# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### No.L-1/44/2010-CERC

Coram:

Shri Gireesh B Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order: 31st of October, 2017

#### In the matter of:

Determination of Point of Connection (PoC) rates and transmission losses for the period of October to December, 2017 in accordance with Regulation 17(2) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and amendments thereto.

#### And

#### In the matter of:

- 1. National Load Despatch Centre, New Delhi
- 2. Central Transmission Utility, New Delhi

.....Respondents

#### <u>ORDER</u>

The Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (herein after "Sharing Regulations") came in to effect from 1.7.2011. The third amendment to the Sharing Regulations, 2015 have come into force with effect from 1st May, 2015.

- 2. National Load Dispatch Centre as the Implementing Agency has been entrusted with the responsibility for computation of transmission charges and losses under the Sharing Regulations for each financial year. Further, Regulation 17 of the Sharing Regulations provides that the information to be submitted by the Implementing Agency consequent to the computations under taken shall include the following:
  - (a) Approved Basic Network Data and Assumptions, if any:



- (b) Zonal and nodal transmission charges for the ensuing Application Period;
- (c) Zonal and nodal transmission losses data for the ensuing Application Period;
- (d) Schedule of charges payable by each constituent for the ensuing Application Period;
- (e) YTC detail (information submitted by the transmission licensees covered under these Regulation and computation by Implementing Agency);
- (f) Zone wise details of PoC Charges to enable each DIC to see details of transmission lines it is using and whose transmission Charges it is sharing.
- 3. The Implementing Agency in its letter No. POSOCO/Trans. Pricing/CERC dated 16.10.2017 has submitted following information in compliance with Regulation 17 of the Sharing Regulations:-
  - (a) Approved Basic Network Data and Assumptions;
  - (b) Zonal and nodal transmission charges for the ensuing Application Period;
  - (c) Zonal and nodal transmission losses data for the ensuing Application Period;
  - (d) Schedule of charges payable by each constituent for the ensuing Application Period;
  - (e) Yearly Transmission Charges(YTC) details of ISTS Licensees;
  - (f) PoC rates and loss percentage computation details;
  - (g) LTA /MTOA and their commencement schedule.



- 4. We have examined the basic network data and assumptions, the results of the Load Flow Studies, the Yearly Transmission Charges of the ISTS licensees and the calculation of PoC Charges for demand zone and injection zone (for LTA to target region) submitted by the Implementing Agency. We have also examined the calculation of losses on PoC based on average losses. Final % losses shall be applicable on demand zones and injection zones. We find that the calculations submitted by the Implementing Agency have been done as per Sharing Regulations and amendments thereof and accordingly, we approve the Basic Network, Load Flow, Assumptions used for computation of the final PoC rates and final transmission losses, their fitment into slabs and schedule of charges payable by each DIC for October to December, 2017, as submitted by Implementing Agency.
- 5. The Implementing Agency after computation of PoC rates and transmission losses for each injection zone and demand zone has assigned them to different slabs. We have gone through the details furnished by the Implementing Agency and find the same in order. We have also examined the details of PoC losses in percentage for each demand zone (for withdrawal DICs) and injection zone (for injecting DICs) and its applicable slab as per slabs approved by the Commission and have found them to be in order.
- 6. In the light of the above, we approve the following:-
  - (a) The applicable PoC slab rates for Long Term Access (LTA) and Medium Term Open Access (MTOA) in ₹/MW/month for each demand zone (for withdrawal DICs) and injection zone (for injection DICs having LTA to target region) as per details at Annexure-I. The slabs for POC rates for LTA / MTOA are as follows:-

PoC Slab	(₹/MW/Month)
I	293699
II	266088
III	238477
IV	210866
V	183255
VI	155644
VII	128033
VIII	100422
IX	72811

