

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड

(भारत सरकार का उपक्रम)

GRID CONTROLLER OF INDIA LIMITED

(A Government of India Enterprise)
[Formerly Power System Operation Corporation Limited (POSOCO)]

राष्ट्रीय भार प्रेषण केन्द्र/ National Load Despatch Centre

Notification of Transmission charges payable by DICs for Billing Month of December, 2023

No: TC/11/2023 Date: 25.11.2023

- Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 came into force with effect from 1.11.2020. National Load Despatch centre (NLDC) as the Implementing Agency under Sharing Regulations 2020 has been entrusted with the responsibility of computation of ISTS transmission charges and losses. As per Regulation (14)(5)(b), Transmission charges payable by DICs shall be notified by the Implementing Agency by 25th day of the month following billing period. The computation of transmission charges shall be done on the basis of inputs received from ISTS Licensees, DICs/ States, CTU as per the Regulations.
- 2. Central Electricity Regulatory Commission has notified three amendments to Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 which came into force with effect from 1.10.2023, 1.11.2023 and 26.10.2023 respectively.
- 3. As per Regulation 24(1), all entities whose transmission elements have declared COD during the billing period shall submit to the Implementing Agency, network data, date(s) of commercial operation of the new transmission element and Yearly Transmission Charge (YTC) of such transmission element in the format stipulated by the Implementing Agency, on or before the end of the billing period.
- 4. As per Regulation 24(2), Implementing Agency shall publish the peak block of the billing period on the first day of the month following the billing period. Accordingly, NLDC had identified 59th time block (14:30 Hrs to 14:45 Hrs) on 13th October, 2023 as a peak block for the billing period of Oct'23 and published the information of peak block on Grid-India website. Details of the inputs from entities have been received as per the stipulated timelines is enclosed as Annexure-I.
- 5. Based on the inputs furnished by ISTS licensees, Monthly Transmission Charges (MTC) to be considered in the computations have been shared with all ISTS licensees/ deemed ISTS licensees for review and comments on 15.11.2023 with last date of submission of comments as 17.11.2023.
- Based on inputs furnished by DICs/ States, all India basic network has been prepared along with node wise generation and demand as per the peak block and made it available on Grid-India website on 15.10.2023 for review and comments of DICs/ States in line with the notified procedures with the last date for submission of comments as 18.10.2023.
- 7. The methodology involved in the computation exercise along with the assumptions followed in the computations are enclosed at **Annexure-II**.
- 8. CERC had notified the CERC (Connectivity and General Network Access to the inter-State Transmission System) (First Amendment) Regulations, 2023 on 01.04.2023 w.e.f 05.04.2023. As per Annexure-II of the said Regulations, titled as "Methodology to determine 'Direct drawal' by a State from a regional entity generating

station", CTU will provide the list of regional entity generating stations (connected to STU and ISTS or only STU) to NLDC within a week of coming into effect of these Regulations for computation of Direct drawal by the state.

Accordingly, based on the inputs received from CTU, NLDC had computed GNAsh and GNAd and published the same on Grid-India website on 03.07.2023. Subsequently, CTUIL vide email dated 24.11.2023 has furnished revised list of eligible regional entity generating stations (connected to STU and ISTS or only STU) for computation of GNAsh and GNAd. Accordingly, NLDC has revised GNAsh and GNAd. Updated details of GNAsh and GNAd are uploaded on the Grid-India website and are also enclosed at Annexure- VIII.

For computation of transmission charges of states, corresponding GNA has been reduced by quantum of GNAd of the state.

- 9. CERC vide notification dated 26.10.2023 has notified the CERC (Sharing of Inter-State Transmission Charges and Losses)(Third Amendment), Regulations 2023 w.e.f. 26th October,2023. Relevant part of the notification is as follows:
 - "(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 sub clauses (a), (b) and (c) of Clause (3) of Regulation 5:

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

HVDCr (in %) = (MW capacity of power flow in the reverse direction / MW capacity of power flow in the forward direction) X100

Where, HVDCr (in %) is more than 30%, the Yearly Transmission Charges corresponding to HVDCr shall be considered in the National component and the balance in the regional component.

Where, HVDCr (in %) is equal to or less than 30%, 30% of Yearly Transmission Charges shall be considered in the National component and 70% in the Regional component:
......"

Accordingly, Transmission charges for HVDC Raigarh-Pugalur has been computed based on the above methodology after considering 3000 MW capacity in the reverse direction and 6000MW capacity in the forward direction from date of coming into effect of CERC (Sharing of Inter-State Transmission Charges and Losses) (Third Amendment), Regulations 2023 which is 26.10.2023. For remaining days of billing period October,2023, Transmission charges for HVDC Raigarh-Pugalur has been computed based on the provisions of CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 which came into force with effect from 1.11.2020.

- 10. As per Annexure-III of CERC (Sharing of Inter-State Transmission Charges and Losses)(First Amendment), Regulations 2023, % waiver for transmission charges is to be computed based on the drawal schedule of drawee entities. Relevant part of the Regulations is as follows:
 - " (a) The transmission charges towards ISTS for each drawee DIC shall be computed in accordance with Regulations 5 to 8 of these regulations.
 - (b) The waiver of transmission charges shall be calculated in the following manner: -

(i) Waiver of a drawee DIC other than a drawee DIC which has obtained "GNARE" shall be calculated based on the following formulae:

Waiver (%) = 100 X
$$\frac{\sum_{n=1}^{T} \frac{SDRTG}{SDTTG}}{T}$$

Where, "SDRG" is the drawl schedule (in MW) through ISTS under GNA from the sources eligible for waiver under Regulation 13 of these regulations in nth block;

"SDTG" is the total drawl schedule (in MW) under GNA through ISTS from all sources in nth block; "n" is the nth time block

"T" is number of time blocks in a month = 96 X number of days in a month

Provided that in case the "SDTG" for a time block is less than 75% of the maximum schedule corresponding to GNA, the "SDTG" shall be taken as 75% of maximum schedule corresponding to GNA for a time block. (ii) Waiver of a drawee DIC which has obtained "GNARE" shall be calculated based on the following formulae:

Waiver (%) = 100 X (sum of SDRTG for all time blocks in the month) / (total number of time blocks in the month X = 0.3 X T-GNARE)

Where, "GNARE" is the GNA to procure power only from the sources eligible for waiver under Regulation 13 of these regulations; "SDRG" is the drawl schedule (in MW) in a time block through ISTS under GNARE from the sources eligible for waiver under Regulation 13 of these regulations;

Provided that maximum waiver shall be limited to 100%: Provided further that if such an entity draws power from any source other than the sources eligible for waiver under Regulation 13 (2) of these regulations, except after obtaining additional GNA or T-GNA or converting GNARE into GNA by making an application to CTU, it shall be charged @TDR of the State in which such an entity is located."

In accordance with the above regulatory provisions, % waiver for drawee DICs has been computed considering the drawal schedule under GNA and GNA-RE.

- 11. Accordingly, the transmission charges are hereby notified for the billing month of December'23 mentioned as follows:
 - a) Various components of the transmission charges determined have been added for each DIC in order to compute total transmission charges (duly considering the applicable waiver) payable by the DIC.
 - b) The transmission charges are computed separately for both GNA and T-GNA:
 - For GNA billing in ₹: These charges are calculated only for Drawee DICs.
 - For T-GNA billing in (Rs./MW/block): These rates are calculated for all the states.
 - c) The notified transmission charges payable by DICs for the billing month of December'23 shall be used by RPCs for preparation of Regional Transmission Account (RTA) for the billing month of December'23 considering details of GNA enclosed along with this notification.
 - d) Transmission charges shall be payable by the entities who are granted T-GNA or T-GNARE under Regulation 26.1 of the GNA Regulations.
 - e) The notified transmission charges for T-GNA bilateral transactions shall be applicable for the applications received on or after 00:00 Hrs of the next day (D+1) following the date of this notification (D). In the case of T-GNA collective transactions, both DAM and RTM, the notified transmission charges shall be applicable from the delivery day D+2 following the date of this notification.

