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

Ref. No.:CC:CD/NGEL/IEGC/2nd amendment **Date: 21.10.2026**

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

Subject: NGEL submission on Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2026

Respected Sir,

Hon'ble Commission has issued draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2026 and invited comments/ suggestions/ objections from the stakeholders on the above Draft Regulations.

In this regard, please find enclosed submission of NTPC Green Energy limited on CERC (Indian Electricity Grid Code) (Second Amendment) Regulations, 2026 for kind consideration.

Thanking you,

Yours sincerely,

(Amit Kumar)
HOD (Commercial & Regulatory Cell)

Submissions on Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2026

1) Amendment to Regulation 19 of the Principal Regulations:

(2) The following shall be inserted after the words 'stipulated period' in the sub-clause (a) of Clause (3) of Regulation 19 of the Principal Regulations:

", as per the following: (i) Concerned REGS or ESS (except Hydro PSP ESS) shall inform the detailed reasons for delay in achieving the COD along with the likely date by which it may make a request seeking extension of the period for injection of infirm power.

(ii) The request seeking extension of the period for inter-change of power shall be made at least 10 days prior to the requested start date of interchange of power.

Submission:

- The successful completion of the trial run and readiness for commencement of interchange of power depend upon fulfilment of prescribed technical requirements and demonstration of requisite capabilities, which may not be ascertainable 10 days in advance.
- Considering the stipulated 3-day prior notice for the trial run, the requirement of 10 days' advance notice for seeking extension of the period for interchange of power may be difficult to comply with in practice.
- Accordingly, it is proposed that the notice period for submission of the request for extension be reduced from 10 days to 3 days, to provide reasonable operational flexibility to the generating station while ensuring adequate notice to the concerned stakeholders.

2) The following four provisos shall be added in sub-clause (e) of Clause (3) of Regulation 22 of the Principal Regulations.

"Provided that the trial run of a standalone ESS shall be performed for a minimum capacity aggregating to 50 MW: Provided further that in the case of a standalone ESS having a capacity of more than 50 MW and less than 250 MW, the trial run for the balance capacity shall be performed in a maximum of three instalments with a minimum capacity of 5 MW:

Submission:

- The proposed provisions specify that the trial run of a standalone ESS shall be conducted for a minimum aggregate capacity of 50 MW, while the balance capacity of an ESS having an installed capacity of more than 50 MW and less than 250 MW may be tested in a maximum of three instalments, with a minimum capacity of 5 MW per instalment.

- As per the Explanatory Memorandum, the provision is to aligned with solar wherein the trial run of solar generating stations having a capacity of up to 250 MW may be conducted in a maximum of five instalments, comprising an initial instalment of 50 MW and the balance capacity in four instalments. However, the proposed provisions for standalone ESS having a capacity of more than 50 MW and less than

250 MW restrict the trial run of the balance capacity to a maximum of three instalments, with a minimum capacity of 5 MW per instalment.

- To maintain consistency with the provisions applicable to solar generating stations, it is suggested that the trial run of standalone ESS having a capacity of more than 50 MW and less than 250 MW may **also be permitted in a maximum of five instalments, comprising an initial instalment of 50 MW and the balance capacity in four instalments.**

3) Amendment to Regulation 24 of the Principal Regulations:

(1) The words ", pumped storage plants having a capacity of more than 25 MW and ESS(excluding Pumped Storage Plant) having a capacity of 25 MW and above," shall be added after the words "hydro generating stations having a capacity of more than 25 MW" in Clause (2) of Regulation 24 of the Principal Regulations.

……..

Submission:

- The CEA (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019 provides that the generating stations of aggregate capacity of 500 MW and above shall have the provision to receive the signal from the State Load Dispatch Centre or Regional Load Dispatch Centre, as the case may be, for varying active and reactive power output.

- Therefore, the implementation of Automatic Generation Control (AGC) for capacity less than 500 MW entails additional technical requirements, infrastructure and associated costs. Accordingly, AGC requirements may be made applicable to new projects through the bidding documents, enabling prospective developers to factor in the associated costs and technical specifications while submitting their bids.

- In respect of existing projects, where AGC implementation is subsequently mandated by the system operator or the Commission, the associated additional expenditure and consequential impact on project cost may be recognised under the Change in Law provisions of the relevant PPA, subject to the terms thereof and applicable regulatory framework.

