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)

September,2020

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(1) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 herein after called as the "Sharing Regulations 2020".

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.
(e) Any Bulk consumer directly connected with ISTS
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 drawals by all States is maximum. For the purpose of identifying peak block, negative net ISTS drawal 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.

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 drawal data corresponding to peak block and Yearly Transmission Charges (YTC) shall be submitted by all DICs, inter-State transmission licensees, and intra-state licensees tariff for whose whose assets have been approved by the Commission, as per the Sharing Regulations 2020, and "Procedure for collection of data and information" by Implementing Agency for determination of ISTS charges and losses.

4.4 RLDCs /IA shall verify the injection/ drawal 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 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/ drawal 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 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 Where a generating station or any other seller has been granted Long Term Access or Medium Term Open Access and has entered into Power Purchase Agreements for supply of power under such Long Term Access or Medium Term Open Access, the transmission charges towards such Long Term Access or Medium Term Open Access for components identified under Regulations 5 to 8 of Sharing Regulations 2020 shall be determined at the drawal nodes, and billed to the buyers after COD of generating station or units thereof:

Provided that where the generating station or any other seller is responsible to pay the transmission charges in terms of the Power Purchase Agreements, bills for transmission charges shall be raised on the buyer in terms of this clause notwithstanding the provision in the PPA and settlement of the transmission charges *inter se* between the buyer and the generating station or the seller shall be made in terms of the PPA or as may be mutually agreed.

5.4 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.

5.5 Where COD of a generating station or unit(s) thereof is delayed and the Associated Transmission System has achieved COD, which is not earlier than its SCOD, the generating station shall pay Yearly Transmission Charges for the Associated Transmission System corresponding to Long Term Access granted for the generating station or unit(s) thereof, which have not achieved COD:

Provided that Yearly Transmission Charges in respect of Associated Transmission System shall be included for determination of transmission charges of DICs upon the generating station or unit(s) thereof achieving COD.

Illustrative example:

The planned Installed capacity for a generating station is 2400 MW with LTA for 2400 MW. The station has 3 units. If LTA 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 generating station. 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 NTPC and so on. The same principle shall be applied on corresponding LTA as well.

5.6 Where only some of the transmission elements of the Associated Transmission System have achieved COD before the COD of the Associated Transmission System and the generating station seeks part operationalisation of Long Term Access, the Central Transmission Utility shall part operationalize Long Term Access, subject to availability of transmission system and Yearly Transmission Charges in respect of such transmission elements of the Associated Transmission System shall be included for determination of transmission charges of DICs. CTU shall furnish the details of such part operationalization of LTA to IA along with the details of the transmission elements of the Associated Transmission System as per the procedure for collection of data and information.

5.7 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 If any transmission element(s) of the Associated Transmission System is required by the generating station prior to COD of the Associated Transmission System, the Yearly Transmission Charges for such transmission element(s) shall be payable by the generating station from the COD of the said transmission element(s) of the Associated Transmission System till the generating station achieves COD.

5.9 Where Long Term Access is granted to a generating station on existing margins and COD of the generating station or unit(s) thereof is delayed, the generating station shall, corresponding to the capacity that is delayed, pay transmission charges at the rate of 10% of transmission charge per MW for the State where such generating station is located. CTU shall furnish the details of such LTA granted to corresponding generating stations on existing margins to IA as per the procedure for collection of data and information.

5.10 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, the transmission charges for such dedicated transmission line is to be paid by the concerned generating station to the inter-State transmission licensee (including deemed inter-State transmission licensee) from the COD of the dedicated transmission line till operationalization of LTA of the generating station.

After operationalization of Long Term Access, Yearly Transmission Charge for the dedicated transmission line proportionate to the quantum of Long Term Access operationalized qua the quantum of Connectivity for the dedicated transmission line shall be considered under the computation of ISTS charges as per Sharing

Regulations 2020 and the balance transmission charges shall continue to be paid by the generating station. CTU shall furnish the details of such dedicated transmission lines along with the connectivity and LTA operationalization details to IA as per the Procedure for collection of data and information.

