



एनटीपीसी लिमिटेड

(भारत सरकार का उद्यम)

NTPC Limited

(A Govt. of India Enterprise)

केन्द्रीय कार्यालय/ Corporate Centre

Ref. No. 01:CD:

Date : 15.02.2022

The Secretary
Central Electricity Regulatory Commission
3rd & 4th Floor, Chanderlok Building
36, Janpath,
New Delhi-110001

Sub: NTPC Submissions on Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021

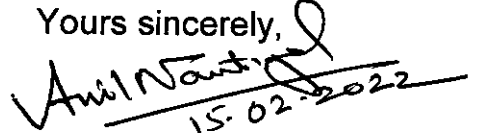
Sir,

Hon'ble Commission vide its notification dated 16.12.2021 has published the Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021 and invited views/ comments/ suggestions/ objections from various stakeholders on the proposed Draft Regulations, 2021.

In this regard, please find enclosed comments/ suggestions of NTPC on the Central Electricity Regulatory Commission (Connectivity and General Network Access to the Inter-State Transmission System) Regulations, 2021.

Thanking you,

Yours sincerely,


15.02.2022
(ANIL NAUTIYAL)

Executive Director (Commercial)

NTPC's Submission on Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021

1. Regulation No. 2.1: Definition

The term "Buying entity" has been used but the same has not been defined. For the sake of clarity, the Definition of "Buying Entity" may be provided.

2. Regulation No. 4.1: *The following entities shall be eligible as Applicants to apply for grant of Connectivity or for enhancement of the quantum of Connectivity:*

Submission: As increase in renewable energy in the grid would lead to shrinking inertia, reduced short circuit strength, and decreased dynamic reactive power reserves, there will be requirement of additional reactive power, voltage support, system inertia and short circuit strength. Synchronous Condensers provides not only dynamic reactive power support but can also provide necessary short circuit power & inertia also which adds to higher reliability in the grid. Therefore, operation of retiring thermal power plants (coal and gas) as synchronous condensers may be facilitated as reactive power support ancillary services providers and enabling provision may be considered in the instant Regulation.

3. Regulation No. 8.1: *Connectivity Bank Guarantee shall be submitted by an Applicant in three parts, Conn-BG1 amounting to Rs. 50 lakhs, and Conn-BG2 and Conn-BG3, as provided in Regulations 8.2 and 8.3 of these regulations.*

Submission: Currently furnishing of BG by the generators who have already tied up for sale of power on ex bus basis by signing the PPA for full capacity or for CGS where power allocation is done by Gol are exempted from furnishing the BG. For these Generators the sale of power is on exbus basis and buyers shall be making their own arrangement for evacuation of power. Further the liability of payment of transmission charges shall be with buyers only and buyers have been identified. The requirement of furnishing the BG shall add to the system cost without achieving the purpose. Therefore, these generators may not be burdened with cost of furnishing BG and the provision of exemption of furnishing the BG in Connectivity Regulation 2009 may be retained.

Accordingly, the Clause may be modified as:

Connectivity Bank Guarantee shall be submitted by an Applicant in three parts, Conn-BG1 amounting to Rs. 50 lakhs, and Conn-BG2 and Conn-BG3, as provided in Regulations 8.2 and 8.3 of these regulations.

Provided In case of applicants who have already firmed up the entities to whom electricity is proposed to be supplied for the entire quantum of power for which connectivity has been sought through signing of PPA or, in the case of Inter-State Generating Stations owned by the Central Government or Ultra Mega

Power Projects coming up through the initiative of the Central Government, where allocation of power to various beneficiaries as notified by Central Government, the applicant shall not be required to submit any Bank Guarantee(BG).

4. Regulation No. 8.3 (d):

The amount for which Conn-BG2 is to be furnished as per clause (b) of this Regulation, shall be equal to estimated cost of ATS and terminal bay(s) and the timeline for completion of ATS and terminal bay(s) shall be based on the scheduled date of commercial operation for such ATS and terminal bay(s).

Submission: Presently as per the extant Regulation the maximum value of the BG to be furnished is Rs. 5 lakhs /MW. This helps in advance, in identifying and incorporate suitably the cost and risk involved of furnishing the BG in tariff based competitive bidding. Further as per the proposed provisions the total cost of ATS is to be shared among the number of developers participating in these substations hence in case of limited number of developers participating, BG amount may become significantly higher. In view of above, it is requested to mention an upper limit as per current provision of Connectivity Regulation 2009.

