Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) (Fourth Amendment) Regulations, 2025

No. L-1/261/2021/CERC **Dated: 12.03.2025**

Explanatory Memorandum

Background

1. The Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 was notified on 7th June 2022, and subsequently, the first amendment and second amendment were notified on 1st April 2023 and on 19th June 2024, respectively (hereinafter collectively referred to as "GNA Regulations"). The draft of the third amendment to the GNA Regulations was also issued on 31.07.2024.

2. The draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) (Fourth Amendment) Regulations, 2025 (hereinafter 'draft Fourth Amendment') is issued keeping in view the imminent requirement to consider access during solar hours and non-solar hours for optimum utilization of transmission system apart from a few other changes.

3. The draft Fourth Amendment has been issued in light of the following:

    a) Considering the challenges of suboptimal utilization of transmission system during non-solar hours, the issue was brought out in Staff Paper dated 09.10.2024 seeking public comments. Based on the proposal under the Staff Paper and the comments received from the Stakeholders on the issue, the utilization of access to ISTS during non-solar hours has been proposed.

    b) To restrict the non-serious players and trading of Connectivity, changes in ownership or shareholding pattern of the company of the Connectivity grantee till COD of the project have been proposed to be restricted.

    c) Changes have been proposed to address the issue raised by CTUIL, vide

letter dated 11.03.2024, regarding the revocation of Connectivity for Renewable Power Park Developer (RPPD).

d) The issue of multiple start dates in a year by STU was raised in a Petition filed by STU. Changes have been proposed to address the requirement of multiple start dates in an application of STU for additional GNA.

4. Each of the above issues is detailed in subsequent paragraphs.

A. Amendment to enable grant of Connectivity to entities with wind-based generation or ESS to optimally utilize transmission systems during non-solar hours.

5. The issue of grant of solar hours Connectivity and non-solar hours Connectivity through the same transmission system was issued under the 'Staff Paper on modifications in the GNA Regulations' dated 9.10.2024. The relevant extract of the proposal under the Staff Paper on the mentioned issue is as under:

"8.3 Proposal

The increasing penetration of VRE sources like solar and wind presents a growing challenge: grid balancing during periods of low VRE generation. Without mandatory ESS for VRE projects, managing this variability could become significantly more complex. In the absence of sufficient storage, states may be forced to rely on additional coal-fired power plants to meet peak demand during non-solar hours. However, strategically deployed ESS can minimize the need for new coal capacity by supplying power during these critical periods. Co-located Energy Storage Systems (ESS) can also significantly improve the utilization of these valuable transmission assets.

a) At present, the Connectivity granted to a REGS is available with it for a full day, i.e. for 24 hours, irrespective of the technology/resource of the generating plant and irrespective of the fact that the applicant is able to utilise this connectivity and inject the power during the entire day or not.

b) Particularly in the case of the Connectivity granted on a Solar generating station without any storage, the Connectivity and transmission system for the same will be utilised only during the Solar hours, and for the remaining period of the day, the transmission system is not likely to be utilised, unless another generating station or storage with complementary injection pattern is added behind the meter.

c) It is proposed that to ensure the optimum utilisation of the transmission system, the

applicant who is seeking Connectivity for the Solar source only, the Connectivity will be granted 'Solar-hour Connectivity.' These plants will have full rights to inject power up to their connectivity quantum into the grid during solar hours. Solar plants that are already connected to the ISTS or have already been granted connectivity will retain the GNA during solar hours. Grid India shall declare solar hours well in advance.

d) Regulation 5.1 to Regulation 5.5 of the GNA Regulations provide as under:

……..

As per the above, an applicant may add, within the quantum of Connectivity granted to it, additional generation capacity or ESS. However, net injection at any point in time shall not exceed the quantum of total Connectivity granted to the existing Connectivity grantee. However, under the aforementioned clause, it is up to the existing Connectivity grantee to agree or disagree with such an addition of capacity on the same Connectivity.

e) It is proposed that the existing connectivity grantee, which was solar-based REGS, shall be mandated to share the dedicated grid infrastructure (terminal bay and the dedicated transmission line) with payment of charges for the dedicated transmission infrastructure (as mutually agreed or as determined by CERC in case of disagreement). For solar hours, the new grantee shall be allowed to schedule power if the transmission system is available after scheduling power of existing solar REGS. The hours other than solar hours shall be treated as non-solar hours. It is clarified that the existing solar REGS can also seek GNA (non-solar)/connectivity at par with the new entity.

f) The applicant who has been granted non-solar hour connectivity will have the right for injection of power during the non-solar hours. Further, for solar hours, the new Connectivity grantee may be allowed to schedule power if the transmission system is available after scheduling power of existing solar REGS.

g) An REGS, which is a REGS with storage or an RHGS where the Connectivity for Solar components is much larger than storage or wind, may also be considered under the aforementioned proposal of the utilisation of Connectivity during non-hours by the existing Connectivity Grantee. The following two examples may be considered:

(i) Suppose an REGS with storage has a Connectivity of 1000 MW with an Installed capacity of 1000 MW Solar and 100 MW storage. Such REGS can utilise a maximum of 100 MW during non-solar hours, which can be considered under the aforementioned proposal.

(ii) Suppose an RHGS with storage has a Connectivity of 1000 MW with the Installed capacity of 700 MW Solar, 300 MW Wind, and 100 MW storage. Such REGS can utilise a maximum of 400 MW during non-solar hours, which can be considered under the aforementioned proposal.

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".

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?."

As per the above, it was proposed to grant Solar hours Connectivity to the applicant based on the Solar power and Non-Solar hours Connectivity to an entity based on a source other than solar source or ESS by utilizing the same transmission system.

6. The following suggestions have been received on the above-mentioned proposal under the Staff Paper:

a) RE Developers/ Associations have suggested increasing the timeline for submission of applications for the existing Solar generators and the timeline for implementation of the project.

b) To provide clarity on how solar plants will meet their auxiliary power during non-solar hours considering Connectivity shall be restricted to solar hours for solar plants.

c) To provide clarity on metering and scheduling requirements and the energy accounting at the Point of Injection (POI) for simultaneous injection and drawl needs of the BESS charging.

d) To provide protection of Solar Generator Rights During Solar Hours to inject power into the grid during solar hours. Similarly, safeguarding the right of existing RE+BESS contracts to inject power from existing BESS projects during non-solar hours.

e) Grid India suggested that both the existing and the new plant (solar + BESS) should act as a single plant from a grid operations perspective. They should be provided with 24x7 grid connectivity, without limiting their physical connectivity to the Grid to solar or non-solar hours only, with suitable mechanisms for limiting their net injection at any point in time. The existing solar plants may participate in voltage support services in the future during non-solar hours. Grid India also

submitted that the existing and the new plant should implement a suitable centralized control mechanism in the form of a master power plant controller, and a relay may be installed at the ISTS end of the dedicated line, which simply trips the line if the injection exceeds some stipulated limit. If the new plant comes with dedicated solar generation for charging BESS, there is a possibility that any excess solar generation by this dedicated solar plant may also be injected during solar hours.