- f) The transmission charges payable by DICs for GNA are given at Annexure-III.
- g) Applicable T-GNA rates are attached as Annexure-IV.
- h) Details of GNA and GNA-RE is given at Annexure-V.
- i) ISTS licensee wise break up of Monthly Transmission Charges (MTC) is given at Annexure-VI.
- j) Entity-wise details of bilateral billing are given separately at Annexure-VII.
- k) Details of GNAsh and GNAd is given at Annexure-VIII.

(नीरज कुमार)

महाप्रबंधक/ रा. भा. प्रे. के.

Input Data furnished by DICs/ ISTS Licensees/ CTU

1. As per Regulation 24(1) of Sharing Regulations 2020, some of the ISTS Licensees have submitted YTC data by 31.10.2023. Sterlite Power has submitted YTC of its SPV's on 01.11.2023. PowerGrid has submitted its YTC and YTC of its SPV's on 01.11.2023. North East Transmission Company Limited has submitted their YTC on 02.11.2023. Further, PowerGrid submitted its Format I(C) on 10.11.2023. Furthermore, PowerGrid submitted its revised Format I(C) on 20.11.2023. The list of ISTS licensees that have submitted YTC data is mentioned as below.

<u>List of ISTS Licensees submitted the YTC data for the billing period October'23</u>

SI. No.	Name of ISTS Licensee
1	Powergrid Corporation Of India Ltd
2	Adani Transmission (India) Limited
3	Chhattisgarh-WR Transmission Limited.
4	Raipur Rajnandgaon-WR Transmission Limited.
5	Sipat Transmission Limited.
6	Western Transmission Gujarat Limited
7	Western Transco Power Limited
8	Alipurduar Transmission Limited
9	Fatehgarh-Bhadla Transmission Ltd.
10	North Karanpura Transco Limited
11	Bikaner-Khetri Transmission Limited
12	Jam Khambaliya Transco Limited
13	Lakadia-Banaskantha Transmission Limited
14	WRSS XXI (A) Transco Limited
15	Karur Transmission Limited
16	Parbati Koldam Transmission Company Limited
17	Bhopal Dhule Transmission Company Ltd.
18	East North Interconnection Company Limited
19	Gurgaon Palwal Transmission Limited

SI. No.	Name of ISTS Licensee
20	Jabalpur Transmission Company Limited
21	Maheshwaram Transmission Limited
22	Khargone Transmission Company Ltd.
23	Goa Tamnar Transmission Projects Limited
24	Mumbai Urja Marg Limited
25	Lakadia Vadodara Transmission Company Limited
26	NRSS-XXIX Transmission Limited
27	Odisha Generation Phase-II Transmission Limited
28	Patran Transmission Company Limited
29	Purulia & Kharagpur Transmission Company Limited
30	Rapp Transmission Company Limited
31	NER-II Transmission Limited
32	Torrent Power Grid Limited
33	Darbhanga-Motihari Transmission Company Limited
34	NRSS XXXI (B) Transmission Limited
35	Kohima Mariani Transmission Limited
36	Raichur Sholapur Transmission Company Private Limited
37	Koppal-Narendra Transmission Limited
38	Warora-Kurnool Transmission Limited
39	Powergrid Vizag Transmission Limited
40	Powergrid NM Transmission Limited
41	Powergrid Unchahar Transmission Limited
42	Powergrid Parli Transmission Limited
43	Powergrid Kala Amb Transmission Limited
44	Powergrid Southern Interconnector Transmission System Limited
45	Powergrid Jabalpur Transmission Limited

SI. No.	Name of ISTS Licensee
46	Powergrid Warora Transmission Limited
47	Powergrid Medinipur Jeerat Transmission Limited
48	Powergrid Mithilanchal Transmission Limited
49	Powergrid Ajmer Phagi Transmission Limited
50	Powergrid Varanasi Transmissoin System Limited
51	Powergrid Fatehgarh Transmission Limited
52	Powergrid Khetri Transmission System Ltd.
53	Powergrid Bhuj Transmission Limited
54	Powergrid Bikaner Transmission System Limited
55	North East Transmission Company Limited
56	Transmission Corporation Of Andhra Pradesh (APTRANSCO)
57	Power Transmission Corporation Of Uttarakhand Ltd.
58	Haryana Vidyut Prasaran Nigam Limited

- 2. As per Sharing Regulations 2020 and NLDC notified Procedure for collection of data and information, CTU shall submit all required data and information as stipulated in Formats II(A) to II(G) within 7 days after the end of the billing period i.e. by 07.10.2023. NLDC had provided the detailed list of ISTS assets of all licensees for segregation into various components as per stipulated formats on 02.11.2023. CTU have submitted data in formats II(A), II(B) and II(E) on 10.11.2023. Further, CTU have submitted data in formats II(F) and revised II(B) on 15.11.2023. CTU have submitted data in formats II(C), II(D), II-(G4) & II(H) on 17.11.2023. CTU have submitted data in formats II-(G1), II-(G2), II-(G3) and revised II(B) on 20.11.2023.
- 3. As per Regulation 24(4) and NLDC notified Procedure for collection of data and information, DICs shall submit the required information to the Implementing Agency as stipulated in Formats III and IV for the billing period within 7 days after end of the billing period. The list of the DICs that have submitted the data by 07.11.2023 is as mentioned below:

S.NO.	WR	SR	NR	NER	ER
1	Chattisgarh	Andhra Pradesh	Uttar Pradesh	Assam	Odisha
2	Gujarat	Telangana	Haryana	Meghalaya	
3	MP	Karnataka	Himachal Pradesh	Nagaland	
4	Maharashtra	Kerala	Rajasthan	Tripura	
5	Goa	Tamil Nadu	Punjab		

	D&D and DNH	Galiveedu (Karnal P1, Hisar P3 &	Renew Solar Power	
6	D&D and DNH	Bhiwadi P6)	Private Ltd.	
7	Hazira	PVG Renew-TN2		
8	ACBIL	PVG ADYAH		
9	Spectrum Power	PVG Azure Earth		
10	Maruti Coal Power	PVG Parampujya		
11	BALCO	Ayana NP Kunta		
12	CGPL	ANP AZURE		
13	DB Power Ltd.	PVG AdaniKANine		
14	DGEN	NTPC Ettayapuram		
15	Dhariwal			
16	GMR Warora			
17	Raipur Energen			
18	Jindal Stg-1			
19	JPL Stg-2			
20	Jhabua Power			
21	JP Nigrie			
22	KAPS 1&2			
23	KAPS 3&4			
24	Raigarh Energy			
25	KSK Mahanadi			
26	LANCO			
27	MB Power			
28	Essar Mahan			
29	NSPCL Bhilai			
30	RKM Power			
31	Sasan UMPP			
32	SKS Power			

				1
33	SSP			
34	TRN Energy			
35	TAPS (1,2)			
36	Naranpar Ostro			
37	ACME RUMS			
38	Mahindra Renewables Pvt. Ltd.			
39	ARINSUM			
40	Bhuvad Renew			
41	Vadwa Green Infra			
42	Roha Green infra			
43	Dayapar Inox			
44	Ratadiya AGEMPL			
45	Alfanar wind			
46	Renew AP2 Gadhsisa			
47	Avikiran			
48	Powerica			
49	SESPL Morjar			
50	SKRPL			
51	SBESS			
52	Netra Wind			
53	AWEK4L			
54	Apraava			
55	SRSSFPL			
56	MSEPL			
57	Torrent Sidhpur			
		1	1	1

