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संदर्भ: ग्रिड इंडिया/पारेषण मूल्य निर्धारण/

दिनांक: 10 मार्च, 2023

To

All States/ DICs / ISTS Licensees

विषय: Seeking comments/suggestions on draft revised procedures for implementation of Sharing Regulations (First Amendment), 2023

- संदर्भ: 1. CERC (Sharing of Inter-State Transmission Charges & Losses) Regulations, 2020 dated 04th May 2020
2. CERC (Sharing of Inter-State Transmission Charges & Losses) (First Amendment) Regulations, 2023 dated 07th February 2023

महोदय,

CERC had notified (Sharing of Inter-State Transmission Charges & Losses) (First Amendment) Regulations 2022 vide notification dated 07th February 2023. As per Regulation 23 (4), the Implementing Agency (NLDC) shall publish the detailed revised procedures and formats for collection of data and information for various agencies and entities for implementation of provisions of these Regulations. The relevant clause of the Regulation is reproduced below:

Quote

23. Procedures to be framed under these Regulations

(4) The Implementing Agency shall, within 45 (forty-five) days of the notification of this amendment, publish the revised detailed procedures for implementation of the provisions of this amendment after stakeholder consultation.

Unquote

Accordingly, Implementing Agency had prepared the following draft revised procedures for implementation of Sharing Regulations 2020 and First Amendment thereof. (enclosed with this letter)

1. Procedure for computation and sharing of ISTS charges
2. Procedure for computation and sharing of ISTS losses
3. Procedure for collection of data and information

It is requested to submit your comments/suggestions on the draft revised procedures to IA by 24.03.2023 (Friday) so that the procedures shall be finalized and published as per the CERC time line. The comments may be sent in electronic form through email to the following:

Implementingagency@grid-india.in; sannymachal@grid-india.in; laxmanrawat@grid-india.in

सादर धन्यवाद,

भवदीय



(एस. सी. सक्सेना)

कार्यपालक निदेशक, रा.भा.प्रे.के

Copy to: Secretary, CERC

Procedure for
Computation and sharing of Inter-State Transmission
System Charges

in compliance of

Central Electricity Regulatory Commission
(Sharing of Inter-State Transmission Charges and Losses
Regulations, 2020) and First Amendment thereof

March, 2023



The Implementing Agency
(National Load Despatch Centre)

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1.0 Outline

- 1.1 This Procedure is made in compliance with Regulation 23(4) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations 2020 and amendments thereof herein after called as the “Sharing Regulations, 2020 and amendments thereof”.
- 1.2 This procedure provides the modalities followed by Implementing Agency for computation of Inter-State transmission charges for each DIC.

2.0 Scope

- 2.1 This procedure shall be applicable to the following:
 - A. Customers who use the ISTS as below:
 - (a) All Designated ISTS Customers (DICs)
 - (b) Generating Stations which are regional entities under the IEGC, 2010 and any subsequent amendments made thereto.
 - (c) ISTS Licensees
 - (d) Non-ISTS Licensees whose assets have been approved by CERC as being used for inter-State transmission of electricity and to be considered under Sharing Regulations 2020 and amendments thereof
 - (e) Any Bulk consumer directly connected with ISTS
 - (f) Any other designated entity representing a physically connected entity as per clauses (b), (d) and (e) above.
 - B. Others
 - (a) Central Transmission Utility
 - (b) National Load Despatch Centre (NLDC), Regional Load Despatch Centres (RLDCs), State Load Despatch Centres (SLDCs) and Regional Power Committees (RPCs)

3.0 Notification of Peak Block by IA

- 3.1 As per Regulation 2 (1) (r), Peak block is the block in which sum of net ISTS draws by all States is maximum. For identifying peak block, negative net ISTS drawl of any State in a time block shall be treated as zero.
- 3.2 The processed Special Energy Metered (SEM) data of the billing period shall be considered for identification of Peak Block of the billing period. For the period for which SEM data is not available as on first day of the month following the billing period, NLDC SCADA data shall be considered for identifying Peak Block.
- 3.3 As per Regulation 24(2), Peak block for the billing period shall be published by IA, on its website, on the first day of the month following the billing period.

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- 3.4 The peak block once declared on first day of the month following the billing period shall be treated as final and shall not be reviewed later based on the SEM data available for the remaining period.
- 3.5 If in case any Grid Disturbance of category GD-5 had occurred during the peak block in any region(s), next peak block shall be considered by IA based on the severity of Grid Disturbance, for notification of peak block for the billing period.

