

Revised Draft on KERC (Verification of captive status of generating plants/consumers in the State of Karnataka) Regulation, 2024

The KERC notified “**Revised Draft on KERC (Verification of captive status of generating plants/consumers in the State of Karnataka) Regulation, 2024**” on 12th March, 2024. The key highlights of this draft is mentioned below:

Objective: The document is a notification from the Karnataka Electricity Regulatory Commission (KERC) regarding the Revised Draft KERC (Verification of Captive Status of Generating Plants/Consumers in the State of Karnataka) Regulations, 2024. The revised draft regulations aim to bring regulatory control and protect the interests of stakeholders by ensuring compliance with the provisions under the Electricity Act 2003 and Electricity Rules 2005. The document outlines the criteria for determining captive status, including share-holding patterns, consumption details, and the process for verification of captive status. The categories of captive users covered include single captive users, cooperative societies, and group captive users, each with specific criteria for verification. It also addresses metering requirements, default consequences, dispute resolution, and the power to remove difficulties and amend regulations.

The document can be accessed [here](#).

- CER Opinions Verification of End use by Captive users:** Revised draft clause no. 2(c) states that “*captive user shall mean the end user of the electricity generated in a Captive Generating Plant and the term “captive use” shall be construed accordingly*”

The Electricity Rules, 2005 qualifies a user as a captive user on the basis of it being the ‘end user’. A variety of cases would highlight that generation side scheduling is more appropriate than ‘end use’ measured at the consumer end.

Differentiating impact of transmission losses may lead to different proportion of captive energy consumed by members of a group captive plant, if measured at injection end or the drawl end. To address this, **the calculation for ‘end use’ for a consumer should be recorded on the basis of the energy scheduled from the captive unit rather than that recorded at the end of the user, which would exclude transmission loss.**

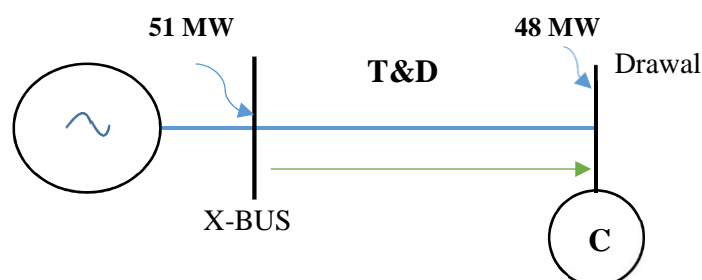


Figure 1: Verification of schedule on Bus Bar

- To ensure that pseudo schedules are not generated, analysis of block-wise data of captive plants/ units may help reveal such a behavior.
- Low DSM charges applicable for the renewable energy based captive plants, may incentivise such a behavior. Gradual alignment of the applicable deviation settlement mechanism (DSM) for RE would address the same.

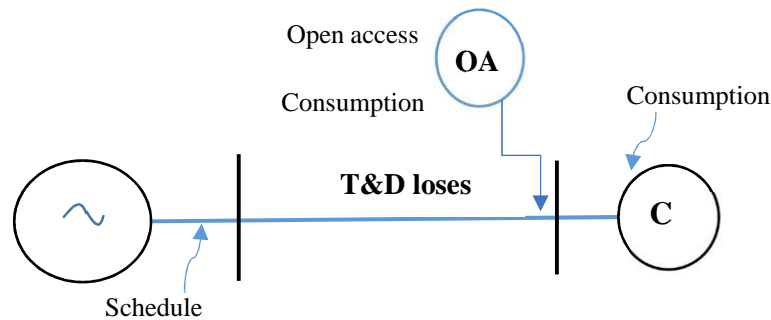


Figure 2: Non-captive open access consumption

2. Captive consumer with open access consumption (non-captive): Verification from plant schedule

- A captive user may also import electricity through open access from non-captive sources (e.g. trading or PXs) and/or from the local distribution company using the same import meter. In such cases, apportionment of consumption to a captive source is not feasible. This further strengthens the argument in favour of use of **schedule of captive plant for calculation of proportional consumption of electricity**.
- Do note that in case of multiple captive users, the captive unit would report schedule with respect to each such user and can hence be apportioned accordingly.