Methodology of the computations and assumptions followed in the basic network

a) Modeling of the Basic Network

- A. The All India network was modeled with the help of network data and node wise generation and demand data furnished by DICs. Wherever network data has not been provided by DICs, network data already available at RLDCs/NLDC has been considered. Wherever technical parameters were not furnished, standard parameters as per CEA Manual on Transmission Planning Criteria have been used.
- B. Certain Transmission Lines included in the basic network were partly owned by ISTS Licensee and partly by STUs. There were cases where the existing lines originally owned by one utility have been made LILO by other utility. In cases where the line originally owned by ISTS Licensee has been made LILO by STU, the Monthly Transmission Charge for the entire line has been considered (including the section owned by STU). In cases where the line originally owned by STU has been made LILO by ISTS Licensee, the Monthly Transmission Charge for the entire line has not been considered.
- C. All India basic network up to 66/33 kV level and at some nodes even till 0.4 kV level has been prepared. As per the Sharing Regulations 2020, basic network means power system at voltage levels of 110 kV and above, containing all power system elements including generating station and transmission systems.
- D. In line with Sharing Regulations 2020, all India basic network has been truncated to 110 kV level. Power flow into lower voltage system has been considered as load at the substation at truncated point. Power flow from a lower voltage system has been considered as generation at the substation at truncated point.
- E. To account for the transmission losses of the truncated lower voltage network and to ensure state drawal as per SEM data corresponding to peak block, minor adjustments in states generation has been done.
- F. Interstate generating Stations (ISGS) connected at 220kV and below voltage level are created as separate control areas.
- G. 400 kV Singrauli considered as slack bus.
- H. HVDC Sasaram flow adjusted in order to remove loop flows in the network.

b) Load Generation balance for the basic network

- A. Node wise generation and demand data for the peak block as submitted by DICs has been considered to prepare Load Generation balance.
- B. Wherever aggregate generation and demand data submitted by DICs, the generation and demand data has been distributed across the nodes of the DICs as per the node wise distribution of the TTC/ATC base case applicable for Oct'23.
- C. Wherever node wise generation and demand data has not been provided by DICs, SEM data/ SCADA data available with NLDC/RLDCs has been considered. In the absence of SEM/ SCADA data, the node wise generation and demand data as available from TTC/ ATC base case / recently submitted base case of states has been considered.

c) Commercial Data considered in the computations

A. The data as submitted by the ISTS Licensees has been examined by NLDC and suitably considered for computation of transmission charges for DICs for the billing period Oct'23. For the ISTS licensees who have not submitted YTC data for Oct'23, the YTC data recently available with reference to the previous computations have been considered.

- B. All ISTS transmission assets commissioned by the end of Oct'23 as furnished by ISTS licensees have been considered in the computations.
- C. Yearly Transmission Charges (YTC) based on approved/adopted tariff by CERC has only been considered in line with Sharing Regulations 2020. RPC certified non-ISTS lines as ISTS lines have not been considered in the computations.
- D. The assets of State Utilities whose approved Tariff by the Commission is not available as on 31.03.2019 are not being considered in the computations since 2019-20 Q3 in line with Terms & Conditions of Tariff Regulations. The same is continued in this computation.
- E. As per minutes of Validation Committee meeting held for 2020-21 Q2 PoC computations, for the assets of Essar Power transmission limited, combined tariff of LILO of 400kV Vindhyachal-Korba at Mahan, GIS S/s at Hazira and 400kV Hazira-Gandhar line) was being excluded from PoC computations in the absence of exclusive tariff of LILO of 400kV Vindhyachal-Korba at Mahan since 2020-21 Q2. As per CERC Order dated 04.06.2021 in I.A. No. 32/2021 in Petition No. 92/MP/2021, Exclusive tariff of 400kV Hazira-Gandhar Line and GIS S/s at Hazira has been approved and same has been considered for billing period Oct'23.
- F. As per Regulation (13) clauses (3), (6), (9), the YTC of assets claimed by licensees have been examined to find out whether the YTC to be completely or partly billed to generators. Accordingly, transmission charges have been computed for DICs in line with the Regulations.
- G. All ISTS assets corresponding to the bilateral payments on the basis of information furnished by ISTS licensees and the worked out bilateral payments in line with Regulation (13) have been considered while preparing final transmission charges for DICs.
- H. The components of Yearly Transmission Charges such as National Component for RE (NC-RE), National Component for HVDC (NC-HVDC), Regional Component (RC) and Transformers Component (TC) have been worked out on the basis of the inputs furnished by CTU.
- I. Indicative cost level of different conductor configuration was provided by CTU and is as follows:

SI. No.	Voltage level (kV)	Type of conductor configuration	Indicative cost (Rs.Lakh/km)
1	± 800	HVDC	368
2	± 500	HVDC	179
3	765	D/C	521
4	765 S/C		234
5	400	S/C	98
6	400	M/C TWIN	461
7	400	D/C Quad Moose	291
8	400	D/C Twin HTLS	224
9	400	D/C Twin Moose	170
10	400	M/C QUAD	869
11	400	D/C TRIPLE	238
12	400	S/C QUAD	161

13	220	D/C	72
14	220	S/C	54
15	220	M/C TWIN	331
16	132	D/C	49
17	132	S/C	28
18	132	M/C TWIN	234

- J. The indicative cost levels provided by CTU are for only selected configurations and voltage level. Hence, for the conductor configurations which are not mentioned in the above list, following assumptions have been made:
 - a. The indicative cost level of 765 kV lines (Quad Bersimis) charged at 400 kV has been considered to be same as cost of one circuit of 400 kV Quad Moose D/C.
 - b. The indicative cost level of 400 kV Quad Bersimis D/C has been considered to be same as 400 kV Quad Moose D/C.
 - c. The indicative cost level of 765 kV Hexa zebra has been considered to be same as 765 kV Quad Bersimis.
 - d. The indicative cost levels of 400 kV ACKC, ACAR, AAAC, Moose, Zebra and Lapwing have been considered to be same as 400 kV Twin Moose depending on the no. of circuits.
 - e. 400 kV lines (Twin Moose) charged at 220 kV are charged as per the rate of 220 kV D/C lines.
- K. Circuit Kms of RE lines considered as National component has been considered as zero.
- L. Circuit Kms of the assets covered under Regulation (13) clauses (3), (6), (9), have been pro-rata adjusted with respect to YTC considered for bilateral payment wherever YTC are to be partly included in the computations.

d) Computation of Usage part of AC system charges

- A. The usage part of AC system charges has been computed by running AC load flow and determining the utilization of the lines with respect to SIL of the lines. For SIL of lines at various voltage levels, annexure-II to Regulations has been followed.
- B. AC Usage Base Charges (AC-UBC) thus determined has been used for apportionment through hybrid method and computed total aggregated nodal charges in ₹ for each drawee DIC.

<u>Transmission Charges for Designated ISTS Customers (DICs) for the billing month of December, 2023</u>

