

Ref. O2Power/The CERC/Draft DSM/01

Date: 08th October 2021

To,

The Hob'ble Secretary Central Electriity Regulatory Commission

3 rd & 4 th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001

Sub.: Comments and suggestions on the Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2021

Ref.: The CERC notification No. L-1/260/2021/CERC dated 07th September 2021.

Dear Sir,

At the outset, O2 Power Private Limited wishes to thank the Hon'ble CERC for taking various proactive initiatives to address the concern faced by the power industry. We are pleased to introduce O2 Power, a fastest-growing renewables platform in India and jointly established by Temasek (a Govt. of Singapore owned firm) and EQT Infrastructure (largest European equity fund) to develop utility-scale renewable energy projects with an initial commitment of up to US\$ 500 million. O2 Power was launched in January 2020 and already awarded/acquired ~1.6 GW MW_(AC) solar capacity from highly rated customers like NHPC, NTPC, SECI, GUVNL and RUMS to date and targeting to become a 4-5 GW IPP in the next 3-4 years.

With regards to the Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2021 referred above, we are hereby submitting our suggestions in the draft regulations as **Annexure-A**, we hope the Hon'ble Commission will find our comments and suggestions constructive and may consider incorporation of the same into the final notification.

Yours Sincerely,

For O2 Power Private Limited

Rakesh Rathore

General Manager - BD

Encl. as per above.



Annexure-A

Proposed changes in the Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2021

At the outset, we congratulate the Hon'ble Commission for the continuous reforms towards the grid operation and astonishing success in controlling frequency variability. Further, by attaining "One Nation One Grid", the Indian grid is by far the largest and the most robust electrical grid available today.

In the current draft DSM Regulations, 2021, the Hon'ble Commission seems to aim to link the proposed Ancillary Services Market and the DSM mechanism to achieve more flexible and commercially independent grid operations and settlements. The draft regulations outline the commercial obligations if not being able to adhere to the advance schedule. However, from the perspective of a Wind and Solar (WS) generator, we wish to submit our limitation regarding the availability of fuel, i.e., flow & density of wind, and solar radiation, at our plant in a given 15-minute time block. Therefore, any schedule forecast is vulnerable to both Under and Over injection in WS generation and should be treated accordingly.

Therefore, we are proposing the following changes into the text of draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2021 with the color coding as the addition of text in green and deletion of text in red for the convenience of reading.

1. Short title and commencement

- (1) These regulations may be called the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021.
- (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 re-enactment 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 in Real Time Market (RTM) or any other contract which is more closure to the delivery;
- (g) 'Available Capacity' for power projects based on wind or solar 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 subsection (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 including the schedule for Ancillary Services; and for a buyer of electricity means its total actual drawal minus its total scheduled drawal including the schedule for Ancillary Services, and shall be computed as per Regulation 6 of these regulations;



- (l) '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 power project based on other than wind or solar resources.
- (n) 'Grid Code' means the Grid Code specified by the Commission under clause (h) of subsection (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 re-enactment 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 re-enactment 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 power projects under the control area of the State is 1000 MW or more;
- (u) '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;
- (v) 'Run-of-River Generating Station' or 'RoR generating station' means a hydro generating station which does not have upstream pondage;
- (w) '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;



- (x) **'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;
- (y) "Seller' means a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the Grid Code;
- (z) 'Time Block' means the time block as defined in the Grid Code;
- (aa) 'WS seller' means a seller in case of a power project based on wind or solar energy.
- (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) Every grid connected regional entity shall adhere to its schedule as per the Grid Code and shall not deviate from its schedule, thereby adversely affecting the secure and stable operation of the grid.
- (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 / buyer 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 (other than WS) shall be computed as follows:

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

Deviation- buyer (in %) = 100 x [(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 total 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 that for the period of one year from the date of effective of these regulations or such further period as may be notified by the Commission, the normal rate of charges for deviation shall not be capped at maximum of 100% of the Contract Rate to provide visibility during the initial phase of development of Ancillary Service Market.

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 settlement in a time block by a seller, shall be payable (in case of under injection), and shall be receivable (in case of over injection) with the Ancillary Service Pool Account by such seller as under:



Entity	Charges for deviation settlement payable / receivable 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 %);(ii) payable @ 10% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %)	(i) payable @ normal rate of charges for deviation up to 2% Deviation-general seller (in);(ii) payable @ 110% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %).
For a general seller being an RoR generating station	Zero (i) receivable @ normal rate of charges for deviation up to 12% Deviation-general seller (in %); (ii) receivable @ 90% of the normal rate of charges for deviation beyond 12% Deviation-general seller (in %).	 (i) payable @ normal rate of charges for deviation up to 12% Deviation-general seller (in %); (ii) payable @ 110% of the normal rate of charges for deviation beyond 12% Deviation-general seller (in %).
For a general seller being a Generating station based on municipal solid waste	Zero	 (i) Zero up to 20% Deviation-general seller (in %); (ii) @ normal rate of charges for deviation beyond 20% Deviation-general seller (in %). limit.
For WS seller	Zero (i) receivable @ contract rate of charges for deviation up to 12% Deviation-general seller (in %); (ii) receivable @ 90% of the contract rate of charges for deviation beyond 12% Deviation-general seller (in %).	(i) Zero up to 120% Deviation-WS seller (in %); (ii) payable @ 10% of the normal rate of charges for deviation beyond 120% Deviation-WS seller (in %): Provided that such seller shall pay back to the Deviation and Ancillary Service Pool account for the total shortfall in energy against its schedule in any time block due to under injection, (a) at the contract rate at which it has been paid based on schedule, or (b) in the absence of a contract rate at the rate of the Area Clearing Price of the Day Ahead Real Time Market or any other



contract closure to the delivery for th	e
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	 (i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %) or 150 MW Deviation-buyer (in MWh) in a time block, whichever is lower; (ii) @110% of normal rate of charges for deviation beyond the above limit.
Buyer (with schedule up to 400 MW)	Zero	(i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %);(ii) @110% of normal rate of charges for deviation beyond the above limit.
Buyer (being an RE Rich State)	Zero	 (i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %) or 250 MW Deviation-buyer (in MWh) in a time block, whichever is lower; (ii) @110% of normal rate of charges for deviation beyond the above limit

- (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.
 - (c) Considering regular requirement of grid support for Wind and Solar (WS) generators due to switching between generation and consumption mode based on the availability of renewable resource, any drawal post 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 contract 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

- (1) 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 Dispatch 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:
 - (a) payments on account of charges for deviation referred to in Regulation 8 of these regulations:
 - (b) payments made by:
 - (i). SRAS Provider for the SRAS-Down despatched under the Ancillary Services Regulations; and
 - (ii). TRAS Provider for the TRAS-Down despatched under the Ancillary Services Regulations.
- (6) Deviation and Ancillary Service Pool Account shall be charged for:
 - (i). 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;
- (ii). 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.
- (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 directions as may be considered necessary in furtherance of the objective of these regulations.

13. Repeal and Savings

- (1) 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
 - (i) 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;
 - (ii) 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
 - (iii) any reference to the Regional Deviation Pool Account Fund shall be construed as reference to the Deviation and Ancillary Service Pool Account.

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