f) CTUIL may publish a list of available non-solar hour connectivity margins in such ISTS substations.

g) The requirement of providing connectivity to storage for discharging its excess energy after a full charge of the storage facility during solar hours may also be taken care of suitably. The margin available during solar hours also may be utilized by the new plant for any injection of power. Further, in case of ramp limitation resources during the initial and final hours of the solar hours, to cater to load in 2 peaks in winter, BESS can inject in solar hours, too.

h) Inclusion of Solar parks under these provisions.

i) One of the Discom suggested restricting the implementation time of Storage or other RE projects to 18 months so as to accelerate the process of unlocking the stranded capacity.

j) Any additional expenses and the investment required to meet the revised technical needs (CONN-TD Revision), re-routing of DTL, etc., should be entirely borne by the new connectivity grantee and common infra to be equitably shared.

k) To prescribe benchmark cost /transparent cost-sharing mechanism for the use of dedicated transmission lines and associated infrastructure and a long stop date for the signing of the sharing agreement.

l) In a multiple developer scenario with different PPA rates, QCA needs to be appointed.

m) Definition of Solar Hours and Non-Solar Hours needs to be defined, State wise, and a declaration of solar hours needs to be published by Grid-India.

7. We have considered the suggestions of the Stakeholders and accordingly propose the amendments to the GNA Regulations.

8. Clause (k) of Regulation 2.1 of the GNA Regulations provides as under:

"(k) "Connectivity" means the state of getting connected to the inter-State transmission system in accordance with these regulations;"

As per the above, Connectivity granted to an entity means such entity shall remain connected to the ISTS, whether it is transacting power or not.

9. Grid India has also suggested that both the existing and the new plant (solar + BESS) should be provided with 24x7 grid connectivity, without limiting their physical connectivity to the Grid to solar or non-solar hours only, with suitable mechanisms for limiting their net injection at any point of time.

10. Connectivity is availed by generating stations based on various fuels such as thermal (coal/gas) based or hydro based or wind-based or solar-based. A generating station that has been granted Connectivity (which gets converted into deemed GNA) avails injection scheduling rights equal to GNA for all hours of the day. We observe that inter alia, there can be the following types of REGS/ESS

    a) Pure Solar based

    b) Pure Wind based

    c) Solar +storage

    d) Wind +storage

    e) Solar +Wind +Storage - RHGS

    f) Standalone ESS

The amendment proposes to convert REGS and RHGS to having a solar-based source as an entity with restricted access with injection scheduling rights for solar hours and non--solar hours defined depending on solar-based capacity and wind-based capacity /ESS. It is proposed to restrict the injection scheduling rights for solar based generation during non-solar hours so that clear injection scheduling rights may be offered to another entity with a complementary source. While sharing such access between two entities, the rights of each of the entities based on solar-based sources and that based on wind-based source /ESS needs to be clearly provided for to avoid any disputes at a later stage.

11. NLDC shall publish the Solar time blocks and Non-Solar time blocks in advance on a weekly basis for each State and also make revisions between the week if required considering the weather situation or any other contingency.

12. Identified generating stations shall be converted into “Entities with restricted Access,” where the injection scheduling rights shall be restricted for solar hours or non-solar hours. The Entities with restricted Access are proposed to be of the following types:

a) The existing entities based on a solar source or an RHGS with a combination of solar source with another source, including ESS, which have been intimated in-principle or final grant of Connectivity with GNA effective or not effective, will be converted as an entity with restricted access corresponding to non-solar capacity during non-solar hours. Such entities shall have full injection scheduling rights during solar hours, and injection scheduling rights during non-solar hours shall be limited to connectivity capacity corresponding to non-solar sources such as wind or ESS. The balance connectivity quantum during non-solar hours shall be offered for granting additional Connectivity to another generating station, which is wind based or ESS.

b) New REGS (with or without ESS) based on a solar source or an RHGS with a combination of solar source with another source, including ESS, seeking Connectivity under Regulation 4.1 shall be granted Connectivity with restricted access.

c) An REGS (with or without ESS) based on Wind source or ESS, seeking Connectivity with restricted access with injection scheduling rights during non-solar hours. Such an entity may get connected to ISTS directly or through a sub-pooling station of another generating station. Such entity shall get clear scheduling rights during non-solar hours. However, if it wishes to inject power during solar hours by way of utilizing access to another REGS based on a solar source, it needs to enter into an agreement with REGS based on a solar source to utilize its margins by way of one of them becoming a lead generator or through the appointment of a QCA in terms of the Grid Code.

13. It is clarified that a wind-based project or ESS shall have the following options while getting connected to ISTS:

a) Make an application seeking Connectivity with restricted access during non-solar hours under Regulation 5.11(a) of these Regulations.

b) The existing entity makes an application under Regulation 5.2 of these regulations, adding such Wind /ESS at the same connection point, in which case the existing entity acts as a lead generator. In such case, the

scheduling shall be coordinated by the lead generator, and there shall be no identification for solar hours/non-solar hours for such capacity.

c) A wind-based source or ESS may choose to make an application under Regulation 4.1 with scheduling rights for a full 24 hours as applicable under prevailing Regulations. Such an application shall not be considered under the capacity released for non-solar hours since scheduling rights are to be given for the full 24 hours and shall be granted as per the availability of a transmission system or augmentation as applicable.

14. It is clarified that while conversion of the exiting entity based on a solar source or an RHGS with a combination of solar source with another source, including ESS into the Entities with restricted Access, if the balance capacity available for grant to other entity during non-solar hours comes to less than the 50MW, in such case, the existing entities will not be converted into the category of Entities with restricted Access. This is done so because the minimum eligible quantum required to seek Connectivity under the GNA Regulations is 50 MW.

15. It is proposed that irrespective of the restricted injection scheduling rights for solar hours or non-solar hours, 'Entities with restricted Access' shall be eligible to inject power under Ancillary services on the direction of the concerned RLDC or NLDC, as applicable. Further, such REGS with restricted access shall also be eligible to draw power from the grid for auxiliary consumption or charging in the case of ESS, for a full day.

