From
S.Girinathan, ACME,
Chief Financial Controller (FAC)/ Regulatory Cell,
7th Floor, Western Wing,
144, Anna Salai,
Chennai - 600 002.

To
The Secretary,
Central Electricity Regulatory Commission,
6th, 7th & 8th Floors, Tower B, World Trade Centre, Nauroji Nagar,
New Delhi-110029

GNA Lr. No. CFC/RC/SE/CERC/EE/ F. /D 112 /24 dt: 2.12.2024

Sub: CERC - Staff Paper on Stakeholder's suggestions for necessary modifications in the GNA Regulations - Submission of comments and views of TNPDCL (Erstwhile TANGEDCO) - Regarding.

Ref:(i)CERC's notification No. L-1/ 250/ 2019/ CERC Dt.09.10.2024

- Adverting to the above reference, the comments and views of TNPDCL (Erstwhile TANGEDCO) on the proposed modifications in the GNA Regulations, are furnished as below:
 - a. Substitution of GNA quantum under Regulation 17.1(i) to Regulation 17.1(iii) to the GNA Regulations would result in developing redundant inter-transmission systems for Bulk consumers (even if the line to connect to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained by a licensee at the cost of such entity. -As per Regulation 12.5 of the GNA Regulations) without utilizing the existing intra-state network, would be a national waste of resources.
 - b. The Use of GNA of a Connectivity grantee by an entity connected with an intra-State network that is not a GNA grantee, will cause irreparable

- loss to the Distribution companies and the very purpose of the provisions under 38 (2)(d) and 42(2) will be defeated.
- c. The Bulk consumers would prefer dual connectivity for the same load capacity and would avail full ISTS transmission charges waiver following which, the third-party sale of RE generation connected with STU network will be reduced. STU transmission charges revenue will reduce. Ultimately, it will burden the Discoms and passed on to the end consumers.
- d. Regarding the provision of Conn BG-2 for Bulk Consumer, as the transmission charges for ATS or dedicated elements like ICT, etc, exclusively constructed for the use of bulk consumers are to be bilaterally billed and the same should not to be included under the transmission pool.
- e. The complexity in regulatory compliance, potential disputes over transmission charges and difficulty in managing power flows increases due to the utilisation of the Connectivity granted to a subsidiary by another subsidiary of the same Parent company.
- f. The minimum annual capacity utilization for the RHGS should be mandated not only for the Connectivity but also should be applied for planning ATS and Common Transmission System Augmentation to ensure efficient planning of transmission systems. Otherwise, there would have been un-necessary capital expenditure on implementation of Transmission schemes for integration/ evacuation of the REGS & RHGS.

Under these circumstances, in order to protect the larger consumer interest and avoid creation of stranded transmission assets, the detailed comments and suggestions of TNPDCL(Erstwhile TANGEDCO) in this context are submitted in the annexure enclosed.

It is requested that the observations /comments and suggestions of TNPDCL(Erstwhile TANGEDCO) may kindly be taken into consideration while finalizing the Modifications in the GNA Regulations.

Thanking you,

Chief Financial Controller

Regulatory Cell

Comments of TANGEDCO on the Staff Paper on Stakeholder's suggestions for necessary modifications in the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State transmission System) Regulations, 2024:

1. Substitution of GNA quantum under Regulation 17.1(i) to Regulation 17.1(iii) to the GNA Regulations.

- i. TANGEDCO strongly objects the substitution of GNA quantum under Regulation 17.1(i) to Regulation 17.1(iii) to the GNA Regulations.
- ii. Providing open access to consumer under the category of bulk consumer directly, by CTUIL is in gross violation of the provisions of Act. This will cause irreparable loss to the Distribution companies and the very purpose of the provisions under 38 (2)(d) and 42(2) will be defeated.
- iii. TANTRANSCO has made significant investments in developing the infrastructure of EHT & HT substations, transmission lines, and transformers to supply power to bulk consumers within the state.
- iv. If majority of the Bulk Consumers seek GNA_{RE} from ISTS to avail full ISTS transmission charges waiver, this could result in stranded assets in intra state network.
- v. Further, even if the entity shall be liable for payment of the applicable charges of the intra-State network or relinquishment charges, as applicable for shifting to 17.1 (iii), it will adversely affect the revenue of DISCOMs in the long run. Since DISCOMS enter into PPA based on the demand requirement of bulk consumers, it would create unwarranted financial liability on DISCOMS due to switching of consumers.
- vi. In addition to losing out on energy consumption tariffs, DISCOMs will also lose consumers, as entities will be shifted to ISTS GNA to access renewable energy without transmission charges which is socialised among the DISCOMS.
- vii. In addition, if the intended bulk consumer is a third-party user utilising intra state transmission network, then per MW Transmission charges payable by DISCOMs and the other LTOA/MTOA/STOA customers will increase.

- viii. Hence, the Tariff loss due to migration of bulk consumers to ISTS & the Transmission charges loss (due to less consumers) will burden the Discoms and ultimately passed on to the end consumers.
 - ix. It is against the mandates of Electricity Act under Sec 61 and 62.

"safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;"

Discoms being the custodians of the end consumers and no undue burden shall be passed on to the consumer. As far as the transmission charges are concerned, it should be shared based on the respective utilization of the users.

