



TNERC (Grid connectivity and Intra-State Open Access) (Amendment) Regulations, 2014 [Draft]

TNERC notified a draft amendment to the Grid connectivity and Intra-State Open Access Regulations on 2nd December, 2021. The key points of this regulation are provided below:

The following Regulation 19 (2) has been inserted in the prevailing Regulation.

Priority for adjustment of energy drawn by open access consumers are summarized below. This shall be implemented for each slot/time block (adjustment in time bock to be relevant for short-term inter-state open access including Power Exchange (PX) transactions), upon adjustment of applicable losses.

(A) Non-captive category		(B) Captive category – (Thermal predominant)	(C) Captive category – (RE predominant)	
1. i. ii. iii. iv.	Thermal Long-term Medium-term Short term inter-state open access including power exchange transactions Short-term intra-state Open access	1. Thermal - Captive	1. Captive sources i. Biomass ii. Solar (higher applicable tariff first followed by lower tariffs) iii. Wind with banking of 1 month (higher applicable tariff first followed by lower tariffs) iv. Wind with banking of 12 months (higher applicable tariff first followed by lower tariffs) iv. Wind with banking of 12 months (higher applicable tariff first followed by lower tariffs) v. Bagasse based co-generation vi. Thermal energy	
2. i. ii. iii. iii. iv.	Renewable sources Solar Wind Bagasse based co- generation Biomass generator	 2. Renewable sources - captive and RPO i. Biomass ii. Solar (higher applicable tariff first followed by lower tariffs) iii. Wind with banking of 1 month (higher applicable tariff first followed by lower tariffs) iv. Wind with banking of 12 months (higher applicable tariff first followed by lower tariffs) v. Bagasse based co-generation 	2. Third party power purchase (order same as in A)	
3.	Distribution Licensee	v. Bagasse based co-generation 3. Third-party power purchase (order same as in A) 4. Distribution Licensee	3. Distribution Licensee	

Table 1: Priority for adjustment of energy drawn by Open Access Consumers

Priority of adjustment for all RE sources put together shall be based on the term of agreement in the following order,





- 1. Long-term
- 2. Medium-term
- 3. Short-term inter-state open access including power exchange transactions
- 4. Short-term intra-state.

Illustration: A consumer who purchases wind long-term, thermal long-term, solar short-term, bagassebased co-generation long-term, the order of adjustment will be wind long-term, bagasse-based cogeneration long-term, thermal long-term, solar short-term.

The draft amendment can be accessed here

CER Opinion

- 1. Settling Multiple Contracts through a Single Meter: The evolving nature of the power sector across states is witnesses sing participation of entities in multiple contracts for the same time block. In the context of both for the buyers as well as sellers, energy accounting and settlement thereof have significant commercial implications including those on account of the applicable deviation settlement mechanism. In case of a variety of contracts to be 'settled' through the same metering point, it becomes imperative to have a mechanism to apportion the metered energy towards various contracts.
- 2. Regulation No 19 (2): Definition of *"predominant"* needs to be included in these Regulations, or may be referred to in case a definition already exists.
- **3. Regulation No 19 (2):** To bring about clarity differentiating the applicability of the Regulations for the captive consumers and others, the following phrase is suggested to be inserted in the draft amendment, *"These apportionment Regulations are differentiated across entities, seeking open access, based on them being a captive entity or not".*
- 4. **Regulation No 19 (2) (A):** The category mentioned under Non-captive Thermal as, *"Short-term inter-state open access including power exchange transactions"*, is suggested to be separated to "collective transactions through power exchange" and "short-term inter-state open access". This will set a clear priority between the two types of transactions.
- **5. Regulation No 19 (2):** A priority across long-term, medium term and short-term contracts is used under the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 in case of congestion management in the transmission network. The variety of contracts under open access (from an energy accounting perspective), involving a variety of buyers/sellers need to define a waterfall cash-flow kind of priority not just across the nature of the contract but also across type of fuel/technologies. In time, a rather simpler mechanism should emerge, once we have sufficient experience post this amendment.