Accordingly, the Clause may be modified as:

(d) The amount for which Conn-BG2 is to be furnished as per clause (b) of this Regulation, shall be equal to estimated cost of ATS and terminal bay(s) or 5 Lakh/MW whichever lower and the timeline for completion of ATS and terminal bay(s) shall be based on the scheduled date of commercial operation for such ATS and terminal bay(s).

5. 15 Transfer of Connectivity

15.2 Where the Connectivity grantee is an REGS, it may split its Connectivity in parts, after COD of such part, subject to the minimum capacity in accordance with Regulation 4.1 of these regulations, and submit the installed capacity of each part to the Nodal Agency

Submission: The provision of splitting the connectivity in parts may also be extended to thermal generating stations. Similarly, the effective date of GNA should may also be allowed as per the proposed CoD schedule of the generator.

6. Regulation No. 8.3 (b):

*The Nodal Agency, **within 6 (six) months** of furnishing of Conn-BG1 as per clause (a) of this Regulation, shall intimate to such entity, (i) amount of Conn-BG2 to be furnished towards ATS and terminal bay(s), which shall not exceed the estimated cost intimated under Regulation 7.2 of these regulations, (ii) the timeline for completion of ATS and terminal bay(s), and (iii) firm date of start of Connectivity:*

Submission: The timeline for intimation of Conn BG-2 amount and ATS system i.e. six months is significantly high particularly for RE Projects considering renewable project implementation timeline. It is suggested to reduce timeline to 3 months for ATS system intimation. Therefore, the clause may be modified as:

*The Nodal Agency, **within 3 (three) months** of furnishing of Conn-BG1 as per clause (a) of this Regulation, shall intimate to such entity, (i) amount of Conn-BG2 to be furnished towards ATS and terminal bay(s), which shall not exceed the estimated cost intimated under Regulation 7.2 of these regulations, (ii) the timeline for completion of ATS and terminal bay(s), and (iii) firm date of start of Connectivity:*

7. Regulation No. 16.2:

Conn-BG2 and Conn-BG3 shall be returned in five equal parts over five years corresponding to the generation capacity which has been declared under commercial operation by the Connectivity grantee. Similarly, Regulation No. 37.3.(3)(d) provides that:

Regulation No. 37.3.(3)(d):

In case, the entity exercises the option (i) of clause (a) of this Regulation to convert the Long term Access granted under the Connectivity Regulations as GNA deemed to have been granted under these regulations, the Construction Bank Guarantee already furnished shall be treated as Conn-BG1 for Rs 50 lakhs and balance as Conn-BG2 under these regulations. In case no construction bank guarantee has been furnished pursuant to signing of PPA and PSA, it shall furnish Conn-BG1 for Rs. 50 lakhs and Conn-BG3 @ Rs. 2 lakh/MW corresponding to such Long term access quantum within two (2) months of exercising the option (i) under clause (a) of this Regulation.

Submission: From Explanatory Memorandum it is understood that BG from generator is to ensure commitment of generator to establish/commission the plant so that the transmission investment is not stranded and since CoD of the plant establishes the investment/commitment made by Generator, hence after the commencement of the commercial operation Generators should not be burdened with cost of furnishing the BGs. Therefore, the clause may be modified as

Conn-BG2 and Conn-BG3 shall be returned within one month corresponding to the generation capacity which has been declared under commercial operation by the Connectivity grantee

8. Regulation 8.2 (c)

Conn-BG1, Conn-BG2 and Conn-BG3, as applicable, shall be furnished within 1 (one) month of intimation of in-principle grant of Connectivity, failing which the

application for Connectivity shall be closed and application fee shall be forfeited.

Regulation 8.3

a) The entity that has been intimated in-principle grant of Connectivity, shall submit its consent for execution of ATS and terminal bay(s), as intimated under Regulation 7.2 of these regulations, along with Conn-BG1, within one month of intimation of in-principle grant of Connectivity, failing which the application for Connectivity shall be closed and application fee shall be forfeited.

e) The entity that has been intimated in-principle grant of Connectivity shall furnish Conn-BG2 within 1 (one) month of intimation by the Nodal Agency under sub-clause (b) of this Regulation, failing which application for Connectivity shall be closed, Conn-BG1 shall be encashed and application fee shall be forfeited.

