# पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(भारत सरकार का उपक्रम)



### POWER SYSTEM OPERATION CORPORATION LIMITED

(A Government of India Enterprise)

राष्ट्रीय भार प्रेषण केन्द्र

**National Load Despatch Centre** 

## Notification of Transmission charges payable by DICs for Nov'20

No: TC/11/2020 Date: 28.12.2020

The Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 came into force with effect from 1.11.2020.

- 2. 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. Further, 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.
- 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. Accordingly, some of the ISTS Licensees have submitted YTC data by 30.11.2020. The list of ISTS licensees that have submitted YTC data by 30.11.2020 is attached as Annexure-V. PowerGrid has submitted the YTC along with its SPVs on 07.12.2020 and revised data on 09.12.2020 and later on 18.12.2020.
- 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 published the information of peak block for the billing period Nov'20 on 01.12.2020 on POSOCO website.
- 5. 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. CTU has submitted the data in formats II-A, II-B, II-C and II-F on 14.12.2020. Thereafter, formats II-D, II-G(1), II-G(3) on 18.12.2020. The revised formats of II-D, II-G(1), II-G(3) along with the remaining formats II-G(2), II-G(4) and II-G(5) on 24.12.2020.
- 6. 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 07.12.2020 is attached as Annexure-VI.
- 7. As per the notified procedure for collection of data and information, NLDC has to made available the finalized Monthly Transmission Charges (MTC) of the ISTS licensees that are considered for computations for review and comments of ISTS licensees by 10.12.2020. However, NLDC could not made it available as the part of the data inputs from CTU were pending till 24.12.2020.

- 8. NLDC/RLDCs has examined the data and information submitted by ISTS licensees/ Deemed ISTS licensees, DICs/ States and CTU. Based on the 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 POSOCO website on 15.12.2020 for review and comments of DICs/ States in line with the notified procedures till 18.12.2020.
- 9. Comments of Uttar Pradesh and Madhya Pradesh have been received by NLDC/ RLDCs which were examined and suitably incorporated in the all India basic network.
- 10. The activities involved in the computation exercise along with the assumptions followed in the computations are detailed as mentioned below:

#### (i) 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, the 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.

#### (ii) 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 November'20.

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.

#### (iii) 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 Nov'20. For the ISTS licensees who have not submitted YTC data for Nov'20, the YTC data used in 2020-21 Q3 computations has been considered.
- B. While checking the YTC of the licensees who have not submitted data, the recently available CERC orders are referred to consider the recently available approved YTC for FY 2018-19 in case for 2019-20 or 2020-21 is not available.
- C. All ISTS transmission assets commissioned by the end of Nov'20 as furnished by ISTS licensees have been considered in the computations.
- D. 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.
- E. 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 as decided by the then validation committee. The same is continued in this computations.
- F. 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. The same is continued in the computations.
- G. In case of YTC of assets claimed by Kohima Mariyani transmission limited, YTC claimed by licensee falls under Regulation 13(12)(c ). As there is no information on bilateral sharing arrangement as approved by CERC, YTC of the assets claimed has been excluded from the computations.
- H. 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, computed transmission charges for DICs in line with the Regulations.
- I. 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.
- J. 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.
- K. 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	246
2	± 500	HVDC	121
3	765	D/C	349
4	765	S/C	156
5	400	S/C	65
6	400	M/C TWIN	307
7	400	D/C Quad Moose	197
8	400	D/C Twin HTLS	133
9	400	D/C Twin Moose	115
10	400	M/C QUAD	576
11	400	D/C TRIPLE	159
12	400	S/C QUAD	108
13	220	D/C	49
14	220	S/C	37
15	220	M/C TWIN	219
16	132	D/C	33
17	132	S/C	18
18	132	M/C TWIN	156

- L. 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.
- M. Circuit Kms of RE lines considered as National component has been considered as zero.
- N. 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.

#### (iv) 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 Rs. for each drawee DIC and injecting DICs having untied LTA.
- C. To take care of loop flows in the basic network, Power flow on HVDC Sasaram was reduced from 250 MW to 50 MW and power flow on HVDC Gazuwaka was reduced from 500 MW to 460 MW.