16. It is observed that Regulation 5.2 of the GNA Regulations provides as follows:

"5.2. Notwithstanding anything contained in Regulation 5.1, a generating station or ESS', with prior approval of CTU, shall be eligible to add, within the quantum of Connectivity granted to it, additional generation capacity, or ESS, including the capacity owned by any other entity:

Provided that the generating station or the ESS being the existing Connectivity Grantee shall be responsible for compliance with the Grid Code and other regulations of the Central Commission for such additional generation capacity including ESS as 'Lead generator' or 'Lead ESS' in terms of Regulation 2.1 (y)(ii) or Regulation 2.1 (x)(ii), as the case may be :

……."

As per the above, a generating station or ESS, after approval of the CTU, may add additional capacity within the quantum of the Connectivity granted.

17. An REGS that is solar-based may request additional capacity under Regulation 5.2 or proposed Regulation 5.11 for utilization of non-solar hours injection scheduling rights. Under Regulation 5.2, the existing entity is the lead generator, and hence, any scheduling coordination for the incoming entity during solar hours or non-solar hours is the responsibility of such lead generator. Under Regulation 5.11, incoming wind source/ESS based entities seeking Connectivity with injection scheduling rights during non-solar hours may seek Connectivity independently (without the mandatory need for a lead generator) or QCA.

18. **Treatment of the existing entities**

a) Existing Connectivity applicants, which are based on solar sources, may be in different stages of application viz, in-principle grant, final grant, GNA effective shall be converted into 'Entity with restricted Access' with injection scheduling rights for solar hours. Such an entity shall be given three months of time after the effectiveness of the proposed amended Regulations to seek approval for additional generation capacity (with or without ESS) or ESS, after which it shall be converted into an entity with restricted access considering such an application.

After the expiry of three months, the balance connectivity quantum (released for non-solar hours) shall be made open for applicants based on Wind source /ESS for non-solar hours; the existing entity may also make an application under Regulation 5.2 or Regulation 5.11 to add additional capacity which shall be considered as per date and time stamp of the application, without any first priority to the existing entity.

Illustrative Examples for Treatment of the existing Connectivity Applicant are explained as under:

Suppose there is an RHGS 'A' (Solar -– 700 MW, Wind - 400 MW, ESS -– 200 MW) having a Connectivity of 1000 MW. Such entity shall be converted into an entity with restricted access with injection scheduling rights during solar hours for 1000 MW, and injection scheduling rights during non-solar hours will be 600MW (400 MW Wind + 200 MW ESS). Entity 'A,' within three months, may seek Connectivity for the remaining quantum of 400 MW for the addition of the ESS or Wind-based project under Regulation 5.2 or 5.11.

19. CTUIL shall publish the following information on its website within 30 days of notification this amendment:

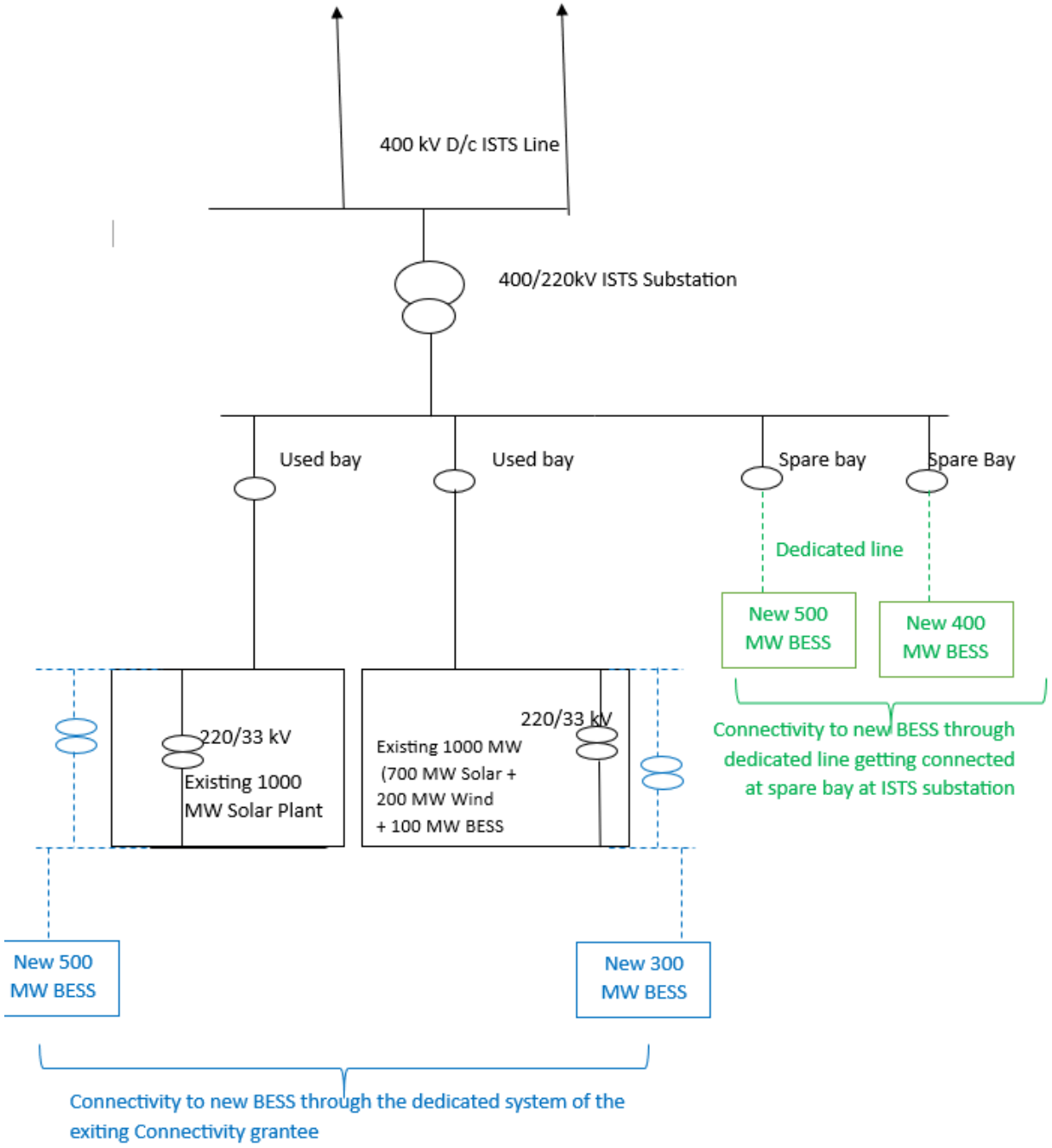
a) Substation-wise details of entities who have been intimated in-principle grant of connectivity, final grant of connectivity along with the details of the quantum of Connectivity granted, sources-wise configuration, and status of their GNA, i.e., GNA is effective or not.

b) the list of vacant bay(s) available at these sub-stations, where Connectivity can be granted to the entities based on Wind source (with or without ESS) or ESS.

