2 working days of receipt of the payments in the "Regional Deviation Pool Account Fund" of the concerned region.

Provided that --

- (i) in case of delay in the Payment of Charges for Deviation into the respective Regional Deviation Pool Account Fund and interest there on if any, beyond 12 days from the date of issue of the Statement of Charges for deviations the regional entities who have to receive payment for deviation or interest thereon shall be paid from the balance available if any, in the Regional Deviation Pool Account Fund for the region. In the case the balance available is not sufficient to meet the payment to the Regional Entities, the payment from the Regional deviation Pool Accounts Fund shall be made on pro rata basis from balance available in the Fund.
  - (ii) the liability to pay interest for the delay in payments to the "Regional Deviation Pool Account Fund" shall remain till interest not paid; irrespective of the fact that constituents who have to receive payments have been paid from the "Regional Deviation Pool Account Fund" in part or full.
- (4) All regional 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 concerned RLDC within a fortnight from the date these Regulations come into force.

Provided that-

- (i) if any regional 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 be required to open a Letter of Credit equal to 110% of weekly outstanding liability in favour of respective Regional Load Despatch Centre 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 regional entity during 2009-10 is Rs. 20 crore, the regional entity shall open LC for 22 crore in 2010-11. If the weekly payable liability any week in 2010-11 is Rs. 35 crore which is more than 50% of the previous financial year's average payable weekly liability of Rs. 30 Crore, the concerned regional entity shall increase the LC amounts to Rs. 38.5 crore (1.1\* Rs. 35.0) by adding Rs. 16.5 days.

- (5) In case of failure to pay into the "Regional Deviation Pool Account Fund" within the specified time of 12 days from the date of issue of statement of charges for Deviations, the RLDC 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 3 days.

#### **11. Application of fund collected through Deviations:**

The surplus amount, if any in the Deviation Pool Account fund as on last day of the month, shall be transferred to a separate fund namely "Power Systems Development Fund" specified by the Commission in the first week of the next month and shall be utilized, for the purpose specified by the Commission.

#### **12. 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.

#### **13. 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.

#### **14. Repeal and Savings:**

- (1) On commencement of these Regulations, Central Electricity Regulatory Commission

(Unscheduled Interchange charges and related matters) Regulation, 2009 shall stand repealed.

- (2) On commencement of these Regulations, any reference to the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009 in any of the Regulations, Standards, Codes or Procedures of the Central Electricity Regulatory Commission shall be deemed to be replaced by Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2013,
- (3) On commencement of these Regulations, the "Regional Unscheduled Interchange Pool Account funds" shall continue to operate till the UI accounts settlement for the period prior to commencement of these Regulations is completed and balance if any, in UI Pool account shall be transferred to the Power System Development Fund.

A. K. SAXENA,  
Chief (Engineering)  
[ADVT.III/4/Exty./150/13]

**Methodologies for the computation of Charges of Deviation and Additional Charges for deviation for each regional entity for crossing the volume limits specified for the over-drawal/under injection by Buyer/Seller <sup>c[70]</sup> (except Renewable Rich State)]<sup>c</sup>:**

**1. When the grid frequency is <sup>D-71</sup> 49.7 Hz 49.85 Hz<sup>p</sup> and above:**

- A. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is less than (+/-) 12% of the schedule in MW or 150 MW whichever is lower in each time block,  $D_{tb}$  to be payable by the regional entity at normal Charges for Deviation;
- B. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is more than (+/-) 12% of the schedule in MW or 150 MW whichever is lower in each time block.

$$(i) \quad D_{tb} = D_0 + D_{12/150}$$

Where

$D_0$  = (+/-) 12% of Scheduled Generation (SG) or 150 MW whichever is lower

$D_{12/150}$  = Deviation in excess of (+/-) 12% of the SG or 150 MW, whichever is lower in each time block

$$(ii) \quad D_{12/150} = D_{tb} - D_0$$

- (iii) The Charges for Deviation corresponding to  $D_{tb}$  shall be payable by the regional entity at normal Charges of Deviation; In addition, graded Additional Charges for the Deviation for  $D_{12/150}$  shall be payable by the regional entity for over drawal/under injection for crossing the volume limit on the basis of percentage term or MW terms as the case may @ 20%, 40%, 100% of Charge of Deviation for the incremental deviation in each slab. The same is illustrated as under:

**Illustrations "A"**

When. 12% of Schedule is less than or equal to 150 MW

<sup>c[72]</sup> *Provided that when the schedule is less than or equal to 400 MW, the additional charges for deviation shall be based on percentage of deviation worked out with reference to schedule of 400 MW.]<sup>c</sup>*

Category	Additional Charges for Deviation
$D_{tb}$ is above 12% and up to 15% of schedule in MW	50 x ( $D_{tb}$ 12% of schedule) x Charge for Deviation corresponding to average grid frequency of the time block

<sup>70</sup> Inserted words "Except Renewable Rich State" after the word "seller/buyer" in Annexure-I, vide Third amendment (C), 2016.

<sup>71</sup> Omitted and inserted figure of clause (1) of Annexure-I, vide Fourth amendment (D), 2018.

<sup>72</sup> Inserted a proviso after Illustration-"A" title in Annexure-I, vide Third amendment (C), 2016.

D <sub>tb</sub> is above 15% and up to 20% of schedule in MW	[100 x (D <sub>tb</sub> - 15% of schedule) + 1.50 x schedule] x Charge for Deviation corresponding to average grid frequency of the time block
D <sub>tb</sub> is above 20%	[250 x (D <sub>tb</sub> - 20% of schedule) + 6.50 x schedule] x Charge for Deviation corresponding to average grid frequency of the time block

**Illustrations "B"** When. 12% of Schedule is less than or equal to 150 MW

Category	Additional Charges for Deviation
D <sub>tb</sub> is above 150 MW and up to 200 MW	50 x (D <sub>tb</sub> - 150) x Charge for Deviation corresponding to average grid frequency of the time block
D <sub>tb</sub> is above 200 MW and up to 250 MW	[100 x (D <sub>tb</sub> - 200) + 2500] x Charge for Deviation corresponding to average grid frequency of the time block.
D <sub>tb</sub> is above 250 MW	[250 x (D <sub>tb</sub> - 250) + 7500] x Charge for Deviation corresponding to average grid frequency of the time block.

**Note:** The Additional Charge for Deviation for under-injection of electricity during the time-block in excess of the volume limit specified in clause 7(1) and (2) of the Regulation when grid frequency is <sup>D<sup>73</sup></sup> ~~49.70 Hz and above~~ <sup>49.85 Hz and above</sup><sup>P</sup>, by the generating stations regulated by the CERC using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel shall be calculated with the <sup>D<sup>74</sup></sup> ~~Cap Rate for Deviation of 303.04 Paise/kWh~~ <sup>E<sup>75</sup></sup> ~~Cap Rate being equivalent to the energy charges as billed for the previous month~~ <sup>Cap Rate for Deviations of 303.04 Paise/kWh</sup><sup>D<sup>76</sup></sup> or the Charge for Deviation corresponding to average grid frequency of the time block, whichever is less.

**2. When the grid frequency is below <sup>D<sup>76</sup></sup> ~~49.7 Hz~~ <sup>49.85 Hz</sup><sup>P</sup> and above:**

The charges for deviation corresponding to D<sub>tb</sub> shall be payable by the regional entity at 1648.08 Paise/kWh including additional charges for the deviation payable by the regional entity at <sup>D<sup>77</sup></sup> ~~824.04 Paise/kWh~~ <sup>800 Paise/kWh</sup>.<sup>D</sup>

**Note:** The charges for Deviation and the additional charges for Deviation for under injection during the time block when grid frequency is below <sup>D<sup>78</sup></sup> ~~49.70 Hz~~ <sup>49.85 Hz</sup><sup>P</sup>, by the generation station regulated by the Commission coal or lignite or gas supplied under Administrative

<sup>73</sup> Omitted and inserted figures in note below the illustration "B" of Annexure-I, vide Fourth amendment (D), 2018.