- Further, the Draft Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Amendment Regulations, 2026, stipulates the requirement of Automatic Generation Control (AGC) for Battery Energy Storage Systems (BESS) having an installed capacity of 50 MW or more. In this regard, it is requested that the provisions of the relevant regulations be suitably aligned to ensure consistency in the applicability and threshold for AGC requirements and to avoid any ambiguity.

4) Amendment to Regulation 25 of the Principal Regulations:
A new Regulation 25A shall be added after Regulation 25 of the Principal Regulations as under:
"25A Scheduling of infirm Power

(1) The scheduling of infirm power shall be allowed only post issuance of a certificate of successful trial run as per Regulation 25 of these Regulations.
(2) If the generating station or ESS has entered into a contract either directly or through REIA or intermediary procurer for sale of power from such generating station or ESS, and such contract have specific provisions for treatment of sale of power prior to achieving commercial operation, the same shall be scheduled to the buyer(s) as per the provisions of such Contract.
(3) In the absence of any specific provisions of treatment of sale of power prior to achieving commercial operation under the contract:
(a) such power shall be first offered to the buyers with whom the generating station or ESS has entered into a contract either directly or through REIA or intermediary procurer, with an advance notice of at least seven (7) days.
(b) If the buyer(s) give their consent to procure such power, the same shall be scheduled to the buyer(s) at a tariff mutually agreed between buyer(s) and the generating station.
(c) If the buyer(s) or the REIA or intermediary procurer do not respond within such notice period, it shall be considered as a deemed refusal of the buyer(s) or REIA or intermediary procurer and in such a case the generating station shall be free to sell such power to any of the third party outside the Contract."

Submission:

- Scheduling of infirm power is permitted only after successful completion of the trial run, for which the generating station is already required to provide 48 hours' prior notice. Since successful completion of the trial run is contingent upon fulfilment of various tests and demonstration of the prescribed capabilities, it may not be feasible to ascertain seven days in advance whether the trial run will be successfully completed. Consequently, a mandatory seven-day advance notice may result in a delay of up to seven days in scheduling and sale of infirm power, even after successful completion of the trial run, leading to loss of sale opportunities and avoidable underutilisation of available generation.

- Accordingly, it is proposed that the notice period be reduced from **seven days to one day**. A one-day notice period would provide a reasonable opportunity to the contracted buyer to exercise its first right to procure the infirm power, particularly since the buyer would already have advance information regarding the proposed trial run through the 48-hour prior notice. At the same time, it would provide the generating station with the necessary flexibility to offer such power to third parties if the contracted buyer does not exercise its right within the stipulated period.

5) Amendment to Regulation 30 the Principal Regulations:

(7) The words "and regional entity bulk consumer," shall be inserted after the words "State control area" occurring multiple times in sub-clause (q) of Clause 11 of Regulation 30 of the principal Regulations.

Submission:

- The proposed insertion of the words "and regional entity bulk consumer" in sub-clause (q) of Clause (11) of Regulation 30 requires further clarification. A State Control Area is responsible for coordinating system operation and managing reserves within its jurisdiction, whereas a regional entity bulk consumer primarily functions as a consumer of electricity and may not have any generating resources, controllable demand response capability or other facilities necessary to maintain and deploy secondary reserves.

- Accordingly, imposing similar obligations on a regional entity bulk consumer, without specifying the requisite technical capabilities, operational framework and mechanism for reserve provision, may be impractical and may result in disproportionate compliance obligations. The requirement to maintain secondary reserves should, therefore, be applicable only to entities having the requisite controllable resources and technical capability, in accordance with the procedures specified by the competent system operator.

6) New Regulation 30A:

"(1) A new Regulation 30A shall be added after Regulation 30 of Principal regulations as under:

30A. CONGESTION CHARGE
(1) Applicability of Congestion Charge.
(a) The congestion charge shall be payable by a Regional entity or entities causing congestion in the inter-regional link or intra-regional link and receivable by a Regional entity or entities relieving congestion. Congestion charges would be levied for:

(i) over drawal or under-injection in the importing control area
(ii) under drawal or over-injection in the exporting control area.
……..

