

# GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

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Ref. No: SLDC/CE/MIS/CERC/1982

Date: 04.10.2021

To,

The Secretary, Central Electricity Regulatory Commission, 3rd and 4th Floor, Chanderlok Building, 36, Janpath, New Delhi-110 001 Fax No: 011-23753923

- Sub: Comments on Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021
- Ref: Hon'ble CERC Notice No. L-1/260/2021/CERC Dated 07.09.21

Dear Sir,

Vide notice under Ref; Hon'ble CERC has invited comments/ suggestions / objections from the stakeholders on Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021. In this regard, SLDC – Gujarat would like to submit following:

# Comments in Definitions part:

# 1. (Definition Available Capacity')

The definition of 'Available Capacity' for Solar shall be modified. The 'Available Capacity' for Solar is the Solar PV AC capacity because the solar PV AC capacity of the plant is always less than the Cumulative capacity of solar inverters that are capable of generating power in a given time block;

# 2. Definition of General seller)

**The definition of 'General** seller' shall be a seller in case of a power project based on other than wind, solar resources, solid waste and run of river sources.

# 3. Definition of Gamming shall be added:

# As per the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014;

'Gaming 'in relation to these regulations, shall mean an intentional mis-declaration of declared capacity by any seller in order to make an undue commercial gain through Charge for Deviations;

It shall be incumbent upon the Generating Stations to declare the plant capabilities faithfully, i.e., according to their best assessment. In case, it is suspected that they have deliberately over / under declared the plant capability contemplating to deviate from the schedules given on the basis of their capability declarations (and thus make money either as undue capacity charge or as the charge for deviations from schedule), the RLDC / SLDC may ask the Generating Station to explain the situation with necessary backup data.

## 4. Contract Rate for WS seller:

# As per the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015, the contract rate for WS seller is:

- I. The contract 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.
- II. In case of multiple PPAs, the weighted average of the PPA rates shall be taken as the Contract 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.
- III. The Contract 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.

# 5. Declaration of Duration of Force majeure event (To be added):

**Declaration of Duration of Force majeure event** shall be decided by the Operation Coordination Committee of respective Regional Power Committee of CEA upon request of State LDC.

As per the IEGC-2010, the "Force Majeure" means:

Any event which is beyond the control of the persons involved which they could not foresee or with a reasonable amount of diligence could not have foreseen or which could not be prevented and which substantially affects the performance by person such being the following including but not limited to :-

a) Acts of God, natural phenomena, floods, droughts, earthquakes and epidemics;

b) Enemy acts of any Government domestic or foreign, war declared or undeclared, hostilities, priorities, quarantines, embargoes;

c) Riot or Civil Commotion;

d) Grid's failure not attributable to the person.

e) Grid disturbance beyond control due to natural calamities as decided by RPC

In "Force majeure" event, it is very difficult to adhere the net drawl schedule strictly. In such condition, the deviations from net drawl schedule is uncontrollable despite of taking various measures. In IEGC -2010 and its subsequent amendments or in the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014, there is no provision of declaration of "Force majeure" event as a grid disturbance, which leads to heavy penalties to the concern State subsequently to the State Discoms.

During such event, there is need to replace the drawl schedule of the affected entities with actual drawl to avoid penalty under DSM for the affected period.

## **Comments in Normal Rate of Charges for Deviations:**

In proposed regulation, the normal rate of charges for deviation for a time block is completely delinked with frequency and there is no charges payable to seller for over injection and under drawl by the buyer from Deviation and Ancillary Service Pool Account. SLDC-Gujarat envisaged that such paradigm shift in the regulation might lead to low system frequency operation.

Moreover, there are many States have REs more than 10000 MW and their installation dispersed to large geographical area. Hence, the generation from Intra State RE sources are intermittent and unpredictable for the State. Therefore, it is very difficult to manage deviation within in  $\pm$  250 MW.

Further, all major RE rich States are having 30 to 40% portfolio of ISGS and 25 to 30% installation of RE. The Intra state thermal generators are old and not flexible. The regional entities are very much dependent on effect of change in revision in ISGS facilitated by RLDC for controlling the drawl. Because of introduction of Real Time Market, any revision in schedule made in odd time blocks is facilitated in 7th time block and any revision in schedule made in even time blocks is facilitated in 8th time block, counting the time block in which the request for revision has been received by the RLDCs to be the first one.