#### (v) Computation of transmission charges payable by DICs

- A. Each transmission charges component determined has been added for each DIC in order to compute total transmission charges payable by the DIC
- B. The transmission charges are computed separately for both LTA/MTOA and STOA:
  - For LTA/MTOA billing in Rs. These rates are calculated only for withdrawal entities (withdrawal rates) and for generators having LTA to target region without identified beneficiaries.
  - 2. For STOA billing in paise/kWh. These rates are calculated for all the states.

#### (vi) Applicability of transmission charges

- A. The notified transmission charges payable by DICs for the billing period Nov'20 shall be used by RPCs for preparation of Regional Transmission Account (RTA) for the billing month Dec'20. RPCs shall prepare RTA for the billing month of Dec'20 considering regional DIC wise break up of LTA/MTOA enclosed along with this notification.
- B. Transmission charges for STOA shall be payable by the generators and embedded entities located in the state as per the notified STOA rate of the state in which they are located.
- C. The notified transmission charges for STOA transactions shall be applicable for the application received on or after 00:00 Hrs of 29.12.2020.
- D. The transmission charges payable by DICs for LTA/MTOA are given at Annexure-I.
- E. The transmission rates applicable for STOA transactions are given at Annexure-II.
- F. Regional DIC wise break up of LTA/MTOA for the purpose of preparation of Regional Transmission Account (RTA) by RPCs is given at Annexure-III.

G. ISTS licensee wise break up of Monthly Transmission Charges (MTC) for the purpose of disbursement of transmission charges by CTU is given at Annexure-IV.

(जी चक्रवर्ती)

मुख्य महाप्रबंधक / रा. भा. प्रे. के

#### Annexure-I

# <u>Transmission Charges for Designated ISTS Customers (DICs) for the billing period November'20</u>

S.No.	Zone	Zone  LTA Demand / Injection  Usage based AC system system charges (Rs.)  Charges (Rs.)  Region  National Component (Rs.)		Regional Component (Rs.)	Transformers component (Rs.)	Bilateral Charges	Total Bill in Rs.				
			(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	TC (Rs.)	
1	Delhi	NR	5238	192419736	976447602	23338225	107796617	212354744	50257398		1562614323
2	UP	NR	9928	520610000	1850583490	44231081	204298357	402459059	133803989	5344180	3161330157
3	Punjab	NR	4298	211993676	801239807	19150556	88454251	174251105	117567361	1320667	1413977423
4	Haryana	NR	3873	390546597	721976114	17256062	79703798	157013087	200329190		1566824848
5	Chandigarh	NR	220	5279802	40959856	978988	4521834	8907820	2866400		63514700
6	Rajasthan	NR	4242	403247089	790689184	18898384	87289496	171956589	98055448	4566066	1574702257
7	HP	NR	1750	28306481	326194684	7796429	36010825	70939791	29566815	52394898	551209923
8	J&K	NR	2764	86797003	515274144	12315647	56884578	112060195	52643689		835975257
9	Uttarakhand	NR	1228	83300288	228913143	5471288	25271261	49783308	36168934	30258689	459166911
10	ADHPL	NR	168.96	2568795	31495339	752775	3476982	6849507			45143397
11	GMR Kamalanga	NR	75.00	7325016	13980530	334151	1543405	3040442			26223543
12	WBSEDCL_Inj	NR	600.00	4527822.175	111844242	2673206	12347238	24323533			155716042
13	MB Power	NR	78.00	11118296	14539751	347517	1605141	3162059			30772765
14	Chuzachen	NR	99.00	5969549	18454300	441079	2037294	4013383			30915606
15	Jorthang	NR	43.20	2393060.924	8052785	192471	889001	1751294			13278613
16	Tashiding	NR	43.65	0	8136669	194476	898262	1769537			10998943
17	NR Railways	NR							4162344		4162344
18	MUNPL Meja	NR								4423197	4423197
19	RAPP 7&8, NPCIL	NR								34056694	34056694
20	Gujarat	WR	6221	331449869	1159571770	27715104	128012926	86634017	53167647	1435902	1787987233
21	Madhya Pradesh	WR	8079	571632520	1506033812	35995946	166261200	112518916	121347163	4094184	2517883741
22	Maharastra	WR	7188	746589935	1339907081	32025326	147921353	100107242	74318385		2440869323