			GNA	Usage based AC system charges (₹)	Balance AC system charges (₹)	National Cor	mponent (₹)	Regional Component (₹)	Transformers component (₹)	Bilateral	Total Transmission		Waiver in (i) Transmission Charges in ₹	Total Transmission charges payable
S.No.	Zone	Region	(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	Charges (₹)	charges payable in (without waiver)	Waiver (in %)		with apportionment of waiver in ₹
1	Delhi	NR	4810	153974951	823798753	125872523	121271192	216709971	60345119		1501972509	9.02	135551216	1439530577
2	UP	NR	9779	605538551	1674829107	255905905	246551140	440583536	140111107	467852	3363987199	6.81	228938437	3302762020
3	Punjab	NR	5497	407746710	941459822	143850574	138592046	247662102	110366675		1989677929	3.72	73921557	2018257393
4	Haryana	NR	5143	388228767	880830974	134586775	129666890	231712969	209907680	2390282	1977324336	5.46	107748877	1969477717
5	Chandigarh	NR	342	16543147	58573633	8949772	8622609	15408484	3253615		111351259	2.60	2890511	114263855
6	Rajasthan	NR	5689	273750365	974343265	148875007	143432809	256312479	92232827	2133749	1891080501	1.16	21974967	1968996375
7	НР	NR	1130	55470164	193532763	29570884	28489906	50911074	35890425	2185021	396050237	0.29	1160198	415901409
8	J&K	NR	1977	152560046	338596702	51735962	49844729	89071853	54342119		736151410	0.80	5882030	769341863
9	Uttarakhand	NR	1402	80125008	240117641	36688831	35347653	63165775	29476135	3526208	488447250	0.00	0	514392565
10	Railways-NR-ISTS-UP	NR	130	2723401	22264831	3401960	3277600	5857026			37524818	5.54	2078518	37342827
11	PG-HVDC-NR	NR	8	496051	1370143	209351	201698	360432			2637677	0.00	0	2778803
12	Northern Railways	NR							2843107		2843107		0	2995225
13	North Central Railways	NR							2076591		2076591		0	2187698
14	RAPP 7&8, NPCIL	NR								32509514	32509514		0	32509514
15	Adani Renewable Energy Park Rajasthan Limited	NR								17384	17384		0	17384
16	ACME Solar Holdings Pvt. Ltd	NR								1949412	1949412		0	1949412
17	THDC India Ltd.	NR								43054680	43054680		0	43054680
18	NRSS XXXVI Transmission Ltd.	NR								2783393	2783393		0	2783393
19	Gujarat	WR	10704	527471859	1833332440	280124459	269884373	137670753	68434159	5323445	3122241488	1.88	58648534	3227223232
20	Madhya Pradesh	WR	7361	669565208	1260703247	192629448	185587784	94670209	149359503		2552515399	6.30	160800582	2519681616
21	Maharashtra	WR	9349	1147225934	1601146217	244647511	235704302	120235152	84542387		3433501504	7.61	261280464	3341948204
22	Chhattisgarh	WR	2280	95328652	390490885	59665146	57484058	29323200	22749521		655041462	8.64	56568074	630494231
23	Goa	WR	548	59646128	93854827	14340570	13816344	7047857	10669055	1244574	200619355	3.48	6933902	203981849
24	DNHDDPDCL	WR	1126	121630214	192847691	29466208	28389057	14481545	38137383		424952098	0.00	0	447688822
25	ArcelorMittal Nippon Steel India Ltd (formerly Essar Steel)	WR	563	7523662	96423846	14733104	14194528	7240773	8781798		148897711	0.00	0	156864364
26	PG-HVDC-WR	WR	5	111215	856340	130845	126062	64305			1288766	0.00	0	1357720
27	BARC	WR	5	289799	856340	130845	126062	64305			1467350	0.00	0	1545860
28	Adani Power Limited	WR								261223719	261223719		0	261223719
29	Mahan Energen Limited (formerly Essar Power M.P. Ltd)	WR								62436606	62436606		0	62436606
30	Andhra Pradesh	SR	4199	374023835	719154046	109883311	105866473	240943615	44138885		1594010164	8.13	129551126	1542813754
31	Telangana	SR	5801	423765839	993525273	151805927	146256587	332868280	37702826		2085924733	9.68	201865361	1984864471
32	Tamil Nadu	SR	8765	720350102	1501163424	229370616	220985862	502946126	94265919		3269082049	1.63	53231011	3387912591
33	Kerala	SR	2679	264088041	458826790	70106547	67543768	153724207	63267995		1077557347	1.91	20546805	1113565050

C No.		Bi.	GNA	Usage based AC system charges (₹)	Balance AC system charges (₹)	National Cor	nponent (₹)	Regional Component (₹)	Transformers component (₹)	Bilateral	Total Transmission	Material (in oct	Waiver in	Total Transmission charges payable
S.No.	Zone	Region	(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	Charges (₹)	charges payable in ₹ (without waiver)	waiver (in %)	Transmission Charges in ₹	with apportionment of waiver in ₹
34	Karnataka	SR	4376	448787413	749468470	114515210	110329051	251100085	107619070	2787544	1784606843	10.22	182113977	1688083828
35	Pondicherry	SR	540	14722145	92484683	14131219	13614645	30985842	12899470		178838005	7.91	14146893	173502779
36	PG-HVDC-SR	SR	6	589684	1027608	157014	151274	344287			2269866	0.00	0	2391313
37	BHAVINI	SR								16534519	16534519		0	16534519
38	Betam	SR								482215	482215		0	482215
39	AP Solar Power Corporation Pvt Ltd (APSPCL)	SR								816503	816503		0	816503
40	JSW Renew Energy Ltd.	SR								3667213	3667213		0	3667213
41	West Bengal	ER	3516	300478468	602178049	92009936	88646468	81334936	55528900	1684503	1221861260	0.04	547763	1286568777
42	Odisha	ER	2157	121012654	369424929	56446368	54382944	49897457	70865973		722030325	10.16	73360496	683376393
43	Bihar	ER	4847	160951656	830135666	126840773	122204047	112124698	180046308		1532303149	4.78	73280299	1537086707
44	Jharkhand	ER	1110	30918056	190107404	29047505	27985660	25677412	51013677	9838228	364587942	17.98	63783904	316371932
45	Sikkim	ER	111	292686	19010740	2904751	2798566	2567741	2708681		30283165	0.00	0	31903442
46	DVC	ER	956	33340055	163732143	25017491	24102965	22114960	9480670		277788284	0.18	510549	292113259
47	Bangladesh	ER	982	26204930	168185109	25697883	24758484	22716413			267562820	0.00	0	281878556
48	Railways-ER-ISTS-Bihar	ER	20	152494	3425359	523378	504246	462656			5068134	0.00	0	5339300
49	PG-HVDC-ER	ER	2	70746	342536	52338	50425	46266			562310	0.00	0	592396
50	NTPC, North Karanpura STPP, Jharkhand	ER								8678918	8678918		0	8678918
51	Arunachal Pradesh	NER	117	3685013	20038348	3061764	2949840	4651769	11437175		45823909	0.00	0	48275681
52	Assam	NER	1396	85701469	239090033	36531818	35196379	55503164	20498602	1935383	474456847	1.43	6734121	492644307
53	Manipur	NER	177	7316934	30314424	4631899	4462578	7037292	3270135		57033263	0.00	0	60084782
54	Meghalaya	NER	238	9819341	40761768	6228204	6000529	9462574	402105		72674520	0.00	0	76562913
55	Mizoram	NER	95	5038084	16270454	2486048	2395169	3777078	1052444		31019276	0.00	0	32678938
56	Nagaland	NER	128	9505901	21922295	3349622	3227175	5089115	22662543		65756652	0.00	0	69274909
57	Tripura	NER	311	3951238	53264327	8138535	7841027	12364960	23294110		108854197	0.00	0	114678354
58	PG-HVDC-NER	NER	1	177752	205522	31403	30255	47710			492641	0.00	0	519000

TOTAL 110378.45 7810894369 18904288867 2888485239 2782895254 3956342448 1935674693 467670865 38746251733 1944050168 38746251733

Transmission Charges to be paid by DICs under Regulation 13(7)

Where Connectivity is granted to a generating station on existing margins and COD of the generating station or unit(s) thereof is delayed

SI.No.	Name of Generating Station	Connectivity Granted by CTU (MW)	Commissioned Connectivity Capacity (MW)	Date of Commercial Operation	Details of effectiveness of connectivity / GNA	Delayed Connectivity Capacity (MW)	Transmission Charges (₹)	Remarks
1	ReNew Power Limited	300	230.1	126MW:18.05.19 58.5MW: 01.10.19 27.6MW: 02.09.20 18MW: 07.02.2021	300MW: 01.05.19	69.9	209700	
2	ReNew Power Limited	50	0	Yet to be commissioned	50MW: 23.11.19	50	150000	
3	SJVN Ltd. (Naitwar Mori HEP)	60	0	-	60MW: 30.09.2022	60	180000	
4	NTPC Ltd. (Rihand Solar)	20	0	-	20MW: 20.10.2022	20	60000	
5	Masaya Solar Energy Private Ltd	300	250	COD 150MW: 21.06.2023 COD 100MW: 08.09.2023	300 MW: 25.03.2022	50	150000	
6	Nuclear Power Corporation of India Ltd (Kakrapar)	1400	700	700MW (U3): 30.06.2023	30.06.2023 (NPCIL vide email dated 29.06.2023 requested to operationalise 700MW out of 1400MW w.e.f. 30.06.2023 upon commissioning of 700MW)	700	2100000	
7	JSW Neo Energy Ltd.	300	216	27 MW: 05.12.2022 (COD) 51.3 MW: 22.04.2023 (COD) 13.5 MW: 10.05.2023 (COD) 24.3 MW: 27.05.2023 (COD) 13.5 MW: 06.06.2023 (COD) 18.9 MW: 06.07.2023 (COD) 21.6 MW: 29.07.2023 (COD) 27 MW: 30.08.2023 (COD) 18.9 MW: 28.09.2023 (COD)	01.10.2023	84	252000	

