Ref: AESPL/CERC/2024/01

Date: 29.11.2024

To,
The Secretary,
Central Electricity Regulatory Commission
7th Floor, Tower B, World Trade Centre,
Nauroji Nagar, New Delhi – 110029

Subject: Comments on Staff Paper on modifications in the GNA Regulations ("GNA Staff Paper").

Reference: Public Notice dated 11.11.2024 (notification No. L-1/261/2021/CERC) inviting written suggestions / objections / comments from stakeholders.

Respected Sir,

This is with reference to the Public Notice dated 11.11.2024 issued by Hon'ble Commission for inviting written suggestions/ objections/ comments from stakeholders on Staff Paper on modifications in the GNA Regulations.

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 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
Senior Manager-Regulatory

ANNEXURE - I

Comments on Staff Paper on modifications in the GNA Regulations

S. No.	Issue No.	Comments/ Suggestions
1.	***Issue No. 2 Use of GNA of a Connectivity grantee by an entity connected with an intra-state network that is not a GNA grantee:*** ***3.4*** *i. Whether such utilisation of GNA of a GNA grantee can be allowed by an entity that is not a GNA grantee* *ii. If such use is allowed, should it be coupled with the following conditions:* *a. Such request to be made along with the NOC from the STU towards availability of space in the intra-State network for such quantum of GNA and period* *b. Such request for utilisation of GNA shall be from an entity located in the same State or same region as that of the GNA grantee. The additional conditionalities that need to be imposed for considering the GNA utilisation beyond the state.*	With respect to Clause 3.4(ii)(b) of the GNA Staff Paper, it is humbly submitted that the utilization of GNA should be permitted by any entity located anywhere in the country, rather than being restricted to the same state or region as the original GNA grantee. This is consistent with the principle that, under the GNA regime, the entire national grid operates as a unified grid, allowing entities to draw power from any source or inject power to any load across the country. Furthermore, as per Regulation 23.1 of the GNA Regulations, the transfer of GNA is allowed for a period of three years, provided it is within the available system margins. However, if the CERC permits a longer transfer period, such as 25 years, this would necessitate additional network enhancements and corresponding bank guarantees to be submitted to the CTU. In such cases, the party acquiring the GNA through transfer should bear the associated charges and provide the required bank guarantees. Additionally, with respect to Clauses 3.4(ii)(d) and 3.4(iii), it is submitted that the transfer of both GNA and $GNA_{(RE)}$ should be allowed. Since the ISTS waiver is based on the schedule from the RE generator, the waiver should remain with entity 'B', which schedules the power. In cases where entities 'A' and 'B' are subsidiaries of a common parent organization, the option to claim the ISTS waiver should be available to both entities, regardless of whether 'A' or 'B' schedules the power.

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	c. *Such request should only be allowed based on the margin available in ISTS, and no augmentation in the ISTS is to be made to facilitate such use of GNA.* d. *Such utilisation shall be restricted to GNA only and not GNARE.* *iii. Issue of Waiver of transmission charges: If entity 'B' draws power from RE resources, should the GNA grantee 'A' be allowed waiver in respect of such RE power drawl.*	
2.	***Issue No. 5: Utilisation of the Connectivity granted to a subsidiary by another subsidiary of the same Parent company:*** *6.4 Whether such utilisation of Connectivity among the different subsidiaries of the same Parent company should be allowed or not?*	The utilization of connectivity among ***"different subsidiaries"*** of the same parent company should be permitted. This step, as outlined by the CERC, is a welcome move that will enhance the ease of doing business for renewable energy (RE) developers for the following reasons: Regulation 15.1 of the GNA Regulations allows connectivity to be shared between parent and subsidiary companies. Additionally, Regulation 15.3 and the CERC Suo-motu order dated 22-09-2023 in Petition No. 11/SM/2023 permit connectivity granted to a parent company to be utilized by its subsidiaries, and vice versa. However, at present, such transfers of connectivity are only allowed post-COD, whether to a subsidiary of the same parent or a third party. While theoretically possible, CTUIL does not currently permit such transfers unless explicitly allowed by the Hon'ble CERC. To address this, it is suggested that the

