

#### **GUJARAT STATE ELECTRICITY CORPORATION LIMITED**

VidyutBhavan, Race Course, Vadodara, - 390007, India. Ph. 91-265-6612003, Fax: 91-265-2344537 e-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

GSECL/GERC Cell/Petition/Solar Energy/ 9010 Date 22.10.2020.

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th Floor, GIFT one,
Road 5C, Zone 5, GIFT City,
Gandhinagar – 382355.

Sub:- Submission of Petition under GERC Notification No.1 of 2019 D remove difficulties thereof for DSM Charges for Solar Energy.

Respected Sir,

GUJARAT.

Enclosed herewith please find 5 (Five) sets of Petition for GERC Notification No.1 of 2019 Dtd. 19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy along with the prescribed Fees.

Enclosed herewith please find Demand Draft for payment of Fee Rs. 10,000.00 (Rs. Ten Thousand only) for Petition under GERC Notification No.1 of 2019 Dtd. 19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy with No. 072144 Dtd. 22-10-2020 drawn on Bank of India, Vadodara payable in favour of "Gujarat Electricity Regulatory Commission" payable at Gandhinagar.

It is requested to kindly appraise the Hon'ble Commission for the further needful please. Thanking you,

For Gujarat State Electricity Corporation Ltd.,

Encl:- As Above.

(R.M.Bhadang) 22) 10 General Manager (F&A)

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# BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

#### Petition No.:

IN THE MATTER OF	Petition under GERC Notification No.1 of 2019 Dtd. 19.01.2019 to remove difficulties thereof for DSM
	Charges for Solar Energy.
AND	
IN THE MATTER OF	Gujarat State Electricity Corporation Limited,
	Vidyut Bhavan, Race Course,
	Vadodara 390007
	Phone No. :0265 6612003; Fax: 0265 2344537
	E-mail: gmf.gsecl@gebmail.com
	Petitioner

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS

### BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

#### 1.0 PREAMBLE:

- The Petitioner, Gujarat State Electricity Corporation Limited (now onwards referred 1.1 as GSECL) has signed PPA for Solar 10 MW Charanka with Solar Energy Corporation of India (now onwards referred as SECI).
- 1.2 SECI is selling the power to other state i.e. inter state power transfer and the billing of sale of power is based on scheduling.
- 1.3 Any deviation of Scheduling and Actual injection is taken care by DSM Charges as per GERC regulation for Solar Power.

#### 2.0 SUBMISSION:

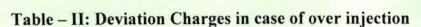
GERC Notification 1 of 2019 Sr. No. 8.6 says "Provided that deviation charges for under or over injection by solar generator connected to the State grid and selling power outside the State shall be payable by solar generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC"

The Petitioner most respectfully submits that as per GERC Notification 1 of 2019 Dtd. 19.01.2019, in Clause.No.8.6 regarding DSM Charges there is no provision for receivable by solar generators in case of over injection by solar generator connected to the state grid and selling power outside the state, which leads to loss to the solar Generator. Accordingly, GSECL is not receiving any DSM charges nor fixed tariff as per PPA in the event of excess generation over & above schedule generation.

Further Petitioner submits that as per CERC Notification Dtd. 07.08.2015 Clause No. 5. the DSM Charges payable & receivable both.

Table – I: Deviation Charges in case of under injection

Sr. No.	Absolute Error in the 15- minute time block	Deviation Charges Payable to Regional DSM Pool
1	<= 15%	At the Fixed Rate for the shortfall energy for absolute error up to 15%
2	>15% but <= 25%	At the Fixed Rate for the shortfall energy for absolute error up to 15% + 110% of the Fixed Rate for balance energy beyond 15% and up to 25%
3	>25% but <=35%	At the Fixed Rate for the shortfall energy for absolute error up to 15% + 110% of the Fixed Rate for balance energy beyond 15% and up to 25% + 120% of the Fixed Rate for balance energy beyond
4	> 35%	25% and up to 35%  At the Fixed Rate for the shortfall energy for absolute error up to 15%  + 110% of the Fixed Rate for balance energy beyond 15% and up to 25%  + 120% of the Fixed Rate for balance energy beyond 25% and up to 35%
		+ 130% of the Fixed Rate for balance energy beyond 35%



Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges Payable
1	<= 15%	At the Fixed Rate for excess energy up to 15%
2 >15% but <= 25%		At the Fixed Rate for excess energy up to 15% + 90% of the Fixed Rate for excess energy beyond 15% and up to 25%
3	>25% but <=35%	At the Fixed Rate for excess energy up to 15% + 90% of the Fixed Rate for excess energy beyond 15% and up to 25% + 80% of the Fixed Rate for excess energy beyond 25% and up to 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%

In view of above, it is requested to amend the regulation in line with the CERC regulation. Copy of GERC & CERC Regulations are attached herewith.

The Petitioner most respectfully requested Hon'ble Commission to consider the amendment in regulation with retrospectively from the date of issuance of GERC notification 1 of 2019 for Solar Generators.

#### 3.0 PRAYERS:

The Petitioner humbly and most respectfully prays to the Hon'ble Commission

- a. To kindly approve all the prayers made under this Petition.
- b. To grant any other relief as the Hon'ble Commission may consider appropriate.
- c. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
- d. To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

  Petitioner

For Gujarat State Electricity Co. Ltd

Place: Vadodara.

Date: 15th October, 2020.

#### **DECLARATION:**

The Petitioner hereby declares that the subject matter of this petition has not been raised by the petitioner before any other competent forum and that no other competent forum is currently seized of the matter or has passed any order in relation thereto.

For Gujarat State Electricity Co. Ltd.

Place: Vadodara.

Date: 15th October, 2020.

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

### BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Regd.No.: 499

Date: 15-10- 2120

PETITION NO.

NOTARIAL

NOTARIAL

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NOTARIAL

	IN THE MATTER OF	Petition under GERC Notification No.1 of 2019 Dtd. 19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy.
. 6	AND	
T.	IN THE MATTER OF	Gujarat State Electricity Corporation Limited,
3		Vidyut Bhavan, Race Course,
1		Vadodara 390007
		Phone No. :0265 6612003; Fax: 0265 2344537
1		E-mail: gmf.gsecl@gebmail.com
0		Petitioner
-		

Affidavit verifying the Application

1, Rajesh M Bhadang, son of Shri.Mithalal Bhadang, aged about 54 years, residing at D-9/Ashirwad Duplex, Near Nisharg Complex, Sainath Road, Diwalipura, Vadodara, do solemnly affirm and say as follows:

I am General Manager (Finance & Accounts) of the Gujarat State Electricity Corporation Limited, the Respondent in the above matter and am duly authorized by the said Respondent to make this affidavit.

The Statements made hereinabove are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on thists' day of October 2020, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Dated: 15:10.2020. Place: Vadodara.



(R.M.BHADANG)

General Manager (F & A)

GSECL-Vadodara)



Solemnly Affirmed/Declared
Sworn Before the by RM Bledwey

Start Bullon.

BABUBHAI K. SHAH NOTARY





## ભારતીય વિશિષ્ટ ઓળખાણ પ્રાધિકરણ

ભારત સરકાર

Government of India

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JARP

ભાડંગ રાજેશ મિઠાલાલ Bhadang Rajesh Mithalal S/O: Bhadang Mithalal D / 9. Ashirwad Duplex Sainath Road o Diwalipura Near Nisarg Flat Vadodara Racecourse Vadodara Gujarat - 390007

9925208 re Not Verified



તમારો આધાર નંબર / Your Aadhaar No. :

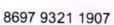
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लारत सरहार Government of India



ભાડંગ રાજેશ મિઠાલાલ Bhadang Rajesh Mithalal જન્મ તારીખ/DOB: 01/06/1966 YEW MALE



મારો આધાર, મારી ઓળખ





Hadi

- આધાર ઓળખાણનું પ્રમાણ છે, નાગરિકતાનું નહિં.
- ઓળખાણનું પ્રમાણ ઑનલાઈન ઑથેન્ટિકેશન દ્વારા પ્રાપ્ત કરો.
- આ ઈલેક્ટ્રોનિક પ્રક્રિયા દ્વારા બનાવેલા દસ્તાવેજ છે.

#### INFORMATION

- Aadhaar is a proof of identity, not of citizenship.
- To establish identity, authenticate online.
- This is electronically generated letter.
- આધાર દેશભરમાં માન્ય છે.
- આધાર ભવિષ્યમાં સરકારી અને બિન-સરકારી સેવાઓનો લાભ મેળવવામાં ઉપયોગી યશે.
- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.



मारतीय विशिष्ट ओणभाए पाधितरा Unique Identification Authority of India

સરનામું :

S/O: ભડંગ મિઠાલાલ, ડી / 9, આશિયાદ ડ્રપ્લેક્ષ, સાઈનાથ શેડ, નિસર્ગ ફ્લેટ પાસે, દિવાળીપુરા, વડોદરા, વડોદરા, ગુજરાત - 390007

Address:

S/O: Bhadang Mithalal, D / 9, Ashirwad Duplex, Sainath Road, Near Nisarg Flat, Diwalipura, Vadodara, Vadodara, Gujarat - 390007



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#### **GUJARAT STATE ELECTRICITY CORPORATION LIMITED**

VidyutBhavan, Race Course, Vadodara, India – 390007. Ph. 91-265-6612003, Fax: 91-265-2350327 E-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

GSECL/GERC Cell/Petition/Solar Energy/1226

w<sub>12|01</sub>|1024 Date : 31.12.2020

To

The Secretary,

Gujarat Electricity Regulatory Commission,

6th Floor, GIFT one,

Road 5C, Zone 5, GIFT City,

Gandhinagar - 382355

**GUJARAT** 

Inward 1 - 0 1 1 4

Date: 67 JAN 202

Sub.: Submission of Petition under GERC Notification No. 1 of 2019 Dtd.

19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy.

Ref.: 1. GERC Letter No. GERC/Legal/2020/1389 Dtd. 25.11.2020.

- T.O. Letter No. GSECL/GERC Cell/Petition/Solar Energy/1101 Dtd. 02.12.2020.
- 3. GERC Letter No. GERC/Legal/2020/1512 Dtd. 18.12.2020.

Respected Sir,

With reference to above subject matter, pl. find enclosed herewith the 05 Sets of Relevant Regulation of CERC Dtd. 07.01.2014, CERC Notification Dtd. 07.08.2015 and GERC Notification No. 1 of 2019 Dtd. 19.01.2019.

You are requested to consider the above attachments with the Petition submitted by GSECL on Dtd. 06.11.2020.

Regards,

For Gujarat State Electricity Corporation Ltd.,

(R.M.Bhadang) 31 12 General Manager (F&A)



असाधारण
EXTRAORDINARY
भाग III-खण्ड 4
PART III-SECTION 4
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

NO. 06

**NEW DELHI, TUESDAY, JANUARY 07, 2014** 

#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

No. L-1/132/2013/CERC

Dated: 6th January, 2014

#### NOTIFICATION

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

- 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);
    - [(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:

Error (%) = 100 X [Actual Generation-Scheduled Generation] / (AvC)]<sup>1</sup>

- (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) '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;

Added vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015

(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;

[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>2</sup>

- 'Gaming' in relation to these regulations, shall mean an intentional misdeclaration 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 (1) 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 inter-State Transmission) Regulations, 2008 as amended from time to time and shall include any subsequent amendment thereof;
- [(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

Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

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deciding the installed capacity for the next month.]3

- (n) '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;
- (o) '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;
- (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) '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;
- (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>4</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.

<sup>&</sup>lt;sup>3</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>&</sup>lt;sup>4</sup> Added vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015

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 underdrawal by the buyer [ 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>5</sup>:

Average Frequenc	y of the 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
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

<sup>&</sup>lt;sup>5</sup> Substituted vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015

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
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 50.05-50.00 Hz, and 20.84 Paise/kWh in frequency range 'below 50 Hz' to 'below 49.70 Hz')

#### Provided that-

- (i) 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 exceed the Cap Rate of 303.04 Paise/kWh as per the methodology specified in clause (3) of this regulation.
- (ii) Provided that no cap rate shall be applicable with effect from [the date of

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revision of price of APM gas by the Government of India]<sup>6</sup> on the charges for the Deviation for the generating stations regulated by [the Commission]<sup>7</sup> using gas supplied under Administered Price Mechanism (APM) as the fuel.

(iii) [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.]8

(iv) [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;

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;

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.]9

<sup>&</sup>lt;sup>6</sup> Substituted vide First Amendment Regulations, 2014 w.e.f. 31.12.2014

<sup>&</sup>lt;sup>7</sup> Amended vide Corrigendum dated 17.02.2014

Substituted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>9</sup> Initially Substituted vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015 and later substituted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

[(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

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to Regional DSM Pool	
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:

Table-II: Deviation Charges in case of over injection

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable
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>10</sup>
- (2) [The Charge for Deviation, except for wind and solar generators which are regional entities, shall be determined in accordance with the following methodology:]11
  - (a) The Charge for Deviation shall be zero at grid frequency of 50.05 Hz and above.
  - (b) 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.
  - (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 'below 49.70 Hz.
  - (d) 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

Added vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015

<sup>11</sup> Substituted vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015

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.

- (3) The Cap rate for the charges for the Deviation for the generating stations regulated by CERC 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.
- (4) The Charges for Deviation may be reviewed by the Commission from time to time and shall be re-notified accordingly.
- (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, Longterm 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 ₹1.78 / kWh sent out

APM gas as fuel	₹2.82/ kWh sent out [up to the date of revision
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of price of APM gas by Government of India and thereafter, at the rate to be notified by the

Commission separately]12

Imported Coal ₹3.03 / kWh sent out RLNG ₹8.24 / kWh sent out

(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-

<sup>12</sup> Substituted vide First Amendment Regulations, 2014 w.e.f. 31.12.2014

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;
  - 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 thereunder, 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) The overdrawal/underdrawal of electricity by any buyer [except Renewable Rich States]<sup>13</sup> during the 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 and below 50.10 Hz';

[Provided that over-drawal/under-drawal of electricity by any Renewable Rich

<sup>13</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

State during the time block shall not exceed limits as specified in Annexure-III, when grid frequency is '49.70 Hz and above and below 50.10 Hz]<sup>14</sup>

Provided that no overdrawal of electricity by any buyer shall be permissible when grid frequency is 'below 49.70 Hz' and no underdrawal of electricity by any buyer shall be permissible when grid frequency is '50.10 Hz and above']<sup>15</sup>.

[]16

**Explanation**: The limits specified in this clause shall apply to the sum total of over-drawal [/under-drawal]<sup>17</sup> by all the intra-State entities in the State including the distribution companies and other intra-State buyers, and shall be applicable at the inter-State boundary of the respective State.

- [(2) The under-injection / over-injection of electricity shall not exceed following when grid frequency is '49.70 Hz or above and below 50.10 Hz':
  - (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 '49.70 Hz or above and below 50.10 Hz'.
- (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.