<sup>74</sup> Omitted and inserted words in note below the illustration "B" of Annexure-I, vide Fourth amendment (D), 2018.

<sup>75</sup> Omitted and inserted wordings of note below the illustration "B" of Annexure-I, vide Fifth amendment (E), 2019.

<sup>76</sup> Omitted and inserted figure of clause (2) of Annexure-I, vide Fourth amendment (D), 2018.

<sup>77</sup> Omitted and inserted figures of clause (2) of Annexure-I, vide Fourth amendment (D), 2018.

<sup>78</sup> Omitted and inserted words and figures in note below the clause (2) of Annexure-I, vide Fourth amendment (D), 2018.

Price Mechanism (APM) the fuel shall be calculated corresponding to the <sup>D</sup>[cap rate for  
~~deviations of 303.04 Paise/kWh~~ Cap Rate as specified in clause 5(3) of these Regulations.]<sup>D</sup>

**Methodologies for the computation of Charges for Deviation and Additional Charges for Deviation applicable to Renewable Rich States for crossing the volume limits specified for the over-drawal/under-injection:**

- A. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is less than limits specified in Annexure-III, in each time block,  $D_{tb}$  to be payable by the regional entity at normal Charges for Deviation;
- B. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is more than limits specified in Annexure-III, in each time block

(i)  $D_L = D_{tb} - L$

Where

$L$  = Limit as specified in Annexure-III

$D_L$  = Deviation in excess of limits specified in Annexure-III, in each time block

- (ii) The Charges for Deviation corresponding to  $D_{tb}$  shall be payable by the regional entity at normal Charges of Deviation; In addition, graded Additional Charges for the Deviation for  $D_L$  shall be payable by the regional entity for over-drawal for crossing the volume limit on the basis of percentage term or MW term, as the case may be @ 20%, 40%, 100% of Charge of Deviation for the incremental deviation in each slab. The same is illustrated as under:

**Illustration**

Category	Additional Charges for Deviation
$D_{tb}$ is above $L$ MW and up to $L+50$ MW	$50 \times (D_{tb} - L) \times$ Charge for Deviation corresponding to average grid frequency of the time block
$D_{tb}$ is above $L+50$ MW and up to $L+100$ MW	$(100 \times (D_{tb} - (L+50)) + 2500) \times$ Charge for Deviation corresponding to average grid frequency of the time block
$D_{tb}$ is above $L+100$ MW	$(250 \times (D_{tb} - (L+100)) + 7500) \times$ Charge for Deviation corresponding to average grid frequency of the time block

2. When the grid frequency is below <sup>D</sup>[<sup>80</sup> ~~49.7 Hz~~ 49.85 Hz]<sup>D</sup>:

The charges for deviation corresponding to  $D_{tb}$  shall be payable by the regional entity at <sup>D</sup>[<sup>81</sup> ~~824.04 Paise/kWh~~ 800 Paise/kWh]<sup>D</sup>. In addition, additional deviation charges for deviation for  $D_{tb}$  shall be payable by the regional entity at ~~824.04 Paise/kWh~~ 800 Paise/kWh.]<sup>C</sup>

<sup>79</sup> Inserted a new "Annexure-I-A" after "Annexure-I", vide Third amendment (C), 2019.

<sup>80</sup> Omitted and inserted figure of clause (2) of "Annexure-I-A", vide Fourth amendment (D), 2018.

<sup>81</sup> Omitted and inserted words and figure of clause (2) of "Annexure-I-A", vide Fourth amendment (D), 2018.