20. **Grant of Connectivity to an Applicant based on Wind Power (with or without ESS) or standalone ESS with injection scheduling rights during non-solar hours**

a) An Applicant based on Wind source (with or without ESS) or ESS may seek Connectivity at an ISTS substation listed by CTUIL (under non-solar hours), under any of the routes under Clause (xi) of Regulation 5.8 of the GNA Regulation (LOA /LAND /LAND BG). Such Connectivity can be sought either through a separate dedicated transmission system to connect at a vacant terminal bay at the ISTS substation or at the terminal bay granted to an existing Connectivity grantee, which is an REGS (with or without ESS) based on the solar source or an RHGS with a combination of solar source.

b) In case of seeking Connectivity at the terminal bay granted to an existing Connectivity grantee, both of the entities, i.e., the existing entities and new entities, shall share the dedicated transmission system for which they will enter into an agreement. Illustration of such connectivity is depicted under the following diagram:



c) If the Connectivity is sought at the terminal bay granted to another entity, the existing entity shall share its dedicated transmission system with the new Applicant, and a mutual agreement is required to be signed between the new Applicant and the existing entity, including the charges towards using the dedicated transmission system in proportion to the quantum of Connectivity granted.

d) In case mutual agreement is not reached between the entities on the sharing of charges for dedicated systems, a benchmark cost is required to be indicated, such

that the agreement is facilitated. Accordingly, it is proposed that the Nodal agency shall publish an indicative capital cost of the various configurations of the transmission system (depending on at which voltage level the incoming entity is getting connected, viz 33kV/132 kV/220KV/ any other), which shall be the ceiling cost towards sharing of the dedicated transmission system (including sub-pooling stations) between new and existing Applicant.

e) In case of any modification or additional requirement due to the grant of Connectivity to the new Applicant, towards compliance with the Grid Code and other regulations of the Central Commission in the dedicated transmission system of the existing Applicant, the new Applicant shall be responsible for implementation of the same.

Sharing of Access rights by "Entities with restricted Access"

21. "Entities with restricted Access" shall have clear injection scheduling rights during solar hours or non-solar hours, depending on the type of entity. In case an entity based on Wind, which has been granted Connectivity under Regulation 5.11(a) (scheduling rights for non-solar hours), wishes to inject power during solar hours, it needs to utilize the balance access available with a solar-based entity at the same substation based on their mutual agreement.

22. For example

An entity 'A' based on Solar source is having connectivity of 500 MW,

On 'D-1' day 'A' schedules 250 MW injection for the period 6 AM to 8 AM for 'D' day. Since Connectivity (deemed GNA) is equal to 500 MW, 'A' can schedule up to 500 MW. Hence, 250 MW is the balance quantum left for scheduling.

Suppose another entity, 'B' (BESS), has been granted Connectivity Regulation 5.11(a) at the sub-pooling station of 'A,' and 'B' wishes to schedule a 200 MW injection during the same 6 AM to 8 AM period. In that case, 'B is required to enter into an agreement with 'A' with either of them acting as 'Lead generator' or appointing a QCA such that there is no dispute in case 'A' revises its schedule. There is a possibility that during the 'D' day at 4 AM, 'A' revises its injection schedule as 400 MW, in which case it is required to be coordinated with 'B' with respect to the balance available for it.

23. The definition of QCA under the Grid Code, 2023 is as under:

"…….

94.	*'Qualified Coordinating Agency' or 'QCA'*	*means the lead generator or any authorized agency on behalf of REGS or RHGS (as per GNA Regulations) including Energy Storage Systems connected to one or more pooling station(s) for coordinating with concerned load despatch centre for scheduling, operational coordination and deviation settlement;*

……..

45. (11) Scheduling of WS seller and ESS by QCA:

(a) The regional entity renewable energy generating station(s) or Projects based on energy storage system(s) connected at a particular ISTS substation or at multiple ISTS substations located in a State may appoint a QCA on their behalf to coordinate and facilitate scheduling for such generating stations or energy storage system(s). The responsibility of QCA is listed at Annexure-6 to these regulations.

(b) NLDC shall submit a procedure for aggregation of pooling stations for the purpose of combined scheduling and deviation settlement for wind or solar or renewable hybrid generating stations that are regional entities, within six (6) months of notification of these regulations for approval of the Commission.

(c) The QCA shall be registered with the concerned RLDC.

(d) QCA registered with the concerned RLDC shall, on behalf of wind, solar or renewable hybrid generating stations or Energy Storage System shall:

(i) Coordinate and facilitate scheduling of power with the concerned RLDC; and;

(ii) Undertake commercial settlement of deviations with the concerned RLDC in accordance with the DSM Regulations.

(iii) Submit a copy of the consent to the concerned RLDC certifying that QCA shall undertake all operational and commercial responsibilities on behalf of generating stations as per the CERC Regulations.

(e) The concerned wind, solar or renewable hybrid generating stations including energy storage systems shall indemnify the RLDC for any act of commission or omission on the part of QCA including compliance with the Grid Code and settlement of its financial liability in the pooled account.

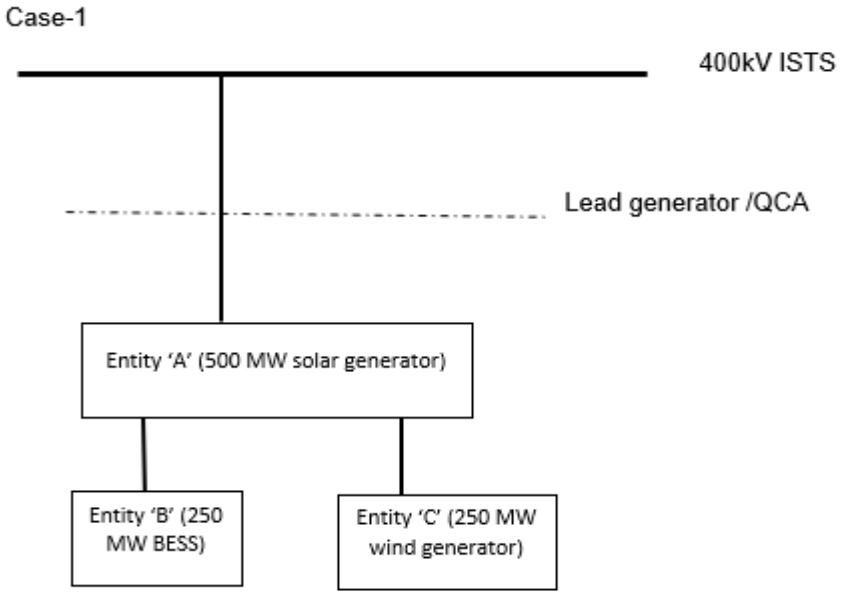
(f) Contract between the generating stations and QCA shall invariably contain provisions for internal dispute resolution, and any disputes arising between the generating stations and QCA shall be settled in accordance with the said mechanism.