S.No.	Zone	Region	LTA Demand / Injection	Usage based AC system charges (Rs.)	Balance AC system charges (Rs.)	ystem National Component Co		Regional Component (Rs.)	Transformers component (Rs.)	Bilateral Charges	Total Bill in Rs.
			(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	(Rs.)	
23	Chattisgarh	WR	2634	58361886	491016520	11735862	54206616	36684865	23730172		675735919
24	Goa	WR	502	41867629	93522843	2235304	10324616	6987286	11586268	1402686	167926631
25	Daman Diu	WR	426	15515817	79382810	1897341	8763602	5930855	17304370		128794794
26	Dadra Nagar Haveli	WR	1006	86706212	187575992	4483283	20707775	14014192	21373774		334861228
27	Jindal Power Limited	WR	114.40	12248998	21324969	509691	2354207	1593233			38031098
28	Spectrum Coal & Power	WR	27.50	3741856	5126194	122522	565915	382989			9939476
29	ACB Ltd	WR	23.00	3767618	4287363	102473	473311	320318			8951082
30	Torrent Power	WR	200.00	8632130	37281414	891069	4115746	2785372			53705731
31	Sembcorp Energy India Ltd Project-I	WR	115.00	2875632	21436813	512365	2366554	1601589			28792953
32	DB Power	WR	186.00	34844665	34671715	828694	3827644	2590396			76763114
33	TRN Energy Pvt. Ltd.	WR	3.00	306560	559221	13366	61736	41781			982664
34	CSPTCL	WR	261.00	5552102	48652245	1162845	5371049	3634910			64373150
35	WBSEDCL_Inj	WR	400.00	3018548.116	74562828	1782138	8231492	5570744			93165750
36	KSK Mahanadi	WR	400.00	13447010	74562828	1782138	8231492	5570744			103594211
37	GMR Warora Energy Ltd, Maharashtra	WR	200.00	11816359	37281414	891069	4115746	2785372			56889959
38	Jorthang	WR	43.20	2393060.924	8052785	192471	889001	601640			12128959
39	Tashiding	WR	43.65	0	8136669	194476	898262	607907			9837313
40	ArcelorMittal and Nippon Steel	WR							12747772		12747772
41	NTPC Lara	WR								5291623	5291623
42	NTPC Gadarwada	WR								146235451	146235451
43	MB Power	WR								12318162	12318162
44	Adani Power Limited	WR								332837046	332837046
45	Andhra Pradesh	SR	2100	307920006	391381618	9354472	43207249	29358536	30128070		811349950

S.No.	Zone	Region	LTA Demand / Injection	Usage based AC system charges (Rs.)	Balance AC system charges (Rs.)	National Component (Rs.)		Regional Component (Rs.)	Transformers component (Rs.)	Bilateral Charges	Total Bill in Rs.
			(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	(Rs.)	
46	Telangana	SR	4159	234303420	775233586	18528978	85583249	58152253	30916535		1202718019
47	Tamil Nadu	SR	8491	607786841	1582734587	37829183	174728715	118724968	83995743		2605800037
48	Kerala	SR	2760	178198865	514537734	12298046	56803281	38596791	49703113		850137829
49	Karnataka	SR	5603	437861792	1044469273	24964021	115305987	78348310	95562262	3892787	1800404433
50	Pondicherry	SR	486	8423828	90595055	2165326	10001397	6795767	12133411		130114784
51	Goa-SR	SR	93	4803768	17310870	413750	1911063	1298533			25737984
52	Sembcorp Energy India Ltd Project-I	SR	55.00	1375302.351	10252389	245044	1131830	769058		773646	14547269
53	Sembcorp Energy India Ltd Project-II	SR	490.00	28276692	91339464	2183119	10083578	6851607			138734459
54	BHAVINI	SR								12151393	12151393
55	Betam	SR								1192053	1192053
56	West Bengal	ER	2641	95376196	492210679	11764403	54338447	61225086	37343926		752258736
57	Odisha	ER	1655	79301555	308510543	7373758	34058554	38374999	65106025		532725433
58	Bihar	ER	4439	153722620	827537875	19779110	91357471	102935754	113042278		1308375109
59	Jharkhand	ER	842	30824560	156868776	3749345	17317799	19512588	49151226	3921542	281345835
60	Sikkim	ER	178	649730	33226114	794142	3668054	4132929	3511325		45982294
61	DVC	ER	622	34883316	115980904	2772077	12803912	14426629	6078822		186945661
62	Bangladesh	ER	782	11151282	145847737	3485929	16101112	18141703			194727764
63	BRBCL Nabinagar	ER								6910184	6910184
64	NPGC Nabinagar	ER								20853115	20853115
65	NTPC Darlipalli	ER								3943074	3943074
66	Arunachal Pradesh	NER	247	1276974	45981417	1099009	5076198	6179905	14527718		74141221
67	Assam	NER	1592	85504355	296748721	7092637	32760087	39883042	22565121		484553963
68	Manipur	NER	237	10435912	44237352	1057324	4883659	5945502	4337654		70897403
69	Meghalaya	NER	328	14106780	61131348	1461110	6748701	8216056	681715		92345709