<u>Transmission Charges for Temporary General Network Access (T-GNA) for billing month</u> <u>December,2023</u>

S.No.	State	Region	T-GNA rate (Rs./MW/block)
1	Delhi	NR	115.42
2	UP	NR	126.87
3	Punjab	NR	133.79
4	Haryana	NR	141.94
5	Chandigarh	NR	120.35
6	Rajasthan	NR	122.73
7	HP	NR	128.83
8	J&K	NR	137.63
9	Uttarakhand	NR	127.84
10	Gujarat	WR	107.13
11	Madhya Pradesh	WR	128.17
12	Maharashtra	WR	135.74
13	Chhattisgarh	WR	106.19
14	Goa	WR	134.54
4.5	Daman and Diu and Dadra and	14/5	120.50
15	Nagar Haveli	WR	139.50
16	Andhra Pradesh	SR	140.32
17	Telangana	SR	132.91
18	Tamil Nadu	SR	137.86
19	Kerala	SR	148.67
20	Karnataka	SR	150.50
21	Pondicherry	SR	122.41
22	West Bengal	ER	128.27
23	Odisha	ER	123.73
24	Bihar	ER	116.76
25	Jharkhand	ER	118.13
26	Sikkim	ER	100.84
27	DVC	ER	107.40
28	Bangladesh	ER	100.71
29	Arunachal Pradesh	NER	144.77
30	Assam	NER	125.11
31	Manipur	NER	119.10
32	Meghalaya	NER	112.87
33	Mizoram	NER	120.69
34	Nagaland	NER	189.88
35	Tripura	NER	129.37

Note: As the GNA for PG-HVDC-NR, PG-HVDC-ER, PG-HVDC-NER, PG-HVDC-WR and PG-HVDC-SR has been computed region-wise, transmission charges of these drawee DICs has not been considered for computation of T-GNA rates of States.

Details of GNA and GNA-RE for billing period October,2023

S.No.	Drawee DIC	Region	GNA (in MW)
1	Delhi	NR	4810.0
2	UP	NR	9779.0
3	Punjab	NR	5497.0
4	Haryana	NR	5143.0
5	Chandigarh	NR	342.0
6	Rajasthan	NR	5689.0
7	HP	NR	1130.0
8	J&K	NR	1977.0
9	Uttarakhand	NR	1402.0
10	Railways-NR-ISTS-UP	NR	130.0
11	PG-HVDC-NR	NR	8.0
12	Gujarat	WR	10704.5
13	Madhya Pradesh	WR	7361.0
14	Maharashtra	WR	9348.8
15	Chhattisgarh	WR	2280.0
16	Goa	WR	548.0
17	DNHDDPDCL	WR	1126.0
18	ArcelorMittal Nippon Steel India Ltd (formerly Essar Steel)	WR	563.0
19	PG-HVDC-WR	WR	5.0
20	BARC	WR	5.0
21	Andhra Pradesh	SR	4199.0
22	Telangana	SR	5801.0
23	Tamil Nadu	SR	8765.0
24	Kerala	SR	2679.0
25	Karnataka	SR	4376.0
26	Pondicherry	SR	540.0
27	PG-HVDC-SR	SR	6.0
28	West Bengal	ER	3516.0
29	Odisha	ER	2157.0
30	Bihar	ER	4847.0
31	Jharkhand	ER	1110.0
32	Sikkim	ER	111.0
33	DVC	ER	956.0
34	Bangladesh	ER	982.0
35	Railways-ER-ISTS-Bihar	ER	20.0
36	PG-HVDC-ER	ER	2.0
37	Arunachal Pradesh	NER	117.0
38	Assam	NER	1396.0
39	Manipur	NER	177.0
40	Meghalaya	NER	238.0
41	Mizoram	NER	95.0
42	Nagaland	NER	128.0
43	Tripura	NER	311.0
44	PG-HVDC-NER	NER	1.2

TOTAL 110378.5

<u>Transmission Charges claimed by ISTS licensees for the billing period October'23</u>

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
1	Powergrid Corporation Of India Ltd	35390.93	35390.93	2997.59	As per data furnished by ISTS Licensee for October'23. MTC of the assets listed under Regulation 13(3) shall be partly settled through the bilateral payments from respective entities as detailed in the transmission charges bill. PowerGrid assets for bilateral payments as mentioned in format I-C are also included in this total YTC claimed.
2	Adani Transmission (India) Limited	595.43	595.43	50.43	As per data furnished by ISTS Licensee for October'23
3	Chhattisgarh-WR Transmission Limited.	168.20	168.20	14.25	As per data furnished by ISTS Licensee for October'23
4	Raipur Rajnandgaon-WR Transmission Limited.	200.49	200.49	16.98	As per data furnished by ISTS Licensee for October'23
5	Sipat Transmission Limited.	92.92	92.92	7.87	As per data furnished by ISTS Licensee for October'23
6	Western Transmission Gujarat Limited	50.66	50.66	4.29	As per data furnished by ISTS Licensee for October'23
7	Western Transco Power Limited	93.02	93.02	7.88	As per data furnished by ISTS Licensee for October'23
8	Alipurduar Transmission Limited	149.84	149.84	12.69	As per data furnished by ISTS Licensee for October'23
9	Fatehgarh-Bhadla Transmission Ltd.	48.09	48.09	4.07	As per data furnished by ISTS Licensee for October'23
10	North Karanpura Transco Limited	39.01	39.01	3.30	As per data furnished by ISTS Licensee for October'23
11	Bikaner-Khetri Transmission Limited	128.95	128.95	10.92	As per data furnished by ISTS Licensee for October'23
12	Jam Khambaliya Transco Limited	44.08	44.08	3.73	As per data furnished by ISTS Licensee for October'23
13	Lakadia-Banaskantha Transmission Limited	100.28	100.28	8.49	As per data furnished by ISTS Licensee for October'23
14	WRSS XXI (A) Transco Limited	122.16	122.16	10.35	As per data furnished by ISTS Licensee for October'23