- (b) The Reliability Support Charges, HVDC Charges for all Regions and HVDC Charges for Mundra-Mohindergarh are givenin Annexure-I.
- (c) The applicable PoC slab rates for Short Term Open Access (STOA) in paise per unit for each demand zone (for withdrawal DICs) and injection zone (for injecting DICs) as per the details at Annexure-II to this order. The slabs for POC rates towards STOA are as follows:-

PoC Slab	(paisa/unit)
	24.93
	21.98
III	19.03
IV	16.08
V	13.13
VI	10.18
VII	7.23
VIII	4.28
IX	1.32

- (d) Reliability Support Charge Rate in respect of STOA as per the details at Annexure-II to this order.
- (e) Transmission losses as per the details at Annexure–III. These slabs for each Region shall be applied based on last week's actual Regional Losses. The slabs of loss are as follows:-

PoC Losses Slab	% of Losses	
I	V +1.00%	
II	V +0.75%	
III	V +0.50%	
IV	V +0.25%	
V	Average Loss	
VI	V -0.25%	
VII	V -0.50%	
VIII	V -0.75%	
IX	V -1.00%	

- 7. We also direct the Implementing Agency to publish zonal PoC Rates and zonal Transmission Losses and associated details which will enable a clear understanding of the calculations used for arriving at these rates, along with underlying network information and base load flows used.
- 8. In order to ensure smooth changeover of short term transactions from the existing rates to the new rates of sharing of transmission charges, we direct that in respect of the applications made for scheduling of bilateral and collective transactions received on or before the date of issue of this order, short-term open access charges would be payable at the rates applicable for the application period from July September, 2017 (Q2 of 2017 -18) and for applications received after date of issue of this order, the short-term open access charges shall be payable as per the rates approved vide this order. Taking into consideration the application of weekly losses, we direct that the application of the new PoC loss slabs would be made applicable from the Monday immediately following the date of issue of the instant order. The rates/losses as approved vide this order shall remain applicable till notification of the next order.

9. The Implementing Agency is directed to endorse a copy of this order to all DICs and other concerned agencies. The Implementing Agency and the Central Transmission Utility shall also give wide publicity to this order through their websites.

sd/- sd/- sd/- sd/- sd/- (Dr. M.K. Iyer) (A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan) Member Member Chairperson

## Annexure-I

	PoC Rates for LTA/MTOA billing				
	Slabs for PoC Rate	s-Northern Regio	on (October 2017- Dec	ember 2017)	
SI.No	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NR (₹/MW/Month)	
1	Haryana	293699	24271	36093	
2	Rajasthan	293699	24271	36093	
3	Uttar Pradesh	266088	24271	36093	
4	Budhil+ Lanco	210866	24271	36093	
5	Karcham Wangtoo	210866	24271	36093	
6	Uttarakhand	183255	24271	36093	
7	Lanco Anpara	155644	24271	36093	
8	Punjab	155644	24271	36093	
9	Delhi	128033	24271	36093	
10	AD Hydro	72811	24271	36093	
11	Chandigarh	72811	24271	36093	
12	HP	72811	24271	36093	
13	J&K	72811	24271	36093	

,	Slabs for PoC Rates- Southern Region (October 2017- December 2017)				
Srl. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for SR (₹/MW/Month)	
1	Andhra Pradesh	293699	24271	14113	
2	Karnataka	293699	24271	14113	
3	Telangana	210866	24271	14113	
4	Sembcorp Gayathri	183255	24271	14113	
5	Kerala	155644	24271	14113	
6	TPCIL	128033	24271	14113	
7	Tamil Nadu	100422	24271	14113	
8	Goa-SR	72811	24271	14113	
9	Meenakshi Energy Private Ltd	72811	24271	14113	
10	Pondicherry	72811	24271	14113	
11	SEPL	72811	24271	14113	