- x. In addition, developing redundant inter-transmission systems for Bulk consumers (even if the line to connect to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained by a licensee at the cost of such entity. -As per Regulation 12.5 of the GNA Regulations) without utilizing the existing intra-state network, would be a national waste of resources.
- xi. In view of protecting the larger consumer interest and avoid creation of stranded transmission assets, TANGEDCO requests the Hon'ble Commission not to consider this suggestion.
- Use of GNA of a Connectivity grantee by an entity connected with an intra-State network that is not a GNA grantee:
 - a. This will cause irreparable loss to the Distribution companies and the very purpose of the provisions under 38 (2)(d) and 42(2) will be defeated.
 - b. When the GNA of a Connectivity grantee by an entity connected with an intra-State network that is not a GNA grantee would lead to complications like potential disputes over transmission charges, difficulty in scheduling power withdrawal, potential grid instability due to uncoordinated access, while also potentially limiting the original GNA grantee's ability to fully utilize their allocated transmission capacity, especially if the non-GNA grantee needs significant access to the grid.

- c. Uncoordinated access to the grid by a non-GNA grantee may lead to unforeseen fluctuations in power flow, potentially impacting grid stability
- d. Less utilisation of intra state transmission system developed by STU.

3. Dual Connectivity to the Bulk Consumer for the same load capacity:

- a. Bulk consumers will prefer this dual connectivity to avail full ISTS transmission charges waiver.
- b. But the third-party sale of RE generation connected with STU network will be reduced. STU transmission charges revenue will reduce. Ultimately, it will burden the Discoms and passed on to the end consumers.
- c. Further, less utilisation of intra state transmission system developed by STU.
- d. Increases the complexity in network management and put extra strain on the network infrastructure and potentially limits overall performance gains in certain scenarios
- e. Hence TNPDCL strongly objects the dual connectivity.

4. Provision of Conn BG-2 for Bulk Consumer.

- a. The transmission charges for ATS or dedicated elements like ICT, etc, exclusively constructed for the use of bulk consumers should be bilaterally billed to such Bulk Consumer and not to be included under the transmission pool.
- b. TANGEDCO strongly objects this.

5. Utilisation of the Connectivity granted to a subsidiary by another subsidiary of the same Parent company.

a. Increases the complexity in regulatory compliance, potential disputes over transmission charges, difficulty in managing power flows, and potential risk to the grid stability if not properly monitored and controlled.

- b. The financial liability on account of any deviation from the accepted terms and conditions as per the extant regulations is vested with the connectivity grantee. Utilization of the connectivity by another subsidiary will create a situation where the original connectivity grantee may become insolvent and the liability could not be imposed.
- c. Further, if the point of connectivity / injection is different, then it would lead to change in power flow pattern and loading of the entire network, which would require system strengthening also , resulting in unwarranted hardship for the other connectivity grantees
- d. Hence, the proposal may be dropped
- Platform for providing NOC by the STU in a time-bound and a transparent manner.
- 7. Provision for grant of Solar hours Connectivity and Non-Solar hours Connectivity through the same Transmission system.
 - a. Better grid integration of solar power, allowing for more efficient utilization of transmission infrastructure.
 - b. The transmission systems developed for wind evacuation across the country are underutilized due to the seasonal nature of the Wind power, whereas the assets created for solar evacuation are beneficially used only for 1/3rd of the day. The cost of these assets are being recovered from the DISCOMS in turn the end beneficiaries and hence, it is inevitable to unlock this stranded transmission capacity immediately to avoid creation of additional transmission infrastructure and optimally utilise the resources in the interest of end consumers. Hence, it shall be made applicable to all the existing RE pooling stations and duly assessing the stranded transmission capacity based on the historical data of the system operators.
 - c. If the exiting RE connectivity grantees are willing to reserve the margin for their future use, then they shall be required to make applicable transmission charges for such reserve capacity. Hence, necessary amendment may be introduced in the Sharing Regulations

d. The timeline for implementation of Storage or other RE projects to utilise non solar hour connectivity shall be restricted to 18 months so as to accelerate the process of unlocking the stranded capacity.

8. Provision for Minimum Transmission Capacity Utilisation for Hybrid ISTS Connectivity.

- a. The minimum annual capacity utilization for the RHGS should be mandated for the Connectivity grantee at planning stage itself. Based on this, the CUF should be applied for planning ATS and Common Transmission System Augmentation to ensure optimal planning of transmission systems.
- b. In planning transmission systems, it is crucial to make realistic assumptions. The capacity utilization factors for REGS and RHGS can be derived from historical data on wind and solar projects across India.
- c. Otherwise, there would have been un-necessary capital expenditure on implementation of Transmission schemes for integration/ evacuation of the REGS & RHGS and the consumers would have been unnecessarily burdened with additional transmission charges and in addition, there could have been stranded assets.
- d. In this context, it is stated that the planning Criteria mandates N-1 criteria for ICTs at the RE Pooling stations, which is extracted below:

Provided that, 'N-1' reliability criteria may be considered for ICTs at the ISTS / STU pooling stations for renewable energy based generation of more than 1000 MW after considering the capacity factor of renewable generating stations.

However, in addition to this ICT, the NCT has recommended 1×105 MVA ICT as 1 spare ICT in most of the Pooling stations without approval of CMETS/SRPC meetings.

e. In addition, the RE generation capacities are planned to be developed in SR, WR and NR with almost equal capacities, there is need to offset the source wise generation to arrive at a **net inter-regional transfer requirements** while conducting All India study.

- f. Hence, the Hon'ble Commission has look into this issue also and make necessary changes in the appropriate regulations.
- g. Under the above circumstances, minimum annual capacity utilization for the RHGS should be mandated to avoid redundancy in transmission system and parking of public funds.

Chief Financial Controller (FAC)
Regulatory Cell