S.No.	Zone	Region	LTA Demand / Injection	Usage based AC system charges (Rs.)	Balance AC system charges (Rs.)	em National Component (Rs )		Regional Component (Rs.)	Transformers component (Rs.)	Bilateral Charges	Total Bill in Rs.
			(in MW)	AC-UBC	AC-BC	NC-RE	NC-HVDC	RC	тс	(Rs.)	
70	Mizoram	NER	136	2568804	25426623	607726	2807016	3417339	1478770	3831981	40138259
71	Nagaland	NER	166	6353167	30867029	737758	3407619	4148530	23125988		68640091
72	Tripura	NER	353	4028856	65852256	1573945	7269873	8850546	1318874		88894349

TOTAL 101176 6250306239 18860010877 450776029 2082083433 2469886249 1705705691 693449219 32512217738

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

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

Sl.No.	Name of Generating Station	State	Capacity	LTA granted	Commissioned capacity	Date of Commercial Operation	Delayed Capacity	Transmission Charges (Rs)
1	Sprng Renewable Energy Pvt Limited	Tamil Nadu	300	300	0	NA	300	9206968
2	NTPC Auraiya Solar	Uttar Pradesh	20	20	8	10.11.20	12	458549

### Annexure-II

# **Transmission rates for Short Term Open Access (STOA)**

S.No.	State	Region	STOA rate (paise/kWh)
1	Delhi	NR	41.43
2	UP	NR	44.23
3	Punjab	NR	45.69
4	Haryana	NR	56.19
5	Chandigarh	NR	40.15
6	Rajasthan	NR	51.56
7	НР	NR	43.75
8	J&K	NR	42.00
9	Uttarakhand	NR	51.93
10	Gujarat	WR	39.92
11	Madhya Pradesh	WR	43.28
12	Maharastra	WR	47.16
13	Chattisgarh	WR	35.63
14	Goa	WR	46.49
15	Daman Diu	WR	42.01
16	Dadra Nagar Haveli	WR	46.22
17	Andhra Pradesh	SR	53.67
18	Telangana	SR	40.17
19	Tamil Nadu	SR	42.62
20	Kerala	SR	42.78
21	Karnataka	SR	44.63
22	Pondicherry	SR	37.18
23	Goa-SR	SR	38.49
24	West Bengal	ER	39.57
25	Odisha	ER	44.71
26	Bihar	ER	40.93
27	Jharkhand	ER	46.43
28	Sikkim	ER	35.83
29	DVC	ER	41.73
30	Bangladesh	ER	34.57
31	Arunachal Pradesh	NER	41.75
32	Assam	NER	42.27
33	Manipur	NER	41.49
34	Meghalaya	NER	39.11
35	Mizoram	NER	40.87
36	Nagaland	NER	57.57
37	Tripura	NER	34.95