Considering the above facts, SLDC Gujarat believes that:

- 1. The hybrid model for charge of DSM shall be adopted. The charges for deviation should be frequency linked as well as proposed methodology in the regulation.
- 2. The limit for deviation for RE rich State having combined RE (Wind + Solar) capacity more than **10000** MW shall be enhanced to  $\pm$  **500** MW.
- 3. The over injection by the general seller shall be receivable at the rate of 50% of Normal rate of charges of deviation when frequency below 49.95 Hz.
- 4. The over injection by the general seller shall be payable at the 50% of Normal rate of charges of deviation when frequency above 50.05 Hz.
- 5. The under injection by the general seller shall be payable at the rate of 125% of Normal rate of charges of deviation when frequency below 49.95 Hz.
- 6. The under injection up to 12% of schedule by the general seller shall be zero when frequency above 50.05 Hz.
- 7. The under injection beyond 12% of schedule by the general seller shall be payable at the Normal rate of charges of deviation when frequency above 50.05 Hz
- 8. For WS seller, the term contact rate should be specified in accordance with the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015.

The proposed changes for general seller is furnished in tabular form is as under:

	Deviation by way of over injection (Seller)		
_	Below 49.95 Hz	Between 49.95 Hz to 50.05 Hz	Above 50.05 HZ
-	Receivable @ 50% of Normal rate of charges of deviation	<ul> <li>(ii) Receivable @</li> <li>25% of the normal rate of charges for deviation</li> </ul>	Payable to Pool at Normal rate of charges of deviation
	Deviation by way of under injection		
General	Below 49.95 Hz	Between 49.95 Hz to	Above 50.05 HZ
Seller		50.05 Hz	
	Payable @ 125%	(i) @ normal rate of	Zero up to 12% of
	Normal rate of	charges for deviation	schedule.
	charges of deviation	up to 2% Deviation-	
		general seller (in %);	More than 12 % payable
		(ii) @ 110% of the	to pool at 50% of
		normal rate of	Normal rate
		charges for deviation	
		beyond 2%	
		Deviation-general	
		seller (in %).	

For buyer (being an RE Rich State), there is no control on RE generation. Many States like Gujarat are having high RE, but very limited hydro resources. The inadvertent deviation also remains on higher side due to vide variation in RE generation and intermittent nature of RE generation. Sometimes, high RE causing heavy under drawl despite of backing down all resources. Many times, the sudden cloud effect causing zigzag pattern in solar generation with variation of more than 400 MW. Therefore, the limit for deviation for RE rich State having combined RE (Wind + Solar) capacity more than 10000 MW shall be enhanced to  $\pm$  500 MW.

For buyer (being an RE Rich State), the following changes are proposed:

For buyer being the State, there shall be three category according to installation of RE:

- I. Less RE penetration State: Combined wind and Ground mounted solar capacity shall be less than 1000 MW
- II. Reasonable rich RE State: Combined wind and Ground mounted solar capacity shall be more than 1000 MW and less than 10000 MW.
- III. Rich RE State: Combined wind and Ground mounted solar capacity more than 10000 MW.

Inadvertent Deviation limit by way of under / over drawl shall be as under:

State	Inadvertent Deviation limit in MWh by way of	
	under / over drawl	
Less RE State	Deviation up to 12% or 150 MW Deviation-buyer	
	(in MWh) in a time block, whichever is lower	
Reasonable rich RE State	Deviation up to 250 MW Deviation-buyer (in	
	MWh) in a time block	
Rich RE State	Deviation up to 500 MW Deviation-buyer (in	
	MWh) in a time block	

# Deviation by way of under drawl (Buyer):

- 1. The under drawl by the State shall be receivable at Normal rate of charges of deviation when frequency below 49.95 Hz.
- 2. The under drawl by the State shall be receivable at 50 % of Normal rate of charges of deviation when frequency above 49.95 Hz and below 50.05 Hz.
- 3. The under drawl by the State shall be payable at 50 % of Normal rate of charges of deviation when frequency above 50.05 Hz.
- 4. There shall be no charges payable when the deviation by way of under drawl is due to "Force majeure" event declared by Regional Power Committee on recommendation of RLDC / SLDC.