Submission: Since internal and external procedural formalities including with bank are involved in submission of BG therefore a time period of minimum 90 days may be provided in all cases for submission of BG, before the process of invoking the connectivity granted is initiated.

9. Regulation 10

General Submission: A generator can firm up its scope of work of the generating station relating to evacuation voltage level, number of line bays, switchyard fault levels, shunt reactor requirements only after connectivity is applied and in principal connectivity is granted by Nodal Agency. This implies that connectivity application to CTU has to be made during initial stage of project planning and also for cost estimation. Present regulation proposes to cancel the connectivity in case CON BG1 or CON BG1/2/3 are not furnished within one month of intimation of connectivity. Further in case of cancellation Con-BG1 is proposed to be encashed.

Considering the realistic timelines involved in award and execution of large thermal generation projects, procedure and timeline specified for connectivity may please be reviewed and suitable provision of separate Advance intimation procedure or Stage-I and Stage-II connectivity applications may be added for firming up the basic inputs required by generators by paying connectivity application fee only.

While determining the ATS of the generator, suitable provision may be provided for the availability of Start-up line for fulfilling the requirement of start up power as per the commissioning schedule of the generator.

10. Regulation 10.1

An entity which has been intimated the final grant of Connectivity, shall furnish technical connection data, inter alia, generator data for fault studies, dynamic simulation data, details of data and voice communication, to the Nodal Agency

as stipulated in the Detailed Procedure for Connectivity and GNA issued in accordance with Regulation 39.1.

Submission: As the details sought under this clause is OEM specific and depend on equipment selected by the contractors (for example relay make, generator transient parameters, governor, exciter model etc.), technical details sought cannot be furnished within this timeline considering the timeline of award and subsequent detailed engineering. As per Connectivity Regulations 2009, this data is to be submitted 2 years before actual physical interconnection (con 4 and 5A). By that time based on design engineering process most of the systems are firm however in the present regulation connectivity agreement is proposed to be signed before start of ATS execution. To match the above timeline, it is suggested that such technical details pertaining to generator may be taken 6 months before date of start of connectivity and may be appended to connectivity agreement suitably later on.

11. Regulation No. 22.2 (a):

Connectivity grantees covered under Regulation 4.1 of these regulations shall be deemed to have been granted GNA, equal to the quantum of Connectivity from the start date of Connectivity.

Submission:

- I. As per the current Regulation, the Generator is allowed to draw start up power at least 15 months before the expected date of first synchronization for carrying out the commissioning activities, the suitable provision may also be provided in the proposed draft Regulations in this regard.
- II. As per the present arrangement the generator is required to have the connectivity line from the start date of commissioning activities and the ATS is required for the power evacuation from the scheduled date of Commercial operation. The availability of transmission lines may be clearly laid down so that in case of delay, generator is aware of transmission charges liability upfront.

12. Regulation 18: Deemed Grant of GNA

*On the date, these regulations come into force
(f) Entity(ies) covered under Regulation 4.1 of these regulations where Long Term Access granted to such entity or to its identified buyer, under the Connectivity Regulations has become effective, shall be deemed to have been granted GNA equal to the quantum of such Long term Access, under these regulations.*

Submission: Since in general, under the proposed new Regulation, the quantum of GNA corresponds to the installed capacity therefore in case of existing stations also GNA equal to the corresponding installed capacity may be granted to maintain the parity, instead of equal to the quantum of such Long term Access which is installed capacity minus normative auxiliary power consumption.

13. Regulation No. 22.2 (d):

Entities covered under Regulation 4.1 and clause (iii) of Regulation 17.1 of these regulations shall furnish one-time GNA charge for Rs. one lakh per MW for the quantum of GNA one month prior to the start date of GNA..... The proceeds of such one- time GNA charge shall be used for reducing Monthly Transmission Charges under the Sharing Regulations

Submission: Since for the promotion of renewable energy, RE Generators have been provided waiver of ISTS transmission charges, payment of onetime GNA charge may also be waived for RE Generators.