# Regional DIC wise break up of LTA/MTOA considered in the computations

SI.No.	Name of the DIC	Region	LTA/MTOA considered in the computations	Name of the state control area in which LTA/MTOA of specific DICs is included in the computations*
1	UP	NR	9734.05	
2	Delhi	NR	5234.50	
3	Haryana	NR	3856.73	
4	Uttarakhand	NR	1228.03	
5	Punjab	NR	4298.33	
6	Rajasthan	NR	4181.54	
7	Himachal Pradesh	NR	1749.91	
8	Jammu & Kashmir	NR	2764.24	
9	Chandigarh	NR	219.73	
10	AD Hydro	NR	168.96	
11	Railways_UP	NR	188.75	Uttar Pradesh
12	Railways_Haryana	NR	11.25	Haryana
13	Railways_Delhi	NR	3.75	Delhi
14	Railways_Rajasthan	NR	59.24	Rajasthan
15	PG-Rihand	NR	0.74	Uttar Pradesh
16	PG-Dadri	NR	0.81	Uttar Pradesh
17	PG-Agra	NR	2.36	Uttar Pradesh
18	PG-Balia	NR	0.95	Uttar Pradesh
19	PG-Bhiwadi	NR	0.95	Rajasthan
20	PG-Kurukshetra	NR	5.14	Haryana
21	MB Power	NR	78.00	
22	WBSEDCL	NR	600.00	
23	GMR Kamalanga Energy Pvt. Ltd	NR	75.00	
24	Chuzachen	NR	99.00	
25	Jorthang	NR	43.20	
26	Tashiding	NR	43.65	
27	Gujarat	WR	6106.51	
28	Madhya Pradesh	WR	7735.31	
29	Chhattisgarh	WR	2616.82	
30	Maharashtra	WR	6876.68	
31	GOA	WR	501.71	
32	Daman Diu	WR	425.86	
33	Dadra Nagar Haveli	WR	1006.27	
34	HVDC Bhadrawathi	WR	2.29	Maharashtra
35	HVDC Vindhyachal	WR	0.69	Madhya Pradesh
36	BARC Facility	WR	9.10	Maharashtra
37	Heavy Water Plant of DAE	WR	12.88	Gujarat
38	HVDC Champa	WR	5.10	Chhattisgarh
39	HVDC Raigarh	WR	0.94	Chhattisgarh
40	Railways_Gujarat	WR	101.25	Gujarat
41	Railways_MP	WR	343.27	Madhya Pradesh
42	Railways_Maharashtra	WR	300.00	Maharashtra
43	Railways_Chhattisgarh	WR	11.25	Chhattisgarh
44	ACB Ltd.	WR	23.00	
45	JINDAL	WR	114.40	

NOTIFICATION OF TRANSMISSION CHARGES PAYABLE BY DICS FOR THE BILLING PERIOD NOV'20 | Page 12 of 19

Sl.No.	Name of the DIC	Region	LTA/MTOA considered in the computations	Name of the state control area in which LTA/MTOA of specific DICs is included in the computations*
46	Spectrum Coal and Power	WR	27.50	
47	Torrent Power	WR	200.00	
48	DB Power	WR	186.00	
49	KSK Mahanadi	WR	400.00	
50	GMR Warora Energy Ltd, Maharashtra	WR	200.00	
51	CSPTCL	WR	261.00	
52	TRN Energy Pvt. Ltd.	WR	3.00	
53	Sembcorp Energy India Ltd	WR	115.00	
54	WBSEDCL	WR	400.00	
55	Jorthang	WR	43.20	
56	Tashiding	WR	43.65	
57	BIHAR	ER	4363.27	
58	JHARKHAND	ER	771.54	
59	DVC	ER	339.69	
60	ORISSA	ER	1655.04	
61	WEST BENGAL	ER	2604.42	
62	SIKKIM	ER	178.24	
63	Bangladesh	ER	782.42	
64	TATA Steel Ltd.	ER	200.00	DVC
65	Railways_Jharkhand	ER	70.00	Jharkhand
66	Railways_Bihar	ER	75.00	Bihar
67	Railways_DVC	ER	82.50	DVC
68	Railways_Odisha	ER	0.00	Odisha
69	Railways West Bengal	ER	33.75	West Bengal
70	HVDC Alipurduar	ER	2.34	West Bengal
71	POWERGRID PUSAULI	ER	1.15	Bihar
72	Andhra Pradesh	SR	2093.71	
73	Karnataka	SR	5594.72	
74	KSEB	SR	2760.29	
75	Tamil Nadu	SR	8489.80	
76	Telangana	SR	4158.82	
77	Puducherry	SR	486.01	
78	Goa	SR	92.87	
79	Railways_Karnataka	SR	7.50	Karnataka
80	PG-HVDC Gazuwaka	SR	4.02	Andhra Pradesh
81	PG-HVDC Talcher	SR	1.88	Andhra Pradesh
82	PG-HVDC Kolar	SR	0.94	Karnataka
83	PG-HVDC Pugalur	SR	0.94	Tamil Nadu
84	Sembcorp Energy India Ltd Project-I	SR	55.00	
85	Sembcorp Energy India Ltd Project-II	SR	490.00	
86	Arunachal Pradesh	NER	246.67	
87	Assam	NER	1589.66	
88	Manipur	NER	237.32	
89	Meghalaya	NER	327.95	
90	Mizoram	NER	136.40	
91	Nagaland	NER	165.59	