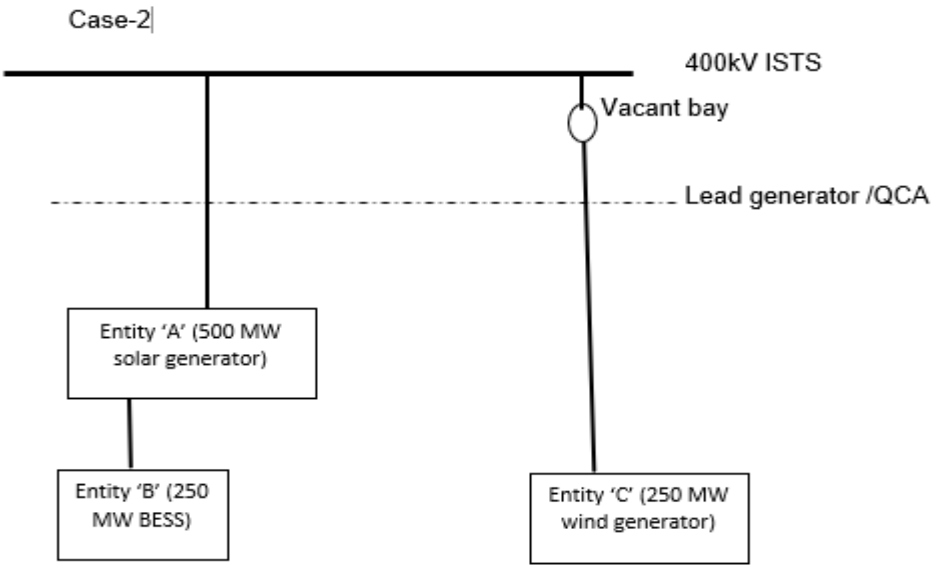
……."

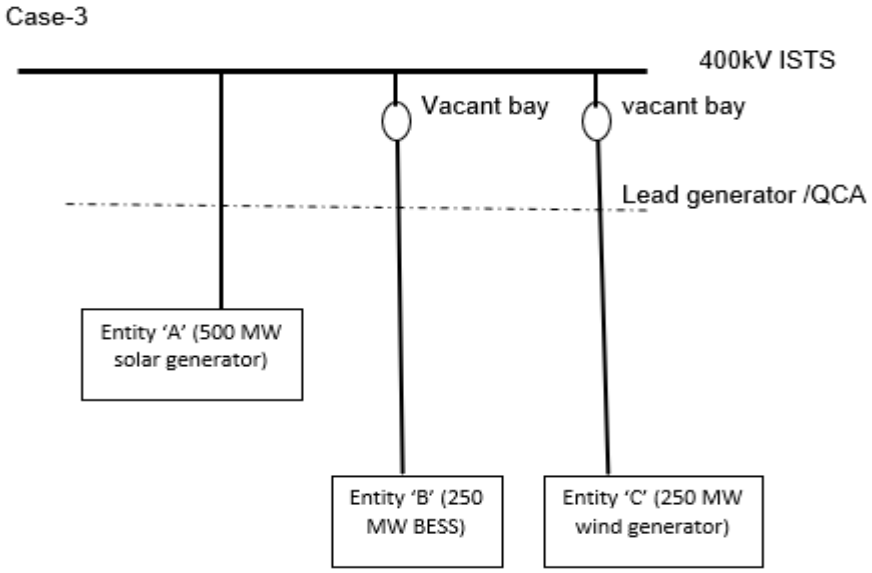
As per the above, Grid Code provides for the provision of a Coordinating agency called QCA.

24. Following is the example for utilization of the margin available during solar hours for scheduling of the power from the entity having scheduling rights for non-solar hours:

Suppose there is an Entity 'A' based on solar power having a Connectivity of 500 MW, i.e., having restricted access of 500 MW to schedule power during Solar hours. Further, there are two entities, Entity 'B' based on BESS and 'C' based on Wind, having Connectivity for 250 MW and 250MW, respectively, and having restricted access rights for scheduling of power during non-solar hours. In this case, during the solar hours, if there is a margin left after scheduling the power of Entity 'A', the other Entity 'B' and Entity 'C' can schedule their power during this period with the help of lead generator or QCA. There may be the following configurations:







As depicted above, there may be three types of cases: (i) Case-1, where both Entity 'B' and Entity 'C' are getting connected to the ISTS through the utilization of the dedicated transmission system of Entity 'A'; (ii) case-II where Entity 'B' is getting connected to the ISTS through the utilization of the dedicated transmission system of the Entity 'A', however, Entity 'B' is getting connected with ISTS through a separate dedicated transmission system at a vacant terminal bay at the same ISTS pooling station where Entity 'A' is connected, and (iii) case-III where both Entity 'B' and Entity 'C' are getting connected to the ISTS through a separate dedicated transmission system at a different vacant terminal bays at the same ISTS pooling station where Entity 'A' is connected. In this scenario, if all three entities have mutually agreed to appoint one of them as lead generator or to appoint a QCA for all scheduling and forecasting activities, such lead generator or QCA shall be responsible for carrying out activities as assigned under the Grid Code and shall facilitate the utilization margin

available in the transmission system to schedule power by Entity 'B' and Entity 'C' during solar hours also.

25. If the 'Entities with restricted Access' fail to appoint a lead generator or QCA, in such case, the injection schedule shall be on clear solar hours or non-solar hours considering the real-time operation complexity and uncertainty in scheduling.

Requirement of Conn BG by the REGS (with or without ESS) based on Wind source or ESS seeking Connectivity under Regulation 5.11(a)

26. Conn BGs under the GNA Regulations ensure the seriousness and sincerity in the implementation of the project and is security towards utilization of the investment made for the development of the transmission system.

27. Under the proposed Amendments, existing REGS based on solar source shall be converted into an entity with restricted access where access during non-solar hours shall be shared with another entity based on wind source/ ESS.

28. As per the suggestions received on the Staff Paper, it is proposed that if the existing entity shares its dedicated transmission system with another entity, the Conn-BG 2 and Conn-BG3 shall be shared among the existing and the new entity, in proportion to their quantum of Connectivity. The new Applicant based on Wind (with or without ESS) or ESS shall submit proportionate Conn-BG2 and Conn-BG3, and the existing Applicant shall submit the fresh reduced BGs. After receipt of the fresh BGs, the Nodal Agency shall return to the original BG of the existing Applicant. The new Applicant is required to submit the Conn-BG1 for full quantum, which is a fixed amount irrespective of the quantum of Connectivity sought.