	Slabs for PoC Rates -North Eastern Region (October 2017- December 2017)			
Srl. No.	Name of Entity PoC Slab Rate (₹/MW/Month)		Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NER (₹/MW/Month)
1	Assam	293699	24271	7459
2	Mizoram	293699	24271	7459
3	Nagaland	210866	24271	7459
4	Arunachal Pradesh	183255	24271	7459
5	Manipur	183255	24271	7459
6	Meghalaya	72811	24271	7459
7	Tripura	72811	24271	7459

	Slabs for PoC Rates - Western Region (October 2017- December 2017)				
Srl.	Name of Entity	PoC Slab	Reliability	HVDC	HVDC Charges for
No.		Rate (₹/MW/		Charges Rate	Mundra -
		Month)	Charges Rate		Mohindergarh
			(₹/MW/Month)	(₹/MW/Month)	(amount payable by
					Adani for 1495 MW
					LTA to Haryana)
1	ACB Ltd	293699	24271	7459	
2	DB Power	293699	24271	7459	
3	Maharashtra	293699	24271	7459	
4	MB Power	293699	24271	7459	
5	Spectrum Coal &	293699	24271	7459	
6	Power TRN Energy Pvt.	293699	24271	7459	
7	Gujarat	266088	24271	7459	
8	Jindal	266088	24271	7459	
9	Goa	238477	24271	7459	
10	Jindal Stg-II,	238477	24271	7459	
11	Adani Power Ltd.	210866	24271	7459	Rs. 287711355 /
12	Chhattisgarh Inj.	210866	24271	7459	
13	Korba	183255	24271	7459	
14	Madhya Pradesh	183255	24271	7459	
15	GMR Chattisgarh	155644	24271	7459	
16	Chhattisgarh W	128033	24271	7459	
17	D&D	100422	24271	7459	
18	KSK Mahanadi	100422	24271	7459	
19	RKM Powergen Pvt	100422	24271	7459	
20	DNH	72811	24271	7459	
21	Torrent Power	72811	24271	7459	



	Slabs for PoC Rates - Eastern Region (October 2017- December 2017)				
Srl. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for ER (₹/MW/Month)	
1	Odisha	293699	24271	7459	
2	Bihar	238477	24271	7459	
3	West Bengal W	183255	24271	7459	
4	DVC	155644	24271	7459	
5	Jharkhand	128033	24271	7459	
6	Bangladesh	100422	24271	7459	
7	GMR Kamalanga	72811	24271	7459	
8	Sikkim	72811	24271	7459	
9	West Bengal Inj.	72811	24271	7459	



## Annexure-II

	PoC Rates for STOA purpose			
Slabs f	or PoC Rates-Northern	Region (Octo	ber 2017- December 2017)	
Srl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)	
1	Rajasthan Inj	24.93	3.37	
2	Uttar Pradesh Inj	24.93	3.37	
3	Haryana Inj	24.93	3.37	
4	Rajasthan W	24.93	3.37	
5	Haryana W	24.93	3.37	
6	Uttar Pradesh W	19.03	3.37	
7	Uttarakhand W	16.08	3.37	
8	Chamera I	16.08	3.37	
9	Rihand	16.08	3.37	
10	Dulhasti	16.08	3.37	
11	Chamera Pooling	16.08	3.37	
12	RAAP C	13.13	3.37	
13	Chamera II	13.13	3.37	
14	Nathpa Jhakri	13.13	3.37	
15	Rampur HEP	13.13	3.37	
16	Karcham Wangtoo	13.13	3.37	
17	Uttarakhand Inj	10.18	3.37	
18	Punjab W	10.18	3.37	
19	Sree Cement	10.18	3.37	
20	Koldam	10.18	3.37	
21	Rosa Power	10.18	3.37	
22	Tehri	10.18	3.37	
23	Singrauli	10.18	3.37	
24	Jammu & Kashmir Inj	7.23	3.37	
25	Delhi W	7.23	3.37	
26	Unchahar NTPC	7.23	3.37	
27	Koteshwar	7.23	3.37	
28	Parbati-3	7.23	3.37	
29	Himachal Pradesh Inj	4.28	3.37	
30	Punjab Inj	4.28	3.37	
31	Delhi Inj	4.28	3.37	
32	Jammu & Kashmir W	4.28	3.37	
33	Himachal Pradesh W	4.28	3.37	
34	Chandigarh W	4.28	3.37	
35	Uri I	4.28	3.37	
36	Uri II	4.28	3.37	
37	BBMB	4.28	3.37	
38	Jhajjar	4.28	3.37	
39	Dadri	1.32	3.37	
40	Chandigarh Inj	1.32	3.37	



