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To

The Secretary,

Central Electricity Regulatory Commission

7th Floor, Tower B, World Trade Centre,

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**Sub: Comments on draft Central Electricity Regulatory Commission (DSM & related matters) Regulation 2024**

Sir,

The Comments on draft Central Electricity Regulatory Commission (DSM & related matters) Regulation 2024 is enclosed below:

**Comments on draft Central Electricity Regulatory Commission (DSM & related matters) Regulation 2024**

Sl. No.	Clauses in the Draft Regulations	Proposed Change / Revised Clause in the Regulations	Remarks/Suggestions
1	Regulation 3 (1)(u) Definitions and Interpretation 'Regional Entity' means a person whose metering and energy accounting	Regulation 3 (1)(u) Definitions and Interpretation <b>Regional Entity</b> means the entity which is in the RLDC control area and whose	The proposed definition is as per the IEGC Regulation 2023. The definition may be aligned with IEGC reg-2023 for better consistency.

	are done at the regional level by the Regional Load Despatch Centre;	metering and energy accounting is done at the regional level;	
2	<p><b>Regulation 3 (1)(m) Definitions and Interpretation</b></p> <p>‘General seller’ means a seller in case of a generating station based on other than wind or solar or hybrid of wind-solar resources;</p>	<p><b>Regulation 3 (1)(m) Definitions and Interpretation</b></p> <p>‘General seller’ means a seller, based on generating station other than wind or solar or hybrid of wind-solar resources;</p>	There is ambiguity in the definition of ‘General Seller’. There is a general apprehension that general seller means seller except those involved in solar, wind & Hybrid of wind-solar resources.
3	<p><b>Regulation 7(1) Normal Rate of Charges for Deviations</b></p> <p>The Normal Rate (NR) for a particular time block shall be equal to the sum of:</p> <p>(a) 1/3 [ Weighted average ACP (in paise/kWh) of the Integrated-Day Ahead Market segments of all the Power Exchanges];</p> <p>(b) 1/3 [ Weighted average ACP (in paise/kWh) of the Real-Time Market segments of all the Power Exchanges]; and</p> <p>(c) 1/3 [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</p>	<p><b>Regulation 7(1) Normal Rate of Charges for Deviations</b></p> <p>The Normal Rate (NR) for a particular time block shall be equal to the sum of:</p> <p>(a) 1/3 [ Weighted average ACP (in paise/kWh) of the Integrated-Day Ahead Market segments of all the Power Exchanges];</p> <p>(b) 1/3 [ Weighted average ACP (in paise/kWh) of the Real-Time Market segments of all the Power Exchanges]; and</p> <p>(c) 1/3 [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].</p> <p>Provided that in cases where there is no despatch of Ancillary services in a time block or where the net charges</p>	<p>For 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. In the similar line, if no despatch of Ancillary services in a time block or where the net charges for Ancillary services are receivable in Deviation and Ancillary Service Pool Account, the Ancillary Service Charge for the corresponding time block of the last available day shall be considered for computation of Normal Rate (NR).</p> <p>This will give equal weightage to all the three input parameters for calculation of Normal rate of Charges for Deviation.</p>

	<p>Regions].</p> <p>Provided that in cases where there is no despatch of Ancillary services in a time block or where the net charges for Ancillary services are receivable in Deviation and Ancillary Service Pool Account, the Ancillary Service Charge shall not be considered for computation of Normal Rate (NR). Further, 50% weight shall be considered for ACP (in paise/kWh) of the Integrated-Day Ahead Market segments, and 50% weight shall be ACP (in paise/kWh) of the Real-Time Market segments of all the Power Exchanges: 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.</p>	<p>for Ancillary services are receivable in Deviation and Ancillary Service Pool Account, <b>the Ancillary Service Charge for the corresponding time block of the last available day shall be considered for computation of Normal Rate (NR).</b> 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.</p>	
4	<p><b>Regulation 8(4)</b> Charges for Deviation, in respect of a WS Seller being a generating station based on wind or solar or hybrid of wind-solar resources, including such generating stations aggregated at a pooling</p>	<p><b>Regulation 8(4)</b> Charges for Deviation, in respect of a WS Seller being a generating station based on wind or solar or hybrid of wind-solar resources, including such generating stations aggregated at a pooling station through QCA shall be without</p>	<p>India is on the path towards a clean energy transition, guided by the Nationally Determined Contribution (NDCs) targets to have 50% of installed capacity from non-fossil fuel sources by 2030(i.e. 500 GW of RE capacity by 2030) and</p>

