AMPLUS ENERGY SOLUTIONS PRIVATE LIMITED

AMPLUS SOLAR
WITH YOU AT THE CORE
A member of PETRONAS group

Date: 01.06.2024

Ref: AMSPL/CERC/01/06

To,
Secretary
Central Electricity Regulatory Commission
World Trade Centre, 6th, 7th and 8th floor, Tower -B, Nauroji Nagar,
New Delhi-110029

Subject: Comments on Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 (Draft DSM Regulations, 2024)

Reference: Public Notice dated 30.04.2024 (notification No. L-1/260/2021/CERC) inviting written suggestions/ objections/ comments from stakeholders

Respected Sir,

This is with reference to the Public Notice dated 30.04.2024 issued by Hon'ble Commission for inviting written suggestions/ objections/ comments from stakeholders on draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024.

Amplus Solar is Asia's leading distributed energy company providing low-carbon clean energy solutions to commercial and industrial customers by setting up on-site solar projects (rooftop and ground-mounted) and off-site solar farms. Amplus Solar has also diversified into new avenues such as battery storage, residential solar, and electric vehicle-based logistics solutions.

Amplus Solar owns and manages a portfolio of over 1 GW of distributed solar assets and serves 250+ renowned Indian and multinational firms like Yamaha, Cisco, Amazon, Walmart, Reckitt Benckiser, Schlumberger, Carlsberg, ABB, TVs, Schneider, Qualcomm, Halliburton, GE, Honda among others, tripling its customer base from 2017 to 2023.

Amplus Solar's operational plants are expected to cumulatively generate 22 billion units of electricity over their lifetime. The carbon dioxide abatement over the lifetime of these projects amounts to 21 million metric Tonnes and the environmental impact can also be equated to 24 million mature trees absorbing carbon dioxide for 40 years.

Amplus Solar is a member of the Petroleum Nasional Berhad (PETRONAS) group, Malaysia and is headquartered in Gurugram, India with regional offices in Bangalore, Mumbai, Pune, Bangkok, Dubai, and Kuala Lumpur. PETRONAS recently established Gentari Sdn Bhd (GENTARI) to independently pursue and deliver integrated sustainable energy solutions, and to capture opportunities in the energy transition. GENTARI offers lower carbon solutions through three initial core pillars – Renewable Energy, Hydrogen

+91 (0124) 4554999 contact@amplussolar.com www.amplussolar.com

Registered Office: A-57, DDA Sheds, Okhla Industrial Area, Phase II, New Delhi-110020
Head Office: Level 6, Emaar – The Palm Square, Golf Course Extension Road, Sector-66, Gurgaon-122102, Haryana

and Green Mobility, forming a portfolio of solutions cutting across the electron value chain to help customers achieve net zero emissions.

We are hereby submitting our comments under **ANNEXURE - I** on above referred subject for kind consideration of the Hon'ble Commission.

Thanking you,

For Amplus Energy Solutions Private Limited

Vivek Ranjan

Amplus Energy Solutions Private Limited

Vivek Ranjan

Manager-Regulatory

ANNEXURE - I

Comments on Central Electricity Regulatory Commission Draft (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
1.	3(j)	Definitions and Interpretation	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; and in the absence of a tariff or price as above, contract rate shall mean the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block.	Upon plain reading of the definition of "Contract rate", there is ambiguity regarding whether the Deviation Charges for WS sellers intending to sell their power under Captive or Third-party mode shall be computed based on the Contract Rate as discovered in the Power Exchange or the weighted average ACP of the Day Ahead Market segments of all Power Exchanges for the respective time block. In light of this ambiguity, we request the Hon'ble Commission to clarify whether the Deviation Charges for WS sellers intending to sell their power under Captive or Third-party mode should be computed based on the Contract Rate as discovered in the Power Exchange or the weighted average ACP of the Day Ahead Market segments of all

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
				Power Exchanges for the respective time block.
2.	7(1)	Normal Rate of Charges for Deviation	Normal Rate (NR) for a particular time block shall be equal to the **sum of**: (a) 1/3 [Weighted average ACP (in paise/kWh) of the Integrated-Day Ahead Market segments of all the Power Exchanges]; (b) 1/3 [Weighted average ACP (in paise/kWh) of the Real-Time Market segments of all the Power Exchanges]; and (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].	It is humbly submitted that penalties based on market-driven rates are unpredictable and highly volatile. Additionally, it is stated that the prices of the Integrated Day-Ahead Market, Real-Time Market, and Ancillary Service Charges vary and depend on numerous external factors such as the availability of coal, increasing coal prices, seasonality, etc., over which buyers have no control. Linking penalties to such mechanisms will negatively impact buyers and impose a significant burden on them. Therefore, to mitigate the effect of penalties based on market-driven rates, it is suggested to the Hon'ble Commission to kindly define a maximum cap on the normal rate of charges for deviation.
3.	8(4)	Charges for Deviation	Charges for Deviation, in respect of a WS being a generating station based on wind or solar or hybrid	1. In its Draft DSM Regulations, 2024, the CERC has included provisions for a