3. Level of Bank Guarantee and Dynamic Bank Guarantee:

In accordance with the revised draft clause no. 4(4.5) and 7(7.1), the following modification may be implemented to improve consequences in case of failure to meet captive status

The bank guarantee required for each captive consumer can be customized based on their individual consumption needs. It should be a minimum of 51% of their captive consumption or the total captive consumption amount, whichever is higher.

If a consumer fails to maintain their captive status, they will be liable to pay cross subsidy surcharges and any additional applicable charges based on their entire captive consumption, not just 51% of their total consumption. A captive consumer may consume well above 51% of the capacity equivalent. Thus limiting Bank Guarantee up to 51% of the capacity exposes the Discom to a risk for not able to provide adequate coverage towards cross-subsidy and additional charges, if applicable, in case a 'captive consumer' does not any more meet the criteria.

For example, if a captive user's consumption requirement is 70% of the total generation and they have obtained a bank guarantee equivalent to 51% of the total consumption, if they fail to meet captive status criteria they would be subject to cross subsidy surcharges and additional charges. After that if they also failed to reply to demand notice of the Discom for the payment, then the bank guarantee claim would only cover 51% of the captive consumption. Therefore, it is advisable to secure a bank guarantee equivalent to captive consumption to avoid potential payment shortfalls.

Furthermore, a consumer may increase/decrease its share in the captive capacity across time. This should be reflected in appropriate change in the bank guarantee, and thus there should be specific mention of the dynamic nature of bank guarantee.

4. Hybrid Annual and Quarterly Criteria for Captive Status:

According to revised draft clause no. 4.3 (i), (ii) and 4.4, the verification of captive status shall be done on annual basis.

Given the variability of the consumption and seasonality of generation including that for RES, The overall consumption (51% criteria) and the proportionality of consumption (in case of group captive users) may vary across months/quarters. **To reduce risk to the captive consumers on account of such variability, a hybrid criteria may be adopted wherein captive criteria are checked on both quarterly as well as annual basis.** In case a captive consumer qualifies the criteria on the annual consumption basis, it would be deemed to have captive status across the year (including the quarter(s) with shortfall). In case of failure to meet the criteria, for example, in one of the quarters but qualifies for the other quarters individually. It would be deemed a captive consumer across all quarters, if it achieves so on the annual basis. In case of failure to achieve captive status on the annual basis, the consumer would be liable to pay applicable charges for that quarter rather than for the year as a whole.

This approach would also help address situations, wherein addition/departure of a consumer to a group of captive users would change the proportionality of consumption/ownership. This is further explained through example below.

Case 1: Verification of Captive Consumption on quarterly basis

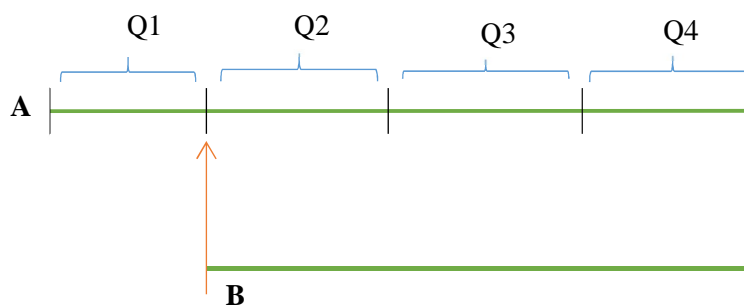


Figure 3: Timeline for quarterly Captive Verification

- Let us consider a scenario where entity **A** maintains its captive consumption for the entire year across all the four quarters. Entity **B** joins at the beginning of the 2nd quarter, satisfying all criteria for the three remaining quarters but not for the full year basis as explained as fig.3.
- In such case, captive user **B** fails to comply with the requirements of captive status on ‘annual basis’ and thus becomes ineligible as a captive user.
- Since each investments are not expected to take place at the beginning of each financial year, quarterly basis for captive consumption verification would be more suitable.

