

**Views of GRIDCO on Draft CERC
(Sharing of Inter-State
Transmission Charges and Losses)
(Third Amendment) Regulations,
2023**

Amendment to sub- clause (a) of Clause (1) of Regulation 6

1. Amendment to sub- clause (a) of Clause (1) of Regulation 6 :

▶ Following is the stipulation as per above Regulations:

▶ *“Provided that where an interregional HVDC transmission system planned to supply power to a particular region is operated to carry power in reverse direction due to system requirements, the percentage Yearly Transmission Charges of such transmission system to be considered in the regional component and the National component shall be calculated as follows::*

$$\text{HVDCr(in\%)} = \frac{\sum_{k=1}^n \text{Maximum power flow in reverse direction (in MW) in any time block on kth day} \times 100}{\text{Capacity of HVDC transmission system in forward direction (MW) X number of days in a month}}$$

Where k, is a day of a month with total 'n' days

where HVDCr >30%, the Yearly Transmission charges corresponding to HVDCr shall be considered in the National component and the balance in the regional component.

where HVDCr is < 30%, 30% of Yearly Transmission Charges shall be considered in the National component and 70% in the Regional component.

Comments:

- ▶ 30% of the transmission charges of bulk transfer through HVDC transmission systems is already under National component considering the flexibility and stability provided by these HVDC systems to Grid.
- ▶ The present Amendment has been brought out considering only the bi-directional flow of the HVDC Raigarh-Pugalur-Thrissur HVDC Transmission System (WR -> SR corridor) for the period April 2022 to April 2023 and other such systems have not been considered.
- ▶ Detailed analysis was carried out only for Raigarh-Pugalur-Thrissur HVDC Transmission System and study of the reverse flow in case of other HVDC lines such as Talcher–Kolar HVDC system have not been carried out. A general assumption made considering the flow of only on line is not technically correct.

Proposal:

- ▶ Additional reverse flow i.e. $HVDCr > 30\%$ should be added to the regional component of the **Drawee Region** instead of adding it to the National Component.
- ▶ Proviso should be modified as under:
- ▶ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX...

Where k , is a day of a month with total 'n' days

*where $HVDCr > 30\%$, the Yearly Transmission charges (YTC) corresponding to **additional HVDCr in excess of 30 % shall be added to the Regional Component of the Drawee Region (Region receiving the reverse flow), 30% to be considered in the National component and the balance in the regional component.***

where $HVDCr \leq 30\%$, 30% of Yearly Transmission Charges shall be considered in the National component and 70% in the Regional component

Justification:

- ▶ The cost of additional reverse flow beneficial to one region cannot be transferred to other regions in form of National component.
- ▶ The additional reverse flow for transfer from one region to other region in a bipolar HVDC line can easily be determined using the proposed formula and loading of the additional reverse component onto the **Drawee Region** will not be an issue.
- ▶ Further, in case the Transmission Charges of any HVDC Bi-Polar Lines is socialized, the prior consent of all the beneficiaries should be taken.

THANK YOU

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.