<table>
<tr><th>S. No.</th><th>Regulation/ Clause No. of the Draft Regulation</th><th>Draft Regulation Title</th><th>Provisions in Draft Regulations</th><th>Comments</th></tr>
<tr><td></td><td></td><td></td><td>of wind-solar resources, including such generating stations aggregated at a pooling station through QCA shall be without any linkage to grid frequency, as under:

<table>
<tr><th>Deviation by way of over injection (Receivable by the Seller)</th><th>Deviation by way of under injection (Payable by the Seller)</th></tr>
<tr><td>1. For $VL_{W_S}(1)$ @ contract rate;
2. For $VL_{W_S}(2)$ @ 90% of contract rate;
3. For $VL_{W_S}(3)$ @ 50% of contract rate,
4. beyond $VL_{W_S}(3)$ @ Zero;</td><td>1. for $VL_{W_S}(1)$ @ contract rate;
2. for $VL_{W_S}(2)$ @ 110% of contract rate;
3. for $VL_{W_S}(3)$ @150% of contract rate;
4. beyond for $VL_{W_S}(3)$ @ 200% of contract rate</td></tr>
<tr><td colspan="2">Note: Volume Limits for WS Seller:</td></tr>
<tr><th>WS Seller</th><th>Volume Limit</th></tr>
<tr><td>A generating station based on solar or a hybrid of wind-solar resources or aggregation at a</td><td>VL_{W_S} (1) = Deviation up to 5% D_{WS}

VL_{W_S} (2) = Deviation up to 5% D_{WS} and upto</td></tr>
</table></td><td>Qualified Co-ordinating Agency (QCA) to handle deviation settlement on behalf of WS generating stations. However, the definition of “Pooling Station” is missing in the said Draft Regulations.

The Indian Electricity Grid Code Regulations, 2023, issued by the CERC, provides a definition of “Pooling Station”. The relevant extract is reproduced below:

“Pooling Station means the ISTS grid sub-station where pooling of generation of connected individual generating stations is done for interfacing with the next higher voltage level.”

In view of the above, it is requested that the Hon’ble Commission include a similar definition of “Pooling Station” in the final DSM Regulations to avoid any ambiguity in the future.</td></tr>
</table>

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
			<table><tr><td>pooling station</td><td>10% *Dws* VLw$_s$ (3) = Deviation up to 10% *Dws* and upto 20% *Dws*</td></tr><tr><td>A generating station based on wind resource</td><td>VLw$_s$ (1) = Deviation upto 10% *Dws* VLw$_s$ (2) = Deviation beyond 10% *Dws* and upto 15% *Dws* VLw$_s$ (3) = Deviation beyond 15% *Dws* and upto 25% *Dws*</td></tr></table> *Note: In case of aggregation of WS sellers at a pooling station through QCA.* --------------------------------------	2. In its Draft DSM Regulations, 2024, the CERC has proposed reducing the tolerance band for a generating station based on solar or a hybrid of wind – solar resources, or aggregation at a pooling station, from +/- 10% to 5%. For a generating station based on wind resources, the tolerance band is proposed to reduce from +/- 15% to +/- 10% in view of aggregation at the pooling station for inter-state wind and solar generating stations. This change, considering aggregation at the pooling station for inter-state wind and solar generating stations, would effectively double the deviation charges payable by WS sellers, meaning generators would end up paying twice their Contract Rate, which is detrimental to RE generators. Furthermore, it is noted that this Hon'ble Commission, in issuing the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2022,

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
				already reduced the tolerance band from +/- 15% to +/- 10%. Now, in the Draft DSM Regulations, 2024, the Hon'ble Commission proposes to further reduce the tolerance band to +/- 5%. This reduction in the tolerance band would decrease the margin for deviation error, thereby increasing the resultant penalties on generators. In view of the above, it is requested that the Hon'ble Commission maintain the existing tolerance band of +/- 10% to better understand the impact of aggregation on deviation settlement before considering any further reduction in the tolerance band. It is requested to the Hon'ble Commission to kindly add "(in %)" as a suffix after the word "*Dws*" while defining the volume limits for WS Seller in Regulations 8(4) of the Draft DSM Regulations, 2024 to have better clarity.