Srl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Maharashtra W	24.93	3.37
2	TRN Energy	24.93	3.37
3	ACBIL+Spectrum	24.93	3.37
4	Jindal Power Limited	24.93	3.37
5	DB Power	24.93	3.37
6	Balco	24.93	3.37
7	MB Power	24.93	3.37
8	Sipat	21.98	3.37
9	Lanco	21.98	3.37
10	Gujarat W	19.03	3.37
11	Essar Steel W	19.03	3.37
12	SASAN	19.03	3.37
13	JPL Extn.	19.03	3.37
14	Goa-WR W	16.08	3.37
15	APL Mundra	16.08	3.37
16	Vindhyachal	16.08	3.37
17	Madhya Pradesh W	13.13	3.37
18	Korba	13.13	3.37
19	Dhariwal	13.13	3.37
20	GMR WARORA	13.13	3.37
21	KSK Mahanadi	13.13	3.37
22	Raikheda	13.13	3.37
23	Chhattisgarh Inj	10.18	3.37
24	Chhattisgarh W	10.18	3.37
25	RKM	10.18	3.37
26	Jhabua Power	10.18	3.3
27	NSPCL	10.18	3.3
28	JP Nigrie	10.18	3.37
29	D&D W	7.23	3.3
30	DNH W	7.23	3.3
31	Mauda	7.23	3.3
32	Maharashtra Inj	4.28	3.37
33	Gujarat Inj	4.28	3.3
34	Madhya Pradesh Inj	4.28	3.37
35	CGPL	4.28	3.3
<u>36</u>	Sholapur-NTPC	4.28	3.3
37	SSP	4.28	3.3
38	TAPS 3&4	1.32	3.3
39	RGPPL	1.32	3.3
40	Torrent	1.32	3.3
41	Goa-WR Inj	1.32	3.3
42	D&D Inj	1.32	3.3
43	Essar Steel Inj	1.32	3.3
44	DNH Inj	1.32	3



Slabs	Slabs for PoC Rates-Eastern Region (October 2017- December 2017)			
Srl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)	
1	Sikkim Inj	24.93	3.37	
2	Odisha Inj	24.93	3.37	
3	Talcher-2	24.93	3.37	
4	Odisha W	21.98	3.37	
5	Teesta III	21.98	3.37	
6	Bihar W	19.03	3.37	
7	Talcher	19.03	3.37	
8	Teesta	19.03	3.37	
9	Barh	16.08	3.37	
10	West Bengal W	13.13	3.37	
11	JITPL	13.13	3.37	
12	Kahalgaon	13.13	3.37	
13	Bhutan Inj	13.13	3.37	
14	West Bengal Inj	10.18	3.37	
15	Jharkhand W	10.18	3.37	
16	DVC W	10.18	3.37	
17	MPL	10.18	3.37	
18	DVC Inj	7.23	3.37	
19	Bangladesh W	7.23	3.37	
20	Adhunik Power	7.23	3.37	
21	GMR Kamalanga	7.23	3.37	
22	Farakka	7.23	3.37	
23	BRBCL Nabinagar	4.28	3.37	
24	Bihar Inj	1.32	3.37	
25	Jharkhand Inj	1.32	3.37	
26	Sikkim W	1.32	3.37	
27	Bangladesh Inj	1.32	3.37	