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		transfer of connectivity among subsidiaries with a common parent be allowed both before and after the COD, thereby eliminating any ambiguity with CTUIL. Such transfers align with the intent of Regulation 15 of the GNA Regulations and would facilitate better utilization of connectivity and address market demands, particularly under the Firm and Dispatchable Renewable Energy (FDRE) regime, where multiple injection points are required to meet the 90% generation availability criterion. Moreover, since management control remains consistent in such transfers and no financial gain or trading is involved, concerns regarding misuse are mitigated. The term "subsidiary" is clearly defined under the Companies Act 2013, requiring a 51% shareholding, which ensures accountability. For effective implementation, the submission and demonstration of documents such as land ownership and financial closure should be allowed across different subsidiaries of the same parent company. This would ensure smooth and transparent utilization of connectivity.
3.	***Issue No. 7: Provision for grant of Solar hours Connectivity and Non-Solar hours Connectivity through the same Transmission system*** *h) Considering the above, Comments and suggestions are sought from stakeholders on the abovementioned proposed model of "Solar-hour Connectivity" and "non-Solar hour Connectivity".*	Before finalising the provisions for granting solar hours connectivity and non-solar hours connectivity through the same transmission system. We respectfully request the Hon'ble Commission to consider following submissions: i. **Clarity on introduction of separate provision for grant of Solar hours GNA and Non-Solar hours GNA for drawee entity:** The GNA Regulations suggests that RE developers must apply for a connectivity, deemed GNA is provided as a bi-product. Conversely, Consumers/ drawee entities must apply for GNA, with Connectivity granted as a bi-

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	i) Should existing solar generators (without storage) also be given the option to install storage for utilisation of connectivity/GNA during non-solar hours by submitting an application to CTUIL within three months and installing within a period of 24 months, failing which connectivity/GNA during non-solar hours shall be utilised to grant another connectivity through the same transmission system as 'non-solar hour connectivity' to another applicant, based on the other RE resources or Storage plant, for injection of power during non-solar hours	product. Furthermore, the GNA applied by a drawee entity/ consumers shall be equivalent to the deemed GNA quantum as granted to generator as a bi-product of the connectivity. This arrangement allows power upto the deemed GNA quantum as granted to a Generator to be drawn by a drawee entity/ consumer with the same GNA across the country. In light of this framework, we request the Hon'ble to provide clarity on whether this commission is intending for introduction of solar hours and non-solar hours GNA for drawee entity because both grant of Connectivity to RE Developer & grant of GNA to drawee entity flows from a different provision of the GNA Regulations. **ii. Submission of application within 3 months for installation of storage for utilization of Connectivity/ GNA:** It is humbly stated that this Hon'ble Commission has proposed a timeline of 3 months for submitting an application by the existing solar generators (without storage) to install storage for the utilization of Connectivity/ GNA during non-solar hours to CTUIL. In this regard, that this Hon'ble Commission shall specify from which date such 3 months period is to be considered. Further, in case existing solar generators (without storage) plan to install storage for utilization of connectivity/ GNA during non-solar hours then such solar generators would be granted 1 years timeline to submit the application to CTUIL from the date of effectiveness of such Regulations because there are many challenges in setting-up such co-located BESS and importantly being to find viable off-take of expensive BESS power. **iii. Clear Demarcation of region-wise solar & non-solar hours:** In many states there is an ambiguity in solar-hours and non-solar hours.

