CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021

CERC notified a draft on "Connectivity and General Network Access to the inter-State Transmission System Regulations, 2021" on 16th December, 2021. The key highlights of this draft Regulation are given below:

Objective: These Regulations aims to facilitate non-discriminatory open access to licensees or generating companies or consumers for use of inter-State transmission system through General Network Access and to consolidate the regulations on the subject.

Connectivity: Eligibility for Connectivity to ISTS

Following entities are eligible to apply for grant of Connectivity or for enhancement of the quantum of Connectivity:

- (a) Generating station(s), including REGS(s), with or without ESS, Standalone ESS with an individual/aggregate installed capacity of 50 MW and above through a Lead Generator or a Lead ESS:
- (b) Captive generating plant with capacity for injection to ISTS of 50 MW and above;
- (c) Renewable Power Park Developer;
- (d) REGS or standalone ESS with an installed capacity of 5 MW and above applying for grant of Connectivity to ISTS through the electrical system of a generating station already having Connectivity to ISTS.

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,

Two or more Applicants may apply for grant of Connectivity at a common terminal bay with an agreement duly signed by such Applicants for sharing the dedicated transmission lines and the terminal bay(s).

Connectivity Bank Guarantee: Connectivity Bank Guarantee shall be submitted by an Applicant in three parts,

- 1) Conn-BG1 amounting to Rs. 50 lakhs
- 2) Conn-BG2 (per terminal bay) Rs. 2Cr.(132 kV)/3Cr.(220/230 kV)/6Cr.(400 kV)/12Cr.(765 kV)
- 3) Conn-BG3 @ Rs. 2 lakh/MW, for the existing ISTS

Conn-BG1, Conn-BG2 and Conn-BG3 shall be issued by any scheduled commercial bank recognized by the Reserve Bank of India, in favour of CTU.

Transfer of Connectivity: A Connectivity grantee shall not transfer, assign or pledge its Connectivity and the associated rights and obligations, either in full or in parts, to any person. Provided that Connectivity granted to a parent company may be utilised by its subsidiary and Connectivity granted to a subsidiary may be utilised by its parent company.

General Network Access (GNA): Eligibility for GNA

The following entities shall be eligible as Applicants to apply for grant of GNA or for enhancement of the quantum of GNA:

• State Transmission Utility on behalf of distribution licensees connected to intra-State transmission system and other intra-State entities;

- A buying entity connected to intra-State transmission system;
- A distribution licensee or a Bulk consumer, seeking to connect to ISTS, directly, with a load of 50 MW and above;
- Trading licensees engaged in cross border trade of electricity in terms of the Cross Border Regulations;
- Transmission licensee connected to ISTS for drawal of auxiliary power.

Deemed Grant of GNA: GNA for a (i) State including intra-State entity (ies) and (ii) other drawee entities, shall be the average of 'A' for the financial years 2018-19, 2019-20 and 2020-21: where, 'A' = $\{0.5 \text{ X maximum ISTS drawal in a time block during the year}\} + <math>\{0.5 \text{ X [average of (maximum ISTS drawal in a time block in a day) during the year}\}$

Relinquishment of Connectivity and GNA: Connectivity grantee and granted GNA can be relinquished, in full or in part.

- (a) In case of relinquishment of full/part quantum of Connectivity, (i) subsisting Conn-BG1 shall be encashed, (ii) subsisting Conn-BG2 shall be encashed if the terminal bay(s) are already developed or construction of which has already been awarded for implementation and (iii) subsisting Conn-BG3 shall be encashed in proportion to the relinquished quantum of Connectivity.
- (b) STU may relinquish GNA on behalf of identified intra-State entity. The relinquishment charges shall be equal to 60 times (provided that, if the balance period of GNA is less than 60 months, it shall be equal to the number of balance months times) the transmission charges paid by such intra-State entity for the last billing month under the Sharing Regulations, corresponding to the relinquished quantum.

Relinquishment charges shall be used for reducing Monthly Transmission Charges.

Temporary General Network Access (T-GNA): The following entities shall be eligible as Applicants to apply for T-GNA to ISTS:

- As buyers: Distribution licensee and Bulk consumer directly connected to ISTS; A buying entity connected to intra-State transmission system; Generating station including REGS for meeting its auxiliary consumption or start-up power or for meeting its supply obligations; Captive generating plant; Standalone ESS.
- Trading licensee (i) on behalf of buyer(s), and (ii) engaged in cross border trade of electricity for injection into or drawal from the Indian grid.
- Power exchange for collective transactions or bilateral transactions on behalf of (i) buyer(s), and (ii) trading licensee(s) engaged in cross border trade of electricity for injection into or drawal from the Indian grid.
- A GNA grantee shall be eligible to apply for T-GNA over and above the GNA granted to it.

T-GNA may be applied for any period from 1 (one) time block and up to 11 (eleven) months. Application for grant of T-GNA may be for bilateral and collective transactions. The T-GNA applications shall be applied and processed through single window electronic platform, namely, National Open Access Registry (NOAR). NLDC shall be responsible for developing and maintaining the NOAR.