Case 2: Verification of Captive Consumption on monthly basis

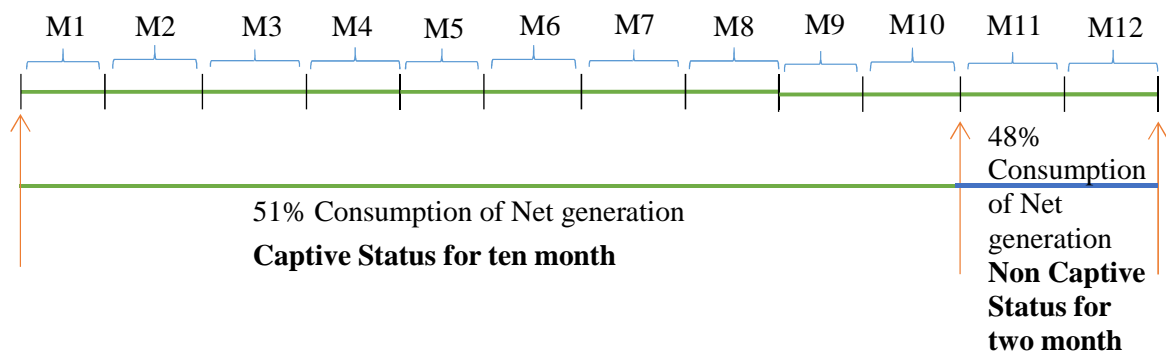


Figure 4: Timeline for monthly Captive Verification

- Let’s consider entity **A** has maintained captive status for all the months except two months (M11 and M12) of the financial year however, overall maintained captive status then those months should also be deemed to qualify as **captive**.
- Now, consider entity **B** has maintained captive status for all the months except two months (M11 and M12) of the financial year however, annually failed to maintain his captive status then he should be considered **non captive** only for the months (M11 and M12) he failed to qualify.

5. Modification/ Suggestion for data metering:

Revised draft clause no. 5(5.1) states that “Each generating unit intended for captive use shall have a separate Special Energy Meter (SEM) with real time communication facility as specified in the Central Electricity Authority (CEA) (Installation and Operation of Meters) Regulations, 2006 (as amended from time to time) and/or the State Load Despatch Centre/ distribution licensee. The generators may provide the monthly data/quarterly/15-minutes data of the energy generated (less auxiliary consumption) and other data to the SLDC/Distribution Licensee.....”

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from time to time) and/or the State Load Despatch Centre/ distribution licensee. The generators **should be mandated to provide 15 minutes data on monthly basis or 15 minutes data on monthly/quarterly basis** of the energy generated (less auxiliary consumption) and other data to the SLDC/Distribution Licensee. Aggregated monthly/quarterly data may not always enable correct apportionment of the power generated from a ‘captive’ plant to various contracts including for captive use as well as sale to third party or through PXs. Periodical testing of the Special Energy Meters should be provided for as per the provisions of the Grid Code.

6. Verification of Proportionate Consumption as per Shareholding in Group Captive:

In accordance to draft clause 4.3(ii), Verification of captive status for group captive users must satisfy the following conditions:

“The proportion shall be computed as follows:

Total Captive Consumption ---- C

Total Captive Share Holding--- S

C = $\sum C_i$, where C_i is the Consumption of the i th Captive Consumer

S = $\sum S_i$, where S_i is the weighted average Shareholding (in Percentage) of the i th Captive Shareholder

Proportional Shareholding of the i th Captive Shareholder

*$PS_i = (S_i/S) * 100$*

Proportional Consumption of the i th Captive Shareholder

*$PC_i = (PS_i * C)/100$*

Conditions to be satisfied for Captive Status

i. $S \geq 26$

ii. $C \% \geq 51$

iii. $0.9 PC_i \leq C_i \leq 1.1 PC_i$ ”

Analysis has revealed that a discrepancy in the application of these conditions, particularly when multiple captive users deviate from their proposed consumption levels, may arise for the users who did not deviate from their own projected consumption but rest of the users did deviate. Given the seasonal nature of business, and economic cycles, determination of the proportional shareholding should be done on quarterly basis, provided that shareholding status is measured on a continuous basis across the year. **A quarterly-annual hybrid basis for calculation of proportionate consumption related to the shareholding in a group captive plant (similar to the one proposed above), would help address variability due to seasonal/business reasons and limit the adverse impact to the quarter affected.**