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
15	Karur Transmission Limited	22.37	22.37	0.37	As per data furnished by ISTS Licensee for October'23. As trial operation of the transmission assets completed on 25.10.2023,YTC considered for 6 days.
16	Aravali Power Company Private Limited	6.76	6.76	0.57	Data not furnished for October'23. Considered the same as in the earlier billing period.
17	Essar Power Transmission Company Limited	405.68	405.68	34.36	Data not furnished for October'23. Considered the same as in the earlier billing period.
18	Jindal Power Limited	19.12	19.12	1.62	Data not furnished for October'23. Considered the same as in the earlier billing period.
19	Kudgi Transmission Limited	196.29	196.29	16.63	Data not furnished for October'23. Considered the same as in the earlier billing period.
20	Parbati Koldam Transmission Company Limited	171.37	171.37	14.52	As per data furnished by ISTS Licensee for October'23
21	Bhopal Dhule Transmission Company Ltd.	185.13	185.13	15.68	As per data furnished by ISTS Licensee for October'23
22	East North Interconnection Company Limited	145.77	145.77	12.35	As per data furnished by ISTS Licensee for October'23
23	Gurgaon Palwal Transmission Limited	137.84	137.84	11.68	As per data furnished by ISTS Licensee for October'23
24	Jabalpur Transmission Company Limited	147.13	147.13	12.46	As per data furnished by ISTS Licensee for October'23
25	Maheshwaram Transmission Limited	56.08	56.08	4.75	As per data furnished by ISTS Licensee for October'23
26	Khargone Transmission Company Ltd.	178.06	178.06	15.08	As per data furnished by ISTS Licensee for October'23
27	Goa Tamnar Transmission Projects Limited	42.70	42.70	3.62	As per data furnished by ISTS Licensee for October'23
28	Mumbai Urja Marg Limited	74.46	74.46	6.31	As per data furnished by ISTS Licensee for October'23
29	Lakadia Vadodara Transmission Company Limited	230.90	230.90	19.56	As per data furnished by ISTS Licensee for October'23
30	NRSS-XXIX Transmission Limited	503.10	503.10	42.61	As per data furnished by ISTS Licensee for October'23
31	Odisha Generation Phase-II Transmission Limited	151.96	151.96	12.87	As per data furnished by ISTS Licensee for October'23

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
32	Patran Transmission Company Limited	30.80	30.80	2.61	As per data furnished by ISTS Licensee for October'23
33	Purulia & Kharagpur Transmission Company Limited	72.48	72.48	6.14	As per data furnished by ISTS Licensee for October'23
34	Rapp Transmission Company Limited	44.05	44.05	3.73	As per data furnished by ISTS Licensee for October'23
35	NER-II Transmission Limited	480.91	480.91	40.73	As per data furnished by ISTS Licensee for October'23
36	Teestavalley Power Transmission Limited	248.37	248.37	21.04	Data not furnished for October'23. Considered the same as in the earlier billing period.
37	Torrent Power Grid Limited	26.03	26.03	2.20	As per data furnished by ISTS Licensee for October'23
38	Darbhanga-Motihari Transmission Company Limited	134.73	134.73	11.41	As per data furnished by ISTS Licensee for October'23
39	NRSS XXXI (B) Transmission Limited	98.09	98.09	8.31	As per data furnished by ISTS Licensee for October'23
40	A D Hydro Power Limited	35.97	35.97	0.00	Data not furnished for October'23. And in view of APTEL order dated 31st August, 2023 in APPEAL NO. 410 OF 2019 & IA NO. 360 OF 2020, YTC has not been considered for recovery.
41	Powergrid Himachal Transmission Ltd (Jaypee Powergrid Limited)	126.73	126.73	10.73	Data not furnished for October'23. Considered the same as in the earlier billing period.
42	Kohima Mariani Transmission Limited	286.90	286.90	24.30	As per data furnished by ISTS Licensee for October'23
43	Raichur Sholapur Transmission Company Private Limited	35.20	35.20	2.98	As per data furnished by ISTS Licensee for October'23
44	Koppal-Narendra Transmission Limited	47.81	47.81	0.00	As per data furnished by ISTS Licensee for October'23. As the required documents have not been furnished by Transmission Licensee, YTC has not been considered.
45	Damodar Valley Corporation	109.09	109.09	9.24	Data not furnished for October'23. Considered the same as in the earlier billing period.
46	Powerlinks Transmission Limited	135.93	135.93	11.51	Data not furnished for October'23. Considered the same as in the earlier billing period.
47	NRSS XXXVI Transmission Limited	1.30	1.30	0.11	Data not furnished for October'23. Considered the same as in the earlier billing period.

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
48	Warora-Kurnool Transmission Limited	409.61	409.61	18.12	As per data furnished by ISTS Licensee for October'23. As trial run operation of Warora Pool -Warangal (New) lines were completed on 18-10-2023, YTC of element no. 1,2,3,4, and 6 considered for 13 days.
49	Powergrid Vizag Transmission Limited	213.06	213.06	18.05	As per data furnished by ISTS Licensee for October'23
50	Powergrid NM Transmission Limited	164.21	164.21	13.91	As per data furnished by ISTS Licensee for October'23
51	Powergrid Unchahar Transmission Limited	19.28	19.28	1.63	As per data furnished by ISTS Licensee for October'23
52	Powergrid Parli Transmission Limited	326.22	326.22	27.63	As per data furnished by ISTS Licensee for October'23
53	Powergrid Kala Amb Transmission Limited	66.82	66.82	5.66	As per data furnished by ISTS Licensee for October'23.
54	Powergrid Southern Interconnector Transmission System Limited	462.10	462.10	39.14	As per data furnished by ISTS Licensee for October'23
55	Powergrid Jabalpur Transmission Limited	256.43	256.43	21.72	As per data furnished by ISTS Licensee for October'23
56	Powergrid Warora Transmission Limited	364.20	364.20	30.85	As per data furnished by ISTS Licensee for October'23
57	Powergrid Medinipur Jeerat Transmission Limited	579.70	579.70	49.10	As per data furnished by ISTS Licensee for October'23
58	Powergrid Mithilanchal Transmission Limited	170.00	170.00	14.40	As per data furnished by ISTS Licensee for October'23
59	Powergrid Ajmer Phagi Transmission Limited	74.79	74.79	6.33	As per data furnished by ISTS Licensee for October'23
60	Powergrid Varanasi Transmissoin System Limited	116.97	116.97	9.91	As per data furnished by ISTS Licensee for October'23
61	Powergrid Fatehgarh Transmission Limited	87.69	87.69	7.43	As per data furnished by ISTS Licensee for October'23
62	Powergrid Khetri Transmission System Ltd.	149.07	149.07	12.63	As per data furnished by ISTS Licensee for October'23

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
63	Powergrid Bhuj Transmission Limited	128.95	128.95	10.92	As per data furnished by ISTS Licensee for October'23
64	Powergrid Bikaner Transmission System Limited	167.88	167.88	14.22	As per data furnished by ISTS Licensee for October'23
65	North East Transmission Company Limited	252.89	252.89	21.42	As per data furnished by ISTS Licensee for October'23
66	Transmission Corporation Of Andhra Pradesh (APTRANSCO)	533.98	139.14	11.78	As per data furnished by ISTS Licensee for October'23
67	Madhya Pradesh Power Transmision Co. Ltd.	12.54	12.54	1.06	Data not furnished for October'23. Considered the same as in the earlier billing period.
68	Karnataka Power Transmission Corporation Limited	1.42	1.42	0.12	Data not furnished by ISTS Licensee for October'23. CERC Tariff Order dated 12.06.2019 has been considered
69	Delhi Transco Limited	3.12	3.12	0.26	Data not furnished by ISTS Licensee for October'23. Data as furnished by ISTS Licensee for Dec'20 has been considered.
70	Power Transmission Corporation Of Uttarakhand Ltd	43.47	43.47	3.68	As per data furnished by ISTS Licensee for October'23. CERC Tariff Order dated 09.11.2021, 25.11.2021 and 13.06.2021 have been considered.
71	Rajasthan Rajya Vidhyut Prasaran Nigam Ltd.	33.98	6.37	0.54	Data not furnished by ISTS Licensee for October'23. Data as furnished by ISTS Licensee for Jan'21 has been considered. RPC certified non-ISTS as ISTS has not been considered in line with clause 13 (13) of Sharing Regulations,2020
72	Tamilnadu Transmission Corporation Limited	0.59	0.59	0.05	Data not furnished by ISTS Licensee for October'23. CERC Tariff 148/TT/2018 Order dated 16.11.2018 has been considered
73	Chhattisgarh State Power Transmission Company Ltd	0.75	0.75	0.06	Data not furnished for October'23. Considered the same as in the earlier billing period.
74	Himachal Pradesh Power Transmission Corporation Ltd	2.61	2.61	0.22	Data not furnished for October'23. Considered the same as in the earlier billing period.
75	Odisha Power Transmission Corporation Limited	9.80	9.67	0.82	Data not furnished by ISTS Licensee for October'23. Data as furnished by ISTS Licensee for Jan'21 has been considered. Filing and Publication fee of ₹ 13.67 Lacs as claimed by the licensee is not considered. The same may be claimed in Bill-2 or Bill-3 as applicable.