    Such sharing of Conn-BGs shall not be applicable if the new entity seeks Connectivity through a separate dedicated transmission system at a vacant terminal bay of the ISTS substation.

    Example: Suppose there is an entity 'A' based on Solar Power, which has been granted Connectivity for 500 MW and submitted Conn-BG2 for Rs. 6 Crores and Conn-BG3 for Rs. 10 Crores.

    a) An Entity 'B' based on BESS seeks Connectivity for 300MW for injection of power during non-solar hours. Then entity 'B' needs to submit Conn-BG1 for Rs. 50 Lakh, Conn-BG2 for Rs. 1.8 Crores {((300/500)*6)/2} and Conn-BG3 for Rs. 3 Crores

{((300/500)*10)/2}. Entity ‘A’ needs to submit fresh Conn-BG2 for Rs. 4.2 Crores and Conn-BG3 for Rs. 7 Crores on which original BGs shall be returned.

29. **Compliance by the New Applicant under Regulation 5.11**

The Applicant seeking Connectivity for scheduling the power during non-solar hours shall comply with all the applicable provisions of the GNA Regulations, including the compliance with the intermediary milestones under Regulation 11A of the GNA Regulations. Since a specific dispensation is being provided in order to optimize the utilization of the transmission system and to promote serious players, it is mandated that the SCOD of the entity seeking such Connectivity shall be less than 18 months from the date of intimation of the in-principle grant of connectivity.

30. **Provision for drawal of the auxiliary power by a solar generator during non-solar hours or drawal of the charging power by an ESS during solar hours** –

a) We note that the existing entity based on a Solar source shall remain connected for a full day and may need to draw power for their auxiliary consumption during the non-solar hours. It is clarified that such entities shall continue to be eligible to draw auxiliary power during non-generation hours as they are presently drawing.

b) Similarly, an ESS having scheduling rights for the Non-Solar time blocks may need to draw charging power during solar hours, which it shall be eligible to draw.

31. Irrespective of the restricted access to schedule injection of power, the Entities with restricted Access shall be allowed to inject power on the directions of the RLDC or NLDC for Ancillary Services.

32. Considering the above discussions, amendments have been proposed as follows:

a) Addition of the definition of “Restricted Access,” “Solar time blocks,” and “Non-Solar time blocks” at Clause (ai-i), Clause (ak-i), and Clause (ak-ii), respectively, under Regulation 2.1.

b) Addition of new Regulation 5.11 for providing provisions in respect of Entities with Restricted Access

c) Addition of Annexure-IV for providing Modalities of Restricted Access for Solar Hours and Non-Solar Hours of the day

Amendment in respect of Regulation 5.2 of the GNA Regulations

33. Regulation 5.2 of the GNA Regulations provides as under:

> *"5.2. Notwithstanding anything contained in Regulation 5.1, a generating station or ESS', with prior approval of CTU, shall be eligible to add, within the quantum of Connectivity granted to it, additional generation capacity, or ESS, including the capacity owned by any other entity:*
>
> *Provided that the generating station or the ESS being the existing Connectivity Grantee shall be responsible for compliance with the Grid Code and other regulations of the Central Commission for such additional generation capacity including ESS as 'Lead generator' or 'Lead ESS' in terms of Regulation 2.1 (y)(ii) or Regulation 2.1 (x)(ii), as the case may be :*
>
> *……."*

As per the above, a generating station or ESS, after approval of the CTU, may add additional capacity within the quantum of the Connectivity granted. At present, the Regulations do not provide for the requirement of submission of Conn-BGs, intimation of the SCOD, or compliance with the intermediary milestones for such additional capacity.

34. There is a possibility that requests for such additions have been made with significant implementation time, and the same shall be in conflict with proposed amendments under Regulation 5.11 to ensure optimal utilization of the transmission system.

35. To address such challenges and to ensure the timely implementation of the project and to promote optimal utilization of the transmission system, it is proposed that application for additional capacity under Regulation 5.2 shall require submission of (i) Conn-BG1 and Conn-BG3, (ii) the SCOD of such capacity. Such entity shall also comply with all the intermediary milestones as per proposed Regulation 5.2.a. Further, in case such additional capacity is REGS (with or without ESS) or ESS (except PSP), SCOD shall not be more than 18 months from the effectiveness of the proposed amendments or the date of approval by the Nodal Agency, whichever is later.

36. The above provision shall also be applicable for the entities that have already made an application under Regulation 5.2 or have been granted approval by the Nodal Agency under Regulation 5.2 as on date of effectiveness of proposed amendments. Such entities are required to furnish SCOD for such additional capacity within a period of two weeks from the effectiveness of proposed amendments.

37. Considering the above, a new Regulation 5.2.a has been proposed to be added as under:

"5.2 a. The additional generation capacity under Regulation 5.2 of these regulations shall be subject to the following conditions:

(a) *Connectivity Bank Guarantee Conn-BG1 and Conn-BG3 under Regulation 8 of these regulations shall be furnished by the existing grantee for such additional generation capacity;*

(b) *The existing grantee shall intimate the scheduled date of commercial operation for such additional capacity;*

(c) *In case additional capacity for which approval is sought under Regulation 5.2 of these regulations is REGS (with or without ESS) or ESS (except PSP), the scheduled date of commercial operation for such additional capacity shall not be later than 18 months from date of approval by the Nodal Agency;*

(d) *The applicant shall furnish documents required under Regulation 5.8.(xi) of these Regulations, as applicable, for such additional capacity, and shall also be subject to other Regulations including Regulation 11A, 11B, 24, 24.6 of these Regulations.*

(e) *The entity which has already made an application or has been granted approval by the Nodal Agency under Regulation 5.2 of these Regulations prior to the date of effectiveness of these amendments, shall furnish the scheduled date of commercial operation for such additional capacity, within a period of two weeks from effectiveness of these regulations:*

Provided that, in case such additional generation capacity is REGS (with or without ESS) or ESS (other than PSP), the scheduled date of commercial operation for such additional capacity shall not be later than 18 months from date of effectiveness of these amendments or date of approval by the Nodal Agency, whichever is later .

Provided also that such additional generation capacity shall also comply with Clauses (a) to (d) of this Regulation, within a period of one month from the date of effectiveness of this Regulation, failing which approval for such additional generation capacity shall be revoked."

B. Amendments to restrict the change in ownership or change in shareholding of the company of the Connectivity Applicant

38. CERC has sought details from CTUIL about the change in ownership of the connectivity applicants from the date of making an application to CTUIL to the COD of the generating station. CTUIL has submitted the same, wherein, in a number of cases, shareholding has changed outside the group company.