Sl.No.	Name of the DIC	Region	LTA/MTOA considered in the computations	Name of the state control area in which LTA/MTOA of specific DICs is included in the computations*
92	Tripura	NER	353.27	
93	PG-HVDC BNC	NER	2.28	Assam

TOTAL 101176.48

<sup>\*</sup>Note: Transmission charges of the state are to be shared on pro-rata basis on the basis of LTA/MTOA of the DICs included in the state's control area as mentioned in the table

## **Annexure-IV**

# <u>Transmission Charges claimed by ISTS licensees for the billing period Nov'20</u>

S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (Rs. Cr)	Total YTC allowed for Nov'20	Equivalent MTC to be considered for Nov'20	Remarks
1	Adani Transmission (India) Limited	772.64	772.64	63.33	
2	CHHATTISGARH-WR TRANSMISSION LIMITED.	165.00	165.00	13.52	
3	RAIPUR RAJNANDGAON-WR TRANSMISSION LIMITED.	219.74	219.74	18.01	
4	SIPAT TRANSMISSION LIMITED.	95.86	95.86	7.86	
5	Western Transmission Gujarat Limited	58.35	58.35	4.78	
6	Western Transco Power Limited	107.37	107.37	8.80	
7	ALIPURDUAR TRANSMISSION LIMITED	159.40	159.40	13.07	
8	APPCC, APEPDCL & APSPDCL	283.72	57.74	4.73	CERC approved ISTS lines are only considered as per Sharing Regulations 2020
9	ARAVALI POWER COMPANY PRIVATE LIMITED	12.77	12.77	1.05	
10	Essar Power Transmission Company Limited	412.98	333.05	27.30	As per minutes of Validation Committee meeting held for 2020-21 Q2 PoC computations, combined tariff of LILO of 400kV Vindhyachal- Korba at Mahan, GIS S/s at Hazira and 400kV Hazira- Gandhar line) have been excluded from computations in the absence of exclusive tariff of LILO of 400kV Vindhyachal-Korba at Mahan.
11	Essar Power Transmission Company Limited (NTPC portion)	3.46	3.46	0.28	
12	Jindal Power Limited	19.12	19.12	1.57	
13	Kudgi Transmission Limited	196.29	196.29	16.09	
14	Madhya Pradesh Power Transmision Co. Ltd.	12.54	12.54	1.03	
15	Parbati Koldam Transmission Company Limited (JV of Rinfra and PowerGrid Corporation of India Limited)	173.04	173.04	14.18	
16	BHOPAL DHULE TRANSMISSION COMPANY LTD.	260.00	260.00	21.31	
17	EAST NORTH INTERCONNECTION COMPANY LIMITED	143.32	143.32	11.75	
18	GURGAON PALWAL TRANSMISSION LIMITED	147.49	147.49	12.09	