14. Regulation No. 27: National Open Access Registry (NOAR)

27.1 (v) NOAR shall:

Provide Dash Board facility with real time information to RLDCs and SLDCs and act as a repository of information related to T-GNA including standing clearance issued by RLDCs and SLDCs, availability of transmission corridor, pending applications, and T-GNA granted and rejected;

Submission: The Dash Board facility with real time information to RLDCs and SLDCs such as standing clearance issued by RLDCs and SLDCs, pending applications, and T-GNA granted and rejected and in particular to availability of transmission corridor may be extended to buying entities also so that the applicant can plan for TGNA and apply accordingly.

15. Regulation No. 26.1:

The following entities shall be eligible as Applicants to apply for T-GNA to ISTS

(i) -----

(vi) Standalone ESS.

Submission: Since as per the proposed regulation the standalone ESS have been made eligible for TGNA but the Generating stations (Thermal/RE) with ESS may also be required to draw the power from the grid for the ESS hence they may also be made eligible for TGNA as allowed for standalone ESS.

Accordingly, the clause may be modified as:

The following entities shall be eligible as Applicants to apply for T-GNA to ISTS

(i) -----

(ii) Standalone ESS

(iii) *Generating station(s), including REGS(s), with ESS, with an installed capacity of 50 MW and above.*

16. Regulation No. 26.1 (a)(iv):

Eligibility for Temporary GNA: Generating station including Renewable Energy Generating Station for meeting its auxiliary consumption or start-up power or for meeting its supply obligations in terms of clause (3) of Regulation 6 of the Power Market Regulations.

Submission: Presently for the stations under shut down the power for running the mandatory auxiliaries / start up power is drawn from grid under DSM. It may please be appreciated that due to certain emergencies plant may be under shutdown condition and certain auxiliaries are required to be run on mandatory basis or unit under RSD is to be start up immediately due to beneficiary/grid requirement by drawing start up power from the grid. The requirement of arranging the power through TGNA shall add to the process time and at times power may not be available through TGNA (due to non-availability of Tr. Corridor from injection point to drawl point) while power shall continue to be required for running the mandatory auxiliaries. Though the Generators have been made eligible for taking TGNA for meeting APC and start up power requirement however drawl of power for above purpose should continue to be allowed without TGNA.

Further as per present mechanism, the auxiliary consumption or start up power of Renewable energy Generating Station is accounted in net-metering under connectivity/LTA approved. Therefore, the existing accounting arrangement is also required to be continued.

17. Regulation No. 5.6:

An Applicant may apply for grant of Connectivity at (i) a terminal bay of an ISTS sub-station already allocated to another Connectivity grantee or (ii) switchyard of a generating station having Connectivity to ISTS, with an agreement duly signed between the Applicant and the said Connectivity grantee or the generating station having Connectivity to ISTS, as the case may be, for sharing the terminal bay or the switchyard and the dedicated transmission lines, if any.

Submission: The model agreement may be provided by CTU in their detailed procedure.

18. GENERAL COMMENT:

- I. Stage-I and Stage-II Connectivity procedure for RE projects may be retained. Since, the RE project implementation time is very less, Stage-I connectivity approval helps in getting prior information before actual project development. Further RE projects are developed through specified bidding guidelines where bidding is conducted by

Implementing Agencies, therefore enabling provision need to be incorporated for RE project covering procedures of stage I&II connectivity.

- II. To meet the country target of 500 GW by 2030, advance action is required for identification of high-capacity corridor transmission system and its integration with main transmission corridor which is required to be evolved upfront in synchronism with upcoming RE capacity. A suitable Regulation may be incorporated for having a comprehensive plan for planning based on RE potential zones to meet the evacuation arrangement within timeline of RE project for faster addition of RE capacity in India.
- III. At times it may happen a generating station which is having connectivity to the STU network and ISTS system both but wants to sell some quantum of power having connectivity with STU through ISTS system. Since injection beyond the quantum of connectivity granted in ISTS system is not permitted, Suitable facilitation in this regard may be provided.
- IV. Similarly suitable facilitation may be provided for the intrastate generator, for selling its power through ISTS since the said generator is not having the connectivity with ISTS and Generators are not eligible for TGNA.