<sup>14</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>&</sup>lt;sup>15</sup> Substituted vide First Amendment Regulations, 2014 w.e.f. 31.12.2014

<sup>&</sup>lt;sup>16</sup> Initially Added vide Second Amendment Regulations, 2015 w.e.f. 01.11.2015 and later deleted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>17</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

- (iii) 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'.
- (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 '49.70 Hz and above'.]<sup>18</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 '49.70 Hz and above' at the rates specified in the [Table-I]<sup>19</sup> [and Table III as the case may be]<sup>20</sup> below in accordance with the methodology specified in clause (7) of this regulation:

#### 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 the 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 in Table II below in accordance with the methodology specified in clause (9) of this regulation;

<sup>&</sup>lt;sup>18</sup> Initially Substituted vide First Amendment Regulations, 2014 w.e.f. 31.12.2014 and later substituted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>19</sup> Amended vide Corrigendum dated 17.02.2014

<sup>&</sup>lt;sup>20</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

(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>21</sup>

#### TABLE-[I]<sup>22</sup>-[for Seller/buyer (except Renewable Rich State)]<sup>23</sup>

[(A)]24 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 gric 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.
В	When 12% of Schedule is more than 1	50 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>21</sup> Inserted vide Corrigendum dated 17.02.2014

<sup>22</sup> Amended vide Corrigendum dated 17.02.2014

<sup>23</sup> Initially Amended vide Corrigendum dated 17.02.2014 and later substituted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>24</sup> Inserted vide Corrigendum dated 17.02.2014

(iv)	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(v)	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(vi)	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.

### TABLE-[II]<sup>25</sup>

### $[(A)]^{26}\,\mathrm{When}\ 12\%$ of Schedule is less than or equal to $150\,\mathrm{MW}$

(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 303.04 Paise /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)	electricity by any seller	Equivalent to 100% 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.
В	When 12% of Schedule is mo	ore than 150 MW
(i)	For under injection of electricity by any seller is above 150 MW and up to 200 MW in a time block	
(ii)	For under injection of electricity by any seller is above 200 MW and up to 250 MW in a time block	
(iii)	electricity by any seller is	Equivalent to 100% 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.

<sup>25</sup> Amended vide Corrigendum dated 17.02.2014

<sup>26</sup> Amended vide Corrigendum dated 17.02.2014

[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>27</sup>

[Table-III: For a Renewable Rich State

(i)	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
(ii)	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
(iii)	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 these Regulations.]28

[]29

- (4) In addition to Charges for Deviation as stipulated under Regulation 5 of these regulations, Additional Charge for Deviation shall be applicable for overinjection/under-drawal of electricity for each time block by a seller/buyer 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'.
- (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 and underinjection in clause (3) of this regulation shall be as per [Annexure-I, Annexure I-A and Annexure-II, Annexure-II-A]<sup>30</sup> of these Regulations respectively.

<sup>27</sup> Initially Added vide Corrigendum dated 17.02.2014 and later substituted vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>28</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>29</sup> Deleted vide Corrigendum dated 17.02.2014

<sup>&</sup>lt;sup>30</sup> Replaced vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

(6) In addition to Charges for Deviation as stipulated under Regulation 5 of these Regulations, Additional Charge for Deviation shall be applicable for overdrawal or under-injection of electricity when grid frequency is '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 of 'below 49.70 Hz'.

Provided further that Additional Charge 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 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 Cap Rate for Deviations of 303.04 Paise/kWh.

**Explanation:** Additional Charges for Deviation shall not be applicable for net over-drawls 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 '49.70 Hz and above' 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 behavior of the buyers and sellers towards grid discipline:

Provided that the Commission may specify different rates for Additional Charges for Deviation for over-drawals 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 'below 49.70 Hz' 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 behavior of the buyers and sellers towards grid discipline:

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

- (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 '49.70 Hz and above', 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 behavior of the generating stations regulated by CERC towards grid discipline.
- (10) 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 10.45 hrs from positive to negative or negative to positive as the case may be.
- (11) 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.

- (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 '49.90Hz 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 Deviations 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 of the region. In 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 the 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 is 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 ₹20 crore, the regional entity shall open LC for ₹22 crore in 2010-11. If the weekly payable liability during any week in 2010-11 is ₹35 crore which is more than 50% of the previous financial year's average payable weekly liability of ₹30 Crore, the concerned regional entity shall increase the LC amount to ₹38.5 Crore (1.1\*₹35.0) by adding ₹16.5 Crore.

(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

- 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, [2014]<sup>31</sup>.
- (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.

Sd/(A K SAXENA)
Chief (Engineering)

<sup>31</sup> Amended vide Corrigendum dated 17.02.2014

**NOTE:** The Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 were published in Part III, Section 4, No. 06 of the Gazette of India (Extraordinary) dated 07.01.2014 and amended vide

- (a) Corrigendum published in Part III, Section 4, No. 57 of the Gazette of India (Extraordinary) dated 17.02.2014
- (b) First Amendment Regulations, 2014 published in Part III, Section 4, No. 381 of the Gazette of India (Extraordinary) dated 31.12.2014
- (c) Second Amendment Regulations, 2015 published in Part III, Section 4, No. 272 of the Gazette of India (Extraordinary) dated 10.08.2015
- (d) Third Amendment Regulations, 2016 published in Part III, Section 4, No. 201 of the Gazette of India (Extraordinary) dated 16.05.2016

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 [except Renewable Rich State]<sup>32</sup>

- 1. When the grid frequency is 49.7 Hz and above
  - A. When D<sub>th</sub> 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<sub>th</sub> to be payable by the regional entity at normal Charges for Deviation;
  - When D<sub>tb</sub> 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<sub>0</sub> = (+/-)12% of Scheduled Generation (SG) or 150 MW whichever is lower,

D<sub>12/150</sub> = Deviation in excess of (+/-)12% of the SG or 150 MW, whichever is lower in each time block

(ii)  $D_{12/150} = D_{fb} - D_{0}$ 

(iii) The Charges for Deviation corresponding to D<sub>tb</sub> shall be payable by the regional entity at normal Charges of Deviation; In addition, graded Additional Charges for the Deviation for D<sub>12/150</sub> 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:

<sup>32</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016



Illustrations 'A' When 12% of Schedule is less than or equal to 150 MW

Category	Additional Charges for Deviation
$D_{tb}$ is above 12% and up to 15% of schedule in MW	50 x (D <sub>th</sub> -12% of schedule) x Charge for Deviation corresponding to average grid frequency of the time block
$D_{tb}$ is above 15% and up to 20% of schedule in MW	(100 x (D <sub>th</sub> -15% of schedule) + 1.50 x schedule) x Charge for Deviation corresponding to average grid frequency of the time block
D <sub>th</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

[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>33</sup>

Illustrations 'B' When 12% of Schedule is more than 150 MW

Category	Additional Charges for Deviation
D <sub>tb</sub> is above 150 MW and up to 200 MW	50 x (D <sub>th</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>th</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 "49.70 Hz and above', 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 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.

<sup>33</sup> Added Vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

[2. When the grid frequency is below 49.7 Hz:

The charges for deviation corresponding to  $D_{tb}$  shall be payable by the regional entity at 824.04 Paisa/kWh. In addition, additional deviation charges for deviation for  $D_{tb}$  shall be payable by the regional entity at 824.04 Paise/kWh.]<sup>34</sup>

**Note:** The charges for Deviation and the additional charges for Deviation for under-injection, during the time block when grid frequency is below 49.70 Hz, by the generation station regulated by the Commission using coal or lignite or gas supplied under Administrative Price Mechanism (APM) as the fuel shall be calculated corresponding to the cap rate for deviations of 303.04 Paise/kWh.

<sup>34</sup> Substituted vide Corrigendum dated 17.02.2014

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<sub>tb</sub> i.e. Deviation from schedule in a time block in MW is less than limits specified in Annexure-III, in each time block, D<sub>tb</sub> to be payable by the regional entity at normal Charges for Deviation;
- B. When D<sub>tb</sub> 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

(iii) The Charges for Deviation corresponding to D<sub>tb</sub> shall be payable by the regional entity at normal Charges of Deviation; In addition, graded Additional Charges for the Deviation for D<sub>L</sub> 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 <sub>tb</sub> is above L MW and up to L+50 MW	50 x (D <sub>tb</sub> -L) x Charge for Deviation corresponding to average grid frequency of the time block
D <sub>th</sub> is above L+50 MW and up to L+100 MW	(100 x (D <sub>tb</sub> -(L+50)) + 2500) x Charge for Deviation corresponding to average grid frequency of the time block

Deviation Settlement Mechanism Regulations, 2014

D <sub>tb</sub> is above L+100 MW	$(250 \text{ x} (D_{tb}-(L+100)) + 7500) \text{ x}$ Charge for Deviation corresponding to average grid frequency of the time
	block

## 2. When the grid frequency is below 49.7 Hz:

The charges for deviation corresponding to  $D_{tb}$  shall be payable by the regional entity at 824.04 Paisa/kWh. In addition, additional deviation charges for deviation for  $D_{tb}$  shall be payable by the regional entity at 824.04 Paise/kWh.]<sup>35</sup>

<sup>35</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

Annexure-II

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 under drawal/ over-injection by buyer/Seller [except Renewable Rich State]<sup>36</sup>

- A. When D<sub>tb</sub> 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<sub>tb</sub> to be [Receivable]<sup>37</sup> by the regional entity at normal Charges for Deviation;
- B. When D<sub>tb</sub> 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 SG or 150 MW whichever is lower,

D<sub>12/150</sub> = Deviation in excess of (+/-)12% of 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<sub>0</sub> 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<sub>12/150</sub>.

[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>38</sup>

C. Additional Charges for the Deviation [Dth]<sup>39</sup> shall be payable by the regional entity for under-drawal/ over-injection when grid frequency is 50.10 Hz or above in accordance with clause 7 (4) of this Regulation.

<sup>36</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>37</sup> Substituted vide First Amendment Regulations 2014 w.e.f. 31.12.2014

<sup>38</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

<sup>39</sup> Substituted vide First Amendment Regulations 2014 w.e.f. 31.12.2014

[Annexure-II-A

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<sub>tb</sub> i.e. Deviation from schedule in a time block in MW is less than limits specified in Annexure-III in each time block, D<sub>tb</sub> to be receivable by the regional entity at normal Charges for Deviation;
- When D<sub>tb</sub> 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<sub>r</sub>
- C. Additional Charges for the Deviation D<sub>L</sub> shall be payable by the regional entity for under-drawal/over-injection when grid frequency is 50.10 Hz or above in accordance with clause 7 (4) of this Regulation.]<sup>40</sup>

<sup>40</sup> Added vide Third Amendment Regulations, 2016 w.e.f. 30.05.2016

## [Annexure-III

## **Deviation Limits for Renewable Rich States**

S.No	States having combined installed capacity of Wind and Solar projects	Deviation Limits (MW)-'L'
1	1000-3000 MW	200
2	>3000 MW	250

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## Central Electricity Regulatory Commission Notification New Delhi, the 7<sup>th</sup> August, 2015

No. 1/14/2015-Reg.Aff.(FSDS)(ii)/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 to amend the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 (hereinafter referred to as the "Principal Regulations") namely: -

- Short title and commencement (1) These regulations shall be called the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015,
  - (2) These regulations shall come into force with effect from 1<sup>st</sup> November, 2015.
- 2. Amendment of Regulation 2 of Principal Regulations:
  - (i) After sub-clause (a) under clause (1) of Regulation 2, new sub-clause (aa) shall be added as under:-
  - " (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:

Error (%) = 100 X [Actual Generation-Scheduled Generation] / (AvC)

- (ii) After sub-clause (q) under clause (1) of Regulation 2, new sub-clause (r) shall be added as under:-
- (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.
- 3. Amendment of Regulation 5 of Principal Regulations: In clause (1) of Regulation 5 of the Principal Regulations, the words "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" shall be substituted by the words "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".
- 4. Amendment of Regulation 5 of Principal Regulations: Sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, shall be substituted as under:-

"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 subclauses (v) to (vii) below:

- 5. Insertion of new proviso under clause (1) under Regulation 5: After sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, new sub-clauses (v), (vi) and (vii) shall be added as under:-
  - "(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

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to Regional DSM Pool
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:

Table – II: Deviation Charges in case of over injection

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable
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."
- 6. Amendment of Regulation 5 of Principal Regulations: In clause (2) of Regulation 5 of the Principal Regulations, the words "The Charge for Deviation shall be determined in accordance with the following methodology" shall be substituted by the words "The Charge for Deviation, except for wind and solar generators which are regional entities, shall be determined in accordance with the following methodology".
- 7. **Insertion of a new proviso to clause (1) under Regulation 7:** After the existing proviso to clause (1) of Regulation 7 of the Principal Regulations, a new proviso shall be added as under:-

"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".

(Shubha Sarma) Secretary

Note: The Principal Regulations were published on 7.1.2014 in the Gazette of India, Extraordinary, Part III, Section 4, Serial No. 06, corrigendum thereof was published (on 17.2.2014) in the Gazette of India, Extraordinary, Part III, Section 4 at Serial No.52 and the first amendment to the Principal Regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 on 18<sup>th</sup> December, 2014.

Extra No. 17



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## The Gujarat Government Gazette

## **EXTRAORDINARY**

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Separate paging is given to this Part in order that it may be filed as a Separate Compilation.

### PART IV-C

Statutory Rules and Orders (Other than those published in Parts I, I-A and I-L) made by Statutory Authorities other than the Government of Gujarat including those made by the Government of India, the High Courts, the Director of Municipalities, the Commissioner of Police, the Director of Prohibition and Excise, the District Magistrates and the Election Commission, Election Tribunals, Returning Officers and other authorities under the Election Commission.

### GUJARAT ELECTRICITY REGULATORY COMMISSION

(Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019

Dated: 19/01/2019

## NOTIFICATION No. 1 of 2019

In exercise of the powers conferred under Sub-section (3) of Section 32, Sub-section (4) of Section 33, clause (h) of Sub-section (1) of Section 86 and Clauses (g) and (zp) of Sub-section (2) of Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, the Gujarat Electricity Regulatory Commission hereby makes the following Regulations, namely:

## 1. Short title and commencement

- 1.1 These Regulations shall be called the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019.
- 1.2 These Regulations shall become effective from the date of Notification.
- 1.3 Deviation Charges specified in these Regulations shall be effective from 1<sup>st</sup> August, 2019.

## 2. Applicability

These Regulations shall apply to all wind and solar generators having combined installed capacity above 1 MW connected to the State grid/substation, including

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[ PART IV-C

those connected via pooling stations, and selling generated power within or outside the State or consuming power generated for self-consumption.

