



**एनटीपीसी ग्रीन एनर्जी लिमिटेड**  
(एनटीपीसी लिमिटेड की सहायक कम्पनी)  
**NTPC GREEN ENERGY LIMITED**  
(A Subsidiary of NTPC Limited)

Ref. No.:CC:CD/NGEL/Congestion/01

Date: 06.04.2026

The Secretary  
Central Electricity Regulatory Commission  
7th Floors, Tower B, World Trade Centre,  
Nauroji Nagar, New Delhi- 110029

**Subject: NGEL submission on Central Electricity Regulatory Commission Suo Moto order in Petition no. 1/SM/2026 regarding Rate of Congestion charge in real-time operation in inter-state transmission of electricity.**

Respected Sir,

Hon'ble Commission has issued Suo Moto order in Petition no. 1/SM/2026 regarding Rate of Congestion charge in real-time operation in inter-state transmission of electricity.

In this regard, please find enclosed submission of NTPC Green Energy limited on Suo Moto order regarding Rate of Congestion charge in real-time operation in inter-state transmission of electricity for kind consideration.

Thanking you,

Yours sincerely,

(Sunit Kumar)

**HOD (Commercial & Regulatory Cell)**

नैगम कार्यालय : एनटीपीसी ग्रीन एनर्जी लिमिटेड, नेत्रा कॉम्प्लेक्स, ई-3, उद्योग विहार फेज-2, ग्रेटर नोएडा, उत्तर प्रदेश – 201306  
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**Submissions on Central Electricity Regulatory Commission Suo Moto order in Petition no. 1/SM/2026 regarding Rate of Congestion charge in real-time operation in inter-state transmission of electricity.**

1. The commission in the suo moto order has proposed the following:
  - (a) The rate of congestion charge shall be **1.5 times the ‘Reference Charge Rate’ (RR), ‘Contract rate’ or ‘Normal Rate of Charges for Deviation’ (NR), as applicable for such entity for such time block** as per Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 and subsequent amendments and re-enactments, with a **minimum rate of Rs 3/unit and a maximum of Rs 10/unit.**
  - (b) No congestion charge shall be levied for congestion in a transmission corridor if the power flow on the corridor is as per the schedule, but the congestion has been caused by forced outages of a line in the corridor, which occurs after the drawal schedule has been fixed. Such contingencies would have to be tackled through emergency instructions by the concerned SLDCs/RLDCs/NLDC to the relevant regional entities in order to relieve congestion, considering grid security.

In this regard following points may please be considered:

**1) Congestion charge Rate for RE projects**

- Renewable Energy (RE) projects are generally developed under Section 63 of the Electricity Act, 2003 through a competitive bidding process, resulting in significantly lower tariff discovery as compared to conventional thermal generation.
- In this context, the proposed levy of congestion charges at 1.5 times the contract rate, in addition to the already applicable DSM charges, would impose a disproportionate and unforeseen financial burden on RE generators. Such additional liabilities, have the potential to adversely impact project viability.
- Wind or solar based generating stations are completely dependent on varying natural conditions like solar Irradiance, cloud cover or wind pattern which is beyond their reasonable control. In view of the inherent non-controllable nature of RE generation and the existing regulatory framework under DSM, it is respectfully submitted that **no congestion charges should be levied** on RE projects.
- However, if the Hon’ble Commission deems it necessary to retain the applicability of congestion charges, it is further submitted that the same may be capped at the PPA/contract rate, instead of 1.5 times the contract rate, so as to mitigate undue financial risk and preserve the viability of RE investments.