**Methodologies for the computation of Charges of Deviation and Additional Charges for deviation fm each regional entity for crossing the volume limits specified for the under drawal/over-injection by buyer/Seller <sup>C<sup>82</sup></sup> (except Renewable Rich State)]<sup>C</sup>:**

- A. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is less than (+/-) 12% of the schedule in MW or 150 MW, whichever is lower in each time block,  $D_{tb}$  to <sup>A<sup>83</sup></sup> be ~~payable~~ <sup>receivable</sup><sup>A</sup> by the regional entity at normal Charges for Deviation;
- B. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is more than (+/-) 12% of the schedule in MW or 150 MW. whichever is lower in each time block:

(i)  $D_{tb} = D_0 + D_{12/150}$

Where

$D_0$  = (+/-) 12% of Scheduled Generation (SG) or 150 MW whichever is lower

$D_{12/150}$  = Deviation in excess of (+/-) 12% of the SG or 150 MW, whichever is lower in each time block

(ii).....  $D_{12/150} = D_{tb} - D_0$

- (iii) The Charges for Deviation corresponding to  $D_0$  shall be receivable by the regional entity at normal Charges of Deviation or the ceiling rate whichever is lower; the regional entity shall not be entitled any receivable for  $D_{12/150}$ .

<sup>C<sup>84</sup></sup> [ Provided that when the schedule is less than or equal to 400 MW, 12% of schedule will be considered as 48 MW for the purpose of this clause.]<sup>C</sup>

- C. Additional Charges for the Deviation <sup>A<sup>85</sup></sup>  ~~$D_{12/150}$~~   $D_{tb}$  <sup>A</sup> shall be payable by the regional entity for under drawal/over injection when grid frequency is <sup>D<sup>86</sup></sup> ~~50.40 Hz~~ <sup>50.05 Hz</sup><sup>D</sup> or above in accordance with clause 7 (4) of this Regulation.

<sup>82</sup> Inserted words “Except Renewable Rich State” after words “seller/buyer” in heading of Annexure-II, vide Third amendment (C), 2016.

<sup>83</sup> Omitted and inserted wordings of Para-A of “Annexure-II”, vide First amendment (A), 2014.

<sup>84</sup> Inserted a proviso after Para-B of “Annexure-II”, vide Third amendment (C), 2016.

<sup>85</sup> Omitted and inserted letter and figure of Para- C of “Annexure-II”, vide First amendment (A), 2014.

<sup>86</sup> Omitted and inserted figure of Para- C of “Annexure-II”, vide Fourth amendment (D), 2018.

**Methodologies for computation of Charges for Deviation and Additional Charges for Deviation applicable to Renewable Rich State for crossing the volume limits specified for the under-drawal/over-injection:**

- A. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is less than limits specified in Annexure-III in each time block,  $D_{tb}$  to be receivable by the regional entity at normal Charges for Deviation;
- B. When  $D_{tb}$  i.e. Deviation from schedule in a time block in MW is more than Limit as specified in Annexure-III
- (i)  $D_L = D_{tb} - L$
- Where
- $L$  = Limit as specified in Annexure-III
- $D_L$  = Deviation in excess of limits specified in Annexure-III, in each time block
- (ii) The Charges for Deviation corresponding to  $L$  shall be receivable by the regional entity at normal Charges of Deviation or the ceiling rate whichever is lower; the regional entity shall not be entitled to any receivable for  $D_L$ .
- C. Additional Charges for the Deviation  $D_L$  shall be payable by the regional entity for under-drawal/over-injection when grid frequency is <sup>D</sup>[<sup>88</sup> ~~50.10 Hz~~ 50.05 Hz]<sup>D</sup> or above in accordance with clause 7 (4) of this Regulation.]<sup>C</sup>

<sup>87</sup> Inserted a new “Annexure-II-A” after “Annexure-II”, vide Third amendment (C), 2016.

<sup>88</sup> Omitted and inserted figure of Para- C of “Annexure-II-A”, vide Fourth amendment (D), 2018.



***Deviation Limits for Renewable Rich States:***

<b><i>S. No.</i></b>	<b><i>States having combined installed capacity of Wind and Solar projects</i></b>	<b><i>Deviation Limits (MW)- "L"</i></b>
<b><i>1.</i></b>	<b><i>1000 – 3000 MW</i></b>	<b><i>200</i></b>
<b><i>2.</i></b>	<b><i>&gt; 3000 MW</i></b>	<b><i>250]<sup>c</sup></i></b>

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<sup>89</sup> Inserted a new “Annexure-III” after Annexure-II-A”, vide Third amendment (C), 2016.