4.0 Data Acquisition and Preparation of Base case for computations

- 4.1 The Implementing Agency shall publish, on its website, the peak block for the billing period on the first day of the month following the billing period for each billing month.
- 4.2 As per Regulation (9) (1) of the Sharing Regulations 2020, Base Case shall be prepared by the IA corresponding to the peak block for each billing period comprising of:
 - a. Basic Network for the power system corresponding to the peak block of the billing period
 - b. Actual generation and actual demand, in MW, at each node of the Basic Network corresponding to the peak block
- 4.3 The basic network data pertaining to the network elements along with actual nodal generation and drawl data corresponding to peak block shall be submitted by all DICs. Yearly Transmission Charges (YTC) shall be submitted by inter-State transmission licensees, Deemed ISTS licensee and Non-ISTS licensees for which tariff have been approved by the Hon'ble CERC.
- 4.4 RLDCs /IA shall verify the injection/ drawl information furnished by the DICs with reference to available SEM data/ SCADA data for the corresponding peak block. PSSE base case that is used for computation of TTC/ATC for peak scenario/ recently submitted updated base case data by the states may also be referred for verification of data submitted by DICs.
- 4.5 In case of major discrepancy of information provided by DICs with reference to SEM/ SCADA data, concerned DICs shall be informed for giving proper explanation for the discrepancy in a specific time period. If DIC fails to rectify the deficiency, IA shall consider the data as per the alternate sources.
- 4.6 The data provided by the DICs shall be as per the formats stipulated by the Implementing Agency. All drawee DICs shall also submit generation from their own generating stations for the peak block during the billing period to the Implementing Agency to prepare the Base Case for load-generation balance.
- 4.7 The Basic Network shall contain all the power system elements including generating station and transmission line at 110 kV and above. Power flow into a lower voltage system from the voltage levels indicated in the definition of the Basic

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Network shall be considered as load at that sub-station. Power flow from a lower voltage system into the electricity systems at the voltage levels shall be considered as generation at that substation.

- 4.8 Dedicated transmission lines constructed, owned and operated by the inter-State transmission licensees shall be considered to be a part of the Basic Network. However, dedicated transmission lines constructed, owned and operated by generating stations shall not be considered as a part of the Basic Network and the generating station shall be deemed to be connected directly to the ISTS at the pooling point. Actual injection of such generating stations at the pooling station shall be taken as actual injection at the pooling point.
- 4.9 While preparing basic network, major transmission lines/ Generation outages for the peak block shall also be factored in basic network, provided the outage is prolonged for the entire period of peak block. The transmission lines, which are temporarily out of service shall be included in the Base Case.
- 4.10 The transmission system declared under commercial operation on or before the last day of a billing period shall be considered for computation of transmission charge for the billing period. However, Basic Network shall be considered as in the peak block of the billing period.
- 4.11 RLDCs shall prepare basic network of their respective region as per the network data, nodal injection/ drawl data submitted by the DICs under their jurisdiction in line with Para 4.0 of this procedure.
- 4.12 If any DIC fails to submit the data as required within the stipulated time frame, IA/ RLDCs shall prepare basic network by obtaining such information from other alternate sources. The alternate sources could be NLDC SCADA/ SEM data/ recent updated base case available/ recent TTC-ATC base case for the corresponding billing period.
- 4.13 In case part of network data is missing, reasonable assumptions shall be made by the Implementing Agency based on data available with it and/or reference to standards published on the Power System Studies, such as the CEA Transmission Planning Criteria.
- 4.14 RLDCs shall furnish the prepared basic network to IA in order to further prepare all India basic network for computation of ISTS charges and losses for each billing period by 12th day of each month following the billing period.
- 4.15 IA shall prepare the All India basic network and shall be made available to all DICs on 15th day of each month following the billing period for review and comment, if any, for 2 days, in order to finalize the all India basic network to be used for the computations for the billing period.