		Deviation by way of under drawl (Buyer)		
	RE (Wind and Solar combined	Below 49.95 Hz	between 49.95 Hz to 50.05 Hz	Above 50.05 HZ
Buyer	Installed Capacity			
(being an	in the State)			
RE Rich	More than 1000 and	Receivable at	Receivable at 50	Payable at 50% of
State)	up to 10000 MW	Normal rate of	% of Normal rate	Normal rate of
,	10000 MW above	charges of	of charges of	charges of
		deviation	deviation	deviation

#### Deviation by way of over drawl (Buyer):

- 5. For reasonable rich RE State, the rate of charges for over drawl shall be zero up to 250 MW and the rate of over drawl more than 250 MW shall be @ 50 % Normal rate of charges of deviation when frequency above 50.05 Hz.
- 6. For rich RE State, the rate of charges for over drawl shall be zero up to 500 MW and the rate of over drawl more than 500 MW shall be @ 50 % Normal rate of charges of deviation when frequency above 50.05 Hz.
- 7. For reasonable rich RE State, the rate of charges for over drawl shall be normal rate of charges for deviation up to 250 MW and 110% of normal rate of charges for deviation more than 250 MW when frequency is above 49.95 Hz and below 50.05 Hz.
- 8. For high rich RE State, the rate of charges for over drawl shall be normal rate of charges for deviation up to 500 MW and 110% of normal rate of charges for deviation more than 500 MW when frequency is above 49.95 Hz and below 50.05 Hz.
- 9. The rate for over drawl by the buyer (being the State) shall be 110% of normal rate of charges for deviation when frequency is below 49.95 Hz.

Over drawl by the buyer being the State				
RE (Wind and Solar combined IC in the State)	Below 49.95 Hz	Between 49.95 Hz to 50.05 Hz	Above 50.05 HZ	
1000 to 10000 MW	110% of normal rate of charges for deviation beyond the above limit	At normal rate of charges for deviation up to 250 MW Deviation-buyer (in MWh) in a time block. At 110% of normal rate of charges for deviation beyond the above limit	Zero - Up to 250 MW Deviation-buyer (in MWh) in a time block At 50% of normal rate of charges for deviation beyond 250 MW	
10000 MW above		At normal rate of charges for deviation up to 500 MW Deviation-buyer (in MWh) in a time block At 110% of normal rate of charges for deviation beyond the above limit	Zero - Up to 500 MW Deviation-buyer (in MWh) in a time block At 50% of normal rate of charges for deviation beyond 500 MW	

## **Deviation for injecting infirm power:**

The infirm power injected into the grid by a generating unit of a generating station during the testing, prior to COD of the unit shall be paid at Charges for Deviation for infirm power injected into the grid, consequent to testing, for a period not exceeding 6 months or the extended time allowed by the Commission in the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access and related matters) Regulations, 2009, as amended from time to time, subject to ceiling of Cap rates corresponding to the main fuel used for such injection as specified below:

Type of fuel	Ceiling of Cap rates payable to generator for injecting	
	infirm power	
Domestic coal / Lignite / Hydro / APM	Average variable cost of NTPC station having highest IC in the	
gas as a fuel	respective region or 40% normal rate of charges for deviation	
	whichever is less	
Imported Coal	Average variable cost of ISGS station having highest IC running	
	on Imported coal in that region or 50% normal rate of charges for	
	deviation whichever is less	
RLNG / Spot gas	Combined cycle variable cost of ISGS gas station having highest	
	IC running on RLNG in the region or 60% normal rate of charges	
	for deviation whichever is less.	

#### **Comments in Schedule of Payment of charges for deviation:**

#### Comments in 10 (1)

The figure 7 (seven) shall be replaced by 10 (ten) working days.

## Comments in 10 (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 200% 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.

Reason: The LC amount may not be sufficient in case of continuous default to make payment of charges for deviation within the time specified in these regulations.

#### Comments in 10 (3)

The 10 (5) regulation of (Deviation Settlement Mechanism and related matters) Regulations, 2014 shall be continued with respect to proposed 10 (3) regulation. The 10 (5) regulation of (Deviation Settlement Mechanism and related matters) Regulations, 2014 is reproduce below:

"In case of failure to pay into the "Regional Deviation Pool Account Fund" within the specified time of *12 working 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."

It is kindly urged to consider the representation made above.

Yours Sincerely,

Sd/-(A. B. Rathod) Chief Engineer, SLDC Vadodara – Gujarat

Copy to:

- 1. The Chief Executive Officer, POSOCO, New Delhi
- 2. The Member Secretary, Western Regional Power Committee, Mumbai