**2) No levy of congestion charges on solar projects during non-solar hours:**

- During non-solar hours, solar generating stations do not inject power into the grid and draw limited electricity solely for meeting **essential auxiliary consumption requirements.**

- It is submitted that such drawal is already governed under the existing regulatory framework, including **DSM charges and Real-Time Deviation Adjustment (RTDA) charges**. Imposition of congestion charges in addition to these would lead to multiple financial liabilities on the same quantum of drawal, therefore an additional liability of congestion charges on such consumption is not justified and it is commercially untenable.
- Further, it is submitted that during Non-Solar Hours, when Solar Generator is not generating and only drawing power solely to meet its Auxiliary Power consumption, is not capable to support the grid to mitigate the congestion and drawal of Auxiliary power is an essential requirement, which cannot be regulated.
- In view of the above, it is respectfully submitted that **solar projects should be exempted from congestion charges during non-solar hours**, as such drawal is non-commercial in nature, already regulated under DSM/RTDA mechanisms, and does not warrant additional penal imposition.

### **3) No levy of congestion charges for Under injection by RE projects:**

- Generation from renewable energy projects is intrinsically dependent on variable natural factors such as solar irradiation and wind speed, which are beyond the control of the generator.
- In situations where an RE project is under-injecting due to adverse weather conditions, and a congestion event is simultaneously declared by NLDC, the generator does not have the technical capability to increase generation to alleviate congestion in the grid.
- Accordingly, under-injection by RE projects, being non-controllable in nature, should not attract congestion charges, as such imposition would be inequitable and contrary to operational realities.

### **4) Tolerance Band in DSM Regulations**

- Wind or solar based generating stations are completely dependent on varying natural conditions like solar Irradiance, cloud cover or wind pattern which is beyond their reasonable control. Unlike conventional generating stations that can regulate their output in response to system requirements or instructions from the load dispatch centre, renewable energy generators have very limited flexibility to control generation.
- Given these unique characteristics, a differentiated treatment for wind and solar generators within the DSM framework is provided to ensure fairness, encourage renewable integration, and maintain investor confidence in the sector. Therefore, some **Tolerance bands** is provided in DSM regulations.

- In line with the DSM regulation, it is requested that no congestion charges shall be levied if the solar/wind projects operating under such permissible DSM tolerance band.

#### **5) Removal of Floor price of Rs. 3/kWh for RE projects**

- Generally Solar projects have been developed under Section 63 of the Electricity Act, 2003 through a competitive bidding process and have PPA tariff around Rs. 2-2.5/kWh.
- Further, due to delays or non-execution of PPAs, several solar projects are compelled to operate in the merchant market, where prices during solar hours frequently fall below ₹1/kWh. In such circumstances, generators are already exposed to significant revenue losses. The imposition of a **minimum congestion charge of ₹3/kWh**, irrespective of actual market realization, would further aggravate financial stress and severely impact project viability. It is therefore submitted that the **floor price be removed, or suitably relaxed, for RE projects.**

#### **6) Maximum 2-time blocks for affirmative action:**

- The CERC (Measures to Relieve Congestion in Real Time Operation) Regulations, 2009 presently provide a limited window of **two clear time blocks** for generators to take corrective (affirmative) action in response to congestion signals to avoid congestion charges which is governed from 4 time blocks allowed for revision of schedule as per CERC (Unscheduled Interchange charges and related matters) Regulations as applicable at that time.
- Considering the operational characteristics and inherent limitations of renewable energy projects—particularly their dependence on variable weather conditions and limited controllability—such a narrow timeframe is not practically feasible for effective response.
- In view of operational limitations of RE projects maximum 2 time-blocks requirements **may be increased to 4-6 blocks.**

In view of the foregoing submissions, it is respectfully submitted that while the objective of ensuring grid security through an appropriate congestion pricing mechanism is duly acknowledged, the proposed framework, in its present form, does not adequately account for the inherent characteristics and operational constraints of renewable energy generators.

The uniform application of congestion charges, without considering issues such as non-controllability of generation, permissible DSM tolerance bands, auxiliary consumption requirements, and prevailing tariff structures, may lead to unintended financial stress and undermine the viability of RE projects developed under competitive bidding.

It is therefore requested that the proposed mechanism be suitably **recalibrated to ensure alignment with DSM Regulations, 2024, maintain regulatory consistency, and support the continued growth of renewable energy in the country**, while balancing the overarching objective of grid reliability and security