<p>station through QCA shall be without any linkage to grid frequency, as under:  Deviation by way of over injection (Receivable by the Seller)</p> <ul style="list-style-type: none"> <li>(i) for VLwS (1) @ contract rate;</li> <li>(ii) for VLwS (2) @ 90% of contract rate</li> <li>(iii) for VLwS (3) @ 50% of contract rate,</li> <li>(iv) beyond VLwS (3) @ Zero;</li> </ul> <p>Deviation by way of under injection (Payable by the Seller)</p> <ul style="list-style-type: none"> <li>v) for VLwS (1) @ contract rate;</li> <li>(vi) for VLwS (2) @ 110% of contract rate;</li> <li>(vii) for VLS3 @ 150% of contract rate;</li> <li>(viii) beyond VLwS (3) @ 200% of contract rate.</li> </ul> <p>WS Seller Volume Limit A generating station based on solar or a hybrid of wind –solar resources or aggregation at a pooling station</p> <ul style="list-style-type: none"> <li>VLwS (1) = Deviation up to 5% DWS</li> <li>VLwS (2) = Deviation beyond 5% DWS and up to 10% DWS</li> <li>VLwS (3) = Deviation beyond 10% Dws and up</li> </ul>	<p>any linkage to grid frequency, as under:  Deviation by way of over injection (Receivable by the Seller)</p> <ul style="list-style-type: none"> <li>(i) for VLwS (1) @ contract rate;</li> <li>(ii) for VLwS (2) @ 90% of contract rate</li> <li>(iii) for VLwS (3) @ 50% of contract rate,</li> <li>(iv) beyond VLwS (3) @ Zero;</li> </ul> <p>Deviation by way of under injection (Payable by the Seller)</p> <ul style="list-style-type: none"> <li>v) for VLwS (1) @ contract rate;</li> <li>(vi) for VLwS (2) @ 110% of contract rate;</li> <li>(vii) for VLS3 @ 130% of contract rate;</li> <li>(viii) beyond VLwS (3) @ 150% of contract rate.</li> </ul> <p>WS Seller Volume Limit A generating station based on solar or a hybrid of wind –solar resources or aggregation at a pooling station</p> <ul style="list-style-type: none"> <li>VLwS (1) = Deviation up to 7.5% DWS</li> <li>VLwS (2) = Deviation beyond 7.5% DWS and up to 15% DWS</li> <li>VLwS (3) = Deviation beyond 15% Dws and up to 20% DWS</li> </ul> <p>A generating station based on wind resource</p> <ul style="list-style-type: none"> <li>VLwS (1) = Deviation up to 10% DWS</li> <li>VLwS (2) = Deviation beyond 10% DWS and up to 15% DWS</li> <li>VLwS (3) = Deviation beyond</li> </ul>	<p>achieve net zero carbon emissions by 2070.</p> <p>A frequent change in the DSM Regulation has had a significant impact on RE generators. If the draft regulation is implemented, the Government of India’s vision for 500 GW RE capacity by 2030 may not be possible, as investors have concerns about investing in the RE sector due to uncertainty and the potential for substantial penalties in the form of deviation charges. This could impede the growth of the RE sector. Additionally, it could hinder the Government of India’s implementation of Flagship Scheme PM Surya Ghar Muft Bijli Yojana 2024.</p> <p>In view of the above, the Hon’ble commission may consider the proposed changes suggested while publishing the final DSM Regulation 2024.</p>
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	<p>to 20% DWS</p> <p>A generating station based on wind resource</p> <p>VLwS (1) = Deviation up to 10% DWS</p> <p>VLwS (2) = Deviation beyond 10% DWS and up to 15% DWS</p> <p>VLwS (3) = Deviation beyond 15% Dws and up to 25% DWS</p>	15% Dws and up to 25% DWS	
5	<p><b>Regulation 8(8)</b></p> <p>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 or WS seller, as the case may be.</p>	<p><b>Regulation 8(8)</b></p> <p>The charges for deviation for injection of infirm power shall be <b>allowed upto 50 MW or 10% of the Installed Capacity of the project/the unit as the case may be:</b></p> <p>Provided that upon such infirm power being scheduled, the charges for deviation for such power shall be as applicable for a general seller or WS seller, as the case may be.</p>	<p>Infirm power generation prior to CoD of the unit upto 100 MW or 5% of the IC of the project or the unit as the case may be in similar to provision of General seller or other type seller may be allowed. Treatment of Deviation as in the case of Over Generation by General seller or other type seller as the case may be.</p>
6	<p><b>Regulation 8(12)</b></p> <p>Notwithstanding anything contained in Clauses (1) to (5) of this Regulation, 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.</p>		<p>Reference charge rate for infirm Generators during schedule.</p>
7	<p><b>Regulation 8(14)</b></p> <p>For a Seller whose bids</p>		<p>Suppose a seller sale 10 MW in HP-Dam, Sch=100 MW &amp;</p>