NOTIFICATION OF TRANSMISSION CHARGES PAYABLE BY DICS FOR THE BILLING PERIOD NOV'20 | Page 15 of 19

19	JABALPUR TRANSMISSION COMPANY LIMITED	146.98	146.98	12.05	
S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (Rs. Cr)	Total YTC allowed for Nov'20	Equivalent MTC to be considered for Nov'20	Remarks
20	MAHESHWARAM TRANSMISSION LIMITED	55.89	55.89	4.58	
21	KHARGONE TRANSMISSION COMPANY LTD.	105.98	105.98	8.69	
26	NRSS-XXIX TRANSMISSION LIMITED	502.08	502.08	41.15	
27	ODISHA GENERATION PHASE-II TRANSMISSION LIMITED	161.42	161.42	13.23	
28	Patran Transmission Company Limited	30.66	30.66	2.51	
29	PURULIA & KHARAGPUR TRANSMISSION COMPANY LIMITED	72.43	72.43	5.94	
30	RAPP TRANSMISSION COMPANY LIMITED	44.03	44.03	3.61	
31	Teestavalley Power Transmission Limited	289.56	289.56	23.73	
32	Torrent Power Grid Limited	46.68	46.68	3.83	
33	Darbhanga-Motihari Transmission Company Limited	119.03	119.03	9.76	
34	NRSS XXXI (B) Transmission Limited	90.76	90.76	7.44	
35	Jaypee Powergrid Limited	161.36	161.36	13.23	
36	KOHIMA MARIANI TRANSMISSION LIMITED	167.40	0.00	0.00	YTC claimed by licensee falls under Regulation 13(12)(c). As there is no information on bilateral sharing arrangement as approved by CERC, YTC claimed is excluded from sharing mechanism
37	RAICHUR SHOLAPUR TRANSMISSION COMPANY PRIVATE LIMITED	35.20	35.20	2.89	
38	DAMODAR VALLEY CORPORATION	137.08	137.08	11.24	
39	KARNATAKA POWER TRANSMISSION CORPORATION LIMITED	1.42	1.42	0.12	
40	DELHI TRANSCO LIMITED	3.12	3.12	0.26	
41	Powerlinks Transmission Limited	224.30	224.30	18.39	
42	NRSS XXXVI Transmission Limited	1.28	1.28	0.10	
43	Warora-Kurnool Transmission Limited	5.46	5.46	0.45	Cost of 240 MVAR reactor with bays at Warora end is considered under the sharing mechanism
44	POWERGRID VIZAG TRANSMISSION LIMITED	293.84	293.84	24.08	
45	POWERGRID NM TRANSMISSION LIMITED	116.34	116.34	9.54	
46	POWERGRID UNCHAHAR TRANSMISSION LIMITED	20.79	20.79	1.70	

47	POWERGRID PARLI TRANSMISSION LIMITED	317.38	317.38	26.01	
S.No.	Name of the Transmission Licensee	Total YTC claimed by Licensees (Rs. Cr)	Total YTC allowed for Nov'20	Equivalent MTC to be considered for Nov'20	Remarks
48	POWERGRID KALA AMB TRANSMISSION LIMITED	72.515	72.52	5.94	Bilateral payment of HPSEB is also included in the claimed YTC
49	POWERGRID Southern Interconnector Transmission System Limited	449.68	449.68	36.86	
50	POWERGRID WARORA TRANSMISSION LIMITED	352.07	352.07	28.86	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 for Nov'20.
51	Power Transmission Corporation of Uttarakhand Ltd	7.97	7.97	0.65	
52	Rajasthan Rajya Vidhyut Prasaran Nigam Ltd.	36.96	36.96	3.03	
53	POWERGRID JABALPUR TRANSMISSION LIMITED	243.68	243.68	19.97	
54	TAMILNADU TRANSMISSION CORPORATION LIMITED	0.59	0.59	0.05	
55	CHHATTISGARH STATE POWER TRANSMISSION COMPANY LTD	0.75	0.75	0.06	
56	HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD	2.61	2.61	0.21	
57	ODISHA POWER TRANSMISSION CORPORATION LIMITED	9.44	9.44	0.77	
58	NORTH EAST TRANSMISSION COMPANY LIMITED	351.53	351.53	28.81	
59	POWERGRID	32179.98	32179.98	2637.70	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 for Nov'20. PowerGrid assets for bilateral payments as mentioned in format I-C are also included in this total YTC claimed.