5.11 Generating stations drawing start-up power from ISTS shall pay transmission charges at the rate of Transmission Deviation Rate for the State in which they are located.

5.12 Where a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS. CTU shall furnish the details of all such generating stations along with details of LTA/MTOA break-up as per the procedure for collection of data and information.

5.13 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 Long Term Access for the period for which the transmission system has got delayed.

5.14 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.

5.15 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 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 LTA/ MTOA of DICs by IA

6.1 IA shall compute total access granted (MW) of DICs based on details of corresponding LTA to states / entities from central sector generating stations as received from RPCs and LTA/ MTOA details received from CTU.

6.2 As per Regulation 13(1) to Sharing Regulations 2020, no transmission charges and losses shall be payable for the use of ISTS by generation based on solar and wind power sources fulfilling certain conditions as detailed in the Regulation.

6.3 LTA/ MTOA availed by the RE generators fulfilling the conditions shall be exempted from this sharing methodology.

6.4 Normative auxiliary consumption as per CERC terms and conditions of Tariff Regulations 2019, shall be subtracted from the Installed Capacity of Generating stations/ Generating Units while arriving at the corresponding LTA for generating stations where power has been allocated by Ministry of power and have not obtained LTA under Connectivity Regulations 2009 or CERC Open Access Regulations 2004. For cases where specific LTA quantum has been applied for and granted by CTU, such LTA shall be considered.

6.5 Where a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS.

6.6 The computed details of total LTA 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 LTA/MTOA of DICs.

7.0 Load Flows Studies on the Basic Network

7.1 The Implementing Agency shall run AC load flow on the all India basic Network, based on the network data obtained from all the DICs, inter-State transmission licensees, intra-state transmisison licensees tariff of whose assets have been approved by the Commission as being used for inter-State transmission including the NLDC, RLDCs and SLDCs.

7.2 The real power at the generator nodes and the withdrawal nodes in the Basic Network shall be as per actual demand and generation data obtained for peak block during billing period. In case of DIC fails to submit required node wise data, Para 6.3.3 of "Procedure for collection of data and information" shall be followed.

7.3 As per Regulation (9) (4) of the Sharing Regulations 2020, IA may make minor adjustment in nodal injection and withdrawal data so as to maintain load generation balance in the representative base case in consultation with NLDC/ RLDCs based on the historic injection and demand data available with them. If required, RPCs may be consulted for specific major issues.

8.0 Methodology of sharing of Inter-State Transmission charges

Total ISTS Monthly Transmission Charges (MTC) shall have the following components:

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

8.1 Computation and sharing of National Component (NC) of transmission charges

8.1.1 National Component shall comprise of the following components:

a) National Component-Renewable Energy:

National Component- RE shall comprise of the Yearly Transmission Charges for transmission systems developed for renewable energy projects as identified by the Central Transmission Utility.

b) National Component-HVDC:

This component shall comprise of the following:

i. 100% of Yearly Transmission Charges for "back-to-back HVDC" transmission system

ii. 100% of Yearly Transmission Charges for Biswanath-Chariali/ Alipurdwar to Agra HVDC transmission system

iii. Yearly Transmission Charges of Mundra–Mohindergarh 2500 MW HVDC transmission system corresponding to 1005 MW capacity

iv. 30% of Yearly Transmission Charges for all other HVDC transmission systems except those covered under above sections.

8.1.2 Transmission Charges under National Component shall be shared by all drawee DICs and injecting DICs with untied LTA in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA respectively.

8.1.3 Proportionate transmission charges of HVDC Mundra-Mohindergarh towards 1495 MW is to be bourne by M/s Adani Power (Mundra) Limited or its successor company.