## 3. Definitions and Interpretation

- 3.1 In these Regulations, unless the context otherwise requires,
  - a) 'Absolute Error' means the absolute value of the error in the actual injection of wind or solar generators with reference to the 'Scheduled Generation' and the 'Actual Generation' as calculated using the following formula for each 15-minute time block:

Absolute Error (%) = 100 X [Actual Injection – Scheduled Generation]/Available Capacity;

- b) 'Act' means the Electricity Act, 2003 (36 of 2003);
- c) 'Actual Drawal' in a time-block means electricity drawn by a buyer measured by the interface meters;
- d) 'Actual Injection' in a time-block means electricity generated or supplied by the seller, as the case may be, measured by the Interface meters;
- e) 'Available Capacity or 'AvC' for wind or solar generators means the cumulative capacity rating of the wind turbines or solar inverters that are capable of generating power in a given time-block;
- f) 'Beneficiary' means a person procuring electricity generated from a generating station including solar/wind captive generating station;
- g) 'Buyer' means a person, including beneficiary, procuring electricity through a transaction scheduled in accordance with the Regulations applicable for short-term open access, medium-term open access and long-term access;
- h) 'CERC' means the Central Electricity Regulatory Commission referred to in Sub-Section (1) of Section 76 of the Act;
- i) 'Commission' means "GERC" (Gujarat Electricity Regulatory Commission) established under Sub-section 1 of Section 82 of the Act;
- Deviation' in a time-block for a seller means its total actual injection of energy minus its total scheduled generation;
- k) 'Gaming' in relation to these Regulations, shall mean an intentional mis-declaration of available capacity or schedule by any seller in order to make an undue commercial gain;
- l) 'Grid Code' means the Grid Code specified by Gujarat Electricity Regulatory Commission under Clause (h) of Sub-section (1) of Section 86 of the Act;
- m) 'IEGC' means the Grid Code specified by the CERC under Clause (h) of Sub-section (1) of Section 79 of the Act;
- n) 'Interconnection/Interface Point' means a point at which an individual Wind / Solar Generating plant or a group of such generating plants are connected to the transmission system or distribution system as the case may be;
- o) '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;
- p) 'Intra-State Entity' means an entity/entities which is/are under the control area of Gujarat SLDC and whose metering and energy accounting is done at State level;
- q) 'Pooling Station' means the sub-station where pooling of generation of individual wind generators or solar generators is done for interfacing with State Transmission Utility/Distribution licensee sub-station:

Provided that where there is no separate pooling station for a wind / solar generator and the generating station is connected through common feeder or individual feeder and terminated at a sub-station of distribution company/STU/CTU, the sub-station of distribution company/STU/CTU shall be considered as the pooling station for such wind/solar generator, as the case may be;

- r) 'Qualified Co-ordinating Agency or QCA' means the mutually agreed agency registered with SLDC, to act as a coordinating agency on behalf of wind/solar generators connected to a pooling station/substation and may be one of the generators.
- 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 State Load Despatch Centre;
- t) 'Scheduled Drawal' at any time or for a time block or any period means schedule of despatch in MW or MWh ex-bus given by the State Load Despatch Centre;
- "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;
- v) 'State Load Despatch Centre or 'SLDC' means Load Despatch Centre of the State, established under Sub-section (1) of Section 31 of the Act, responsible for coordinating scheduling of the state entities in accordance with the provisions of the State Grid Code;
- w) 'State Pool Account' means a separate account to be maintained by the SLDC for receipt and payments on account of deviations under these Regulations and it is a part of the State Deviation Settlement Account;
- x) '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;
- 3.2. All other words and expressions used in these Regulations although not specifically defined herein above, but defined in the Act, or defined under any law passed by the Parliament applicable to the electricity industry in the State or the Grid Code or any other Regulations of this Commission shall have the meaning assigned to them in the Act or in such law/Regulations.
- Headings or Capital words are inserted for convenience and may not be taken into account for the purpose of interpretation of these Regulations;
- 3.4. Words in the singular or plural term, as the case may be, shall also be deemed to include the plural or the singular term, respectively;

## 4. Objective

- 4.1. The objective of these Regulations is to facilitate large-scale grid integration of solar and wind generating stations while maintaining grid stability and security as envisaged under the Grid Code, through forecasting, scheduling and commercial mechanism for deviation settlement of the generators.
- 4.2. In order to maintain system security, stability & reliability, the grid operator shall consider the Wind & Solar Power Generation forecast in the mid-term to long term, day ahead & intraday operation, for planning, and the process of scheduling. The grid operator shall make full use of the flexibility from conventional power plant as well as the capacity of inter grid tie lines to accommodate the maximum Wind & Solar Power while maintaining grid security.

[ PART IV-C

## 5. Forecasting and Scheduling Code

- 5.1. This code provides methodology for day-ahead/intra-day scheduling of wind and solar energy generator(s) which are connected to the State Grid/Sub-Station, and revision of schedule(s) and methodology of handling deviations of such wind and solar energy generator(s) and its deviation charges. Revision of schedule shall be allowed if the revision is more than 2% of the previous schedule. For wind energy based generation (maximum 16 intra-day revisions) and solar energy based generation (maximum 9 intra-day revisions) shall be allowed.
- 5.2. Appropriate meters shall be provided for energy accounting. Telemetry/communication system & Data Acquisition System shall also be provided for transfer of information to the Gujarat SLDC by the generator or QCA appointed by it. Generator(s)/QCA shall install the meter/communication/data acquisition system etc.
- 5.3. Wind and Solar generators and those represented by Qualified Coordinating Agencies (QCAs), shall mandatorily provide the technical specifications of the associated equipment, at the beginning and whenever there is any change to the SLDC in the format prescribed by the SLDC. The data relating to power system output & parameters and weather related data as applicable shall also be mandatorily provided by such generators or QCA appointed by them to the SLDC in real time.
- 5.4. Forecasting shall be done by wind and solar generators connected to the State grid, or by QCAs on their behalf. The forecast by the QCA or wind and solar generator, as the case may be, shall be generator centric with intimation to SLDC containing the availability of WTGs/Solar generators based schedule for each pooling station separately.
- 5.5. SLDC shall also undertake forecasting of wind and solar power that is expected to be injected into the State grid. The forecast by the SLDC shall be with the objective of ensuring secure grid operation by planning for the requisite balancing resources and grid operation.
- 5.6. The QCA or wind and solar generator/generators may either derive its forecast based on the SLDC's forecast for preparing its schedule or provide the SLDC with a schedule based on their own forecast. However, if the generator(s)/QCA derive its schedule based on SLDC's forecast, they shall not take a plea that the error is due to erroneous forecast by SLDC.
- 5.7. The QCA or individual generator, either injecting wind energy, solar energy or both, connected to a substation shall not be permitted aggregation of more than one pooling stations or individual generating station connected to a substation as the case may be.
- 5.8. The QCA shall co-ordinate the aggregation of schedules of all generators connected to a pooling station and communicate it to the SLDC. In case of the generators who are directly connected to the Sub-station, such generators or the QCA appointed/nominated by such generators shall communicate their schedule at interface / interconnection point to the SLDC.
- 5.9. The QCA or the wind and solar generator shall submit "Day-Ahead" and a "Week-Ahead" schedule by 9 AM everyday for each pooling station or each generating station, as the case may be, which shall be utilized for planning availability of energy and for calculating the margin available in the grid of the State. "Day-Ahead" schedule shall contain wind or solar energy generation schedule at intervals of 15 minutes (time-block) for the next day, starting from 00:00 hours of the day, and prepared for all 96 time-blocks. "Week-Ahead" schedule shall contain the same information for the next seven days.
- 5.10. The schedule of wind generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4<sup>th</sup> time block, the first being the time-block in which notice was given. There may be maximum of 16 revisions during the day.

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- 5.11. The schedule of solar generator/generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4<sup>th</sup> time block, the first being the time-block in which notice was given. There may be maximum of 9 revisions during the day starting from 05:30 hours to 19:00 hours of that day.
- 5.12. The declared Available Capacity (AvC) for a wind generating plant shall be applicable for the entire 24 hours in a day whereas considering the availability of solar irradiation only during the day, the AvC for a solar generating plants shall be applicable only between 05:30 to 19:00 hours.
- 5.13. The plan for data telemetry, formats of forecast submission, file upload facility in software etc. shall be provided by SLDC to the QCA/Generator and other details in this regard shall be provided in the Detailed Procedure to be prepared by SLDC and approved by the Commission. SLDC shall prepare the above details within one month from this notification and get it approved from the Commission.
- 5.14. Any commercial impact on account of deviation from schedule based on the forecast shall be borne by the wind and/or solar generator, either directly or transacted through the representing QCA.
- 5.15. In case of QCA appointed by renewable energy generator for forecasting and scheduling work, the QCA shall be responsible for the deviation charges payable on behalf of the generator. The individual generator and QCA shall execute an agreement specifying that the QCA shall be responsible for all obligations/liabilities arising out of the forecasting and scheduling work carried out by him on behalf of the renewable energy generator. The QCA shall provide payment security to the extent of 110% against deviation charges in the form of Bank Guarantee / Revolving LC. The QCA may ensure similar payment security mechanism back to back with respective generators. The payment security amount for the first year shall be worked out considering average deviations observed during the mock trial for different set of sites:
  - a) Wind generating plant of approximate 50 MW capacity at Pooling Sub-Station.
  - b) Solar generating plant of approximate 25 MW capacity at Pooling Sub-Station.

For second year and onwards the payment security shall be reviewed based on the average deviations observed during the first year (previous year) and applying the aforesaid mechanism, the security amount shall be worked out and the same shall be provided by the OCA.

5.16. When the QCA is appointed by the generator for the purpose of these Regulations, the responsibility for all the payments related to deviation charges payable on behalf of the RE generators shall be that of QCA. The QCA shall be held responsible for the dues payable/receivable on behalf of the generator, if the generator fails to pay the deviation charges payable under these Regulations through the QCA. The RE generators and QCA shall sign an agreement in this regard.

## 6. ROLE OF QCA

QCA may be one of the generators or any other mutually agreed agency for the following purposes:

6.1 Provide schedules with periodic revisions as per these Regulations on behalf of all the Wind/Solar Generators connected to the pooling station(s) or individual Wind/Solar generator connected directly to the sub-station of transmission licensee / State Transmission Licensee / distribution licensee/ transmission licensee network/ distribution licensee network.

- [ PART IV-C
- 6.2. Responsible for co-ordination with authorized agency DISCOM/STU/SLDC and other agencies in coordination with Generator /Developers for metering, data collection and its transmission and communication.
- 6.3. Undertake commercial settlement of deviation charges arising on account of forecasting/scheduling on behalf of the individual generators which is connected directly to substation of transmission licensee / State Transmission Licensee / distribution licensee/ transmission licensee network/ distribution licensee network or generators connected with pooling station, including payments to the State Pool account through SLDC.
- 6.4. Undertake de-pooling of payments received/payable on behalf of the individual generator/generators of the pooling station from the State Pool account and settling them with the individual generators
- 6.5. Undertake commercial settlement of any other charges on behalf of the generators as may be mandated from time to time.

Failure of QCA in carrying out above activities shall not relieve the Generators/Developers from the penalties etc. provided in these Regulations.

QCA shall be treated as a Forecasting and Scheduling Entity and will be the single point of contact with SLDC. QCA shall get registered with the SLDC.

## 7. Qualifying criteria for QCA

- 7.1 The QCA shall be appointed by Wind/Solar Generators who may be one of the generators or any mutually agreed agency. Any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person shall be eligible to act as a QCA provided it satisfies the qualifying criteria as laid down hereunder:
  - The QCA shall have the experience of minimum 1 year in the field of Wind/Solar Power forecasting and scheduling,
  - (ii) The financial strength of the QCA must be such that it should be in a position to handle the risk of penalties on account of deviation by the generator. Accordingly, the net worth of the QCA from forecasting & scheduling services must be positive amounting to at least Rs.2.5 Crores in the recent last financial year which should reflect from its audited balance sheet or from the certificate of a practicing Chartered Accountant,
  - (iii) The QCA shall have the capability to provide real time monitoring systems or equivalent systems for seamless flow of information to and from SLDC and RLDC in order to facilitate scheduling, revision of schedule, intimation of outages/grid constraints etc.
  - (iv) QCA should have an established team of Renewable Resource Analysts, modeling Statisticians, Energy modelers, Software developers and 24x7 operation and monitoring team.
  - (v) The QCA shall be using software developed by at least CMMI level 3 certified companies or as decided by SLDC or the Commission from time to time.

Provided that when a generator carries out forecasting and scheduling activity for itself, it need not avail the services of QCA and as such will be exempted from the qualifying criteria of QCA.

## 8. COMMERCIAL MECHANISM AND DEVIATION SETTLEMENT

- 8.1 The commercial mechanism for deviation settlement is stated below:
  - a) The wind or solar generators connected to the State grid and selling power within the State shall be paid by the buyer as per actual generation at the tariff agreed in the power purchase agreement or wheeling agreement.
  - b) The wind or solar generators connected to the State grid and selling power outside the State shall be paid by the buyer as per the terms of agreement at the tariff agreed in the power purchase agreement or wheeling agreement and pay deviation charges as per the CERC (Deviation Settlement Mechanism and Forecasting) Regulations, 2014 as amended from time to time.
  - c) The wind or solar generators connected to the State grid and self-consuming power within the State, accounting of such energy generated shall be set off against consumption as per prevailing orders passed by the Commission.
  - d) The wind or solar generators who deviate from its given schedule shall be liable to pay deviation charges as per the provisions of these Regulations given at Table-I and Table-II.
- 8.2 The QCA /individual generator selling power/consuming power outside the State of Gujarat but connected with the State transmission network/distribution network shall give separate schedule for the energy generation as per these Regulations to the SLDC. The deviation settlement account for such generators shall be prepared by the SLDC for measurement of deviation of energy by such generator and its impact on the State periphery. Such generators shall pay the deviation charges within the State in the State Pool account in case of deviations by them.
- 8.3 In case where the QCA functions on behalf of individual generator at pooling sub-station, the QCA shall also de-pool the energy deviations as well as deviation charges to each generator using one of the options given in clause 16.
- 8.4 The QCA shall undertake all deviation related commercial settlement on behalf of the generator(s) connected to the respective pooling station(s) who are either selling / consuming power within the State (Intra-State) or selling/consuming power outside the State (Inter-State).
- 8.5 In the event of actual generation of a wind generating station or a pooling station, as the case may be, being less or more than the scheduled generation, the deviation charges for shortfall or excess generation shall be payable by the wind generator or the QCA appointed on its behalf, as the case may be, to the State DSM Pool, as given in Table I below.

Table - I

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to State DSM Pool
1	<= 12%	None
2	>12% but <=20%	At Rs. 0.25 per unit for the shortfall or excess energy for absolute error beyond 12% and up to 20%
3	>20% but <=28%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 12% and up to 20% + Rs. 0.50 per unit for balance energy beyond 20% and up to 28%
4	> 28%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 12% and up to 20% + Rs. 0.50 per unit for balance energy beyond 20% and up to 28% + Rs. 0.75 per unit for balance energy beyond 28%

[ PART IV-C

Provided that deviation charges for under or over injection by wind generator connected to the State grid and selling power outside the State shall be payable by wind generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

8.6 In the event of actual generation of a solar generating station or at a pooling station, as the case may be, being less or more than the scheduled generation, the deviation charges for shortfall or excess generation shall be payable by the solar generator or the QCA appointed on its behalf, as the case may be, to the State DSM Pool, as given in Table – II below:

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Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to State DSM Pool
1	<= 7%	None
2	>7% but <=15%	At Rs. 0.25 per unit for the shortfall or excess energy for absolute error beyond 7% and up to 15%
3	>15% but <=23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23%
4	>23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23% + Rs. 0.75 per unit for balance energy beyond 23%

Provided that deviation charges for under or over injection by solar generator connected to the State grid and selling power outside the State shall be payable by solar generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

- 8.7 When all settlement pertaining to a pooling station is carried out by the QCA, in that case the QCA shall also de-pool the energy deviations as well as deviation charges to each generator for each time-block as defined in 'De-pooling mechanism'.
- 8.8 The SLDC, QCA and individual generator shall maintain separate records and account of time-block wise schedules, actual generation and deviations for all Pooling Sub-Stations, generators, including wind and solar generators.
- 8.9 The wind /solar generator shall be liable to pay the deviation charges for the deviation made between the actual energy generated and scheduled energy as per these Regulations at the rates specified in these Regulations.
- 8.10 Once the accounting procedures as above are put in place, all Wind and Solar Energy generators having installed capacity of above 1 MW shall be covered within the State Pool Account of the renewable energy created separately. The Energy Accounting of DSM shall be settled at the rates and methodology stipulated above for wind and solar generators separately.
- 8.11 State Pool Accounts / Energy Accounts as mentioned above shall be prepared by the SLDC on Weekly / Monthly (30/31 days) basis.
- 9 Implementation procedure with respect to Regulations

The complete accounting process will be operationalized in the following manner:

9.1 Metering:

Interface Metering for intra-state entities shall be undertaken on an urgent basis. Every entity must be metered with a Special Energy Meter (SEM) i.e. ABT compliant meter, capable of recording the energy in 15 minutes time block.