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
4.	8(5)	Charges for Deviation	Charges for Deviation, in respect of a Standalone Energy Storage System (ESS), shall be at par with the charges for Deviation for a **general seller <u>other than</u> an RoR generating station, or a generating station based on municipal solid waste or WS seller** as specified in Clause (1) of this Regulation.	In this regard, we request the Honorable Commission to clarify whether the Charges for Deviation for a Pumped Hydro Storage system should be categorized under the Charges for Deviation for a Standalone Energy Storage System (ESS). If not, we kindly request the Honorable Commission to include a provision specifically addressing the Charges for Deviation for Pumped Hydro Storage.
5.	8(7)	Charges for Deviation	**Deviation by way of under drawal (Receivable by the Buyer)** **(I) For VL_B (1) and f within f_{band}** (ii) When 50.00 Hz < f < = 50.05 Hz, *for every increase in f by 0.01 Hz, charges for deviation for such buyer shall be decreased by 7% of the NR so that charges for deviation become 50% of NR when f = 50.05 Hz* -------------------------------- **Volume Limits for Buyer:** **Buyer** | **Volume Limit** -- Buyer (being | VL_B (1) = Deviation up to 200	With respect to clause 8(7)(I)(ii) of the Draft DSM Regulations, 2024, it is humbly submitted that a plain reading of the clause gives a prima facie inference that the phrase "7% of the NR" should be revised to "10% of the NR" *so that charges for deviation become 50% of NR when f=50.05 Hz.* Accordingly, it is requested that the Hon'ble Commission kindly modify clause 8(7)(I)(ii) of the Draft DSM Regulations, 2024 as depicted below: **Deviation by way of under drawal (Receivable by the Buyer)** **(I) For VL_B (1) and f within f_{band}**

<table>
<tr><th>S. No.</th><th>Regulation/ Clause No. of the Draft Regulation</th><th>Draft Regulation Title</th><th>Provisions in Draft Regulations</th><th>Comments</th></tr>
<tr><td></td><td></td><td></td><td><table><tr><td>an RE Rich State)</td><td>MW

VL_B (2) = Deviation beyond 200 MW and up to 300 MW

VL_B (3) = Deviation beyond 300 MW</td></tr><tr><td>Buyer (being Super RE Rich State)</td><td>VL_B (1) = Deviation up to 250 MW

VL_B (2) = Deviation beyond 250 MW and up to 350 MW

VL_B (3) = Deviation beyond 350 MW</td></tr></table></td><td>(ii) When 50.00 Hz < f < = 50.05 Hz, for every increase in f by 0.01 Hz, charges for deviation for such buyer shall be decreased by <u>10%</u> of the NR so that charges for deviation become 50% of NR when f = 50.05 Hz

Also, it is requested to the Hon’ble Commission to kindly modify the phrases “Buyer (being an RE Rich State)” and “Buyer (being Super RE Rich State)” to “Buyer (located in an RE Rich State)” and “Buyer (located in a Super RE Rich State)” respectively, in order to provide better clarity.</td></tr>
<tr><td>6.</td><td>8(9)</td><td>Charges for Deviation</td><td>The charges for deviation for drawal of start-up power before the COD of a generating unit or for drawal of power to run the auxiliaries during the 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.</td><td>It is requested that the Hon’ble Commission kindly clarify whether the charges for deviation for the drawal of power to run auxiliaries during non-solar hours should be categorized under Regulation 8(9) of the Draft DSM Regulations, 2024. If not, we respectfully request the Hon’ble Commission to include a provision specifically addressing the charges for</td></tr>
</table>

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
				deviation for the drawal of power to run auxiliaries during non-solar hours.
7.	8(12)	Charges for Deviation	(12) 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.	In its Draft DSM Regulations, 2024, there is a provision for the revision of schedules, but this is limited to cases of Forced Outages of a Seller. However, the draft regulations do not address the need for schedule revisions for Sellers in situations other than Forced Outages. In light of this, it is requested that the Hon'ble Commission add a proviso to Regulation 8(12) of the Draft DSM Regulations, 2024, stating that revisions in generation schedules for Sellers contained in Clauses (1) to (5) shall be permitted in accordance with the CERC (Indian Electricity Grid Code) Regulations, 2023. Additionally, Regulation 8(12) of the Draft DSM Regulations, 2024 should be modified as depicted below: *"(12) Notwithstanding anything contained in Clauses (1) to (5) of this Regulation, in case*

S. No.	Regulation/ Clause No. of the Draft Regulation	Draft Regulation Title	Provisions in Draft Regulations	Comments
				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. *Provided that the revision in generation schedule for Sellers defined in Clause (1) to (5) shall be permitted, in accordance CERC (Indian Electricity Grid Code) Regulations, 2023."*