(2) Rate of congestion charge.
The Commission may, from time to time, by order specify the rate of congestion charge applicable to whole or a part of the region:
…….."

Submission:

(a) 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.

(b) <u>No levy of congestion charges for Under injection by RE projects:</u>

- 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.

(c) <u>Tolerance Band in DSM Regulations</u>

- 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.

(d) <u>Congestion charge Rate for RE projects</u>

- 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.

- The rate of congestion charge may have a direct financial impact on generating companies and other regional entities. Accordingly, the rate should be finalised only after detailed consultation with all relevant stakeholders, including renewable energy developers, generating companies, distribution licensees and system operators, to ensure transparency, predictability and a fair allocation of congestion-related costs.

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.

Additional Point

1) "*49. PROCEDURE FOR SCHEDULING AND DESPATCH FOR INTER-STATE TRANSACTIONS*

……

(8) In case of requirement of revision of schedule due to forecasting error, a WS seller may revise its schedule only in case of bilateral transactions and not in case of collective transaction. Such revision of schedule shall become effective from the time block and in the manner as specified in sub-clause (c) of clause (4) of this Regulation.

……"

Submission:

- In suo motu Order in Petition No. 14/SM/2023, the Hon'ble Commission, at paragraph 30, clarified that a generating station acting as a Wind/Solar (WS) seller or Run-of-River (RoR) generating station shall be permitted to revise its schedule under Regulations 49(8) and 49(9) of the IEGC, as applicable from the 7th/8th time block, irrespective of whether the generating station is operating under GNA or deemed T-GNA, in the case of bilateral transactions.

- In view of the aforesaid clarification, it is requested that the same be expressly incorporated in the proposed amendment to Regulation 49(8), so as to avoid any ambiguity regarding the applicability of schedule revision provisions to WS sellers operating under GNA or deemed T-GNA.

- Accordingly, Regulation 49(8) may be modified as follows:

(8) In case of requirement of revision of schedule due to forecasting error, a WS seller may revise its schedule ***irrespective of whether such a generating station is under GNA or deemed T-GNA*** *only in case of bilateral transactions and not in case of collective transaction. Such revision of schedule shall become effective from the time block and in the manner as specified in sub-clause (c) of clause (4) of this Regulation.*

……"

2) The CERC (Indian Electricity Grid Code) Regulations, 2023, provide for trial run and Commercial Operation Date (COD) declaration requirements for Renewable Energy Generating Stations (REGS), Energy Storage Systems (ESS/BESS) and hybrid projects. However, certain scenarios involving co-located REGS and BESS require further clarification regarding the applicability and manner of compliance with these requirements. The following points are submitted for consideration:

a. There may be cases where a co-located Renewable Energy Generating Station (REGS) is installed exclusively for charging a standalone Battery Energy Storage System (BESS), without any separate grid connectivity or independent injection of power into the grid. In such cases, the applicability of trial run and Commercial Operation Date (COD) declaration requirements for the REGS may be clarified, considering that it functions solely as a charging source for the BESS.

   Further, there may be cases where non-solar hour connectivity is granted under the Right of First Refusal (ROFR) mechanism, wherein the BESS is required to be installed within 24 months, while the commensurate co-located RE generating capacity may be installed within 36 months. In such cases, the BESS may be commissioned and declare COD as a standalone BESS before the commissioning of the associated solar REGS at a later date. Accordingly, clarification is required regarding the applicability of trial run and COD declaration requirements for the subsequently commissioned REGS, including whether the REGS would be required to undergo an independent trial run and declare COD separately, notwithstanding the prior commissioning and COD declaration of the BESS.

b. Further, there may be cases where a co-located solar REGS supplies power both for charging the BESS and for injection into the grid, while the BESS discharges power during non-solar peak hours, with a common grid connectivity limit. For example, a 100 MW solar project co-located with a 50 MW/100 MWh BESS, having a common grid connectivity of 50 MW during both solar and non-solar hours, may utilise part of the solar generation to charge the BESS and inject the remaining power into the grid within the connectivity limit. During peak hours, the BESS may discharge power into the grid, subject to the same limit. In such cases, the applicability of trial run and COD declaration requirements for the solar REGS and BESS may be clarified, including whether these requirements are to be fulfilled independently or in a coordinated manner, considering their respective commissioning schedules and operating functions.