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Chairman

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28.02.2020

Dear Sir,

I am herewith enclosing a note regarding the draft CERC Regulations on Sharing of Inter-State Transmission Charges and Losses. It is requested that the points raised in this note may kindly be considered while finalizing the Regulations.

Best Wishes,

Yours sincerely,

R. Preman D

(Preman Dinaraj)

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Remarks on the draft Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2019

Introduction

CERC issued CERC (Sharing of Inter-state Transmission charges and Losses) Regulations, 2010 on 15.6.2010 effective from 1.7.2011. Prior to the issue of these regulations, the transmission charges were pooled for the region and paid for by beneficiaries of the regions i.e. regional postage stamp method. Prior to 2002-03, the transmission charges were shared on the basis of energy drawal.

CERC (Sharing of Inter-state Transmission charges and Losses) Regulations, 2010 were framed after discussions and consultation with Stakeholders starting in 2007 based on the notified Tariff Policy of GoI. As per the said Regulation, the sharing of transmission charges are based on Point of Connection (PoC) methodology i.e.as Withdrawal charges for drawee entities and injection charges for injecting utilities. The transmission charges are shared based on usage and is sensitive to distance, direction and quantum of power flow in line with notified Tariff Policy. DICs furnish their anticipated demand and drawal (LTA + MTOA + Approved STOA) for the next 3 months to National Load Despatch Centre (NLDC) for determining their charges for the next quarter. The Withdrawal and injection charges are determined based on load flow studies based on hybrid method which is a combination of marginal participation and average participation method. As per the Regulation the transmission losses are shared on regional basis as per load flow study.

With time and experience, periodic review of the regulation was envisaged taking cognizance of the changes in the power sector. Five amendments were issued till date duly following the consultative process. The first, second, third, fourth and fifth amendment became effective from 24.11.2011, 28.3.2012, 1.5.2015, 1.6.2015 and 14.12.2017 respectively. Major changes occurred in 2015 wherein the number of PoC slabs were increased from 3 to 9. Further 'injection charges' got subsumed in 'withdrawal charges' as per the 2015 amendment.

Experience of implementation

Initially there was some apprehension on the impact of the PoC mechanism, considering the complexity of the method. Some States even approached respective high courts challenging the Regulations on few aspects. However, subsequently their apprehensions settled down and the PoC mechanism is working very effectively which has been examined and acknowledged even by the taskforce formed for reviewing the framework of Point of Connection charges. The task force has also concluded that POC has served its purpose as enshrined in the mandate under EA, 2003 and Tariff Policy namely sensitive to distance, direction and quantum of flow. Further the mechanism

has led to the overall development of transmission system in the Country and rationalization of transmission charges.

But, recently, few States have raised apprehensions that their PoC charges are increasing and persumed that the issue is with the mechanism. It was observed that the PoC charges of intervening states through which significant number of new transmission lines were drawn were affected with high PoC charges. This has led these States to a wrong conclusion that there is fallacy in PoC mechanism.

Since the existing mechanism is well established and scientifically based, any modifications shall attempt to make it more scientific and progressive. Proposals to move backwards to the age old postage stamp methods is regressive and counter productive.

Real issues behind high PoC charges for some States

A detailed analysis of the developments in the last decade will indicate that the issues behind unrealistic high PoC charges for few States are due to the following factors:

1. **Creation of large number of transmission lines and under utilization of the same.**

Transmission assets are planned and constructed based on the LTA of the applicant. As per the information available in the public domain (website of CTU), the LTA granted by CTU as on 30-11-2019 and for which transmission assets are constructed is 114625MW. Out of which around 36,118MW of LTA has been relinquished/revoked. Out of the balance available LTA of 69523.3 MW, only around 43021.3MW LTA is in operation, ie. % utilization of LTA is only 37.5%.

LTA granted as on 30-11-2019	114625	MW
LTA Relinquished/revoked	36118.4	MW
Present LTAO/LTA	69523.3	MW
LTA under operation	43021.3	MW
% utilization	**37.5**	%

Out of the total LTA of 114625.4 MW granted as on 30-11-2019, IPP LTA contributes to 94810.94MW. On analyzing the RTA of all the regions, the total utilization of LTA by IPPs is only 41.85% as submitted below.

As per RTA (all Regional RTAs) (November 2019)	LTA utilized	
CGS LTA	70136.16	MW
IPP LTA	39681.61	MW
LTA granted to IPPs	94810.94	MW
% utilization by IPPs	41.85	%

Thus it can be seen that the % utilization of LTA by IPPs is only 41.85%. The transmission system created based on the LTA applications of these IPPs are thus hugely underutilized. While the intervening states use any of such systems marginally, they become liable to bear the entire cost of these lines. Had the provisions in the Regulations related to delay in CoD of the generating stations or that related to relinquishment charges payable by IPPs on non-utilization of LTA were put to use, the States would have been relieved from this burden completely. Also all the transmission assets created for evacuation from these generators are created for meeting reliability criteria of the systems connected to these generators.

2. **Ineffective implementation of the provisions in the existing Regulation**

There are well laid provisions in the existing PoC Regulations which can resolve the issues related to unutilized LTA through effective implementation, monitoring and control. Existing Sharing Regulations addresses these issues as follows and do take care that such lapses from part of any DIC is not socialized. The provisions in the existing Regulations are as follows:

a. If a generating station is delayed and its associated transmission system is commissioned, existing Regulation stipulates that the generating station shall pay the transmission charges of such transmission system and vice versa.
b. Relinquishment of LTA is taken care of by collecting 66% of the estimated transmission charges (net present value) for the stranded transmission capacity for the period falling short of 12 (twelve) years of access rights. Relinquishment charges collected from relinquished LTA applicants are to be used to reduce the transmission charges of DICs.