39. We note that once Connectivity is granted to an entity on submission of Conn-BGs, it is on a promise that such an entity shall commission its generating station, whereby on declaration of COD, Conn-BGs are returned back in specified time. A number of applicants apply for the same substation, but only a few are able to avail of the Connectivity due to the scarce resources of Connectivity. In such a situation, an entity that obtains Connectivity but does not commission any project but sells such an SPV with Connectivity to another entity shows prima facie that it is non-serious or lacks commitment to implementing the project while seeking Connectivity.

40. We are of the view that there is a need to monitor the transfer of ownership of the Connectivity applicant prior to the COD of the project to ensure that serious, committed, and sincere applicants obtain Connectivity and commission the project.

41. We observe that REIAs such as SECI also have included restrictions in a change in the shareholding pattern of project developers under various RFS. We have perused a sample Request for Selection (RfS) documents issued by SECI for the development of RE Projects, extract of one of such RfS No. SECI/C&P/IPP/13/0019/24-25 dated 30.10.2024 quoted as under:

"22 Shareholding by the Project Promoter

22.1 The Bidder shall provide complete information in their bid in reference to this RfS about its promoters and upon issuance of LoA, the RPD shall provide information about its promoters and their shareholding in the Company before signing of PPA with SECI.

22.2 No change in the controlling shareholding of the Bidding Company or Bidding Consortium shall be permitted from the date of submission of response to RfS till the execution of the PPA. However, in case the Project is being set up by a listed Company, this condition will not be applicable. Following shall not be considered as change in shareholding as mentioned above:

i. Infusion of Fresh equity capital amongst the existing shareholders/promoters at the time of Bid Submission to meet equity requirements.

ii. Conversion of CCDs, CCPs etc. already issued to existing shareholders.

iii. Death, marriage, Divorce, minor attaining major (any legal heir who was minor at the time of signing of PPA), insolvent, insane of existing shareholders.

iv. Transfer of shares within the members of Immediate Promoter Group only.

v. Transfer of shares to IEPF.

vi. Issue of Bonus Shares.

22.3 ***In case of the Successful Bidder itself executing the PPA, it shall ensure that its promotors shall not cede control (Control shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors) of the Bidding Company/Consortium until 1 year after the SCSD****, except with the prior approval of SECI.*

22.4 ***In case of companies having multiple promoters (but none of the shareholders having more than 50% of voting rights and paid up share capital), it shall be considered as a company under joint control. In such cases, the shareholding pattern in the company as submitted at the time of bidding, shall be maintained upto 1 year after SCSD****.*

22.5 ***In case of Project being executed through SPVs: The Successful Bidder, if being a single company, shall ensure that its shareholding in the SPV/ Project Company executing the PPA shall not fall below 51% at any time prior to 1 year after SCSD, except with the prior approval of SECI. In the event the Successful Bidder is a consortium, then the combined shareholding of the consortium members in the SPV/ Project Company executing the PPA, shall not fall below 51% at any time prior to 1 year after SCSD, except with the prior approval of SECI. Further, the successful bidder shall ensure that its promoters shall not cede control of the bidding company till 1 (one) year from the SCSD****, except with the prior approval of SECI.*

22.6 Any change in the shareholding after the expiry of 1 year after SCSD can be undertaken under intimation to SECI.

22.7 In the event of Change in Shareholding/ Substitution of Promoters triggered by the Financial Institutions leading to signing of fresh PPA with a new entity, an amount of INR 10,00,000 (Indian Rupees Ten Lakh per Project) +applicable taxes per transaction as Facilitation Fee (non-refundable) shall be deposited by the developer to SECI."

As per the above, change in ownership/shareholding of the Successful Bidder or the SPV implementing the project is restricted up to 1 year after the Scheduled Commencement of Supply Date (SCSD).

42. In light of the above discussion, it is proposed that change in controlling ownership/shareholding in the Company of Connectivity grantee or the SPV executing the project shall restricted till the COD of the project.

43. Further, we also observe that if there is a requirement that a change of ownership/ shareholding is inevitable due to a specific reason, CTU may allow such change with reasoned approval, under information to the Commission.

44. Accordingly, a new Clause (6) in Regulation 11A is proposed to be added as under:

"(6) Any changes in shareholding pattern of the Connectivity grantee upto CoD of the project shall be subject to the following:

(a) The promoters of the Connectivity grantee shall not cede control (where control

shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors) of the Company.

(b) In case Connectivity grantee has multiple promoters (but none of the shareholders have more than 50% of voting rights and paid up share capital), the shareholding pattern shall be maintained and cannot be changed upto COD of the project.

(c) Any change in shareholding pattern other than covered in subclauses (a) and (b), shall require prior approval of the nodal agency and shall be filed for information of commission within 45 days of such approval. Nodal Agency may allow such application considering the practical requirement for change in shareholding.

(d) In case any change in control or shareholding pattern of the Connectivity grantee is carried out in contravention to sub-clauses (a) to (c) of this Clause, the Connectivity shall be revoked, Bank Guarantee submitted under sub-clause (c) of Clause (vii) or sub-clause (c) of Clause (xi) of Regulation 5.8 of these regulations shall be encashed, and Conn-BG1, Conn-BG2 and Conn-BG3 shall be treated in termsof Regulation 24.2 or Regulation 24.3 of these regulations, as applicable."

C. Amendments to allow the STU to seek different dates of start of additional GNA in a year

45. Regulation 19.2 of the GNA Regulations provides as under:

"19.2. STU, on behalf of intra-State entities including distribution licensees, may apply, once in a financial year (starting from the financial year following the financial year in which these regulations have become effective) by the month of September each year, for additional GNA for the next 3 (three) financial years (with entity-wise segregation) indicating GNA within the region and from outside the region, as stipulated in the 'Detailed Procedure for Connectivity and GNA', issued in accordance with Regulation 39.1:

Provided that such additional GNA quantum to be added in each of the next three financial years shall be applicable from a specified date of the respective financial year."

As per above, STU, on behalf of intra-State entities, may apply, once by the month of September each year, for additional GNA for the next 3 (three) financial years, which shall be applicable from a specified date of the respective financial year.

46. Vide Petition No. 434/MP/2024, the requirement of different start dates in an application by STU was brought to our notice. STU makes an application for additional GNA on behalf of intra-State entities. Suppose a State has 3 distribution licensees A, B, and C, where a distribution licensee A needs additional GNA from 1.4.2026, 'B' needs additional GNA from 15.7.2026, and 'C' needs additional GNA from 1.11.2026, STU should be able to apply such additional GNAs from the different specified dates.