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		Accordingly, it is requested to the Hon'ble Commission to clearly demarcate the region-wise solar & non-solar hours. iv. **Treatment of Auxiliary power drawn during non-solar hours by solar generators:** During non-solar hours the solar plant draws power from the grid to meet its auxiliary consumption and which is treated at DSM rates as of now. In case solar generators install co-located BESS then during non-solar when the BESS is supplying power its off-takers as per contracts, then from where such solar plant get its auxiliary power and at what rates which needs to be clarified. v. **Provision for grant of Solar hours Connectivity and Non-Solar hours Connectivity through the same Transmission system for Hybrid RE projects:** It is requested to the Hon'ble Commission to kindly clarify on how the provision for solar hours connectivity and non-solar hours connectivity shall be implemented for Hybrid RE projects. vi. **Cost towards sharing of terminal bays & DTL:** It is stated that Storage would draw power during solar hours for its charging and inject power during non-solar hours from the same bay. Accordingly, it is requested to the Hon'ble Commission to kindly develop a modalities for sharing of cost towards terminal bays and DTL in case the connectivity is shared between two different entities.
4.	***Issue No. 8: Provision for Minimum Transmission Capacity Utilisation for Hybrid ISTS Connectivity***	In this context, it is respectfully submitted that tenders issued by REIAs/Discoms typically specify a minimum CUF that RHGS projects must achieve. However, mandating a minimum annual CUF may not be commercially feasible for RHGS grantees due to various stipulations in utility tenders or C&I PPAs. These include

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	8.6 An applicant should take Connectivity for a quantum that it wishes to utilise. It is proposed that to ensure the optimal utilization of the transmission system, a minimum annual capacity utilization, i.e., 50%, for RHGS may be mandated, failing which the underutilized capacity of the Connectivity may be reduced, effective 1st October 2026. Alternatively, the quantum of Connectivity equal to the average of maximum injection in any time block of a day over the year (first year after the declaration of COD) may be allowed to be retained by the Connectivity grantee, and the balance quantum of the part of the Connectivity may be revoked (with corresponding Conn-BGs to be returned). Connectivity on such vacated capacity may be granted to other entities. *8.7 Considering the above, Comments and suggestions are sought from stakeholders on the above proposal whether the minimum annual capacity utilization of the Connectivity by the RHGS should be mandated or not.*	requirements related to CUF ranges, maximum and minimum CUF limits, the ratio of wind and solar components in the hybrid mix, and other constraints. Additionally, RHGS projects can either be co-located or non-co-located. In the case of non-co-located systems, the connectivity points are at separate locations and different substations, yet the power is scheduled under a single contract with individual schedules. This setup inherently limits utilization to the lower CUF of the individual solar or wind components. Any curtailment in such cases could result in significant disadvantages for the grantee. Therefore, it is recommended that minimum CUF requirements be determined contractually rather than imposed through regulations. Furthermore, it is requested that this Hon'ble Commission permit renewable energy developers to demonstrate peak power or monitor the maximum CUF of the project within any time block of a day over a two-year period following the declaration of COD.
	New Provisions to be Inserted	
1.	***Clause 1 of Regulation 11 (A) : Conditions subsequent to be satisfied by the Connectivity Grantee***	As per, Clause (1) of Regulation 11A of the GNA (Second Amendment) Regulations, 2024 specifies that Renewable Power Park Developers and REGS (excluding Hydro generating stations) or ESS (excluding PSPs) obtaining Grid Connectivity under sub-clause (c) of Clause (vii) of Regulation 5.8 or covered