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Authorized representative of the distribution licensee/GETCO/QCA/generator, as the case may be, shall forward weekly/monthly meter readings to the SLDC latest by Wednesday of the previous week / 5<sup>th</sup> day of the next month of a previous month in addition to data acquisition provided to SCADA for energy accounting purpose under these Regulations.

## 9.2 Energy Accounting

Every intra-State grid connected entity shall be metered with a Special Energy Meter (SEM), i.e. ABT compliant meter, capable of recording the energy in 15 minutes time block and the energy accounting for each such entity shall be done with consideration of such meter data.

## 10 Means of Communication between QCA & SLDC

QCA and SLDC should communicate using software developed by the QCA duly approved by the SLDC for following:

- Communicating day ahead, intra-day and/or week ahead schedule along with revisions to SLDC.
- Informing real time generation at pooling station and/or at individual generator level, as required.
- c) Providing information of grid constraints and curtailments from SLDC side to QCA.
- d) QCA should provide software login to the SLDC, wherein live data for all schedules and information on the deviations shall also be made available. This method will help in online communication without time lag and facilitate prompt payment of deviation charges by the generator/QCA to SLDC.
- e) The software should facilitate information from the generator side/QCA to SLDC on generator outage with reasons for outage.
- f) It should intimate the QCA on the DSM charges at the pooling station by the SLDC.
- g) It should provide basic information of the site and turbines/inverters (Static Sheet).
- h) SLDC should be able to view the State level schedule alongwith actual generation being handled by QCA/generator.

### 11 Access to Meters:

It is necessary that the agreement between the generator(s) and QCA provides for the following:

- Access to the QCAs to modem installed on existing ABT meters for getting data on 15 minutes basis, or
- b) Permit access to the API link for getting the data from the meter to the QCA's central server to facilitate better forecasting.
- c) Alternatively, allow the QCA to install additional meters on the existing CT/PT to facilitate acquisition of real time data so that best schedule can be submitted to SLDC.

## 12 Deviation Accounting

Deviation settlement for the State shall be governed by the following provisions:

- 12.1 Computation of Deviation Charges: Deviation charges shall be computed in the following manner:
  - a) SLDC to calculate Absolute Error occurred in the scheduled energy and actual energy for each pooling station and for each generator which feed the energy directly to the substation.

[ PART IV-C

- b) Energy Account specifying the Deviation Charges for the renewable energy generators based on these Regulations prepared by the SLDC for the pooling stations/wind energy generators/solar generators, with consideration of the actual deviation in the energy from scheduled energy made by the pooling station or individual generator directly feeding energy in to the substation.
- c) SLDC to prepare the energy account specifying the deviation made in the scheduling by the pooling substation or individual generator directly feeding to sub-station and collect the deviation settlement charges from the entity concerned for the amount payable by them as per the provisions of these Regulations.
- d) SLDC is required to adjust the deviation settlement charges received from the renewable energy generators/QCAs under these Regulations in the State Pool for deviation charges payable / receivable. The said State DSM pool account is required to be maintained as revenue neutral in accordance with current practice.

The above mechanism shall be applicable up to 31<sup>st</sup> July, 2019 without any financial implications (as stated in Regulation 8 above).

## 12.2 Settlement of deviation charge

- a) SLDC shall compute the deviation from schedule and compute the deviation charges payable/receivable for the distribution licensees / conventional generators/renewable generators in proportion to their respective deviation.
- b) SLDC shall collect deviation charge from the RE generators (Pooling station/individual generator connected with the sub-station) based on the charges for deviation as specified in these Regulations.

## 13 Payment Mechanism for Settlement of Deviations by Wind/Solar Generators and Payment Security:

- 13.1 The payment settlement of deviations charges for deviations beyond permissible limit shall be the prime responsibility of all the wind generators connected to respective pooling stations and solar generators connected with the sub-station or pooling station as the case may be. The QCA shall collect the applicable deviation charges from all the generators as agreed between them and pay to SLDC.
- 13.2 The wind/solar generators/QCA shall provide payment security to SLDC in the form of Bank Guarantee and/or revolving LC covering 110% of DSM payment for one month.
- 13.3 In case the wind or solar generator defaults in payment to QCA, then QCA shall inform about the default by the generator to the SLDC and request disconnection of such defaulting generator from the grid.
- 13.4 Payment of all charges on account of deviations beyond the permissible limit at a Pooling Station by Wind and Solar generators shall have priority over other payments and shall be paid within 10 (ten) days from the issuance of the account. In case of default in payment exceeding more than 2 days, interest of 0.04% per day for each day of delay shall be levied.

## 14 Information about Curtailment:

- 14.1 Curtailment in the injection shall be intimated by the generator/QCA/SLDC through software enabled communication or any other mode of communication.
  - In case if SLDC fails to communicate about the curtailment to QCA/generator, deviation penalty shall not be levied for those given time blocks.
- 14.2 In case there is a planned curtailment due to line maintenance or for any other reasons in certain time blocks of a day by the SLDC, Generator / QCA shall be responsible to curtail the generation as per the advice of the SLDC. The QCA/generator shall amend the schedule

and in case QCA/generator fails to revise the schedule, SLDC shall revise the schedule as per requirement.

- Energy Accounting (Deviation charges and de-pooling of deviation charges of 15 Wind/Solar generators connected to pooling stations)
- 15.1 All accounts related to deviation shall be prepared by the generator/QCA on a weekly basis, based on inputs from the SLDC. The same is to be made available to SLDC by the generator/QCA through software/online.
- 15.2 SLDC shall furnish the processed energy account data along with release of every DSM account.
- 15.3 The data furnished by SLDC shall be open to all entities for checking/verification for a period of 15 days. In case any mistake is detected, SLDC shall forthwith make a complete check and rectify the mistakes.

#### 16 De-pooling of Deviation charges:

- 16.1 QCA shall de-pool the energy deviations as well as deviation charges to each generator connected at the respective pooling station, using one of the following options:
  - In proportion to available capacity of each generator, a)
  - In proportion to energy generated in each time block by each generator,
  - c) In proportion to absolute error of Individual generator schedule.
  - Any other methodology/criteria mutually agreed between QCA and generators.

They may adopt any one of the above methods, declaring that the same shall apply to all the members of the pooling station.

16.2 Finalization of a methodology shall be on majority (>= 51%) consensus basis measured in terms of MW capacity and a methodology once finalized shall not be changed without majority consensus.

#### 17 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.

#### 18 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.

#### 19 Power to amend:

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

### ROOPWANT SINGH, IAS

Secretary

Gujarat Electricity Regulatory Commission

Date: 19/01/2019

Place: Gandhinagar.

Government Central Press, Gandhinagar.



## GUJARAT STATE ELECTRICITY CORPORATION LIMITED

VidyutBhavan, Race Course, Vadodara, India - 390007. Ph. 91-265-6612003, Fax: 91-265-2350327 E-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

Speed Post

GSECL/GERC Cell/Petition/Solar Energy/ 1101

Date: 02.12.2020

To

The Secretary,

Gujarat Electricity Regulatory Commission, 10/23

6th Floor, GIFT one.

Road 5C, Zone 5, GIFT City,

Gandhinagar - 382355

**GUJARAT** 

Sub.: Petition under GERC Notification No. 1 of 2019 Dtd.19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy- submission of attachments.

Ref.: GERC Letter No. GERC/Legal/2020/1389 Dtd. 25.11.2020.

Sir,

With reference to above subject matter, please find enclosed herewith the relevant pages of GERC Regulation dtd 19.01.2019 and CERC Regulation Dtd. 07.08.2015.

It is requested to consider the above attachments with the Petition on above subject submitted by GSECL on Dtd. 06.11.2020.

Thanking You,

Encl: As above

For Gujarat State Electricity Corporation Ltd.,

(R.M.Bhadang) 2 12 2020

General Manager (F&A)

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Provided that deviation charges for under or over injection by wind generator connected to the State grid and selling power outside the State shall be payable by wind generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

8.6 In the event of actual generation of a solar generating station or at a pooling station, as the case may be, being less or more than the scheduled generation, the deviation charges for shortfall or excess generation shall be payable by the solar generator or the QCA appointed on its behalf, as the case may be, to the State DSM Pool, as given in Table – II below:

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Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to State DSM Pool	
1	< = 7%	None	
2	>7% but <=15%	At Rs. 0.25 per unit for the shortfall or excess energy for absolute error beyond 7% and up to 15%	
3	>15% but <=23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23%	
4	>23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23% + Rs. 0.75 per unit for balance energy beyond 23%	

Provided that deviation charges for under or over injection by solar generator connected to the State grid and selling power outside the State shall be payable by solar generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

- 8.7 When all settlement pertaining to a pooling station is carried out by the QCA, in that case the QCA shall also de-pool the energy deviations as well as deviation charges to each generator for each time-block as defined in 'De-pooling mechanism'.
- 8.8 The SLDC, QCA and individual generator shall maintain separate records and account of time-block wise schedules, actual generation and deviations for all Pooling Sub-Stations, generators, including wind and solar generators.
- 8.9 The wind /solar generator shall be liable to pay the deviation charges for the deviation made between the actual energy generated and scheduled energy as per these Regulations at the rates specified in these Regulations.
- 8.10 Once the accounting procedures as above are put in place, all Wind and Solar Energy generators having installed capacity of above 1 MW shall be covered within the State Pool Account of the renewable energy created separately. The Energy Accounting of DSM shall be settled at the rates and methodology stipulated above for wind and solar generators separately.
- 8.11 State Pool Accounts / Energy Accounts as mentioned above shall be prepared by the SLDC on Weekly / Monthly (30/31 days) basis.
- 9 Implementation procedure with respect to Regulations

The complete accounting process will be operationalized in the following manner:

9.1 Metering:

Interface Metering for intra-state entities shall be undertaken on an urgent basis. Every entity must be metered with a Special Energy Meter (SEM) i.e. ABT compliant meter, capable of recording the energy in 15 minutes time block.

# Central Electricity Regulatory Commission Notification New Delhi, the 7<sup>th</sup> August, 2015

No. 1/14/2015-Reg.Aff.(FSDS)(ii)/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 to amend the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 (hereinafter referred to as the "Principal Regulations") namely: -

- Short title and commencement (1) These regulations shall be called the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015,
  - (2) These regulations shall come into force with effect from 1<sup>st</sup> November, 2015.
- 2. Amendment of Regulation 2 of Principal Regulations:
  - (i) After sub-clause (a) under clause (1) of Regulation 2, new sub-clause (aa) shall be added as under:-
  - "(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:

Error (%) = 100 X [Actual Generation—Scheduled Generation] / (AvC)

- (ii) After sub-clause (q) under clause (1) of Regulation 2, new sub-clause (r) shall be added as under:-
- (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.
- 3. Amendment of Regulation 5 of Principal Regulations: In clause (1) of Regulation 5 of the Principal Regulations, the words "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" shall be substituted by the words "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".
- 4. Amendment of Regulation 5 of Principal Regulations: Sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, shall be substituted as under:-

"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 subclauses (v) to (vii) below:

- 5. Insertion of new proviso under clause (1) under Regulation 5: After sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, new sub-clauses (v), (vi) and (vii) shall be added as under:-
  - "(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—IP Deviation Charges in case of under injection

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to Regional DSM Pool
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:

Table Deviation Charges in case of over injection

The second second	addensas Deviation Char	ges in case of over injection
Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable
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%
enco 3 produce.	>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."

- 6. Amendment of Regulation 5 of Principal Regulations: In clause (2) of Regulation 5 of the Principal Regulations, the words "The Charge for Deviation shall be determined in accordance with the following methodology" shall be substituted by the words "The Charge for Deviation, except for wind and solar generators which are regional entities, shall be determined in accordance with the following methodology".
- 7. Insertion of a new proviso to clause (1) under Regulation 7: After the existing proviso to clause (1) of Regulation 7 of the Principal Regulations, a new proviso shall be added as under:-

"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".

(Shubha Sarma) Secretary

Note: The Principal Regulations were published on 7.1.2014 in the Gazette of India, Extraordinary, Part III, Section 4, Serial No. 06, corrigendum thereof was published (on 17.2.2014) in the Gazette of India, Extraordinary, Part III, Section 4 at Serial No.52 and the first amendment to the Principal Regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 on 18<sup>th</sup> December, 2014.



## GUJARAT STATE ELECTRICITY CORPORATION LIMITED

VidyutBhavan, Race Course, Vadodara, - 390007, India. Ph. 91-265-6612003, Fax: 91-265-2344537 e-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

GSECL/GERC Cell/Petition No:1932/2021/Solar DSM/

Date: 14.12.2022.

To, The Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT one, Road 5C, Zone 5, GIFT City, Gandhinagar - 382355. GUJARAT.

Sub:- Submission of details sought through daily order Dtd. 06.12.2022 in the Petition No:1932/2021.

Respected Sir,

Enclosed herewith please find 5 (Five) sets of details sought by Hon'ble commission through daily order Dtd. 06.12.2022 in the Petition No: 1932/2021.

It is requested to kindly appraise the Hon'ble Commission for the further needful please. Thanking you,

For Gujarat State Electricity Corporation Ltd.,

Encl:- As Above.

General Manager (F&A)

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## BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

Filing No:

Case No.: 1932 of 2021

IN THE MATTER OF	Petition under GERC Notification no. 1 of 2019 dated: - 19-
	01-2019 to remove difficulties thereof for DSM charges for
	Solar Energy.

## AND

IN THE MATTER OF	Gujarat State Electricity Corporation Limited, Vidyut Bhavan, Race Course,
	Vadodara 390007
	Phone No. :0265 6612003; Fax: 0265 2344537
	E-mail: gmf.gsecl@gebmail.com
	Petitioner

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## THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS AS UNDER

- 1.0 The Petitioner Gujarat State Electricity Corporation Limited (GSECL) has filed a Petition under GERC Notification no. 1 of 2019 dated: - 19-01-2019 to remove difficulties thereof for DSM charges for Solar Energy.
- 2.0 The petition was heard by Hon'ble commission on 25/11/2022 wherein the representatives of petitioner remained present. Moreover, Hon'ble commission through daily order dated: -06/12/2022 in the present petition considered submissions made by the petitioner that the petitioner is seeking amendment in GERC (Forecasting, scheduling, Deviation settlement and related matters of solar and wind generation sources) Regulations, 2019 in line with the CERC's DSM Regulations, 2014. However, Hon'ble commission noted that the amendment notified by the CERC to its principal DSM regulation, 2014 is not placed on record by the petitioner GSECL. Accordingly GSECL sought an adjournment to grant some time to file the reply along with the amendment issued by Hon'ble CERC in their principal DSM Regulations, 2014. Thereafter, Hon'ble Commission directed GSECL to file the reply with required amendment in Regulations of CERC DSM Regulations, 2014 within two weeks' time.
- 3.0 Accordingly respondent GSECL is filing the Present reply and submitting Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015 issued by Hon'ble CERC on 07/08/2015 amending the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014 as directed by the Hon'ble Commission. It is kindly requested to consider the present submission and amended regulations dated: 07/08/2015 issued by Hon'ble CERC in the present matter and place on the record.