47. Vide Order dated 11.01.2025 in Petition No. 434/MP/2024, the following was noted :

"14. We find merit in the Petitioner's request for additional GNA for different quantums from different dates in a financial year, based on their load requirement, as the requirement of GNA may vary across the same financial year due to increasing load in different phases. Further, an intra-state entity other than the distribution licensee that applies for GNA/ additional GNA through STU, may not have the GNA start date coinciding with the start date of additional GNA/ GNA of other intra-state entities in a financial year. Accordingly, the Petitioner should be allowed to seek additional GNA for different quantums and from different start dates of such additional GNA in a financial year.

15. However, we also agree with the submission of CTUIL that the number of start dates that an STU can incorporate in an application for a particular Financial Year should be limited to avoid the complexity in the processing of the application. In view of the CTUIL submission regarding applying for additional GNA from a specified start date to enable systematic planning of the ISTS infrastructure by aligning with anticipated STU's demand, we are of the view that any additional GNA on different start dates in a financial year will be granted based on the system availability. If any of the additional GNA sought with multiple start dates cannot be granted from the sought dates, the same will be granted upon consideration of CTUIL's planning of the ISTS infrastructure after aligning with anticipated STU's demand. The GNA-seeking entity, i.e., STU, while seeking additional GNA from different start dates, will have to bear this issue in his mind.

……

17. Considering the above, we allow the prayer of the Petitioner to apply by way of a fresh application for the grant of additional GNA with different start dates (three different start dates) for FY 2025-26……..

18. We also direct the Commission's staff to process a proposal for amendment to the GNA Regulations so that a considered view may be taken on the grant of additional GNA by STUs with different start dates in a financial year or through different applications for each start date and the number of such applications that can be considered for applying additional GNA in a financial year, etc."

As per the above, the Commission found merit in seeking additional GNA for different quantums from different dates in a financial year and also directed the Commission's staff to process a proposal for amendment to the GNA Regulations on this issue so that a considered view may be taken.

48. We note that there is a need to allow the STU to seek the additional GNA for different quantums from different dates in a financial year, keeping in view the requirement of multiple intra-State entities within a State on whose behalf STU may apply. However, there is a need to limit the number of dates that may be sought in a year for ease of processing the applications by the Nodal Agency. Accordingly, it is proposed that considering approximately one start date of GNA for each quarter, four start date of GNA in a Financial year in a single application has been proposed. The intra-State entity may accommodate their requirement of GNA under such dates through mutual discussion with the STU. It is not necessary that such four dates have to be mandatorily in different quarters and may be in the same quarter also, which is to be decided by STU as per the requirement of intra-State entities.

49. Considering the above, the proviso in Regulation 19.2 of the GNA Regulations has been proposed to be substituted as under:

"Provided that such additional GNA quantum to be added in each of the next three financial years shall be applicable from a specified date(s) of the respective financial year subject to a maximum four dates for a year."

D. Amendments to mandate the Renewable Power Park Developer to submit the details of the SCOD for generating stations to be set up in the Renewable Power Park

50. Clause (d) of Regulation 24.6 of the GNA Regulations provides as under:

"(d). Connectivity granted to a Renewable Power Park developer shall be revoked for the corresponding capacity, if the generating station(s) within the Power Park fails to achieve COD on or before,

i. Scheduled date of commercial operation of the generation project as per LOA or PPA as extended or delayed commissioning permitted by the Renewable Energy Implementing Agency or the distribution licensee or the authorized agency on behalf of distribution licensee, as the case may be.

ii. Six months after the scheduled date of commercial operation for generating station(s) being set up without LOA or PPA."

As per the above, Connectivity Granted to RPPD shall be revoked for Corresponding capacity if the generating station(s) within the Power Park fails to achieve COD on or before (i) SCOD or extended SCOD of the generation project as per LOA or PPA, or (ii) Six months after the SCOD for generating station(s) being set up without LOA or PPA.

51. CTUIL, vide its Letter dated 11.03.2024, has raised the following difficulty in respect of the implementation of Regulation 24.6 of the GNA Regulations:

"1. Revocation of Connectivity as per para 24.6 of GNA Regulations, in case of grant of Connectivity to a Renewable Power Park Developer (RPPD).

Para 24.6 of the GNA Regulations states the following:

……

From the above, it can be observed that Connectivity Granted to RPPD shall be revoked for Corresponding capacity if the generating station(s) within the Power Park fails to achieve COD on or before, (i) SCOD of the generation project as per LOA or PPA as extended or delayed commissioning permitted by the REIA or the distribution licensee or the authorised agency on behalf of distribution licensee, as the case may be (ii) Six months after the SCOD for generating station(s) being set up without LOA or PPA.

However, as per GNA Regulation, RPPD is not mandated to furnish any LOA or PPA while applying for grant of Connectivity, as that has been mandated for REGS. Accordingly, the Connectivity to RPPD is granted based on the start date of Connectivity as mentioned by RPPD in its application and availability of Transmission System for effecting the Connectivity to RPPD. In view of the above, it is proposed to modify clause (d) of Para 24.6 of the GNA Regulation as detailed below:

"d. Connectivity granted to a Renewable Power Park developer shall be revoked for the corresponding capacity, if RPPD fails to achieve COD on or before,

i. six months from the start date of Connectivity as intimated under intimation for final grant of Connectivity under Regulation 9."

As per the above, CTUIL raised the concern that in the case of RPPD, they are not mandated to furnish any LOA or PPA while applying for a grant of Connectivity, and accordingly, CTUIL proposed revocation of the Connectivity of the RPPD after six months from the start date of Connectivity as intimated under intimation for final grant of Connectivity.

52. We observe that Renewable Power Park provides SCOD for the Park and the start date of Connectivity while seeking the Connectivity. RPPD is not mandated to provide as to when the generating stations within the park are planned to be commissioned. This leads to a situation where some of the Renewable Power Parks have nil or minimal generation capacity set up, leading to suboptimal utilization of transmission system and revocation of Connectivity in such cases, cannot be resorted to since SCOD of generating station within the park has not been made available.

53. In light of the above, it is proposed that RPPD shall provide the SCOD of the generating stations set-up in the Park to the Nodal Agency. Accordingly, a new sub-clause (d) is proposed to be inserted after sub-clause (c) in Clause(vii) of Regulation 5.8 of the Principal Regulations as under:

"(d) The Renewable Power Park Developer shall furnish the scheduled date of commercial operation of the generating stations under the Park prior to grant of final connectivity."

54. CTU also submitted that revocation in the case of RPPD is not linked to the effective date of GNA, as the case of REGS is covered under Regulation 24.6(1)(a). Accordingly, Regulation 24.6(1)(d) (except sub-clauses (i) and (ii) is proposed to be substituted as under:

"(d)Connectivity granted to a Renewable Power Park developer shall be revoked for the corresponding capacity, if the Connectivity and corresponding GNA has been made effective in terms of Clause (a) of Regulation 22.4 of these regulations and generating station(s) within the Power park fails to achieve COD on or before, "

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