The priority of adjustment of energy for open access, proposed under the amendment, is based on the type of contracts rather that type of entity. Further, discussion and analysis is required to finalise overall priority based on economic as well as regulatory principles. As the priority of adjustment will also be applicable for procurement of energy from all power sources, *i.e.* thermal as well as RE power sources, this sub-section is suggested to be modified as follows,





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A. For the non-captive category:

The order of preference, based on the type of energy sources will be as,

- 1. Thermal
- 2. Renewable Sources
 - i. Solar*
 - ii. Wind*
 - iii. Hybrid*
 - iv. Bagasse based co-generation
 - v. Biomass generator

*Including embedded storage

3. Distribution Licensee

Provided that the above would be further prioritized as per the type of contracts,

- *i.* Long-term inter-state
- ii. Long-term intra-state
- *iii. Medium-term inter-state*
- iv. Medium-term intra-state
- v. Collective Transactions through power exchanges
- vi. Short-term inter-state
- vii. Short-term intra-state

B. For the Captive category Thermal predominant:

The order of preference, based on the type of energy sources will be as,

- 1. Thermal
- 2. Renewable Sources
 - i. Solar*
 - ii. Wind*
 - iii. Hybrid*
 - iv. Bagasse based co-generation
 - v. Biomass generator

*Including embedded storage

- 3. Third party power purchase
- 4. Distribution Licensee

Provided that the above would be further prioritized as per the type of contracts,

- *i.* Long-term inter-state
- *ii.* Long-term intra-state
- *iii. Medium-term inter-state*
- iv. Medium-term intra-state
- v. Collective Transactions through power exchanges
- vi. Short-term inter-state
- vii. Short-term intra-state





C. For the Captive category Renewable energy sources predominant:

The order of preference, based on the type of energy sources will be as,

- 1. Renewable Sources
 - i. Solar*
 - ii. Wind*
 - iii. Hybrid*
 - iv. Bagasse based co-generation
 - v. Biomass generator

*Including embedded storage

- 2. Thermal
- 3. Third party power purchase
- 4. Distribution Licensee

Provided that the above would be further prioritized as per the type of contracts,

- *i.* Long-term inter-state
- ii. Long-term intra-state
- iii. Medium-term inter-state
- iv. Medium-term intra-state
- v. Collective Transactions through power exchanges
- vi. Short-term inter-state
- vii. Short-term intra-state"
- **Note 1:** Priority within the collective transactions w.r.t. the green power (for example under GTAM/ GDAM) vis-a-vis non green power should also be specified.

Note 2: A clarification maybe required regarding priority for open access for generators selling electricity under contracts discovered through DEEP platform.

- 6. Hydro Power Open Access: Since MoP has specified HPO trajectories in its order dated 29th January, 2021, it is suggested that the provisions for including Hydro Power Obligation (HPO) and subsequently hydro power purchase from open access be included in these Regulations. The priority of adjustment of energy may be set such that the hydro power is adjusted after thermal sources and before all other sources of renewable energy.
- 7. Banked Energy: Banked Energy must be accounted for with its priority being higher than all other sources of energy irrespective of the category under consideration.
- 8. Stand-alone storage: It is suggested that a provision for adjustment of electricity from stand-alone storage be included as a separate category in these Regulations to ensure that the Regulations are forward looking in its design itself.
- **9.** Regulation No 19 (2) (B): The applicability and the priority mentioned herein does not clarify if the entity seeking open access has multiple RE based captive power plants and is participating in banking energy (in case of wind) with the distribution licensee.
- **10.** Regulation No 19 (2) (B) (2): Under Thermal predominant captive category, RPO specific captive renewable energy and captive renewable energy for other purposes cannot be distinguished, as renewable energy purchase for captive consumption is also considered to be qualified for RPO. Renewable energy procurement





from other markets and mechanisms including those through GTAM and GDAM may not be captive but also qualifies for RPO, except in case the entity plans to sell the power though RECs.

- **11. Regulation No 19 (2) (B) (2)**: The explanatory statement for prioritizing Biomass sources over other sources of renewable energy under "*Captive category Thermal predominant*" and the reverse under "*non captive category*" is not clarified in these amendments.
- **12. Data sharing and transparency:** The SLDC should maintain proper record of the data (block-wise) for priority being accorded to the various transactions as per these Regulations. Such data should be archived and be available for ease of access through SLDCs portal for individual transactions and the adjustments towards energy accounting thereof.