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## PRAYERS:

The Petitioner humbly and most respectfully prays to the Hon'ble Commission: -

- a. To kindly place on record the present reply submitting the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015 on record in the present matter of the petition no. 1932 of 2021.
- b. To kindly approve the prayer made in the present petition.

Petitioner

For Gujarat State Electricity Co. Ltd.

Place: Vadodara.

Date: 14.12.2022



Date: 14-12-2

Petition no. 1932 of 2021

## BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

Filing No:

Case No.: 1932 of 2021

01-2019 to remove difficulties thereof for DSM charges for
Solar Energy.

## AND

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1	JAIRATON	1	

## Gujarat State Electricity Corporation Limited, IN THE MATTER OF

Vidyut Bhavan, Race Course,

Vadodara 390007

Phone No.: 0265 6612003; Fax: 0265 2344537

E-mail: gmf.gsecl@gebmail.com

Petitioner

## JAIRATON

## Affidavit verifying the Application



I, Kalpana Hiren Chadderwala, wife of Shri. Hiren Chadderwala aged about 48 years, residing at 50/B, Shivkumud Society, Near Akota Garden, Akota, Vadodara do solemnly affirm and say as follows:

I am General Manager (Finance & Accounts) of the Gujarat State Electricity Corporation Limited, the Petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit.



The Statements made hereinabove are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on this 14th day of December 2022, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been Chaddeneala

concealed there from.

Place: Vadodara. Dated: 14.12.2022.

(K.H.Chadderwala) General Manager (F & A) GSECL-Vadodara

Solemnly Affirmed/Declared Sworn Before me by K.H. E

NOTARY



## Central Electricity Regulatory Commission Notification



New Delhi, the 7th August, 2015

No. 1/14/2015-Reg.Aff.(FSDS)(ii)/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 to amend the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 (hereinafter referred to as the "Principal Regulations") namely: -

- 1. Short title and commencement (1) These regulations shall be called the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015.
  - (2) These regulations shall come into force with effect from 1<sup>st</sup> November, 2015.
- 2. Amendment of Regulation 2 of Principal Regulations:
  - (i) After sub-clause (a) under clause (1) of Regulation 2, new sub-clause (aa) shall be added as under:-
  - " (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:

Error (%) = 100 X [Actual Generation—Scheduled Generation] / (AvC)

- (ii) After sub-clause (q) under clause (1) of Regulation 2, new sub-clause (r) shall be added as under:-
- (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.
- 3. Amendment of Regulation 5 of Principal Regulations: In clause (1) of Regulation 5 of the Principal Regulations, the words "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" shall be substituted by the words "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".
- 4. Amendment of Regulation 5 of Principal Regulations: Sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, shall be substituted as under:-

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 subclauses (v) to (vii) below:

- 5. Insertion of new proviso under clause (1) under Regulation 5: After sub-clause (iv) to clause (1) of Regulation 5 of the Principal Regulations, new sub-clauses (v), (vi) and (vii) shall be added as under:-
  - "(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

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to Regional DSM Pool
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%

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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:

Table – II: Deviation Charges in case of over injection

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable
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

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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."
- 6. Amendment of Regulation 5 of Principal Regulations: In clause (2) of Regulation 5 of the Principal Regulations, the words "The Charge for Deviation shall be determined in accordance with the following methodology" shall be substituted by the words "The Charge for Deviation, except for wind and solar generators which are regional entities, shall be determined in accordance with the following methodology".
- 7. Insertion of a new proviso to clause (1) under Regulation 7: After the existing proviso to clause (1) of Regulation 7 of the Principal Regulations, a new proviso shall be added as under:-

"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".

(Shubha Sarma) Secretary

Note: The Principal Regulations were published on 7.1.2014 in the Gazette of India, Extraordinary, Part III, Section 4, Serial No. 06, corrigendum thereof was published (on 17.2.2014) in the Gazette of India, Extraordinary, Part III, Section 4 at Serial No.52 and the first amendment to the Principal Regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 on 18<sup>th</sup> December, 2014.





## **GUJARAT STATE ELECTRICITY CORPORATION LIMITED**

VidyutBhavan, Race Course, Vadodara, – 390007, India. Ph. 91-265-6612003, Fax: 91-265-2344537 e-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

GSECL/GERC Cell/Petition No:1932/2021/Solar DSM/284

Date: 22.06.2023

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th Floor, GIFT one,
Road 5C, Zone 5, GIFT City,
Gandhinagar – 382355.
GUJARAT.

Sub:- Submission of details sought through daily order Dtd. 08.05.2023 in the Petition No: 1932/2021.

## Respected Sir,

Enclosed herewith please find 5 (Five) sets of details sought by Hon'ble commission through daily order Dtd. 08.05.2023 in the Petition No: 1932/2021.

It is requested to kindly appraise the Hon'ble Commission for the further needful please.

Thanking you,

For Gujarat State Electricity Corporation Ltd.,

Encl:- As Above.

(Sailaja Vachhrajani) General Manager (F&A)

AN (

Date: 23 JUN 2023



## BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

Filing No:

Case No.: 1932 of 2021

of 2019 dated: - 19
or DSM charges fo

## AND

IN THE MATTER OF	Gujarat State Electricity Corporation Limited,
	Vidyut Bhavan, Race Course,
	Vadodara 390007
	Phone No.:0265 6612003; Fax: 0265 2344537
	E-mail: gmf.gsecl@gebmail.com
	coacommerce.gsecl@gebmail.com
	Petitioner



### THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS AS UNDER: -

- 1.0 The Petitioner Gujarat State Electricity Corporation Limited (GSECL) had filed a Petition under GERC Notification no. 1 of 2019 dated: 19-01-2019 to remove difficulties thereof for DSM charges for Solar Energy.
- 2.0 The petition was heard by Hon'ble commission on 25/11/2022 wherein the representatives of petitioner remained present. Hon'ble commission through daily order dated: 06/12/2022 in the present petition considered submissions made by the petitioner that the petitioner is seeking amendment in GERC (Forecasting, scheduling, Deviation settlement and related matters of solar and wind generation sources) Regulations, 2019 in line with the CERC's DSM Regulations, 2014. However, Hon'ble commission noted that the amendment notified by the Hon'ble CERC to its principal DSM regulation, 2014 was not placed on record by the petitioner GSECL. Accordingly GSECL sought an adjournment to grant some time to file the reply along with the amendment issued by Hon'ble CERC in their principal DSM Regulations, 2014. Hon'ble Commission directed GSECL to file the reply with required amendment in Regulations of CERC DSM Regulations, 2014 within two weeks' time.
- 3.0 Accordingly GSECL had filed the reply vide affidavit dated: 14/12/2022 wherein the amendment notified by the Hon'ble CERC vide notification no. No.1/14/2015-Reg.Aff. (FSDS)(ii)/CERC dated: 7<sup>th</sup> August 2015 to its principal DSM regulation, 2014 (Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015) was placed on the record of Hon'ble commission.
- 4.0 Thereafter the present petition was heard by Hon'ble commission on 27/04/2023 wherein the representatives of petitioner remained present. Hon'ble commission through daily order dated: 09/05/2022 in the present petition directed GSECL to place amendments / orders notified by Hon'ble CERC to its principal regulations, 2014. Moreover, during the hearing, Hon'ble commission also directed GSECL to place on record, the latest regulations notified by Hon'ble CERC in this matter. Accordingly GSECL had sought adjournment to examine the matter and requested Hon'ble commission to grant some time for filing it on record of this petition.
- 5.0 Accordingly, GSECL is submitting the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 issued by Hon'ble CERC vide notification No. L-1/260/2021/CERC Dated: 14th March 2022. Also the notification dated: 31/10/2022 issued by Hon'ble CERC notifying that the Central Electricity Regulatory Commission (Deviation Settlement Mechanism & related matters) Regulation, 2022 were effective from 05/12/2022 is submitted herewith for the kind perusal by Hon'ble Commission. Moreover, Hon'ble CERC through order dated: -



06/02/2023 in the suo-moto petition no. 01/SM/2023 has issued directions in the interest of grid security, in pursuance of the provisions of the Electricity Act, 2003 and the provisions of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 wherein certain relaxations in the Regulation no. 8 of the DSM Regulations, 2022 have been issued. This order dated: -06/02/2023 issued by Hon'ble CERC is also submitted herewith for kind perusal. It is humbly requested to take the DSM regulation dated: -14/03/2022, Notification dated: -31/10/2022 and order dated: -06/02/2023 on record as the integral part of the present petition.

6.0 The Regulation 6 of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 states the methodology to compute the deviation of energy for different types of sellers. The regulation 6 (2) describes the method of computation of Wind or Solar or Wind-Solar Hybrid generator (WS seller) as under:-

### Quote

"(2) Deviation in a time block for WS sellers shall be computed as follows:

Deviation-WS seller (in MWh) = [(Actual Injection in MWh) – (Scheduled generation in MWh)].

Deviation-WS seller (in %) =  $100 \times [(Actual Injection in MWh) - (Scheduled Generation in MWh)] / [(Available Capacity)]."$ 

### <u>Unquote</u>

Moreover, the clause no. 27 of the suo-moto order dated: -06/02/2023 relaxing the Regulation 8 of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 states the charges for deviation of energy for different types of sellers as computed as per the Regulation 6 of the CERC DSM regulations 2022. The relaxed regulation 8 (1) describes the charges for deviation in a time block by a seller wherein the charges for deviation by Wind or Solar or Wind-Solar Hybrid generator (WS seller) are specified as under:-

### Quote

(1) "Charges for deviation in a time block by a seller shall be payable by such seller as under:

For	WS	Zero:	(i) Zero up to [10% Dws]	
seller		Provided that such seller shall be paid	and	
		back for over injection as under:		
		(i) @ contract rate, or in the absence	(ii) @ 10% of contract rate or in	
		of a contract rate, @ the weighted	the absence of a contract rate,	
		average ACP of the Day Ahead	@ the weighted average ACP of	
		Market segments of all Power	the Day Ahead Market	
		Exchanges for the respective time	segments of all Power	
		block, up to [10% Dws];	Exchanges for the respective	



and

(ii) @ 90% of the contract rate, or in the absence of a contract rate, @ 90% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [10% Dws] and up to [15% Dws].

time block for deviation beyond [10% DWS] and up to [15% DWS] and (iii) @ 50% of contract rate or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [15% DWS]: Provided that such seller shall pay back for the total shortfall in energy against its schedule in any time block due to under injection, @ the contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges, for the respective time block

### **Unquote**

7.0 In view of the above, it is kindly requested to consider the submission made by GSECL and also to consider the amendment of the DSM regulations issued vide notification no. 01 of 2019 with retrospective effect.



### PRAYERS:

The Petitioner humbly and most respectfully prays to the Hon'ble Commission: -

- a. To kindly place on record the present reply submitting the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters), 2022, Notification dated:- 31/10/2022 and suo-moto order dated:- 06/02/2023 on record in the present matter of the petition no. 1932 of 2021.
- b. To kindly approve the prayer made in the present petition.

Petitioner

For Gujarat State Electricity Co. Ltd.

Place: Vadodara. Date: 21/06/2023

### Declaration:

Declaration that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any orders in relation thereto.

Signature of the Petitioner

Gujarat State Electricity Corporation Limited

Dated: 21/06/2023

Place: Vadodara



# BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

Filing No:

Case No.: 1932 of 2021

Regd. No.: 3557

Date: 21/06 /20 23

IN THE MATTER OF	Petition under GERC Notification no. 1 of 2019 dated: - 19-
	01-2019 to remove difficulties thereof for DSM charges for
	Solar Energy.

AND

NOTAP

IN THE MATTER OF

Gujarat State Electricity Corporation Limited,

Vidyut Bhavan, Race Course,

Vadodara 390007

Phone No.:0265 6612003; Fax: 0265 2344537

E-mail: gmf.gsecl@gebmail.com

coacommerce.gsecl@gebmail.com

Petitioner

Avea:

Av

## Affidavit verifying the Application

ı, Nitin B. Kansara, son of Shri. Budhiprasad C. Kansara aged about 55 years, residing at 31, Raag Duplex, Subhanpura, Vadodara do solemnly affirm and say as follows:

I am Controller of Accounts in the Gujarat State Electricity Corporation Limited, the Petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit.

The Statements made hereinabove are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on this 21 day of June 2023, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been

concealed there from.

Place: Vadodara. Dated: \$1.06 .2023.

(Nitin B. Kansara) Controller of Accounts GSECL-Vadodara

Solemnly Affirmed/Declared
Sworn Before me by ... N. B. Kee

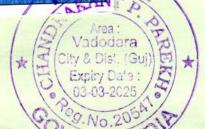
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C. P. PAREKH NOTARY (Govt. of India)

CHANDRAKANT P. PAREKH ADVOCATE & NOTARY

Reg. No. 20547

B-11, Jay Mahalaxmi Park Society.
Opp. Padam Park Society.
Novino-Tarsali Road,
Makarpura, Vadodara.



20/12 01 terment by colleged bids and yet many market bloom and a content proper service. Swarn Halore and by JN-L والدوسين Larger

# CENTRAL ELECTRICITY REGULATORY COMMISSION PREAMBLE

New Delhi, the 14th March, 2022

Whereas it is necessary to provide for a regulatory mechanism for treatment and settlement of deviation from schedule of drawal or injection of electricity in the interest of reliability, security and stability of the grid, it is hereby specified as follows:

#### NOTIFICATION

No. L-1/260/2021/CERC - In exercise of the powers conferred under Section 178 read with clauses (c) and (h) of sub-section (1) of Section 79 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, 2022.
- (2) These regulations shall come into force on such date as may be notified by the Commission separately.

### 2. Objective

These regulations seek to ensure, through a commercial mechanism that users of the grid do not deviate from and adhere to their schedule of drawal and injection of electricity in the interest of security and stability of the grid.