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (₹ Cr)	Total YTC allowed for October'23 (₹ Cr)	Equivalent MTC to be considered for October'23 (₹ Cr)	Remarks
76	Uttarpradesh Power Transmission Corporation Limited	27.23	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
77	Power Development Department, Jammu & Kashmir	10.11	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
78	Gujarat Energy Transmission Corporation Limited	5.71	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
79	Maharashtra State Electricity Transmission Company Ltd	97.68	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
80	West Bengal State Electricity Transmission Company Ltd	32.05	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
81	Haryana Vidyut Prasaran Nigam Limited	0.35	0.35	0.03	As per data furnished by ISTS Licensee for October'23
82	Assam Electricity Grid Corporation Limited	10.78	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
83	Meghalaya Power Transmission Corporation Limited	3.61	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available
84	Kerala State Electricity Board	10.06	0.00	0.00	Data not furnished by ISTS Licensee for October'23. YTC has been considered as zero in line with CERC terms & conditions for Tariff Regulations 2019 as tariff as on 31.03.2019 is not available

Entity-wise details of Bilateral billing for October,2023 billing period

Sl.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks
1	02 Nos of 132 kV line bays at Daltonganj Substation	Powergrid	Jharkhand Urja Sancharan	ER	826497	lharkhand	As per Regulation 13(12) of Sharing
2	04 Nos. 220 KV Bays at Daltonganj Substation;	Powergrid	Nigam Limited (JUSNL)	EK	826497	Jharkhand	Regulations 2020
3	220 kV, 2 nos. Line bays at Hamirpur Substation	Powergrid	Himachal Pradesh Power Transmission Corporation Limited (HPPTCL)	NR	1292005	Himachal Pradesh	As per Regulation 13(12) of Sharing Regulations 2020
4	02 Nos. 220 KV Line Bays (HPSEB Future Bays)	Powergrid	Himachal Pradesh State Electricity Board (HPSEB)	NR	893016	Himachal Pradesh	As per Regulation 13(12) of Sharing Regulations 2020
5	Asset-B(ii) 2 nos. 220 kV Line Bays at Kotputli S/S	Powergrid	Rajasthan DISCOMs	NR	994710	Rajasthan	As per Regulation 13(12) of Sharing Regulations 2020
6	2 nos. 220 kV line bays (#211 and 212) at 400/220 kV Jaipur (South) Substation	Powergrid	Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPNL)	NR	1139038	Rajasthan	As per Regulation 13(12) of Sharing Regulations 2020
7	400KV D/C Kota - Jaipur (South) line along with associated bays at Kota and Jaipur(South) (part of RAPPJaipur (S) 400KV D/C line with one ckt LILO at Kota)	Powergrid	RAPP 7&8, NPCIL	NR	32509514		As per Regulation 13(3) of Sharing Regulations 2020

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks
8	1 no. 220 kV line bay (# 210) of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	Powergrid	Uttar Pradesh Power Transmission Corporation Limited (UPPTCL)	NR	467852		As per Regulation 13(12) of Sharing Regulations 2020
9	2X500MVA 400/230kV transformers along with associated bays andequipmentat new 400/230kV (GIS) Tirunelveli Pooling Substation	Powergrid	Betam	SR	482215		As per Regulation 13(3) of Sharing Regulations 2020
10	Asset 1. Kalpakkam PFBR-Sirucheri 230 kV D/C Line, Asset 2. Kalpakkam PFBR - Arani 230 KV D/C Line,Asset3. 230 kV D/C Kalpakkam PFBR-Kanchipuram transmission line and 2 numbers of 230 kV Bays at Kanchipuram Sub-station of TNEB	Powergrid	Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI)	SR	16534519		As per Regulation 13(3) of Sharing Regulations 2020
11	220 kV line bays at Madhugiri for termination of 220 kV D/C Madhugiri – Nittur line	Powergrid	Karnataka DISCOMs	SR	841658	Karnataka	As per Regulation 13(12) of Sharing Regulations 2020
12	04 No. 220 KV bays at 400/220kV Yelahanka Substation	Powergrid	Karnataka Power Transmission Corporation Limited (KPTCL)	SR	1945885	Karnataka	As per Regulation 13(12) of Sharing Regulations 2020
14	HVDC Mundra-Mahendergarh	Powergrid	Adani Power Limited	WR	261223719		

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks
15	2 nos. 220 kV line bays at Mapusa (Colvale) (Powergrid) Substation (for Mapusa- (Colvale) (Powergrid)-Tuem 220 kV D/C line)	Powergrid	Goa Electricity Department (GED), Goa	WR	1244574	Goa	As per Regulation 13(12) of Sharing Regulations 2020
16	400 kV Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) D/C line alongwith 2 nos. 400 Kv line bays at Banaskanta (PG) under Tr. System for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat in WR	Powergrid	Gujarat Power Corporation Limited (GPCL)	WR		Gujarat	As per Regulation 13(3) of Sharing Regulations 2020
17	Est. of 2x500 MVA, 400/220 kV PS at Banaskantha (Radhanesda) (GIS) with 1X125 MVAR BR, 2 nos of 400 kV line bays at Bnsknta (Radhanesda) (GIS) for interconnection of Bnsknta (Radhanesda) PS-Bnsknta (PG) 400 kV D/C (twin AL59) TL & 4 Nos 220 kV Line bays	Powergrid	Gujarat Power Corporation Limited (GPCL)	WR	5323445	Gujarat	As per Regulation 13(3) of Sharing Regulations 2020
19	2 nos. 220 kV Line bays (Bay No 209 & 211) at NP Kunta substation	Powergrid	AP Solar Power Corporation Pvt Ltd (APSPCL)	SR	816503		As per Regulation 13(3) of Sharing Regulations 2020
20	04 Nos. 220 kV bays at Dehradun Sub- station	Powergrid	Power Transmission Corporation Of Uttarakhand Limited	NR	2590533	Uttrakhand	As per Regulation 13(12) of Sharing Regulations 2020
22	ICTs at 400/220 kV, 2x500 MVA Dhanbad sub-station	North Karanpura Transco Ltd.	Jharkhand Urja Sancharan Nigam Limited (JUSNL)	ER	9011731	Jharkhand	As per Regulation 13(12) of Sharing Regulations 2020

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks
23	Mahan Bilaspur Line	Essar Power Transmission Company Ltd.	Mahan Energen Limited (formerly Essar Power M.P. Ltd)	WR	62436606		As per CERC order dated 14.03.2020 in Petition No. 145/TT/2018 Along with IA No.89/IA/2018, IA No. 47/IA/2020 & IA No.75/IA/2020
24	2 numbers 400 kV line bays at Bhadla (POWERGRID) Sub-station	Powergrid	Adani Renewable Energy Park Rajasthan Limited	NR	10886		As per Regulation 13(3) of Sharing Regulations 2020
25	Establishment of 400 kV Pooling Station at Fatehgarh		Adani Renewable Energy Park Rajasthan Limited	NR	6498		As per Regulation 13(3) of Sharing Regulations 2020
26	Fatehgarh Pooling Station – Bhadla (PG) 765 kV D/C line (To be operated at 400 kV)		ACME Solar Holdings Pvt. Ltd	NR	1949412		As per Regulation 13(3) of Sharing Regulations 2020
27	2 Nos. 400 kV line bays at Fatehgarh Pooling Station			NR			As per Regulation 13(3) of Sharing Regulations 2020
28	1x25 MVAR Bus Reactor at 400 kV Fatehgarh Pooling Station along with associated bay	Fatehgarh Badhla		NR			As per Regulation 13(3) of Sharing Regulations 2020