8.2 Computation and sharing of Regional Component RC) of Transmission Charges

8.2.1 Regional Component shall comprise of the following components:

a) Regional Component of HVDC (RC-HVDC) comprising of 70% of Yearly Transmission Charges of HVDC transmission systems planned to supply power to the concerned region, except HVDC transmission systems covered under National HVDC Component.

b) Yearly Transmission Charges for static compensators (STATCOMs), static VAR compensators (SVCs), bus reactors, spare transformers, spare reactors and any other transmission element(s) located in the concerned region and identified by the Central Transmission Utility as being critical for providing stability, reliability and resilience in the grid.

8.2.2 Transmission Charges under Regional Component of HVDC shall be shared by drawee DICs of the receiving region and injecting DICs with untied LTA in the receiving region, in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA, respectively.

8.2.3 Transmission Charges of STATCOMs, SVCs and bus reactor etc. shall be shared by drawee DICs of the region and injecting DICs with untied LTA to the same region, in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA, respectively.

8.3 Computation and sharing of Transformer Component (TC) of Transmission Charges

8.3.1 Transformer Component for a State shall comprise of Yearly Transmission Charges for inter-connecting transformers (ICTs) planned for drawal of power by the concerned State.

8.3.2 For transformers used for drawl requirement of more than one State, Yearly Transmission Charges shall be apportioned to such States in the ratio of number of feeders from such transformers emanating for each State.

8.3.3 Transformer Component for a State shall be borne and shared by the drawee DICs located in the concerned State in proportion to their Long Term Access plus Medium Term Open Access.

8.4 Computation and sharing of AC System Component (ACC) of Transmission Charges

8.4.1 AC System Component shall comprise of the remaining Yearly Transmission Charges which are not covered under National Component, Regional Component and Transformer Component.

8.4.2 AC System Component shall comprise of AC Usage-Based component and AC

Balance component.

8.4.3 Computation of share of Transmission charges under AC usage-based component

a) The transmission charge per circuit kilometer for a transmission line for each conductor configuration at each voltage level shall be made uniform.

b) Total circuit kilometer for transmission lines for each conductor configuration at each voltage level shall be allocated uniform charges based on the indicative cost per circuit kilometer for a transmission line for each conductor configuration at each voltage level as furnished by CTU.

c) The following illustration shall be followed to calculate uniform transmission charges type wise per circuit km.

Type	Cost (Rs Lakh)	Cost (Rs Lakh) /Circuit	Actual ckt-km Type Wise	Equivalent ckt km	Indicative Cost Type Wise per ckt-km
				w.r.t 400 kV D/C Quad Moose	(Rs Lakh/ckt-km)
765 kV - D/C – HEXA	a_1	$b_1=a_1/2$	T_1	$K_1=T_1\times(b_1/b_3)$	$I_{1=}{}^{T}C_M \times(K_1/K)/T_1$
765 kV - S/C – HEXA	a_2	$b_2=a_2$	T_2	$K_2=T_2\times(b_2/b_3)$	$I_{2=}{}^{T}C_M \times(K_2/K)/T_2$
400 kV - D/C - Quad Moose	a_3	$b_3=a_3/2$	T_3	$K_3=T_3\times(b_3/b_3)$	$I_{3=}{}^{T}C_M \times(K_3/K)/T_3$
400 kV - D/C - Twin Moose	a_4	$b_4=a_4/2$	T_4	$K_4=T_4\times(b_4/b_3)$	$I_{4=}{}^{T}C_M \times(K_4/K)/T_4$
400 kV - S/C - Twin Moose	a_5	$b_5=a_5$	T_5	$K_5=T_5\times(b_5/b_3)$	$I_{5=}{}^{T}C_M \times(K_5/K)/T_5$
220 kV - D/C -	a_6	$b_6=a_6/2$	T_6	$K_6=T_6\times(b_6/b_3)$	$I_{6=}{}^{T}C_M \times(K_6/K)/T_6$
220 kV - S/C -	a_7	$b_7=a_7$	T_7	$K_7=T_7\times(b_7/b_3)$	$I_{7=}{}^{T}C_M \times(K_7/K)/T_7$
132 kV - D/C -	a_8	$b_8=a_8/2$	T_8	$K_8=T_8\times(b_8/b_3)$	$I_{8=}{}^{T}C_M \times(K_8/K)/T_8$
132 kV - S/C -	a_9	$b_9=a_9$	T_9	$K_9=T_9\times(b_9/b_3)$	$I_{9=}{}^{T}C_M \times(K_9/K)/T_9$
400 kV - D/C - Triple Snowbird	a_{10}	$b_{10}=a_{10}/2$	T_{10}	$K_{10}=T_{10}\times(b_{10}/b_3)$	$I_{10=}{}^{T}C_M \times(K_{10}/K)/T_{10}$
400 kV - D/C - Twin HTLS	a_{11}	$b_{11}=a_{11}/2$	T_{11}	$K_{11}=T_{11}\times(b_{11}/b_3)$	$I_{11=}{}^{T}C_M \times(K_{11}/K)/T_{11}$
		Sum	T	K	