### 3. 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 the electricity drawn by a buyer, measured by the interface meters;
  - (c) 'actual injection' in a time block means the electricity injected by the seller, measured by the interface meters:
  - (d) 'Ancillary Services' means the Ancillary Services as defined in the Ancillary Services Regulations;
  - (e) 'Ancillary Services Regulations' means the Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2015 as amended from time to time and shall include any reenactment thereof;
  - (f) 'Area Clearing Price' or 'ACP' means the price of electricity contract for a time-block transacted on a Power Exchange after considering all valid buy and sale bids in particular area(s) after market-splitting;
  - (g) 'Available Capacity' for generating station based on wind or solar or hybrid of wind-solar resources which are regional entities, is the cumulative capacity rating of wind turbines or solar inverters that are capable of generating power in a given time block;
  - (h) 'Buyer' means a person purchasing electricity through a transaction scheduled in accordance with the Grid Code;
  - (i) 'Commission' means the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Act;
  - (j) 'Contract rate' means the tariff for sale or purchase of power, as determined under Section 62 or adopted under Section 63 or approved under Section 86(1)(b) of the Act by the Appropriate Commission or the price as discovered in the Power Exchange, as the case may be;
  - (k) 'Deviation' in a time block for a seller of electricity means its total actual injection minus its total scheduled generation; and for a buyer of electricity means its total actual drawal minus its total scheduled drawal, and shall be computed as per Regulation 6 of these regulations;
  - Deviation and Ancillary Service Pool Account' means the Account to be maintained and operated by the concerned Regional Load Despatch Centre in each region as per Regulation 9 of these regulations;
  - (m) 'General seller' means a seller in case of a generating station based on other than wind or solar or hybrid of wind-solar resources;

- (n) 'Grid Code' means the Grid Code specified by the Commission under clause (h) of sub-section (1) of Section 79 of the Act;
- (o) 'Interface meters' means interface meters as defined under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time and any reenactment thereof;
- (p) 'Load Despatch Centre' means National Load Despatch Centre, Regional Load Despatch Centre or State Load Despatch Centre, as the case may be;
- (q) 'Normal Rate of Charges for Deviation' means the charges for deviation (in paise/kWh) as referred to in Regulation 7 of these regulations;
- (r) 'Open Access Regulations' means the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 as amended from time to time and shall include any reenactment thereof;
- (s) 'Regional Entity' means a person whose metering and energy accounting are done at the regional level by Regional Load Despatch Centre;
- (t) 'Renewable Rich State' or 'RE-rich State' means a State whose combined installed capacity of solar and wind generating stations under the control area of the State is 1000 MW or more;
- (u) 'Reference Charge Rate' means (i) in respect of a general seller whose tariff is determined under Section 62 or Section 63 of the Act, Rs/ kWh energy charge as determined by the Appropriate Commission, or (ii) in respect of a general seller whose tariff is not determined under Section 62 or Section 63 of the Act, the daily weighted average ACP of the Day Ahead Market segments of all the Power Exchanges, as the case may be;
- (v) 'RLDC Fees and Charges' means the fees and charges as specified under the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019 as amended from time to time and shall include any re-enactment thereof;
- (w) 'Run-of-River Generating Station' or 'RoR generating station' means a hydro generating station which does not have upstream pondage;
- (x) 'Scheduled generation' or 'Scheduled injection' for a time block or any period means the schedule of generation or injection in MW or MWh ex-bus including the schedule for Ancillary Services given by the concerned Load Despatch Centre;
- (y) 'Scheduled drawal' for a time block or any period means the schedule of drawal in MW or MWh ex-bus including the schedule for Ancillary Services given by the concerned Load Despatch Centre;
- (z) "Seller' means a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the Grid Code;
- (aa) 'Time Block' means the time block as defined in the Grid Code;
- (bb) 'WS seller' means a seller in case of a generating station based on wind or solar or hybrid of windsolar resources.
- (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 any other regulation of this Commission shall have the meaning assigned to them respectively in the Act or any other regulation.

#### 4. Scope

These regulations shall be applicable to all grid connected regional entities and other entities engaged in inter-State purchase and sale of electricity.

#### 5. Adherence to Schedule and Deviation

- (1) For a secure and stable operation of the grid, every grid connected regional entity shall adhere to its schedule as per the Grid Code and shall not deviate from its schedule.
- (2) Any deviation shall be managed by the Load Despatch Centre as per the Ancillary Services Regulations, and the computation, charges and related matters in respect of such deviation shall be dealt with as per the following provisions of these regulations.

### 6. Computation of Deviation

(1) Deviation in a time block for general sellers shall be computed as follows:

Deviation-general seller (in MWh) = [(Actual injection in MWh) - (Scheduled generation in MWh)].

Deviation-general seller (in %) =  $100 \times [(Actual injection in MWh) - (Scheduled generation in MWh)] / [(Scheduled generation in MWh)].$ 

(2) Deviation in a time block for WS sellers shall be computed as follows:

Deviation-WS seller (in MWh) = [(Actual Injection in MWh) – (Scheduled generation in MWh)].

Deviation-WS seller (in %) =  $100 \times [(Actual Injection in MWh) - (Scheduled generation in MWh)] / [(Available Capacity)].$ 

(3) Deviation in a time block for buyers shall be computed as follows:

Deviation- buyer (in MWh) = [(Actual drawal in MWh) – (Scheduled drawal in MWh)].

Deviation- buyer (in %) =  $100 \times [(Actual drawal in MWh) - (Scheduled drawal in MWh)] / [(Scheduled drawal in MWh)].$ 

### 7. Normal Rate of Charges for Deviations

(1) The normal rate of charges for deviation for a time block shall be equal to the Weighted Average Ancillary Service Charge (in paise/kWh) computed based on the total quantum of Ancillary Services deployed and the net charges payable to the Ancillary Service Providers for all the Regions for that time block:

Provided that for a period of one year from the date of effect of these regulations or such further period as may be notified by the Commission, the normal rate of charges for deviation for a time block shall be equal to the highest of [the weighted average ACP of the Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of the Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary Service Charge of all the regions] for that time block:

Provided further that in case of non-availability of ACP for any time block on a given day, ACP for the corresponding time block of the last available day shall be considered:

(2) The normal rate of charges for deviation shall be rounded off to the nearest two decimal places.

### 8. Charges for Deviation

(1) Charges for deviation in a time block by a seller shall be payable by such seller as under:

Entity	Charges for deviation payable to  Deviation and Ancillary Service Pool Account		
Seller	Deviation by way of over injection	Deviation by way of under injection	
For a general seller other than an RoR generating station or a generating station based on municipal solid waste	(i) Zero up to [2% Deviation-general seller  (in %)]:  Provided that such seller shall be paid back for over injection @ the reference charge rate for deviation up to [2% Deviation-general seller (in %)];  and  (ii) @ 10% of the normal rate of charges for deviation beyond [2% Deviation-general seller (in %)].	(i) @ the reference charge rate up to  [2% Deviation-general seller (in %)];  (ii) @ 120% of the normal rate of charges for deviation beyond [2% Deviation-general seller (in %)] and up to [10% Deviation-general seller (in %)]; and  (iii) @ 150% of the normal rate of charges for deviation beyond [10% Deviation-general seller (in %)].	
For a general seller being an RoR generating station	Zero: Provided that such seller shall be paid back for over injection up to [2% Deviation-general seller  (in %)] @ the reference charge rate.	<ul> <li>(i) @ the reference charge rate up to</li> <li>[2% Deviation-general seller (in %)];</li> <li>(ii) @ normal rate of charges for deviation beyond</li> <li>[2% Deviation-general seller (in %)] and up to [10% Deviation-general seller (in %)];</li> <li>and</li> </ul>	

1000000		(iii) @ 110% of the normal rate of charges for deviation beyond [10% Deviation-general seller (in %)].
For a general seller being a generating station based on municipal solid waste	Zero:  Provided that such seller shall be paid back for over injection up to [20% Deviation-general seller (in %)] @ contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block.	(i) Zero up to [20% Deviation-general seller (in %)]:  Provided that such seller shall pay back for the shortfall in energy against its schedule in any time block due to under injection up to [20% Deviation-general seller (in %)] @ 50% of the contract rate, or in the absence of a contract rate, @ 50% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block;  and  (ii) @ normal rate of charges for deviation beyond [20% Deviation-general seller (in %)].
For WS seller	Zero:  Provided that such seller shall be paid back for over injection as under:  (i) @ contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block, up to [5% Deviation -WS seller (in %)];  and  (ii) @ 90% of the contract rate, or in the absence of a contract rate, @ 90% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [5% Deviation-WS seller (in %)] and up to [10% Deviation-WS seller (in %)].	(i) Zero up to [10% Deviation-WS seller (in %)]; and (ii) @ 10% of the normal rate of charges for deviation beyond [10% Deviation-WS seller (in %)]:  Provided that such seller shall pay back for the total shortfall in energy against its schedule in any time block due to under injection, @ the contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges, for the respective time block.

(2) Charges for deviation in a time block by a buyer shall be payable by such buyer as under:

Entity	Charges for deviation payable to  Deviation and Ancillary Service Pool Account		
Buyer	Deviation by way of under drawal	Deviation by way of over drawal	
Buyer (other than the buyer with schedule less than 400 MW and the RE-rich State)	Zero:  Provided that such buyer shall be paid back for under drawal as under:  (i) @ 90% of normal rate of charges, for deviation up to [10% Deviation-buyer (in %) or 100 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  and  (ii) @ 50% of normal rate of charges,	(i) @ normal rate of charges for deviation up to [10% Deviation-buyer (in %) or 100 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  (ii) @120% of normal rate of charges for deviation beyond [10% Deviation-buyer (in %) or 100 MW Deviation-buyer (in MWh) in a time block, whichever is lower] and up to [15% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  and  (iii) @150% of normal rate of charges for deviation	

	for deviation beyond [10% Deviation-buyer (in %) or 100 MW Deviation-buyer (in MWh) in a time block, whichever is lower] and up to [15% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	beyond [15% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	
Buyer (with schedule up to 400 MW)	Zero:  Provided that such buyer shall be paid back for under drawal @ 90% of normal rate of charges for deviation up to [20% Deviation-buyer (in %) or 40 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	(i) @ normal rate of charges for deviation up to [20% Deviation-buyer (in %) or 40 MW Deviation-buyer (in MWh) in a time block, whichever is lower]; and  (ii) @120% of normal rate of charges for deviation beyond [20% Deviation-buyer (in %) or 40 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	
Buyer (being an RE Rich State)	Zero:  Provided that such buyer shall be paid back for under drawal as under:  (i) @ 90% of normal rate of charges for deviation up to [10% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  and  (ii) @ 50% of normal rate of charges for deviation beyond [10% Deviation-buyer (in %) or 200 MW Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower] and up to [15% Deviation-buyer (in %) or 300 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	(i) @ normal rate of charges for deviation up to [10% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  (ii) @120% of normal rate of charges for deviation beyond [10% Deviation-buyer (in %) or 200 MW Deviation-buyer (in MWh) in a time block, whichever is lower] and up to [15% Deviation-buyer (in %) or 300 MW Deviation-buyer (in MWh) in a time block, whichever is lower];  and  (iii) @150% of normal rate of charges for deviation beyond [15% Deviation-buyer (in %) or 300 MW Deviation-buyer (in MWh) in a time block, whichever is lower].	

- (3) (a) The charges for deviation for injection of infirm power shall be zero.
  - (b) The charges for deviation for drawal of start-up power before COD of a generating unit or for drawal of power to run the auxiliaries during shut-down of a generating station shall be payable at the normal rate of charges for deviation.
- (4) The charges for inter-regional deviation and for deviation in respect of cross-border transactions, caused by way of over-drawal or under-injection shall be payable at the normal rate of charges for deviation.

### 9. Accounting of Charges for Deviation and Ancillary Service Pool Account

- By every Thursday, the Regional Load Despatch Centres shall provide the data for deviation calculated as per Regulation 6 of these regulations, for the previous week ending on Sunday mid-night to the Secretariat of the respective Regional Power Committees.
- (2) After receiving the data for deviation from the Regional Load Despatch Centre, the Secretariat of the Regional Power Committee shall prepare and issue the statement of charges for deviation prepared for the previous week, to all regional entities by ensuing Tuesday:
  - Provided that transaction-wise DSM accounting for intra-State entities shall not be carried out at the regional level.
- (3) Separate books of accounts shall be maintained for the principal component and interest component of charges for deviation by the Secretariat of the Regional Power Committees.
- (4) There shall be a Deviation and Ancillary Service Pool Account to be maintained and operated by the Regional Load Despatch Centre for the respective region:

Provided that the Commission may by order direct any other entity to operate and maintain the Deviation and Ancillary Service Pool Account.

- (5) The Deviation and Ancillary Service Pool Account shall receive credit for:
  - payments on account of charges for deviation referred to in Regulation 8 of these regulations and the late payment surcharge as referred to in Regulation 10 of these regulation;
  - (b) payments made by:
    - (i) SRAS Provider for the SRAS-Down despatched under the Ancillary Services Regulations;
    - (ii) TRAS Provider for the TRAS-Down despatched under the Ancillary Services Regulations; and
    - (iii) such other charges as may be notified by the Commission.
- (6) Deviation and Ancillary Service Pool Account shall be charged for:
  - (a) payment to seller for over injection as referred to in clause (1) of Regulation 8 of these regulations;
  - (b) payment to buyer for under drawal as referred to in clause (2) of Regulation 8 of these regulations;
  - (c) the full cost of despatched SRAS-Up including the variable charge or the energy charge or the compensation charge, as the case may be, for every time block on a regional basis as well as the incentive for SRAS, payable to the concerned SRAS Provider as referred in the Ancillary Services Regulations;
  - (d) the full cost towards TRAS-Up including the charges for the quantum cleared and despatched and the commitment charge for the quantum cleared but not despatched as referred in the Ancillary Services Regulations; and
  - (e) such other charges as may be notified by the Commission.
- (7) In case of deficit in the Deviation and Ancillary Service Pool Account of a region, surplus amount available in the Deviation and Ancillary Service Pool Accounts of other regions shall be used for settlement of payment under clause (6) of this Regulation:

Provided that in case the surplus amount in the Deviation and Ancillary Service Pool Accounts of all other regions is not sufficient to meet such deficit, the balance amount shall be recovered through the RLDC Fees and Charges.

### 10. Schedule of Payment of charges for deviation

- (1) The payment of charges for deviation shall have a high priority and the concerned regional entity shall pay the due amounts within 7 (seven) days of the issue of statement of charges for deviation by the Regional Power Committee, failing which late payment surcharge @ 0.04% shall be payable for each day of delay.
- (2) Any regional entity which at any time during the previous financial year fails to make payment of charges for deviation within the time specified in these regulations, shall be required to open a Letter of Credit (LC) equal to 110% of their average payable weekly liability for deviations in the previous financial year in favour of the concerned Regional Load Despatch Centre within a fortnight from the start of the current financial year.
- (3) In case of failure to pay into the Deviation and Ancillary Service Pool Account within 7 (seven) days from the date of issue of statement of charges for deviation, the Regional Load Despatch Centre shall be entitled to encash the LC of the concerned regional entity to the extent of the default and the concerned regional entity shall recoup the LC amount within 3 days.

### 11. 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, may relax any of the provisions of these regulations on its own motion or on an application made before it by the affected party.

#### 12. Power to Remove Difficulty

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 practice directions as may be considered necessary in furtherance of the objective of these regulations.

### 13. Repeal and Savings

- Save as otherwise provided in these regulations, the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 shall stand repealed from the date of commencement of these Regulations.
- (2) Notwithstanding such repeal, anything done or any action taken or purported to have been done or taken including any procedure, minutes, reports, confirmation or declaration of any instrument executed under the repealed regulations shall be deemed to have been done or taken under the relevant provisions of these regulations.
- (3) On commencement of these regulations, the Regional Deviation Pool Account Fund constituted under the repealed regulations shall be renamed as the Deviation and Ancillary Service Pool Account constituted under these regulations, and
  - (a) all sums of money credited to the Regional Deviation Pool Account Fund shall be deemed as credited to the Deviation and Ancillary Service Pool Account;
  - (b) all amounts due to and from the said Regional Deviation Pool Account Fund shall be deemed as being due to and from the Deviation and Ancillary Service Pool Account; and
  - (c) any reference to the Regional Deviation Pool Account Fund shall be construed as reference to the Deviation and Ancillary Service Pool Account.

SUSHANTA K. CHATTERJEE, Chief (Regulatory Affairs)

[ADVT.-III/4/Exty./701/2021-22]

# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

No. L-1/260/2021/CERC

31st October 2022

### **NOTIFICATION**

Whereas the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 were published in Part-III, Section 4, No. 147 of the Gazette of India Extraordinary on 22.03.2022.

Whereas, the Clause (2) of Regulations 1 of the said regulations provides that the Regulations shall come into force on such date as may be notified by the Commission separately.

And, now, therefore, it is notified that the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 shall come into force with effect from 05.12.2022.

Sd/ (Harpreet Singh Pruthi) Secretary

### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 01/SM/2023

Coram: Shri I. S. Jha, Member Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 06th February, 2023

### IN THE MATTER OF:

Directions in the interest of grid security, in pursuance of the provisions of the Electricity Act, 2003 and the provisions of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022

### **ORDER**

The Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 (hereafter, DSM Regulations, 2022) came into force with effect from 05.12.2022.