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks
29	Space for future 220kV (12 Nos) Line Bays	Transmission Limited		NR			As per Regulation 13(3) of Sharing Regulations 2020
30	Space for future 400kV (8 Nos) Line Bays alongwith line reactors at at Fatehgarh Pooling Station			NR			As per Regulation 13(3) of Sharing Regulations 2020
31	Space for future 220/400kV transformers (5 Nos) alongwith associated transformer bays at each level.			NR			As per Regulation 13(3) of Sharing Regulations 2020
32	Space for future 400kV bus reactors (2 Nos) alongwith associated bays.			NR			As per Regulation 13(3) of Sharing Regulations 2020
33	765/400 kV 1500 MVA ICT along with associated bays at Meerut Sub-station under Transmission System associated with Tehri Pump Storage Plant (PSP)			NR			As per Regulation 13(3) of Sharing Regulations 2020
34	765/400 kV 800 MVA ICTI along with associated bays at Koteshwar (Tehri Pooling Station) under Transmission System associated with Tehri Pump Storage Plant (PSP)	Powergrid	THDC India Ltd.	NR	43054680		As per Regulation 13(3) of Sharing Regulations 2020

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks	
35	400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays at both ends under Transmission system associated with Tehri Pump Storage Plant (PSP)			NR			As per Regulation 13(3) of Sharing Regulations 2020	
36	400 kV D/C North Karanpura-Chandwa (Jharkhand) Pooling Station line with quad moose conductor	North karanpura Transco Ltd.	NTPC, North Karanpura STPP, Jharkhand	ER	8678918		As per Regulation 13(3) of Sharing Regulations 2020	
38	02 nos. 220 Kv line bays at Rajarhat GIS	Powergrid	WBSETCL	ER	1684503	West Bengal	As per Regulation 13(12) of Sharing Regulations 2020	
39	8 numbers 220 kV Line Bays at 400/220 Kv GIS Sub-station at Kurukshetra	Powergrid	Haryana(HVPNL)	NR	2390282		As per Regulation 13(12) of Sharing Regulations 2020	
42	2 Numbers 220 kV line bays at New Mariani Substation	Powergrid	AEGCL (Assam Electricity Grid Corporation Ltd.)	NER	1935383		As per Regulation 13(12) of Sharing Regulations 2020	
43	1 No. 220 kV line bay at 400/220 kV Roorkee Sub-station	Powergrid	PTCUL (Power Transmission Corporation Of Uttarakhand Limited)	NR	935675		As per Regulation 13(12) of Sharing Regulations 2020	

SI.No.	Name of the Asset	Transmission Licensee	Name of the beneficiary	Region	MTC in ₹	State Control Area in which the Bilateral charges are included	Remarks	
44	400 kV line bays at Bhiwani Substation for termination of 400 kV Babai-Bhiwani D/C Line	Powergrid	NRSS XXXVI TL	NR	2783393		As per Regulation 13(12) of Sharing Regulations 2020	
	Establishment of 2x500 MVA, 400/230 kV Karur Pooling Station (at a location in between Karur Wind zone and Tiruppur wind zone)							
45	LILO of both circuits of Pugalur – Pugalur (HVDC) 400 kV D/C line (with Quad Moose ACSR Conductor) at Karur PS	Karur Transmission Limited	JSW Renew Energy Ltd.	SR	3667213		As per Regulation 13(3) of Sharing Regulations 2020	
	2x125 MVAr, 400 kV Bus reactors at Karur PS							

TOTAL

467670865

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Revis	Revised GNAsh and GNAd as per CERC(Connectivity and General Network Access to the inter-State Transmission System)(First Amendment) Regulations, 2023											
State	Yearly Average of Daily Max ISTS drawal (X ₁)(MW)	Yearly Max ISTS drawal(Y ₁)(MW)	Z ₁ = 0.5*x+0.5*y (MW)	Yearly Average of Daily Max ISTS drawal (X ₂)(MW)	Yearly Max ISTS drawal(Y ₂)(MW)	Z ₂ = 0.5*x+0.5*y (MW)	Yearly Average of Daily Max ISTS drawal (X ₃)(MW)	Yearly Max ISTS drawal(Y ₃)(MW)	Z ₃ = 0.5*x+0.5*y (MW)	GNAsh* (MW)=Avg of Z1 Z2 & Z3	GNA (MW) As per Annexure-I of GNA Regulations ,2022	GNAd (MW) (=GNA-GNAsh)
		2018-19			2019-20		2020-21					
Northern Region				•								
Haryana	4660	7321	5991	5433	7778	6606	5499	9132	7316	5143	5418	275
Rajasthan	3874	5596	4735	4359	7759	6059	5080	7466	6273	5689	5755	66
Uttar Pradesh	7068	10304	8686	8136	12090	10113	8492	12582	10537	9779	10165	386
Southern Region												
Tamil Nadu	6707	9560	8134	7361	9984	8673	7501	11475	9488	8765	9177	412
Telangana	4160	6115	5137	4104	7854	5979	4380	8193	6286	5801	6140	339
Andhra Pradesh	2635	4578	3606	2741	5357	4049	3771	6110	4941	4199	4516	317
Western Region												
Chhattishgarh	1100	2219	1659	1491	2353	1922	1459	2714	2086	1889	2149	260
Gujarat	5346	8699	7023	4284	6260	5272	4675	8611	6643	6312	6434	122
Maharashtra	6481	10207	8344	6437	8790	7613	7409	10238	8824	8260	8496	236
Easten Region												
Bihar	4095	4782	4438	4320	5494	4907	4553	5840	5196	4847	5043	196
North Easten Region												
Arunachal Pradesh	118	145	132	99	132	115	84	128	106	117	134	17
Assam	1171	1468	1319	1186	1608	1397	1251	1690	1470	1396	1529	133
Manipur	135	196	166	147	201	174	166	218	192	177	204	27
Nagaland	112	145	128	117	140	128	113	140	126	128	134	6

Note:

- 1. For computation of GNAsh, ISTS drawal has been considered after subtracting the Direct drawal based on the details of generating stations as provided by CTU as per CERC(Connectivity and General Network Access to the inter-State Transmission System) (First Amendment) Regulations, 2023.
- 2. Block-wise meter data has been used for computation of ISTS drawal by State.
- 3. For Haryana, GNAsh has been reduced by 1495MW in line with the Annexure-I of GNA Regulations, 2022
- 4.#As the power from Telangana STPP,, Dhariwal(unit-1 of 300MW) and Chuzachen HEP were not included in ISTS drawl for the period 2018-19, 2019-20 and 2020-21,so for the computation of GNAd & GNAsh these Generating stations have not been considered.

List of generating stations as provided by CTU, from which drawal through STU lines and Scheduled quantum of States have been considered for computation of Direct drawal and GNAsh

Northern Region	Generating Stations						
Haryana	IGTPS(Jhajjhar)						
Rajasthan	Anta GPS, RAPS B						
Uttar Pradesh	Unchahar Stage-I, Tanda Stage-II, Narora Atomic Power Station (NAPS)						
Southern Region							
Tamil Nadu	Madras Atomic Power Station (MAPS), Neyveli TS-II Stage-I, New Neyveli TPS						
Telangana	Ramagundam STPS St-I&II, Telangana STPP(#)						
Andhra Pradesh	Simhadri- Stage-1						
Western Region							
Chhattishgarh	NSPCL (formerly BESCL)						
Gujarat	Tarapur 1&2 APS, Kawas GPS, Gandhar GPS						
Maharashtra	Tarapur 1&2 APS, Ratnagiri Gas & Power Pvt.Ltd, Dhariwal(# unit-1 of 300MW)						
Easten Region							
Bihar	Kanti Stage-2 (at 220kV level)						
Sikkim	Chuzachen HEP(#)						
North Easten Region							
Arunachal Pradesh	Pare HEP, Ranganadi HEP						
Assam	Bongaigaon TPS						
Manipur	Loktak HEP						
Nagaland	Doyang HEP						