PURVAH GREEN POWER PRIVATE LIMITED

CIN: U35100WB2023PTC266923

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Ref No: CTUIL/PGPPL/CERC/Comments/019 01 Nov 2024

To,

The Secretary,

Central Electricity Regulatory Commission (CERC),

7th Floor, Tower B, World Trade Centre, Nauroji Nagar, New Delhi- 110029

Subject: Submission of Comments on 'Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2024'

Ref: CERC Public Notice No. L-1/260/2021/CERC dated 02 Oct 2024

Respected Sir,

This is in reference to the above referenced public notice inviting comments on the Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2024.

We hereby submit our comments for your kind consideration whilst finalization of the Regulations.

Proposed Amendment by CERC

Regulation 8(8):

The charges for injection of infirm power shall be zero:

Provided that if infirm power is scheduled after a trial run as specified in the Grid Code, the charges for deviation over the scheduled infirm power shall be as applicable for a general seller or WS seller, as the case may be:

Provided further that when the system frequency, f > 50.05Hz, the charges for deviation of scheduled infirm power by way of over injection by a general seller or WS seller, as the case may be, shall be zero.

Modification to the Amendment suggested in blue

Regulation 8(8):

The charges for injection of infirm power shall be zero:

Provided that if infirm power is scheduled after a trial run as specified in the Grid Code, the charges for deviation over the scheduled infirm power shall be as applicable for a general seller or WS seller, as the case may be:

Provided further that when the system frequency, f > 50.05Hz, the charges for deviation of scheduled infirm power by way of over injection by a general seller or WS seller, as the case may be, shall be zero.

Reasoning for the modification proposed

Central Electricity Regulatory Commission (Indian Electricity Grid Code) (First Amendment) Regulations, 2024, restricts renewable energy (RE) generators from injecting infirm power beyond 45 days from the date of first-time energization and integration (FTC) approval. To align IEGC Regulations and DSM Regulations, scheduling of infirm power before demonstration of firm capacity to be permitted

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up to 45 days. By the end of this time, RE generators must establish firm capacity and have the necessary communication and metering systems in place.

Meeting the commissioning requirements, as outlined by CEA standards, presents several technical and practical challenges:

- **Phased Commissioning:** REGS plants are energized and commissioned in stages, with smaller packages of 50 MW or less. This phased approach requires additional time to complete trial runs for the entire project capacity.
- Incremental Charging of Components: Elements like 220 kV lines, transformers, and unit transformers are energized in stages. For a 100 MW project, completing this process may take 4-5 separate charging attempts, as each feeder is charged progressively. Large-scale projects, in particular, require additional time for charging and synchronization.
- **Internal Parameter Checks:** After each partial capacity is energized, additional time is required for internal parameter checks to ensure consistent and reliable trial runs.
- **Seasonal Testing Constraints:** Testing cannot be conducted at rated capacity during monsoon and lean wind seasons due to fluctuations in solar radiation and wind speeds.
- **Testing Variability:** Sudden changes in cloud cover or wind speed can cause variations in generation and PPC (Power Plant Controller) performance (e.g., active power, reactive power, frequency, ramp rates), which can disrupt trial runs.
- Completion of Required Tests: Even with all necessary equipment on site, some tests are challenging to complete under IEGC 2023 requirements, especially PPC tests. OEMs require additional time for parameter configuration, logic development, and software fine-tuning to ensure compliance with CEA standards.
- Extended Time for Large Plants: For large plants (500 MW or more), PPC testing can only begin once full capacity is commissioned. At a rate of 45 days per 50 MW, completing PPC tests for a 500 MW plant may take up to 5-6 months.
- Grid Imbalance and Firm Capacity Demonstration: IEGC 2023 Regulations stipulates conditions to confirm firm capacity, such as 4 hours of cumulative power flow during sunrise-to-sunset for solar and daily for wind generators. Permitting scheduling of infirm power until firm capacity demonstration would help reduce grid imbalances, providing grid operators with a clearer picture of incoming power. This improved predictability would enable more effective grid management compared to situations where infirm power injections are unknown.

In light of these considerations, we believe it would be beneficial to permit scheduling of infirm power during or before the completion of trial runs.

We respectfully request the Hon'ble CERC to uphold its approach from its Suo-motu order dated 06.02.2023 (Petition no. 01/SM/2023), allowing scheduling of infirm power accordingly.

Thanking you.

Regards

Mohammad Farrukh Aamir Head – Compliance & Regulatory Purvah Green Power Pvt Ltd