To implement the above provisions, proper monitoring and implementation of the provisions relating to delay in CoD of generating stations, proper mechanism of collecting relinquishment charges from the relinquished LTA applicants and passing it over to DIC's affected is required. However, these provisions had mostly remained in paper only, so far.

3. **Subsuming of 'injection charges'**

Before the third amendment to PoC regulation, when there were separate 'withdrawal charges' and 'injection charges' , the burden of above underutilized lines do not get loaded to intervening states alone. If injection charges were prevailing, all the beneficiaries (located in different States) of generating stations located in areas with high concentration of underutilized lines would also have shared the burden to a large extent. Thus, subsuming of injection charges has led to skewing of transmission charges for intervening states.

Proposals in the draft Regulations in nutshell

1. Transmission charges to be recovered as:
   a. National Component:
      i. 100% cost of few HVDC lines and 30% cost of all other HVDC lines
      ii. 100% cost of transmission lines constructed for evacuation of Renewable Energy
   b. Regional Component: 70% cost of HVDC lines not covered under National Component plus cost Static Compensator (STATCOM), Static VAR Compensator (SVC), Bus Reactors, and any other transmission elements.
   c. Transformer component : Transmission charges of Inter Connecting T/Fs
   d. Cost of AC transmission lines : Recovered as 'Usage component' and 'Balance component'
      a. (Except the 'Usage component', entire Transmission charges is proposed to be recovered based on LTA + MTOA. 'Usage component' as per the report of the Committee will be limited to around 22% and balance 78% shall be shared on all India basis prorate to LTA + MTOA.)
2. Transmission charges to be computed on post facto basis rather than projection.
3. No Transmission charge for STOA
4. Any drawal above LTA + MTOA to be treated as Transmission Deviation
5. Loss computation on all India basis

Flaws in the proposed method

While the proposals like computation of Transmission charges on post facto basis , new treatment of regional assets and transformer components, nationally important HVDC lines and Renewable energy evacuation lines as national component etc are progressive steps in right direction to address concerns of stake holders, the methodology for sharing the cost of AC system components as proposed in the draft regulation is highly irrational and unscientific and goes against the mandate of EA,2003 and Tariff Policy and has the following adverse implications. Further, it promotes non-optimal transmission investment as cost of under utilization gets socialized and nobody is answerable for the poor planning.

The proposal shows that around 80% of the cost of AC systems are going to be shared on all India basis based on LTA and MTOA contracts, which is in fact a repeat of the old postage stamp method in another guise. It is really astonishing to note that there is not even a single mention in the draft Regulation on the relinquishment charges due from private IPPs and any methodology proposed to utilize such proceedings for bringing down the burden on intervening States.

As already detailed above, a huge quantum of LTA granted(55,000MW) to private IPPs are not currently being utilized. This is a huge figure in comparison with the total LTA now being

operational, which is only a little over 1,00,000 MW. The reason for non-utilization is purely attributable to the LTA applicants for whom the transmission system is created and therefore its cost has to be borne by such LTA applicants and cannot be socialized.

The proposal to socialize the cost attributable to the failure of these private IPPs by transferring the entire burden to DISCOMs which are already financially stressed will have huge ramifications on the consumers of the states. It is noted that the proposal fails on the statutorily mandated test of safeguarding the interest of consumers while ensuring recovery of reasonable costs. The proposal is likely to foster non optimum investments, which is also against the statutory framework. Further, this proposal will not help in resolving the issues raised by the States. The draft Regulation appears to be side stepping from the real issues and is potentially incentivizing those who created the mess at the cost of many states which do not have any role in creation of huge unutilized transmission assets. The proposal to bifurcate AC system charges as 'Usage based component' and 'balance component' is to be revisited and redesigned in such a manner to enable sharing of the charges rationally among real users/beneficiaries.

Alternate proposals

Instead of the proposed methodology, the existing PoC mechanism can be continued with following modifications which will help in addressing and resolving the issues now faced by some intervening states.

1. The provisions in the existing and proposed Regulation related to delay in CoD of generating stations to be implemented in letter and spirit by Central Transmission Utility unlike in the past wherein many states were forced to take legal recourse to get the provisions implemented.
2. Proper mechanism for collecting and adjusting the Relinquishment charges payable by private IPPs who are not using the system, in the transmission charges payable by existing DISCOMs, to be incorporated in the proposed regulation. In the proposed Regulations, there is no provision for adjusting the relinquishment charges. There need to be a mechanism for the same especially when there could be a huge quantum of relinquishment charges coming in a single stretch, which has really accumulated over the last 5 years or more. This can lead to drastic variations in transmission charges over the months. To address this issue it is suggested that relinquishment charges due may be placed in a pool administered by CERC. The amount collected in this pool along with interest may be paid to CTU over the life period of the asset and the amount so received by CTU may be considered for reducing the transmission charges of these unutilized lines. This will reduce significantly the burden due to under utilized asset and will provide relief to the DICs.
3. Special tariff for underutilized lines may be introduced by CERC by considering elongated debt service period, elongated useful life for assets while allowing depreciation and lower RoE etc so that all stakeholders take a portion of the burden created in the system.

4. Introducing monthly connectivity charges for generators connected to the ISTS. Presently, connectivity is provided without any cost. This has enabled many merchant generators to avail connectivity and sell power through short term markets. By imposing connectivity charges, CTU can utilize these charges for reducing the burden of transmission charges of all DICs.
5. Reintroducing 'injection charges' to alleviate burden on intervening states and at the same time the generators/beneficiaries of generators pay for the usage of intervening system.

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