From: "srikrishna chakravarthi" <srikrishna.chakravarthi@suzlon.com>
To: "Harpreet Singh Pruthi" <secy@cercind.gov.in>, "Shilpa Agarwal" <shilpa@cercind.gov.in>
Sent: Monday, December 2, 2024 10:57:33 PM
Subject: Submitting comments on GNA staff paper dt 09.10 2024

Dear Sir/Madam,

Please find attached comments on GNA staff paper.

Thanks and Regards
V V S K Chakravarthi

Staff Paper on Stakeholder's suggestions for necessary modifications in the GNA Regulations

Sr.No	Clause No	Description	Suzlon Comments	Justification
1	8.1. to 8.3	**Issue No. 7:** Provision for grant of Solar hours Connectivity and Non-Solar hours Connectivity through the same Transmission system	Request Hon.CERC to consider and allow Wind connectivity during non solar hours through the same transmission system	1) As per CEA RE generation analysis report, solar plants typically will have less PLF compared to the wind plant. 2) In general wind plant generates more energy in the evenings comapared to day time, hence it is proven as the best energy mix during non solar hours. 3) As per our assesments (Fig .1), solar plants have less generation hours per day compared to wind plant. Most of the times, wind generation is complementary to non solar generating hours & by adding wind generation in the same transmission system will also helps to stabilize the grid. so addition of wind generation is optimal solution rather than installing ESS (Energy Storage system) whose cost is much higher compare to wind Case : Incase both wind & solar plants having peak generations, then there is possibility to curtail the additional energy which is beyond dedicated radial transmission system. In this scenario CERC may permit below mentioned options to the connected RE developers. a. RE developers may grant short term access to sell the additional energy in the energy exchange. b. Banking facility may be provided for the additional generations as per transmission line capability. c. ESS can be installed for such additional gerneration over and above the transmission line capability. A separate tariff & DSM mechanism to be introduced to mitigate the above mentioned scenario. Request Hon. CERC to considerd the above justification and permit wind connectivity during non-solar hours in the existing transmission infrastrucure.
2	8.4 to 8.7	**Issue No. 8:** Provision for Minimum Transmission Capacity Utilisation for Hybrid ISTS Connectivity	Minimum Transmission Capacity Utilisation shall not to be mandated based on the hybrid RE plant CUF.	1) Solar energy plant CUF varies from 18 to 23% per annum, wind energy plant CUF varies from 20 to 35% per annum where as hybrid (Wind + Solar) CUF varies from 40 to 60% per annum based on individual site assesment data and combination of the configuration of each energy sources. 2) In general transmission lines are designed to cater maximum injection at the time of peak wind seasons. 3) Generally in India peak wind seasons falls under the months of Mid may to mid August.Which mean 04 months peak season will have high CUF inturn transmission capacity utilization will be equal or greater than the designed transmission line capacity. 4) With the above submission we may consider low CUF for balance 08 months, In this scenario which RE developer will utilize the connectivity granted for the hybrid project by maintaining the low CUF.

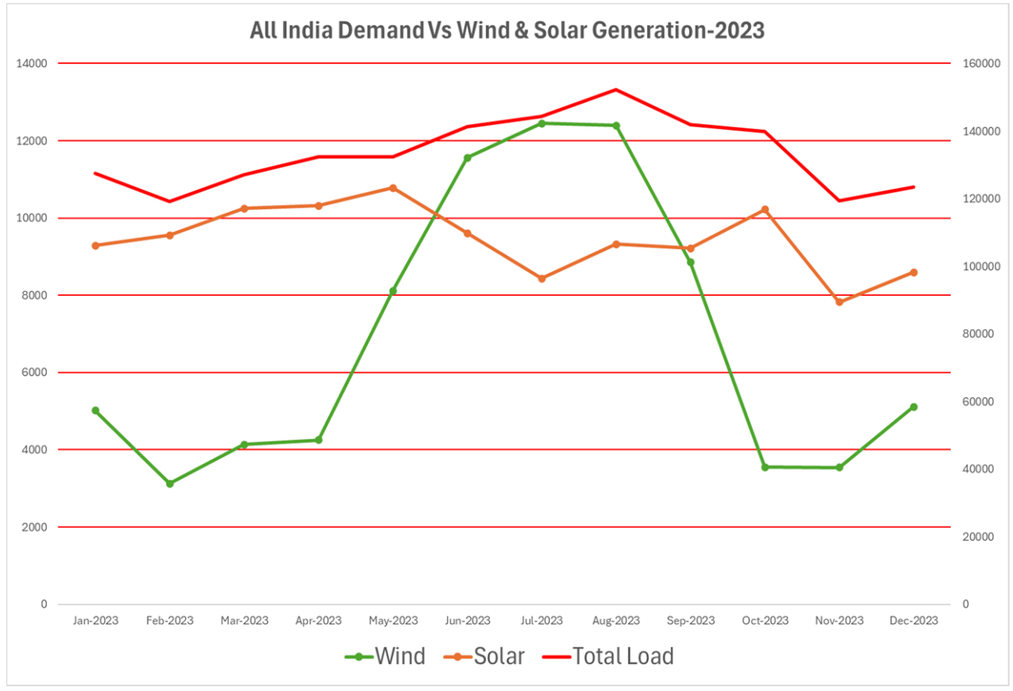

Fig.1 All India Demand Vs Wind & Solar Generation-2023