- 2. After the Regulations came into effect, the Commission has been closely monitoring implementation of the DSM Regulations, 2022 from the date of its operation. While the various players sought to align themselves with the new system put in place by the DSM Regulations, 2022, the Commission was apprised that wide frequency fluctuations occurred post the implementation of the DSM Regulations, 2022. The Commission has since held detailed discussions and consultations with the Grid Controller of India Ltd (Grid-India) and with regional entity generating stations to assess the implementation challenges in this regard. In the wake of the operational experience post 05.12.2022 the Commission issued directions on 26.12.2022 vide suo motu Petition No. 16/SM/2022 stipulating inter-alia certain regulatory measures to contain frequency within the operating band and reduce wide frequency fluctuations.
- 3. The Commission further reviewed implementation of the DSM Regulations, 2022, post issuance of directions dated 26.12.2022. The Commission also received Operational Feedback from Grid-India on 10.01.2023 and held detailed deliberations with the Grid-

India, the regional entity generating stations, the Wind and Solar Generators represented by their Associations and the Regional Power Committees.

### Grid-India Operational Feedback:

- 4. As directed by the Commission, Grid-India has been providing weekly operational feedback on implementation of DSM Regulations highlighting inter-alia the high and low frequency events, status on primary, secondary and tertiary response from the regional generators while detailing the efforts to procure SRAS and RRAS to maintain frequency within operative band.
- 5. The Weekly feedback from the Grid-India communicated vide 10.01.2023 highlighted that while some improvement in the frequency profile excursions above 50.05 Hz was observed, the overall frequency profile still remains a matter of concern. While the frequency remained within the operative band for ~75-80% of the time before 05.12.2022, it deteriorated to the level of ~54% during 5-26 December 2022 but consequently improved to ~60% post the issuance of directions dated 26.12.2022. After the issuance of the directions dated 26.12.2022, the frequency excursions and the percentage of times the frequency remaining within the operating band improved but is still short of the expected level of operation.
- 6. The number of excursions above 50.2 Hz has increased from a maximum of 5 times per day from 01.11.2022 to 05.12.2022, to ~23-24 times per day between 5-26 December 2022. Consequently, it reduced to a maximum of ~13-14 times per day post 26.12.2022directions, which is still short of the expected level of operation.
- 7. It was mentioned that frequency response characteristics of individual generators could not be compared for primary response assessment due to lack of event involving large generation/ load loss during the week 26.12.2022 to 01.01.2023. However, the availability of secondary reserves continues to be inadequate even post 28.12.2022 due to reasons such as limited availability of down and up margins on account of 5% limits on the response provided by the generating stations, constraints in participation in SRAS by some regional generating stations due to issues of communication, stability issues cited by some lignite based thermal generating stations, and non-participation of Ultra Mega Power Plants (UMPP) generating stations.

8. On deployment of reserves for system security, the weekly report (26.12.2022 to 01.01.2023) by the Grid-India highlighted that Maximum SRAS Up and SRAS Down deployed for week were 1191 MW and 2072 MW respectively and that of RRAS UP and RRAS Down were 1394 MW and 2500MW. The reports also highlighted that the ISGS gas stations were also dispatched for RRAS, a few hours ahead of resource adequacy in anticipation of all India power supply scenario. Duration of dispatch of Gas units under RRAS and the maximum support are shown in the following table.

Date	Morning	Max. Support (MW)	Evening	Max. Support (MW)
26-Dec-2022	07:00 - 11:15	1092	NATIONAL ALI	min Hashrus
27-Dec-2022	07:45 - 10:45	847	Past-Int	
28-Dec-2022	08:00 - 11:00	1076	The state of the s	
29-Dec-2022	08:00 - 12:30	1073	14:15 – 17:30	879
30-Dec-2022	07:45 - 12:00	1246	12:00 - 15:45	693
31-Dec-2022	08:00 - 11:00	865	Description (A) 872	
01-Jan-2023	-	-		

9. During high and low frequency events, many States were not responding to bring grid frequency back into operative band. It was observed from the data provided by the Grid-India on deviation of States during high and low frequency events during the week 26.12.2022 to 01.01.2023 that some State entities had continued their under-drawal even in high frequency events (i.e. when grid frequency was above 50.05 Hz). While during low frequency period (i.e. grid frequency below 49.90 Hz), some States continued their over-drawal.

### Consultation with other stakeholders:

10. The Commission also held meetings with the Regional Power Committees (RPCs), the regional entity generating stations and the wind and solar generating stations represented by their Associations to assess the implementation challenges and the operational behavior of the buyers and the sellers post implementation of DSM Regulations, 2022 and subsequent to the Order dated 26.12.2022. During the meeting held with RPCs, it was highlighted that there has been minor but not significant reduction in frequency excursion events post 28.12.2022.

It was informed that the ancillary resources are not being deployed as envisaged in the Ancillary Services Regulations to serve the required purpose and the reserves available with NLDC need to be assessed whether they are sufficient to control the grid frequency.

- 11. It was also suggested during the interaction with the RPCs that till the adequate reserves are made available with the system operator, appropriate incentive may be required for passive support from States to support the grid with available resources in their hand. It was suggested that indicative DSM rates may be made available ex-ante by the system operator to enable the States to take judicious actions to support frequency. RPCs also sought a few clarifications on various provisions of the DSM Regulations such as treatment of deviation for infirm power when it is scheduled by a generating station, treatment for deviation for drawal of start-up power, accounting of inter-regional and cross border entities etc.
- 12. The regional entity generators during their interaction with the Commission highlighted the difficulty in operating within the tight band of +/- 2% of schedule. They also requested for higher incentive for providing support during high and low frequency conditions.
- 13. The Commission also held discussion with the wind and solar generators represented by their Associations. They also expressed difficulties in their operation under the DSM Regulations, 2022. It was made out that the incentive / disincentive structure under the DSM Regulations, 2022 forced them to over schedule and under inject to avoid disincentive. It was made out that this affected the wind generators more adversely.

### **Analysis and Decision:**

14. Based on the above feedback and consultation, the Commission observes that though some improvement in the frequency excursions above 50.05 Hz was observed, the overall frequency profile still remains a matter of concern. The required support from the buyers and the sellers in the form of Reserves and Ancillary Services, as was envisioned, under the Ancillary Services Regulations dated 31.01.2022, has not been forthcoming. The general impression given by the buyers and the sellers is that prior to 05.12.2022, when the deviation charges were linked to frequency, passive support from the buyers and the sellers used to come because of the inherent incentives in the Regulations which were applicable at that time.



- 15. The Commission would like to reiterate in this context that the basic intent of the Ancillary Service Regulations, 2022 was to transit the same sets of buyers and sellers, who were acting based on 'commercial considerations', to provide support for grid operation through an organized mechanism of Ancillary Services. Accordingly, the National Load Despatch Center and the Regional Load Despatch Centers were empowered to estimate, procure in advance and deploy various types of Ancillary Services to ensure that the frequency remains under control. Unfortunately, the desired behavior change in terms of participation through Ancillary Services has not happened.
- 16. As a result, there have been occasions when the costlier RLNG based gas generations were brought into service under RRAS to mitigate the likely capacity shortfall. Regular deployment of RRAS for a long duration is a matter of concern and reflects utter lack of Resource Adequacy in the system. The need for Resource Adequacy has been reiterated by the Commission time and again. It is desirable that every state balances load and generation within its control area and reduces Area Control Error (ACE). This is possible only when the State has robust Resource Adequacy plan on long term and short term (operational) time horizons, including provision for planning reserve margin (PRM). The States need to act on this aspect of procuring adequate resources in advance so as to meet demand reliably in all time frames. This will not only ease grid operation but also reduce the burden of the States in terms of DSM charges.
- 17. Further, reserves by design are meant to be preserved to meet contingency, but the trend is to use reserves to meet the 'energy requirement' of the system regularly leaving insufficient reserves for contingency. Power system as big as ours cannot sustain in such manner, more so when the country has embarked on an ambitious target of large scale of integration of variable renewable energy. Grid does not generate electricity and as such cannot be used as a platform for meeting energy needs or providing spinning reserves. Adequate generation resources and reserves must be maintained at all levels including at the State level.
- 18. Frequency excursions have revealed, inter alia inadequate primary response from the generators through their governors as mandated under the IEGC. Further, secondary response through AGC was expected to correct the area control error (ACE) which has an element of both frequency control and tie-line flow control. Performance of neither has been satisfactory

as is reflected in the Grid-India report and revealed from interaction with the generators and other stakeholders. All this highlights the need for a detailed investigation into the causes and the Commission has accordingly decided to form a high-level committee of experts to go into detail the causes for inadequate primary and secondary response and suggest remedial measures. The Commission has also decided to roll out Tertiary Reserves Ancillary Service (TRAS) at the earliest and notification of date of effect of TRAS shall be issued shortly.

- 19. There is an urgent need for the system operator to estimate and procure adequate reserves and deploy them prudently, so as to avoid frequency fluctuations. System operators need to take all possible measures to enlarge the canvas of SRAS and RRAS/TRAS providers by enabling participation of State entities through necessary procedures. New and innovative technologies like energy storage systems and resources like aggregated demand response need be encouraged further for participation in SRAS and RRAS/TRAS.
- 20. While the market participants adjust to the new regime and align themselves to the vision of the Commission, it has become incumbent upon the Commission, given the continued frequency fluctuations, to intervene in the interest of grid security to induce the grid participants to behave in a manner that helps maintain grid frequency.
- 21. The Commission, therefore, feels it expedient to invoke its powers under Regulation 11 and Regulation 12 of the DSM Regulations, 2022 to relax and to remove difficulty in implementation of DSM Regulations highlighted by various stakeholders, as an interim measure, so as to ensure smooth and secure operation of the grid.
- 22. Regulation 11 of the DSM Regulations, 2022 provides as under:
  - "11. 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, may relax any of the provisions of these regulations on its own motion or on an application made before it by the affected party."

- 23. Regulation 12 of the DSM Regulations, 2022 provides as under:
  - "12. Power to Remove Difficulty 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 practice directions as may be considered necessary in furtherance of the objective of these regulations."

24. The Commission has also been vested with the inherent regulatory powers under section 79(1)(c) of the Electricity Act, 2003 ("the Act") which requires the Commission "to regulate the inter-state transmission of electricity". The relevant Section of the Act is reproduced below for ready reference:

"Section 79. (Functions of Central Commission): --- (1) The Central Commission shall discharge the following functions, namely: -

- (c) to regulate the inter-State transmission of electricity;"
- 25. In the interest of grid security and based on the feedback of the stakeholders during consultations, the Commission in exercise of its powers under Regulation 11 and Regulation 12 of the DSM Regulations, 2022 and under section 79(1)(c) of the Electricity Act, 2003 ("the Act") issues practice directions herein as delineated in the subsequent paragraphs.

### 26. Relaxation of Regulation 7 of the DSM Regulations, 2022:

The Commission hereby relaxes Regulation 7 of the DSM Regulations, 2022 to provide that the Normal Rate of Charges for Deviations for a time block as specified in Regulation 7 of the DSM Regulations, 2022 shall be equal to the higher of [the weighted average ACP of the Day Ahead Market segments of all the Power Exchanges; and the weighted average ACP of the Real Time Market segments of all the Power Exchanges, for that time block] subject to a ceiling of Rs 12 per kWh, until further orders.

### 27. Relaxation of Regulation 8 of the DSM Regulations, 2022:

The Commission hereby relaxes provisions of Regulation 8 of the DSM Regulations, 2022 and the said Regulation 8 shall be read as follows, until further orders:

(1) The charges for deviation in a time block by a seller shall be payable by such seller as under:

Entity	Charges for deviation payable to Deviation and Ancillary Service Pool Account			
Seller	Deviation by way of over injection	Deviation by way of under injection		
For a general	Zero: Provided that such seller shall be paid back for over injection @	(i) @ the reference charge rate up to [10% $D_{GS}$ or 100 MW, whichever is less]:		
seller other than an RoR generating station or a generating station based on	the reference charge rate for deviation upto [10% D <sub>GS</sub> or 100 MW, whichever is less].	(ii) @ 120% of the normal rate of charges for deviation by way of under injection beyond [10% D <sub>GS</sub> or 100 MW, whichever is less] and up to [15% D <sub>GS</sub> or 150 MW, whichever is less];		
municipal	The same of the sa	and		
solid waste		(iii) @ 150% of the normal rate of charges for deviation beyond [15% D <sub>GS</sub> or 150MW, whichever is less].		
	Zero:	(i) @ the reference charge rate up to [10% D <sub>GS</sub> or 100 MW, whichever is less];		
For a general seller being an RoR generating station	Provided that such seller shall be paid back for over injection @ the reference charge rate for deviation upto [10% D <sub>GS</sub> or 100 MW, whichever is less].	(ii) @ the normal rate of charges for deviation by way of under injection beyond [10% D <sub>GS</sub> or 100 MW, whichever is less] and up to [15% D <sub>GS</sub> or 150 MW, whichever is less]; and		
Mark and the state of the state		(iii) @ 110% of the normal rate of charges for deviation beyond [15% D <sub>GS</sub> or 150 MW, whichever is less].		
For a	Zero:	(i) Zero up to [20% D <sub>GS</sub> ]:		
general seller being a generating station based on municipal solid waste	Provided that such seller shall be paid back for over injection up to [20% D <sub>GS</sub> ] @ contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block.	Provided that such seller shall pay back for the shortfall in energy against its schedule in any time block due to under injection up to $[20\% D_{GS}]$ @ 50% of the contract rate, or in the absence of a contract rate, @ 50% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block;		
	White is the sale of the sale	and (ii) @ normal rate of charges for deviation beyond [20% $D_{GS}$ ].		

	POA synu - Wavy	i) Zero up to [10% D <sub>WS</sub> ] and
For WS seller being a generating station based on solar or hybrid of wind –solar resources	Zero: Provided that such seller shall be paid back for over injection as under:  (i) @ contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block, up to [10% Dws]; and  (ii) @ 90% of the contract rate, or in the absence of a contract rate, @ 90% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [10% Dws] and up to [15% Dws]	(ii) @ 10% of contract rate or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [10% Dws] and up to [15% Dws] and (iii) @ 50% of contract rate or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [15% Dws]. Provided that such seller shall pay back for the total shortfall in energy against its schedule in any time block due to under injection, @ the contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges, for the respective time block.
For WS seller being a generating station based on wind resource	Zero:  Provided that such seller shall be paid back for over injection as under:  (i) @ contract rate, or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block, up to [15% Dws];  and  (ii) @ 90% of the contract rate, or in the absence of a contract rate, @ 90% of the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [15% Dws] and up to [20% Dws].	(i) Zero up to [15% D <sub>WS</sub> ] and  (ii) @ 10% of contract rate or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [15% D <sub>WS</sub> and up to [20% D <sub>WS</sub> ] and  (iii) @ 50% of contract rate or in the absence of a contract rate, @ the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block for deviation beyond [20% D <sub>WS</sub> ]  Provided that such seller shall pay back for the total shortfall in energy agains its schedule in any time block due to under injection, @ the contract rate, or in the absence of a contract rate, @ the

weighted average ACP of the Day
Ahead Market segments of all Power Exchanges, for the respective time block.