CER Opinion

- 1. **Relinquishment of GNA (Regulation No. 25.1 (a)):** The draft Regulation states "For an entity covered under Regulation (i) of Regulation 17.1 of these Regulations, STU may relinquish GNA on behalf of identified intra-State entity. The relinquishment charges shall be equal to 60 times the transmission charges paid by such intra-State entity for the last billing month under the Sharing Regulations, corresponding to the relinquished quantum." Although this Regulation aids in the recovery of transmission charges, it makes the relinquishment charges equal to five (5) years of the transmission charges paid by the intra-State entity which is unreasonably high, since in case the entity goes bankrupt, they will not be able to pay the charges as specified in this Regulation.
- 2. National Open Access Registry (NOAR) (Regulation No. 27.1 (v)): The draft Regulation states "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". It is necessary to provide data to stake holders other than RLDCs and SLDCs. Since, the dash board facility provides real time data to only to the RLDCs and SLDCs, it will be difficult for other stake holder to get information regarding the same. It is suggested relevant data of NOAR providing details of access requested, granted and denied, and details about quantum of OA requested/granted across time blocks be made available in the public domain, possibly enabled through Application Programing Interface (API) so as to assist further analytics and research.

As per the Regulation 27.1(vi), "NOAR shall facilitate generation of periodic reports for market monitoring and surveillance". Periodicity of such reports should at least be on a monthly basis so that the gap in information flow and analysis is minimized.

- 3. **Market Monitoring and Unique Identification on the NOAR:** In case an entity, who has been granted GNA, participates in the Power Exchanges as well and subsequently interferes in the market by engaging in activities, with or without a consortium, that tends to compromise the competitive nature of the market, either by "playing with the available transmission capacity, or by controlling the demand/ supply bids".
 - Market manipulation may not only involve energy market but also the associated allocation of transmission capacity (including that through open access). To ensure that identification of market manipulation/gaming, unique identifiers should be defined and used across all market platforms/contracts as well as for allocation of transmission capacity including those in NOAR.
- 4. Exigency and Application for grant of T-GNA (Regulation No. 28.4 (b)): The draft Regulation states "Exigency application for grant of T-GNA: Application made on (D) day for grant of T-GNA with scheduling for (S) day, which may be (D) day or (D+1) day or (D+2) day, with a minimum start time of 7 (seven) time blocks unless specified otherwise in the Grid Code: Provided that the Exigency application for grant of T-GNA shall be made for any time block(s) between 00:00 hrs to 24:00 hrs of the (S) day". The term "Exigency" should be fined outlining its scope, especially as it is also not defined in the Indian Electricity Grid Code and not defined in these Regulations. The respective Load Dispatch Centre (LDC) may be offered certain flexibility in taking a final call on the applications under the 'exigency' criteria.

A limit on the quantum of OA to be granted under exigency should be defined to ensure that such applications are not an outcome of complacency on part of the applicant and also that these do not make an adverse impact on the market outcome.

- 5. **Processing of applications for grant of T-GNA by Nodal Agency (Regulation No. 29.3):** The draft Regulation states "Advance applications for T-GNA shall be considered on first-come-first-served basis and shall be processed latest by 23.59 hrs of the (D+1) day, 'D' being the date of making the application." The draft cause may be amended as "Advance applications for T-GNA shall be accorded priority in grant of GNA".
 - As per draft Regulation "Advance applications for T-GNA shall be considered on first-come-first-served basis ...". It is important to elaborate 'consideration' of an application. Does it mean that the system operator would run its model sequentially after each application, treating each one on an incremental basis. Alternative approach would be to accorded priority in granting open access once the system operators undertakes network analysis, and in case of expected congestion, prior applications would be given priority in grant of OA.
 - To implement first come first serves basis on a practical basis, there is also a need to define granularity of time stamping of the applications and also an approach to break a tie.
- 6. **Regulation No. 29.4 (a):** "Applications received till 1300 hrs of (S-1) day shall be processed after 1300 hrs on (S-1) day on first-come-first-served basis, and shall be finalised by 1400 hrs of (S-1) day." The result publication date must be mentioned in these Regulations as well.
- 7. **Market Monitoring and Unutilised Transmission capacity:** Gains from hoarding of transmission capacity, especially during periods of shortage that witness price spike in the market, would outstrip the cost of hoarding the transmission capacity on account of liability to pay transmission charges.
 - In this context, the mandate to surrender unused capacity is included in the regulation. It is also important to identify hoarding of transmission capacity that remains untilised i.e. a schedule for the same is given, say on a day-ahead basis, but the users do not honour the schedule and pay deviation charges thereof. The economics of deviation charges, partially related to market prices, may still be attractive in such cases, particularly for OA granted to RE based generation (due to lower applicability of deviation charges). A market monitoring mechanism should identify such cases and, the regulatory framework should penalize such persistent cases to ensure that arbitrage opportunities are not used to the detriment of the market outcome.
- 8. **Under any contract (Regulation No. 36.1, 36.2 and 36.6)**: The phrase "under any contract" may be rewritten as 'under any contract (excluding those arrived through the collective transactions, which are dealt separately)'.
- 9. **Provision for Unused GNA (Regulation 33.3)**: A priority for reallocation of unused transmission capacity be incorporated in the regulation. The following regulation may be suitably modified as
 - "Provided that in case such T-GNA grantee does not schedule power up to its T-GNA quantum at the time of making scheduling request, the unutilised quantum of T-GNA shall be released, as per priority mentioned herein, for collective transactions under day ahead market, schedule revision by GNA grantees, Exigency applications for T-GNA and collective transactions under real time market in terms of Regulation 36 of these regulations.