TOTAL MTC considered for the billing period Nov'20 from the claimed assets of ISTS licensees (Rs. Crores)

3248.20

PTCUL MTC for bilateral

3.03

TOTAL MTC to be settled for Nov'20 under Sharing mechanism (Rs. Crores)

3251.22

# <u>List of ISTS Licensees submitted the YTC data for the billing period Nov'20</u>

SI. No.	Name of ISTS Licensee			
1	Powergrid Corporation of India Limited			
2	Powergrid Vizag Transmission Limited			
3	Western Transco Power Limited			
4	Western Transmission Gujarat Limited			
5	Torrent Power Limited			
6	Aravali Power Company Private Limited			
7	Adani Power Limited			
8	Bhopal Dhule Transmission Company Limited			
9	Jindal Power Limited			
10	Essar Power Transmission Company Ltd.			
11	NRSS XXXVI Transmission Limited			
12	Warora-Kurnool Transmission Limited			
13	Jabalpur Transmission Company Ltd			
14	Purulia Kharagpur Transmission company Ltd.			
15	NRSS-XXIX Transmission Ltd.			
16	NRSS-XXXI (B) Transmission Limited			
17	Patran Transmission Company Limited			
18	RAPP Transmission Company Ltd.			
19	Darbhanga Motihari Transmission Company Limited			
20	Teestavalley Power Transmission Ltd			
21	Maheshwaram Transmission Ltd			
22	Powergrid Unchahar Transmission Ltd			
23	Powergrid Parli Transmission Limited			
24	Khargone Transmission Limited			
25	POWERGRID Southern Interconnector Transmission System Limited			
26	Gurgaon Palwal Transmission Limited			
27	Odisha Generation Phase-II Transmission Ltd			
28	Chhattisgarh WR Transmission Limited			
29	Sipat Transmission Limited			
30	Raipur Rajnandgaon Transmission Limited			
31	POWERGRID Kala Amb Transmission Ltd			
32	POWERGRID Warora Transmission Limited			
33	POWERGRID Jabalpur Transmission Limited			
34	Powergrid NM Transmission Limited			
35	Alipurduar Transmission Limited			
36	Kohima-Mariyani Transmission Limited			
37	Andhra Pradesh APTRANSCO			
38	Madhya Pradesh MPPTCL			
39	Chhattisgarh CSPTCL			

Super DICs NHPC

NTPC

Sr .no.	WR	NR	ER	SR	NER
1	Gujarat	ВВМВ	BIHAR	ANDHRA PARADESH	ARUNCHAL PRADESH
2	MP ( Partial Submission)	HARYANA	ODISHA	KERALA	ASSAM
3	Chattisgarh	PUNJAB	DVC	TAMIL NADU	MANIPUR
4	Maharashtra		JITPL	TELANGANA	MIZORAM
5	Goa			IL&FS	MEGHALAYA
6	Daman and Diu(DD)			NTPL	NAGALAND
7	Dadar Nagar Haveli(DNH)			SEIL P1	TRIPURA
8	ESIL			SEIL P2	NHPC
9	Ratnagiri Dabhol				NTPC
10	TAPS 1 & 2			RENEWABLE ENERGY	
11	TAPS 3 & 4			Azure Earth Pavagada_100MW	
				Amplus Kurukshetra	_
12	Jindal power			Pavagada_50MW	
13	LANCO			Amplus Rewari Pavagada 50MW.	
14	NSPCL Bhilai			PVG_FortumSolar 250 MW	
15	CGPL			ORANGE WIND	
16	SSP			PAVAGADA SOLAR	_
17	KAPS			PVG_ADYAH_Block _1,2,3,6,10 & 13	
18	Essar Mahan			PVG_ReNew_TN2	
19	BALCO			1 VG_NEIVEW_11V2	_
20	KSK Mahanadi				
21	Sasan UMPP				
22	Tamnar TPP (Jindal Extn.)				
23	DGEN				
24	DB Power Ltd. REGL RAIGARH				
25 26	Dhariwal				
27	Raikheda TPP				
28	JP Nigrie				
29	GMR Warora Energy				
30	ACBIL+Spectrum+ MCCPL				
31	MB Power (Anuppur)				
32	RKM Power				
33	Jhabua Power				
34	TRN Energy				
35	SKS Power				
36	Badwar				
37	Barsaita Desh				
38					
39	Ramnagar Pahad Ostro				
40	Bhuvad				
		1			

41

42

43

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45

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Vadva

Naranpar Roha

Dayapar

Ratadiya

Nanavalka

Gadhsissa