Note:  $D_{GS}$  means Deviation-general seller (in %);  $D_{WS}$  means Deviation-WS seller (in %)

(2) The charges for deviation in a time block by a buyer shall be payable by such buyer as under:

Entity	Charges for deviation payable to Deviation and Ancillary Service Pool Account			
Buyer	Deviation by way of under drawal	Deviation by way of over drawal		
Buyer (other than the buyer with schedule less than 400 MW and the RE-rich State)	Zero: Provided that such buyer shall be paid back for under drawal as under: (i) @ 90% of normal rate of charges, for deviation up to [10% D <sub>BUY</sub> or 100 MW, whichever is lower]; (ii) @ 50% of normal rate of charges, for deviation beyond [10% D <sub>BUY</sub> or 100 MW, whichever is lower] and up to [15% D <sub>BUY</sub> or 200 MW, whichever is lower].	(i) @ normal rate of charges for deviation up to [10% D <sub>BUY</sub> or 100 MW, whichever is lower]; (ii) @120% of normal rate of charges for deviation beyond [10% D <sub>BUY</sub> or 100 MW D <sub>BUY</sub> , whichever is lower] and up to [15% D <sub>BUY</sub> or 200 MW, whichever is lower]; and (iii) @150% of normal rate of charges for deviation beyond [15% D <sub>BUY</sub> or 200 MW, whichever is lower].		
Buyer (with schedule up to 400 MW)	Zero: Provided that such buyer shall be paid back for under drawal @ 90% of normal rate of charges for deviation up to [20% D <sub>BUY</sub> or 40 MW, whichever is lower].	(i) @ normal rate of charges for deviation up to [20% Deviation-buyer (in %) or 40 MW, whichever is lower]; and (ii) @120% of normal rate of charges for deviation beyond [20% D <sub>BUY</sub> or 40 MW, whichever is lower].		
Buyer (being an RE Rich State)	Zero: Provided that such buyer shall be paid back for under drawal as under: (i) @ 90% of normal rate of charges for deviation up to [200 MW]; and (ii) @ 50% of normal rate of charges for deviation beyond [200 MW] and up to [300 MW].	(i) @ normal rate of charges for deviation up to 200 MW; (ii) @120% of normal rate of charges for deviation beyond [200 MW] and up to [300 MW]; and (iii) @150% of normal rate of charges for deviation beyond [300 MW].		

Note: D<sub>BUY</sub> means Deviation-buyer (in %)

(2A) Notwithstanding anything contained in Clauses (1) and (2) of Regulation 8 of the DSM Regulations, 2022, the provisions of Clauses (2B) and (2C) as stipulated below shall apply irrespective of volume limit, in respect of the general seller other than an ROR generating station or a generating station based on municipal solid waste and in respect of the buyer, when the system frequency (hereinafter "f") in a time block, is "below 49.95 Hz (i.e. f < 49.95 Hz)" or "above 50.03 Hz (i.e. f > 50.03 Hz).

### (2B) When f < 49.95Hz

- (a) The general seller other than an ROR generating station or a generating station based on municipal solid waste shall be paid back for deviation by way over injection (i) @ 120% of reference charge rate when [49.90 Hz < f < 49.95 Hz]; and (ii) @ 150% of reference charge rate when [f ≤ 49.90];
- (b) The general seller other than an ROR generating station or a generating station based on municipal solid waste shall pay for deviation by way under injection (i) @ 150% of reference charge rate or @ 120% of the normal rate of charge for deviation, whichever is higher, when [49.90 < f < 49.95]; and (ii) @ 200% of reference charge rate or @ 150% of the normal rate of charge for deviation, whichever is higher, when [f ≤ 49.90];
- (c) The buyer shall be paid back for deviation by way of under drawal (i) @ 120% of normal rate of charge for deviation when [49.90 < f < 49.95]; and (ii) @ 150% of normal rate of charge for deviation when [f ≤ 49.90];
- (d) The buyer shall pay for deviation by way of over drawal (i) @ 150% of normal rate of charge for deviation when [49.90 < f < 49.95]; and (ii) @ 200% of normal rate of charge for deviation when  $[f \le 49.90]$ .

### (2C) When f > 50.03 Hz

- (a) The general seller other than an ROR generating station or a generating station based on municipal solid waste shall be paid back for deviation by way over injection (i) @ 50% of reference charge rate when [50.03 < f < 50.05]; and (ii) @ zero when [f ≥ 50.05];
- (b) The general seller other than an ROR generating station or a generating station based on municipal solid waste shall pay for deviation by way under injection (i) @ 75% of reference charge rate, when [50.03 < f < 50.05]; and (ii) @ 50% of reference charge rate, when [f ≥ 50.05];
- (c) The buyer shall be paid back for deviation by way of under drawal (i) @ 50% of

- normal rate of charge for deviation when [50.03 < f < 50.05]; and (ii) @ zero when [f  $\geq$  50.05];
- (d) The buyer shall pay for deviation by way of over drawal (i) @ 75% of normal rate of charge for deviation when [50.03 < f < 50.05]; and (ii) @ zero when  $[f \ge 50.05]$ .
- (3) (a) The charges for deviation for injection of infirm power shall be zero: Provided that upon such infirm power being scheduled, the charges for deviation for such power shall be as applicable for a general seller.
  - (b) The charges for deviation for drawal of start-up power before COD of a generating unit or for drawal of power to run the auxiliaries during shut-down of a generating station shall be payable at the reference charge rate or contract rate or in the absence of reference charge rate or contract rate, the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block, as the case may be.
- (4) The charges for inter-regional deviation caused by way of over drawal or under drawal or over injection or under-injection shall be payable or receivable, as the case may be, at the normal rate of charges for deviation.
- (4A) The charges for deviation in respect of cross-border transactions, caused by way of over drawal or under drawal or over injection or under-injection shall be payable or receivable, at the deviation charge rates and subject to volume limits as applicable to a seller (of respective category) or to a buyer (other than an RE-rich State), as the case may be.
- (5) Notwithstanding anything contained in Clause (1) of Regulation 8 of the DSM Regulations 2022, in case of forced outage of a seller, the charges for deviation shall be @ the reference charge rate, for a maximum duration of eight time blocks or until the revision of its schedule, whichever is earlier.
- (6) In case of multiple contracts, the contract rate or the reference rate referred to in Regulation 8 of the DSM Regulations, 2022 shall be the weighted average of the contract rates of all such contracts.
- (7) In case of a State having net injection at the regional periphery, the deviation charges for such State shall be as applicable to a buyer.

- 28. The above directions of the Commission shall come into effect from 00.00 hours of 08.02.2023 and remain in force until further orders by the Commission. It is clarified that the directions as contained in this Order are being issued in exigency as an interim measure, in the interest of grid security, and the Commission shall come up with suitable amendments to the DSM Regulations, 2022 separately based on further analysis.
- 29. The directions in this Order are being issued in supersession of our Order in suo-motu Petition No. 16/MP/2022 dated 26.12.2022 which stands superseded after this instant Order taking effect. Accordingly, the Petition No. 01/SM/2023 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-
(P.K. Singh)	(Arun Goyal)	(I. S. Jha)
Member	Member	Member



# **GUJARAT STATE ELECTRICITY CORPORATION LIMITED**

VidyutBhavan, Race Course, Vadodara, – 390007, India. Ph. 91-265-6612003, Fax: 91-265-2344537 e-mail: gmf.gsecl@gebmail.com Website: www.gsecl.in

CIN: U40100GJ1993SGC019988

GSECL/GERC Cell/1932-2021/ 1069

Date: 20.02.2024.

By Speed Post

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th Floor, GIFT one,
Road 5C, Zone 5, GIFT City,
Gandhinagar – 382355.

Sub: Submission of Affidavit regarding Publication of Public Notice in the Petition No. 1932/2021.

Ref: Daily Order Dtd. 05.02.2024 issued by Hon'ble commission.

Respected Sir,

This has reference to the Daily Order dated 05/02/2024 issued by Hon'ble Commission in GSECL's Petition No. 1932 of 2021. As directed by Hon'ble Commission, a public notice inviting comments/suggestions from various stakeholders is published in English news paper "INDIAN EXPRESS" and 02 Gujarati News Papers i.e. "Gujarat Samachar" and "Sandesh" on 19.02.2024 (All editions in the state of Gujarat).

An Affidavit (Five Sets) in this regard along with clippings of newspapers are submitted herewith.

It is requested to apprise the Hon'ble Commission accordingly.

Regards,

For Gujarat State Electricity Corp. Ltd.

(Shubhadeep Sen) General Manager (F & A)

Encl: As above.



# BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

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Case No. 1932/2021

IN THE MATTER OF	Petition under GERC Notification No.1 of 2019 Dtd.  19.01.2019 to remove difficulties thereof for DSM  Charges for Solar Energy.
AND	
IN THE MATTER OF	Gujarat State Electricity Corporation Limited,
	Vidyut Bhavan, Race Course,
	Vadodara 390007
	Petitioner

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS

The Petitioner most respectfully and humbly submits that the Public Notices as directed by Hon'ble Commission in daily order Dtd. 05.02.2024 inviting comments of the stake holders and to upload the petition on the web site of GSECL in the matter of Petition No. 1932 of 2021 have been published in editions Dated 19.02.2024 of English newspaper 'Indian Express' and two Gujarati newspapers i.e. 'Gujarat Samachar' & 'Sandesh'. Copies of the Public Notice as above are attached herewith. (Annexure I ,II and III)

As directed by Hon'ble Commission details of the "Notice" published in newspapers having wide circulation in the state are as under.

1	Name of News papers	<ol> <li>'Indian Express' (In English)</li> <li>'Gujarat Samachar' (In Gujarati)</li> <li>'Sandesh' (In Gujarati)</li> </ol>
2	Date of publication	19.02.2024.
3	Center to avail copy of Application	General Manager (F&A), Gujarat State Electricity Corporation Limited (GSECL), Vidyut Bhavan, Race Course, Vadodara – 390 007
4	Electronic Copy	Available on Web site www.gsecl.in
5	Last date for affidavit before secretary GERC for objections / suggestions	11.03.2024

The clippings of the relevant newspapers Dtd. 19.02.2024 marked as Annexure–I, II, and III are submitted herewith for perusal of the Hon'ble Commission.

PETITIONER

GUJARAT STATE ELECTRICITY CORPORATION LIMITED.

Place: Vadodara. Dated: .19.02.2024.

# BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

IN THE MATTER OF	Petition under GERC Notification No.1 of 2019 Dtd. 19.01.2019 to remove difficulties thereof for DSM Charges for Solar Energy.
AND	
IN THE MATTER OF	Gujarat State Electricity Corporation Limited, Vidyut Bhavan, Race Course, Vadodara 390007  Petitioner

SR. No. 2888 Date: 1912/2024

### Affidavit verifying the Application

I, Nitin. B. Kansara, son of Shri Budhiprasad, aged about 55 years, residing at 31, Raag Duplex, Near Gorwa Workshop, Subhanpura, Vadodara do solemnly affirm and say it As follows:

I am Controller of Accounts (Commerce) of the Gujarat State Electricity Corporation Limited, the Petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit.

The Statements made hereinabove are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on this 19 day of February 2024, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

-(1

(Nitin. B. Kansara)

Controller of Accounts (Commerce)

Place: Vadodara. Dated: 19.02.2024

My Commission Expires On 04/ 07/2028





Solemnly Affirmed/Declared Sworn Before me by M. B. an Larce

H. J. ZALA NOTARY (Govt. of India)

98

CLIPPING OF PUBLIC NOTICE ISSUED BY GSECL PETITION NO. 1932 /2021 PUBLISHED ON 19.02.2024 IN ENGLISH NEWS PAPER 'INDIAN **EXPRESS':** 

# 5 CALENDAR

WWW.INDIANEXPRESS.COM THE INDIAN EXPRESS, MONDAY, FEBRUARY 19, 2024

### **GUJARAT STATE ELECTRICITY CORPORATION LIMITED**

VidyutBhavan, Race Course, Vadodara, – 390007, India. Ph. 91-265-6612003, Fax: 91-265-2344537 e-mail: gmf.gseci@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

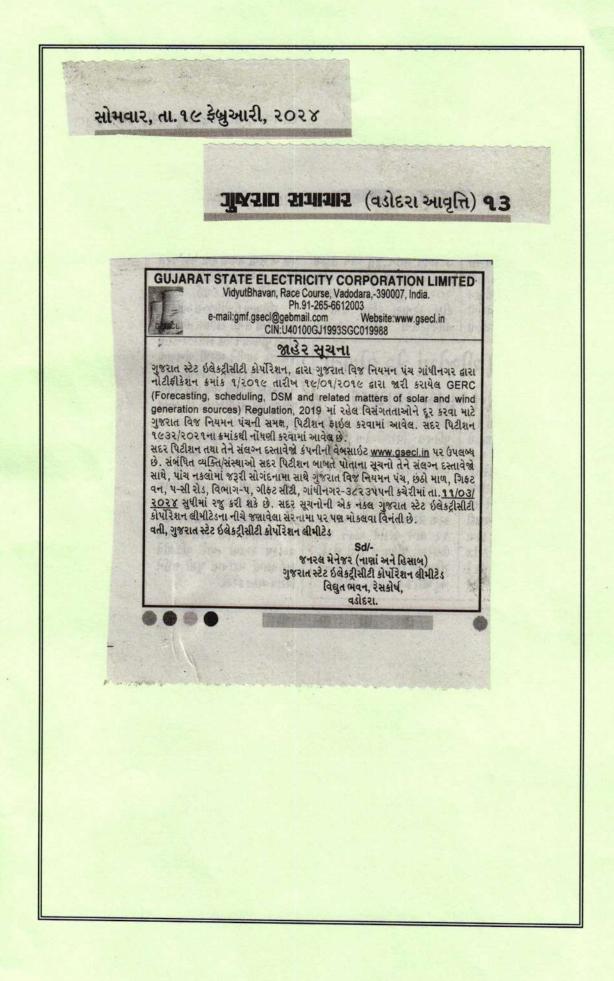
### PUBLIC NOTICE

Gujarat State Electricity Corporation Limited has filed Petition before the Gujarat Electricity Regulatory Commission to remove difficulties in GERC (Forecasting, scheduling, DSM and related matters of solar and wind generation sources) Regulations, 2019 issued vide Notification no. 1 of 2019. Said petition has been registered as case No. 1932/2021 Said petition along with GERC (Forecasting, scheduling, DSM and related matters of solar and wind generation sources) Regulations, 2019 and Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 issued by CERC vide notification No. L-1/260/2021/CERC Dated: -14th March 2022 are up loaded on our web-site <a href="https://www.gsecl.in">www.gsecl.in</a>, Interested persons may download the petition and relevant documents and file comments with The Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT ONE, Road5-C, Zone5, GIFT City, Gandhinagar — 382355 with the documents, on which they want to rely upon, in five sets, duly supported by an affidavit on or before 11.03.2024. One copy of such submission is required to be sent to the below mentioned address also.

For Gujarat State Electricity Corporation Ltd.,

General Manager (Finance & Accounts)
Gujarat State Electricity Corporation Limited,
Vidyut Bhavan, Race Course,
Vadodara – 390 007.

CLIPPING OF PUBLIC NOTICE ISSUED BY GSECL PETITION NO. 1932/2021 PUBLISHED ON 19.02.2024 IN VERNACULAR GUJARATI NEWS PAPER "GUJARAT SAMACHAR":



### **ANNEXURE-III**

CLIPPING OF PUBLIC NOTICE ISSUED BY GSECL PETITION NO. 1932/2021 PUBLISHED ON 19.02.2024 IN VERNACULAR GUJARATI NEWS PAPER "SANDESH":

