

To,

Date: 09-02-2024

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

Sub: Comments on Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for the tariff period from 1.4.2024 to 31.3.2029.

Ref: 1. Your PUBLIC NOTICE vide File No. L-1/268/2022/CERC Dated: 04.01.2024

2. Your DRAFT NOTIFICATION No.L-1/268/2022/CERC Dated 4th January, 2024

Respected Sir,

With reference to the above, and in response to the point no. 2 of the public notice referred above, I being an interested person would like to submit a comment on the subject draft regulations.

**#A** As per para 3,(7), Auxiliary Energy Consumption will be expressed as a percentage of the sum of gross energy generated at the generator terminal.

In 3,(60), PAF means the average of the daily DC . . . expressed as a percentage of the installed capacity in MW less the Auxiliary Energy Consumption and Auxiliary Energy Consumption for emission control system as per these regulations.

In 3(61), PLF calculation formula has been devised where  $Aux_n$  and  $Aux_{en}$  have been deducted from IC only.

(Here, suppose the IC is 1000MW and gross generation is 700MW. As per the draft,  $Aux_n$  and  $Aux_{en}$  will be calculated on gross energy generated i.e. 700MW, whereas those will be deducted from 100% of the IC i.e. 1000MW in calculation for PAF & PLF.)

So, in the above calculations, it is seen that two different bases (IC and gross energy generation) are being used. Same kind of ambiguity/ confusion has arisen again in Regulation no. 62, 63 and 65

Here, capacity charges are based on Annual Fixed Charges which in turn depends on IC of the Generating Station, not on the gross generation. However, Auxiliary consumption and/ or Auxiliary Consumption for Emission control are being calculated on the gross generation at generator terminal. The gap may not be very prominent as of now. However, as the RE(WS) capacity is growing manifold each year, This gap between IC and gross generation of the conventional generators (e.g. Coal, Gas, lignite etc.) will become more prominent day by day.

**#B** It may kindly be noted that, although it seems the auxiliary consumption should be proportional to the gross generation, practically, it is not so. Auxiliary motors are required to start much before the generator starts generating. Even when the generator is in full speed but not synchronised with the grid (Zero generation), it consumes a good percentage of full load current.

Similarly, even when a unit is on standby, i.e. not running- but ready to start, some of its auxiliary motors, DC system with battery chargers, its control system, UPS system, AC of the control room and the Control Panel room, lighting system, Firefighting system, Switchyard control etc are required to keep in live condition.

So, even when the generator is not generating but on standby or starting up, it will consume a considerable quantum of Auxiliary energy

Considering the above, if auxiliary consumptions  $Aux_n$  and  $Aux_{en}$  are expressed as a percentage of the Installed Capacity of the generating station, instead of gross energy generated at generator terminal, it seems it will be more practical and also more logical in calculating various terms e.g. PLF, PAFM, PAFM etc. (specially the denominator parts, i.e.  $[N_x IC_x (100 - AUX_n - AUX_{en})]$ ).

Thanking you,

Yours sincerely,

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