	are cleared in the HP-DAM, the 'reference charge rate' for deviation by way of 'under-injection' for the quantum of power sold through HP- DAM shall be equal to the weighted average ACP of the HP-DAM Market segments of all the Power Exchanges for that time block;		Actual Generation=85, Dev=-15(Under injection). How to calculate the Deviation as per above regulation and what will be the Reference Charge rate. Please clarify.
8	<b>Regulation 8(15)</b> 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.		Necessary provision may be incorporated while publishing final DSM Regulation 2024 for Generators giving drawl schedule.
9	<b>Regulation 9</b> <b>Accounting of Charges for Deviation and Ancillary Service Pool Account</b> (5) The Deviation and Ancillary Service Pool Account shall receive credit for: ..... (iii) such other charges as may be notified by the Commission.  (6) Deviation and Ancillary Service Pool Account shall be charged for: .....  (e) such other charges as may be notified by the Commission.	<b>Regulation 9</b> <b>Accounting of Charges for Deviation and Ancillary Service Pool Account</b> (5) The Deviation and Ancillary Service Pool Account shall receive credit for: ..... (iii) such other charges as may be notified by the Commission.  <b>(iv) reactive energy exchanges</b> <b>(v) congestion charge;</b>  (6) Deviation and Ancillary Service Pool Account shall be charged for: .....  (e) such other charges as may be notified by the Commission.	As per definition in SI No 89 of CERC IEGC reg-2023, 'Pool Account' means Deviation and Ancillary Service Pool Account as defined in the DSM Regulations, where the following transactions shall be accounted: i. deviations and ancillary services ii. reactive energy exchanges iii. congestion charge;  As per provision of IEGC Regulation 2023, the Reactive Energy Charges & Congestion charge are accounted in the Deviation & AS Pool. In view of the above,

	(f) reactive energy exchanges (g) congestion charge;	(f) reactive energy exchanges (g) congestion charge;	the same may be included in the DSM regulation for consistency and better interpretation of the both the regulations.
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**1. DSM Settlement during Grid disturbance of category GD-5:**

As per Regulation 49(5) of CERC(IEGC) Regulation 2023:

*“....GD-5 occurs when forty per cent or more of the antecedent generation or load in a regional grid is lost as defined in the CEA Grid Standards.....”*

*..... Scheduled generation of all the affected regional entity generating Stations supplying power under bilateral transactions shall be deemed to have been revised to be equal to their actual generation..... Such regional entity generating station shall pay back the energy charges received by it for the scheduled generation revised as actual generation to the Deviation and Ancillary Service Pool Account:*

*.....Provided that, in case the beneficiaries or buyers of such regional entity generating station are also affected by such grid disturbance, the scheduled drawals of such beneficiaries or buyers shall be deemed to have been revised to corresponding actual generation schedule of regional entity generating stations:*

*Provided further that in case the beneficiaries or buyers of such regional entity generating station are not affected by such grid disturbance and they continue to draw power, the scheduled drawals of such beneficiaries or buyers shall not be revised.*

*(d) The scheduled generation of all the affected regional entity generating stations supplying power under collective transactions shall be deemed to have been revised to be equal to their actual generation. Such regional entity generating stations shall refund the charges received towards such scheduled energy to the Deviation and Ancillary Service Pool Account....”*

*In view of the above provision, only regional Entity generator schedule revised but buyers’ case is not considered.*

**Case Study: DSM Settlement during GD-5 for Buyer or beneficiaries:**

Consider scenario in which the followings are the demand pattern in different regional grid for a time block.

NR-70000 MW

SR-50000 MW

WR-60000 MW

ER-30000 MW

NER-5000 MW

EB1, EB2 are buyers of ER buying power from WR generators.

ES1, ES2 are sellers of ER Region selling power to NR & WR buyers.

Buyer (EB1) Schedule=-10000 MW, Actual drawl=-9800 MW, Actual Deviation=200 MW (under drawl)

Generator (ES1) schedule=1000 MW, Actual Generation=900 MW, Deviation=-100(Under Injection)

Suddenly, a Grid disturbance of category-5 has occurred in Eastern Region, where a generation of around 5000 MW and load of around 12000 MW lost. The GD-5 sustained for 1 hours.

As per Regulation no-49(5) of CERC(IEGC) Regulation 2023:

Generator schedule of all Bilateral & Collective transaction will be revised to actual and the DSM penalty of Generator will be Zero and generator will refund the amount received through contracts or collective transaction to Deviation and Ancillary Service Pool.

Further, the beneficiaries of affected ER generators are from NR & WR, so beneficiary schedule of NR & WR will not get be revised.

Buyer (EB1) lost 6000 MW of its load and the settlement of DSM of buyer EB1 will be as follows:

Schedule=-10000 MW

Actual after GD-5=-3800 MW

Deviation= 6200 MW (Under Drawal)

**As per present DSM Reg-2022, buyer will get upto 10% or 100 MW of UD@ Normal Charges for Deviation. The buyer or beneficiaries will not get any financial benefit of 6100 MW of power lost in GD-5. There will be a huge financial loss to the Discoms and its end consumer.**



**Further, as per draft DSM Regulation 2024, buyer will get upto 10% or 100 MW of UD@ 85% of Normal Charges for Deviation. The buyer or beneficiaries will not get any financial benefit of 6100 MW of power lost in GD-5. There will be a huge financial loss to the Discoms and its end consumer.**

**In view of above, Hon'ble Commission may consider the above scenario and bring necessary changes in IEGC Regulation 2023 as well as in the draft DSM regulation 2024 for Buyer or Beneficiaries affected during Grid Disturbance of Category-5 otherwise a huge financial loss to the Discoms and its end consumers.**

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