${}^{T}C_M$ = Monthly Transmission Charge w.r.t. AC System Component

d) The type wise indicative cost thus computed shall be multiplied with circuit kilometers of each transmission line in order to arrive at average MTC of the transmission line. The total MTC of all transmission lines under this sharing mechanism shall be adjusted to total AC system component by scaling up/ down in case of discrepancy.

e) After load flow studies on the basic network, percentage usage of each line shall

be computed by dividing the power flow on each line by Surge Impedance Loading (SIL) of the line. In case, power flow on any line is more than Surge Impedance Loading, percentage usage shall be capped at 100%.

f) Percentage usage of each transmission line shall be multiplied by line wise charges of such transmission line to obtain usage-based transmission line charges.

g) For the transmission lines covered under National RE-Component, circuit km of such transmission lines shall be considered as "zero".

h) Where entire Yearly Transmission Charges are to be billed to a generating station under sections 5.5, 5.8 and 5.10 of this procedure, Circuit Km of such transmission lines shall be considered as "zero".

i) Where Yearly Transmission Charges are to be partly included for computation of AC usage-based transmission charges and partly to be billed to the generating station or any other entity covered under section 5 of this procedure, the circuit kilometers of such transmission lines shall be reduced pro rata corresponding to the Yearly Transmission Charges to be included for computation of AC usage-based transmission charges.

Example:
Suppose a transmission line has 500 circuit km and 50% of its Yearly Transmission Charges are to be billed to a generating station 'A' and 50% is to be included for computation of transmission charges in accordance with Regulations 5 to 8 of Sharing regulations 2020. For calculation of AC-UBC, circuit km for this transmission line shall be taken as 250 circuit km.

j) The usage-based line cost shall then be attributed to various nodes as per their utilization factors of the line in proportion to the nodal injection/ demand to arrive at the nodal transmission charges.

k) The load flow results and usage-based cost of each line of the basic network corresponding to peak block during billing period shall form the basis of calculation of transmission charges and the input to the computation software. The output of the software shall be the computed nodal transmission charges.

l) Transmission charges (in Rs.) for billing towards LTA/MTOA shall be calculated only on Withdrawal nodes (as Withdrawal charges) and only for generators who have Long Term Access to target region (as injection charges) corresponding to untied power.

m) IA shall aggregate transmission charges at drawal nodes (excluding drawal nodes of a DIC having LTA/MTOA other than distribution licensee of the state) within the geographical boundary of the state to determine the transmission

charges of the state under AC usage-based component.

n) IA shall aggregate transmission charges at injection nodes to determine the transmission charges of injecting DICs with untied LTA.

o) The demand zones shall normally be the State control areas. Generation zones are formed by combining the generators connected to the ISTS.

8.5 Computation and sharing of AC Balanced Component of Transmission Charges:

8.5.1 The Yearly Transmission Charges under AC-Balanced Component shall be the balance Yearly Transmission Charges for AC System Component after apportioning the charges for AC-Usage-Based Component.

