

Ref: PXIL/SPD&L&S/02122019

Date: 2nd December 2019

To
The Secretary
Central Electricity Regulatory Commission
3rd and 4th floor, Chanderlok Building
36 Janpath
New Delhi - 110001

Sub: CERC draft Regulations on "Sharing of Interstate Transmission Charges and losses) Regulations, 2019 - Observations, Comments and Suggestions from Power Exchange India Limited.

Ref: Public Notice No. L-1/250/2019/CERC dated 31st October 2019.

Dear Sir,


With reference to the subject cited above, we hereby submit our observations, comments and suggestions, in response to the public notice.

With increase in electricity demand, transmission infrastructure development is bound to grow whether the new generation capacity comes from renewables or conventional sources. Hence, a mechanism that encourages market based transactions would provide right signals for future investment in the sector.

We request the Hon'ble Commission to kindly take our suggestions on record and grant us an opportunity to present them to the Commission and its staff.

Thanking You,

Yours faithfully,
For **Power Exchange India Limited**


Chandrashekhar Bhat
Vice President - IT



15

Observations, Comments and Suggestions on CERC draft Regulations on “Sharing of Interstate Transmission Charges and losses) Regulations, 2019”

1. Regulation 4 - Components and Sharing of ISTS Charges and Losses

(4) Components of transmission charges

Transmission charges for each DIC shall have the following components:

- a. National Component (NC);*
- b. Regional Component (RC);*
- c. Transformers Component (TC); and*
- d. AC System Component (ACC).*

Suggestion

The draft regulations categorize the transmission charges into four different components. The National Component and Regional Component are proposed to be shared in in the ratio of Long term Access (LTA) plus Medium Term Open Access (MTOA) quantum of the respective drawee DICs and injecting DICs having untied LTA capacity. Transformers Component is proposed to be shared by the State in which they are located. The AC System component is further divided into the Usage Based Component (AC-UBC) and Balance Component (AC-BC). The AC-UBC is to be shared by DICs corresponding to their respective usage of transmission lines and AC-BC is to be apportioned to all drawee DICs in the ratio of their quantum of LTA plus MTOA and to injecting DICs with untied LTA capacity.

The suggested mechanism is a big change and likely to have financial consequences for the states and generators having untied LTA capacity. In such a transition, there needs to be some clear indication through a detailed study about the amount of Yearly Transmission Charges (YTC) that are being socialized and the amount of YTC that are being allocated as per the actual usage of the grid. In the absence of such information, intuition would point out that the DICs which currently have higher POC charges will probably gain financially while those with lower POC charges will lose.

Further, it is also suggested that for an equitable allocation of various transmission components across the drawee and injecting DICs, the allocation should be computed based on the maximum of the LTA plus MTOA and net ISTS drawal by the DICs rather than on LTA plus MTOA only. This will result in better representation of the reliability considerations of the grid usage.

2. Regulation 9 (1) and 9 (4) - Computation of share of transmission charges under AC-UBC

(1) The Base Case file shall be prepared by the Implementing Agency for the Peak Block of the month comprising of the following:

(a) Basic Network, which shall be the network file for the power system for the peak block of the month; and,

(b) Actual generation and demand, in MW, at each node of the Basic Network for the Peak Block.

Further, the Peak Block has been defined in the Regulation 2 (m) as following:

(m) 'Peak Block' means the block in which sum of net ISTS drawals by all States is maximum during the month

Suggestion

The current practice adopted by the Implementing Agency is to collect data corresponding to the non-coincident peak demand and peak injection of the respective DICs. The peak demand of various DICs is then normalized with respect to the National Peak Demand while adjusting the peak injection for the transmission losses in order to obtain a load generation balance in the Power Flow Case. It may so happen that the timing of Peak Demand occurring in various states is different from that of the timing of the National Peak Demand. Thus, to fully reflect the operating characteristics and usage of the transmission system by various DICs, it is proposed that the Implementing Agency notify the timing of the Peak Block of each individual drawee and injecting DIC rather than the national Peak Block. The transmission charges may then be computed iteratively for all the DICs with respect to their peak blocks while keeping the other DICs at the demand level witnessed corresponding to

the DIC for which the transmission charges are being computed. The above methodology will also help in avoiding wide undue variations in the submitted and normalized data of the DICs which has been the challenge in the past framework.

(4) Implementing Agency shall run AC load flow studies on the Base Case file stated at clause (1) of this Regulation for the month and determine power flow on each transmission line.

Provided that while carrying out the load flow studies, the Implementing Agency may make minor adjustment in the generation and demand data, if required, to ensure load generation balance.

Suggestion

The provision proposes minor adjustments to be made by the Implementing Agency to ensure load generation balance. It is requested that Commission may identify norms for usage of such adjustments so that equitable modifications are made in the generation and demand data for benefit of market participants.

3. Regulation 10 (1) - Sharing of transmission losses

(1) All India Average Transmission losses for ISTS shall be calculated by Implementing Agency for each week, from Monday to Sunday, as follows:

{(Sum of injection into the ISTS at regional nodes for the week) minus (Sum of drawal from the ISTS at regional nodes for the week)}/ Sum of injection into the ISTS at regional nodes for the week X 100 %

Suggestion

The above regulation is a departure from the earlier mechanism of allocating transmission losses on the basis of the marginal participation by the DICs computed through the POC software plus the actual weekly losses witnessed in each region. The proposed methodology will result in compromising the distance related sensitivity of the transmission losses. The impact of the same on various DICs needs to be studied and highlighted to the market participants.

4. Regulation 11 (1) - Transmission charges in specific cases

The framework proposes exemption of ISTS charges for Solar and Wind based projects with Long term PPAs and developed under competitive bidding route in accordance with guidelines issued by Ministry of Power, Government of India.

Suggestion

An ambitious target of 175 GW and 450 GW of RE sources is to be achieved by FY21-22 and FY29-30 respectively. Waiver from payment of Interstate transmission charges and losses should also be extended to Wind, Solar and other Renewable based projects that sell power in the Short-term market and on Power Exchanges. This exemption will help in establishment of market based mechanism for transacting green power and provide an alternative route to meet the above targets besides the current Central and State Auctions which dominate the capacity additions for RE projects.

An additional benefit of this mechanism would be creation of a pan-India renewable energy market, as any surplus power injected into the grid can be purchased by resource deficient states through a market based avenue. Such market based mechanism will remove the inherent lumpy nature of RE capacity additions allowing States to accurately size their RE purchase requirements vis-à-vis the commitments under the Renewable Purchase Obligations (RPO).

5. Regulation 13 (3) – Billing

(3) No transmission Charges shall be levied for Inter-State transmission system in respect of Short Term Open Access transactions

Clarification

It is requested to clarify whether the Collective Transactions are also exempted from Transmission Charges.