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		under sub-clause (c) of Clause (xi) Regulation 5.8 (i.e. through Land BG route) must submit documents in terms of sub-clause (b) of Clause (vii) or sub-clause (b) of Clause (xi) of Regulation 5.8 (i.e. Registered Title Deed as proof of ownership or lease rights or land use rights) within 18 months of receiving In-principle grant of Connectivity or within 12 months of receiving a final grant, whichever is earlier. We would like to emphasize that demonstrating the land requirement for Solar project having capacities greater than 500 MW and for Wind Project having project capacities greater than 300 MW within 18 months of receiving in-principle grant of Connectivity or within 12 months from receiving the final grant of Connectivity is challenging for the developer. Acquiring such a large land parcel within such a short timeframe is not only difficult but also puts financial strain on developers, who needs to invest for obtaining the Registered Title Deed as proof of ownership or lease rights or land use rights for 50% of the required land. Therefore, in view of the above, the timeline for demonstrating 50% of the land required for Solar and Wind Projects, should be linked to the capacity of the project. Further, there are cases wherein CTUIL provides start date of GNA beyond 30 months from issuance of in-principle/ final grant of Connectivity (e.g. No new ISTS Connectivity/ GNA is available before 2028 in Rajasthan). In such cases while the start date of GNA may be 30 to 42 months from the issuance of in-principle/ final grant of Connectivity, the requirement to demonstrate possession of 50% of the land required remains within 18 months of receiving in-principle grant of Connectivity or within 12 months from receiving the final grant of

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		Connectivity. It is pertinent to note that while the GNA start date and consequently RE project COD is expected to be 30 to 42 months post in-principle/ final grant of Connectivity, the requirement to demonstrate 50% possession of land is much before i.e. 12/18 months from in-principle/ final grant of Connectivity, which will result into non utilization of land acquired for demonstration of 50% possession, thereby putting financial strain on Solar and Wind Project Developers. Therefore, the timeline for demonstrating the land documents should also be linked to start date of GNA. Considering the general timeline for construction of a 300 MW Solar or Wind Project is 24 months and the timeline to demonstrate 50% land possession is 12 months from final grant of Connectivity, it can be inferred that 12 months has been considered for Project COD/GNA start date after demonstration of 50% land possession. Accordingly, in cases where GNA start date is expected to beyond 30 months from in-principle grant of Connectivity, the timeline for demonstration of 50% land possession should be no earlier than 12 months prior to start date of GNA. Accordingly, considering the above issues the Clause (1) of Regulation 11 A should be modified as follows:- "*An applicant which is REGS (other than Hydro generating station) or ESS (excluding PSP) covered under sub-clause (c) of Clause (xi) of Regulation 5.8 or Renewable power park developer covered under sub-clause (c) of Clause (vii) Regulation 5.8, shall submit documents for land in terms of sub-clause (b) of Clause (xi) or sub-clause (b) of Clause (vii) of Regulation 5.8 of these*

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regulations, as the case may be, within the timeline for Final grant of Connectivity and In-Principle Grant of Connectivity whichever is earlier as per the Table below
<table>
<tr><th rowspan="2">Capacity Criteria (MW)</th><th colspan="2">GNA Start Date within 30 Months</th><th colspan="2">GNA Start date after 30 months</th></tr>
<tr><th>Final Grant of Connectivity (Months)</th><th>In-Princip e Grant of Connectivity (Months)</th><th>Final Grant of Connectivity (Months)</th><th>In-Principle Grant of Connectivity (Months)</th></tr>
<tr><td>Solar Plant < 500</td><td>12</td><td>18</td><td>GNA_{SD} -12</td><td>GNA_{SD} -18</td></tr>
<tr><td>Solar Plant >= 500</td><td>18</td><td>24</td><td>GNA_{SD} -18</td><td>GNA_{SD} -24</td></tr>
<tr><td>Wind < 300</td><td>12</td><td>18</td><td>GNA_{SD} -12</td><td>GNA_{SD} -18</td></tr>
<tr><td>Wind >= 300</td><td>18</td><td>24</td><td>GNA_{SD} -18</td><td>GNA_{SD} -24</td></tr>
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GNA_{SD} - Represents the difference between the start date of GNA.

The Bank Guarantee submitted under sub-clause (c) of Clause (vii) or under sub-clause (c) of Clause (xi) of Regulation 5.8 of these regulations shall be returned within 7 days of submission of stipulated documents as proof of Ownership or lease rights or land use rights."
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