8.5.2 Transmission charges under AC-Balanced Component shall be shared by all drawee DICs and injecting DICs with untied LTA in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA respectively.

9.0 Computation of Transmission Charges for Short Term Open Access

9.1 State-wise Transmission charges for Short Term Open Access shall be calculated as follows:

STOA Rate for the State (in Paise/kWh)

$$= \frac{\text{Transmission charges of the state for the billing month (in rupees)}}{7200 \times \{\text{LTA and MTOA (in MW) of the State for the corresponding billing period}\}}$$

9.2 Transmission Charges for STOA transactions shall be payable by generating stations and embedded entities located in the State, as per the last published STOA Rate for the State. In case of drawee entities that are users of RLDC which have no Long Term Access or Medium Term Open Access, STOA Rate of the state in which they are located shall be applicable.

9.3 No transmission charges for Short Term Open Access for Inter-State Transmission System, shall be payable by a distribution licensee which has Long Term Access or Medium Term Open Access or both, or by a trading licensee acting on behalf of such distribution licensee.

9.4 SLDCs shall furnish the details of distribution licensees of concerned state having Long Term Access or Medium Term Open Access or both, along with details of prospective Long Term Open Access and/or Medium Term Open Access of the licensees for next three months by 25th of each month to RLDC/IA .

9.5 STOA bilateral transactions where buyer and seller both are distribution licensees or traders applying on behalf of such distribution licensees, one having Long Term Access or Medium Term Open Access or both and the other licensee having no Long

Term Access or Medium Term Open Access, then the following shall apply:
(a) If distribution licensee with Long Term Access or Medium Term Open Access or both has applied for STOA, then no transmission charges for STOA transactions shall be applicable
(b) If distribution licensee without any Long Term Access or Medium Term Open Access or both has applied for STOA, then transmission charges for STOA transactions shall be applicable

Illustration:

(i) Suppose a distribution licensee 'D1' (seller) applied for a short term bilateral transaction of 100 MW under First Come First Serve (FCFS) category intends to supply power to another Distribution Licensee 'D2' (Buyer). D1 has LTA of 2000 MW where as D2 has no LTA or MTOA. Then the distribution licensee D1 shall not be liable to pay charges for such STOA.

(ii) Suppose a distribution licensee 'D1' (seller) applied for a short term bilateral transaction of 100 MW under First Come First Serve (FCFS) category intends to supply power to another Distribution Licensee 'D2' (Buyer). D1 has no LTA or MTOA where as D2 has LTA of 2000 MW. Then the distribution licensee D1 shall be liable to pay charges for such STOA.

10.0 Determination of Transmission Charges for DICs

10.1 Transmission charges for DICs shall be the sum of charges computed under National Component, Regional Component, Transformer Component and AC System Component.

Example: Transmission Charges (in Rs.) = NC + RC + TC + ACC where,

NC (National Component) = National Component-RE + National Component-HVDC

RC (Regional Component) = Regional Component-HVDC + Charges of STATCOM etc.

TC = Transformer Component

ACC (AC System Component) = AC usage-based component + AC Balance component

10.2 In case of under/over recovery of monthly transmission charges, transmission charges shall be scaled on pro-rata basis.

10.3 Wherever lines belonging to an ISTS Licensee are Looped In Looped Out by an Intra-State Transmission Licensee, the entire length shall be considered for Load flow studies and average cost shall be applied on the whole line.
Similarly, wherever line belonging to an Intra-State Transmission Licensee that is not certified by RPC is Looped In Looped Out by an ISTS Licensee, the charges of such lines shall not be considered in computation. The same may be recovered through scaling up the final charges.