5.0 Computation of ISTS Monthly Transmission Charges (MTC) by IA

- 5.1 All Inter-State transmission licensees, deemed ISTS Licensees and Non-ISTS Licensees whose assets are being used for inter-state transmission of electricity as approved by Hon'ble CERC shall furnish YTC to IA along with the details of bilateral billing, if any, for each billing period by the end of the billing period as per Para 6.4 of the "Procedure for collection of data and information for determination of ISTS charges and losses" published by IA.
- 5.2 IA shall check and compile the YTC data received from all entities as mentioned in Para 5.1 and shall compute Monthly Transmission Charges (MTC) by multiplying number of days in a billing period with YTC per day of the corresponding year for all the licensees in the sharing methodology.
- 5.3 In case of a new transmission element that has declared COD during the billing period, while considering the YTC of the element in the computations for that billing period, Monthly transmission charges on pro-rata basis for the total number of days that element has existed in the network shall be considered under the sharing methodology for the billing period.
- 5.4 Notwithstanding any provision to the contrary in the PPA entered into between the drawee DIC and the generating station or the seller, transmission charges for components identified under Regulations 5 to 8 of Sharing Regulations 2020 and amendments thereof shall be determined on drawl nodes. The bills for sharing of transmission charges shall be raised on the Drawee DICs and the settlement of the transmission charges inter se between the Drawee DICs and the generating station or the seller, wherever necessary, shall be made in terms of the PPA or as per the mutual agreement between the concerned.
- 5.5 As per Regulation 13(3) of Sharing Regulations, 2020 and amendments thereof, where COD of a Connectivity grantee other than Renewable Power Park Developer is delayed on or before start date of Connectivity in terms of GNA Regulations, and the Associated Transmission System has achieved COD, which is not earlier than start date of Connectivity, the Connectivity grantee shall pay Yearly Transmission Charges for the Associated Transmission System corresponding to Connectivity capacity which has not achieved COD:

Provided that where a Connectivity grantee is Renewable Power Park Developer and the generation capacity within the Renewable Power Park has not declared COD on or before start date of Connectivity in terms of GNA Regulations, and the Associated Transmission System has achieved COD, which is not earlier than start date of Connectivity, the Renewable Power Park Developer shall pay Yearly Transmission Charges for the Associated Transmission System corresponding to generation capacity which has not achieved COD:

Provided that Yearly Transmission Charges in respect of Associated Transmission System corresponding to the Connectivity capacity which have achieved COD shall be included for determination of transmission charges of DICs in accordance with Regulations 5 to 8 of Sharing Regulations 2020 and amendments thereof.

Illustrative example:

- a) The planned Installed capacity for a Connectivity grantee other than Renewable Power Park Developer is 2400 MW with Connectivity for 2400 MW. The station has 3 units. If Connectivity capacity is broken up unit wise it comes out to 800 MW corresponding to each unit. Suppose the Annual transmission charges are Rs. 300 Crore. Once first unit is declared COD Rs. 100 Crore shall be considered in Regulation 5 to 8 and Rs. 200 Crore shall be billed to the Connectivity grantee. Once 2nd unit is declared COD, Rs. 200 Crore will be included in Regulation 5 to 8 and Rs. 100 Crore shall be billed to Connectivity grantee and so on. The same principle shall be applied on corresponding Connectivity as well.
 - b) Where a Connectivity grantee is Renewable Power Park Developer, planned generation capacity within Renewable Power Park is 2400MW with Connectivity for 2400MW. If $\frac{2}{3}^{\text{rd}}$ of generation capacity i.e. 1600MW is delayed. Suppose the Annual transmission charges are Rs. 300 Crore. Annual transmission charges of Rs. 100 Crore will be included in Regulation 5 to 8 and Rs. 200 Crore will be billed to the Renewable park developer and so on.
- 5.6 As per Regulation 13(4) of Sharing Regulations, 2020 and amendments thereof, where one or more of the transmission elements of the Associated Transmission System have achieved COD before the COD of the Associated Transmission System and the Connectivity grantee seeks part effectiveness of its Connectivity as per Clause (a) of Regulation 22.4 of GNA Regulations, Yearly Transmission Charges in respect of such transmission elements of the Associated Transmission System shall be included for determination of transmission charges of DICs in accordance with Regulations 5 to 8 of Sharing Regulations, 2020 and amendments thereof.
- 5.7 As per Regulation 13(5) of Sharing Regulations, 2020 and amendments thereof, Where only some of the transmission elements of the Associated Transmission System have achieved COD before the COD of the Associated Transmission System and if such transmission elements are certified by the respective Regional Power Committee(s) as required for improving the performance, safety and security of the grid, the Yearly Transmission Charges for such transmission elements of the Associated Transmission System shall be included for determination of transmission charges of DICs. However, the YTC of such transmission elements shall only be considered for a billing period on furnishing the details of RPC certification of the transmission elements to IA as per the stipulated time lines for furnishing data by the ISTS licensees as per this procedure.
- 5.8 As per Regulation 13(6) of Sharing Regulations, 2020 and amendments thereof, if any transmission element(s) of the Associated Transmission System is required by the Connectivity grantee prior to COD of the Associated Transmission System, the Yearly Transmission Charges for such transmission element(s) shall be payable by the Connectivity grantee from the COD of the said transmission element(s) of the Associated Transmission System till the Connectivity grantee achieves COD.