10.4 As per Regulation 14(1) to Sharing Regulations 2020, The Implementing Agency shall publish transmission charges payable by drawee DICs and injecting DICs with untied LTA for the billing month in Rupee terms

10.5 Implementing Agency shall provide the following information to RPC on completion of computation of transmission charges:

a) Corresponding LTA (MW) data for each month based on the allocation from central sector generating stations received from RPCs and LTA/MTOA details received from CTU.

b) Component-wise breakup of Transmission charges (in Rs) payable by each constituentfor the billing month

10.6 Based on the information furnished by the Implementing Agency, Secretariat of the respective Regional Power Committee shall issue Regional Transmission Accounts and shall publish the same on its website..

10.7 The Regional Transmission Deviation Account shall be prepared by RPC from the processed metered data of all SEMs furnished by RLDC to RPC on weekly basis for DSM account.

10.8 RLDCs shall send the details of short-term open access to respective RPCs for issuance of Regional Transmission Deviation Account.

11.0 Time lines for various activities under this procedure

Sl.No.	Name of the Activity	Time line
1	Data and information of ISTS assets to be furnished by all ISTS licensees and Non-ISTS Licensees whose assets are approved by CERC as being used for Inter-state Transmission of electricity	By 31st day of each billing period
2	Data and information of any new ISTS assets achieved COD by last day of the billing period	On 1st day of each month following billing period
3	Notification of Peak Block by IA	On 1st day of each month following billing period
4	Data and information to be furnished by all DICs/ CTU to RLDCs/ IA	By 7th day of each month following billing period
5	Availability of finalized MTC to be considered for computations of the billing period to all ISTS Licensees and Non-ISTS Licensees whose assets are approved by CERC as being used for Inter-state Transmission of electricity for review and comment	On 10th day of each month following billing period
6	Comments to be sent by ISTS Licensees on finalized MTC to be considered for computations of the billing period	By 12th day of each month following billing period

Sl.No.	Name of the Activity	Time line
7	Preparation of basic network by each RLDC	By 12th day of each month following billing period
8	Availability of finalized LTA/ MTOA agreement profile to RLDCs for review and comment	On 12th day of each month following billing period
9	Comments to be sent by all RLDCs on the details of LTA/MTOA agreement profile	By 15th day of each month following billing period
10	Preparation of all India basic network for the billing period by IA and made available to all DICs for review and comment	By 15th day of each month following billing period
11	Comments to be sent by all DICs on the all India basic network to IA	By 18th day of each month following billing period
12	Notification of transmission charges payable by DICs by NLDC	By 25th day of each month following billing period
13	Furnishing details of LTA/MTOA of distribution licensees to RLDC/ IA including prospective LTA/ MTOA of next 3 months by SLDC	By 25th day of each month

12.0 Information to be published by IA in Public Domain

12.1 Implementing Agency shall provide following information in public domain:

a) The Basic Network, generation at nodes and drawal at nodes considered for the Base Case and the load flow results, for each billing period and Assumptions if any;

b) Details of transformers, list of transmission elements and corresponding transmission charges considered under Regional Component for the billing period;

c) Details of transmission system covered under National Component;

d) New transmission system added during billing period;

e) YTC detail (Information submitted by the transmission licensees covered under the Regulation and computation by Implementing Agency) besides confirming to CTU in writing for the purpose of disbursement of charges to Licensees;

f) Details of LTA and MTOA in respect of each DIC for the billing period;

g) Detailed calculations for arriving at the average cost in respect of each transmission line using indicative cost;

h) Transmission charges payable by each constituent for the billing month along with component-wise break-up.

12.2 The above information shall be made available for viewing as well as downloading in .xls/.csv formats on the website of IA only after logging in. The username and password for this purpose can be generated through registration on the website.

12.3 IA shall design and develop an interactive "query" to show case the results of computations includes:

a) a given generator is meeting which loads and in what proportion

b) a given load(s) is met by which generators and in what proportion

c) a given DIC is using which transmission lines and in what proportion

d) a given transmission is serving which DICs and in what proportion.

e) and as required by DICs on time to time basis

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Annexure I

Process Chart for Determination of Transmission Charges