- 5.9 As per Regulation 13(7) of Sharing Regulations, 2020 and amendments thereof Where Connectivity is granted to a Connectivity grantee other than Renewable Power Park Developer, on margins of existing system or on the augmented system with no ATS, and if the COD of such Grantee is delayed beyond start date of connectivity, the Connectivity grantee shall, corresponding to the capacity that is delayed, pay transmission charges from the start date of such Connectivity at the rate of Rs. 3000/MW/month:

Provided that where a Connectivity grantee is Renewable Power Park Developer and the generation capacity within the Renewable Power Park has not declared COD on or before start date of Connectivity in terms of GNA Regulations, the Renewable Power Park Developer shall pay transmission charges from the start date of such Connectivity at the rate of Rs. 3000/MW/month corresponding to generation capacity which have not achieved COD.

- 5.10 As per Regulation 13(8) of Sharing Regulations, 2020 and amendments thereof, In case a generating station or unit(s) thereof has achieved COD and the Associated Transmission System is delayed, the concerned inter-State transmission licensee(s) shall make alternate arrangement at its own cost for despatch of power of the generating station or unit(s) thereof in consultation with the Central Transmission Utility:

Provided that till such alternate arrangement is made, the inter-State transmission licensee(s) shall pay to the generating station, the Yearly Transmission Charge corresponding to the quantum of Connectivity for the period for which the transmission system has got delayed.

- 5.11 As per Regulation 13(9) of Sharing Regulations, 2020 and amendments thereof, where a dedicated transmission line has already been constructed or is under construction by an inter-State transmission licensee under coordinated transmission planning of the Central Transmission Utility, and the Connectivity grantee has not achieved COD on or before COD of the dedicated transmission line, the Yearly Transmission Charges for such dedicated transmission line shall be payable by the concerned Connectivity grantee to the inter-State transmission licensee from the COD of the dedicated transmission line till COD of such Connectivity grantee and after which Yearly Transmission Charge for the dedicated transmission line shall be considered in accordance with Regulations 5 to 8 of Sharing Regulations, 2020 and amendments thereof.

- 5.12 Regional entity Generating station (a) drawing start-up power prior to COD or (b) drawing auxiliary power before or after COD through ISTS, shall pay transmission charges for such drawl, at T-GNA Rate for the State in which it is located and the amount so received in a billing month, shall be reimbursed to the drawee DICs in proportion to their share in the first bill in the following billing month.

- 5.13 Transmission deviation charges shall not be levied for injection of infirm power prior to COD of a generating station.

5.14 As per Regulation 13(12) of Sharing Regulations, 2020 and amendments thereof, in case of a transmission system where COD has been approved in terms of proviso (ii) of Clause (3) of Regulation 4 of the Tariff Regulations, 2014 or Clause (2) of Regulation 5 of the Tariff Regulations, 2019 or where deemed COD has been declared in terms of Transmission Service Agreement under Tariff based Competitive Bidding, the Yearly Transmission Charges for the transmission system shall be:

- a) paid by the inter-State transmission licensee whose transmission system is delayed till its transmission system achieves COD, or
- b) paid by the generating company whose generating station or unit(s) thereof is delayed, till the generating station or unit thereof, achieves COD, or
- c) shared in the manner as decided by the Commission on case to case basis, where more than one inter-State transmission licensee is involved or both transmission system and generating station are delayed. In such case, MTC and line lengths (total & to be considered in MTC) would be furnished by ISTS Transmission Licensee accordingly along-with all the computations/ relevant orders etc.
- d) paid by the respective drawee DIC(s) of the State whose intra-state transmission system is delayed, till such intra-State transmission system achieves COD.
- e) paid by the Bulk consumer or distribution licensee granted approval to directly connect to ISTS, whose connecting transmission line to ISTS is delayed, till such line is connected to ISTS, or
- f) paid by the ESS whose project is delayed, till the ESS achieves COD.
- g) paid by the Renewable Power Park developer whose Park is delayed, till it is connected to ISTS.

5.15 As per Regulation 13(13) of Sharing Regulations, 2020 and amendments thereof, An intra-State transmission system for which tariff is approved by the Commission shall be included for sharing of transmission charges of DICs only for the period for which such tariff has been approved.

5.16 Monthly Transmission Charges (MTC) considered for computation of transmission charges for the billing period under Sharing Regulations 2020 and amendments thereof; shall be made available to all ISTS licensees (and Non-ISTS licensees having ISTS lines as approved by CERC) by 10th day of each month following billing period for review and comment, if any, for 2 days, in order to finalize MTC to be considered for the computations.

6.0 Computation of total GNA and GNARE of DICs by IA

6.1 IA shall compute total GNA and GNARE (MW) of DICs based on the details received from CTU for the billing period.

6.2 The computed details of total GNA and GNARE of DICs as per Para 6.1 shall be made available to RLDCs on 12th day of each month following billing period for review and comment, if any, for 2 days, in order to finalize the total GNA and GNARE of DICs.