SI	Slabs for PoC Rates- Southern Region (October 2017- December 2017)			
Srl. No.	Name of Entity	PoC Slab Rate (paise /kWH)	Reliability Support Charges Rate (paise/kWH)	
1	Karnataka W	24.93	3.37	
2	Andhra Pradesh W	24.93	3.37	
3	Tamilnadu Inj	19.03	3.37	
4	Karnataka Inj	19.03	3.37	
5	Telangana W	16.08	3.37	
6	Sembcorp Gayatri Power	16.08	3.37	
7	NTPL	13.13	3.37	
8	Thermal Powertech	13.13	3.37	
9	Kerala W	10.18	3.37	
10	Coastal Energy	10.18	3.37	
11	Tamilnadu W	7.23	3.37	
12	IL&FS	7.23	3.37	
13	Simhadri 1	7.23	3.37	
14	Kudankulam	7.23	3.37	
15	Kaiga	7.23	3.37	
16	Telangana Inj	4.28	3.37	
17	Andhra Pradesh Inj	4.28	3.37	
18	Puducherry W	4.28	3.37	
19	Goa-SR W	4.28	3.37	
20	Simhadri 2	4.28	3.37	
21	NLC	4.28	3.37	
22	Ramagundam	4.28	3.37	
23	Kudgi-NTPC	4.28	3.37	
24	Kerala Inj	1.32	3.37	
25	Vallur	1.32	3.37	
26	SEPL+MEPL	1.32	3.37	
27	Puducherry Inj	1.32	3.37	
28	Goa-SR Inj	1.32	3.37	



Slabs for PoC Rates- North Eastern Region (October 2017- December 2017)			
Srl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Mizoram W	24.93	3.37
2	Assam W	24.93	3.37
3	Palatana	19.03	3.37
4	Tripura Inj	16.08	3.37
5	Mizoram Inj	16.08	3.37
6	Nagaland W	16.08	3.37
7	Bongaigaon-NTPC	16.08	3.37
8	Arunachal Pradesh W	13.13	3.37
9	Manipur W	13.13	3.37
10	Ranganadi	13.13	3.37
11	Meghalaya Inj	7.23	3.37
12	Assam Inj	7.23	3.37
13	Tripura W	7.23	3.37
14	Manipur Inj	4.28	3.37
15	Nagaland Inj	4.28	3.37
16	Meghalaya W	4.28	3.37
17	Arunachal Pradesh Inj	1.32	3.37

Slabs for PoC Losses-Northern region (October 2017- December 2017)		
Srl. No.	Zone	Slab w.r.t Weighted Average
1	RAPP C	I
2	Rajasthan W	I
3	Rihand	I
4	Singrauli	I
5	Uttar Pradesh W	II
6	Rajasthan Inj	III
7	Uttar Pradesh Inj	IV
8	Himachal Pradesh W	IV
9	Shree Cement	V
10	Uttarakhand W	V
11	Tehri	V
12	Koteshwar	V
13	Haryana W	V
14	Himachal Pradesh Inj	VI
15	Rampur HEP	VI
16	Nathpa Jhakri	VI
17	Chandigarh W	VII
18	Uttarakhand Inj	VII
19	Karcham Wangtoo	VII
20	BBMB	VII
21	Rosa Power	VII
22	Unchahar	VII
23	Dulhasti	VIII
24	Parbati III	VIII
25	Chamera Pooling Point	VIII
26	Chamera I	VIII
27	Chamera II	VIII
28	Delhi W	IX
29	Jammu & Kashmir Inj	IX
30	Punjab W	IX
31	Jammu & Kashmir W	IX
32	Punjab Inj	IX
33	Haryana Inj	IX
34	Uri I	IX
35	Uri II	IX
36	Dadri	IX
37	Jhajjar	IX
38	Delhi Inj	IX
39	Chandigarh Inj	IX
	Koldam	IX
40	Notualii	IA

Slabs for PoC - Western Region (October 2017- December 2017)		
Srl. No.	Zone	Slab w.r.t Weighted Average
1	MB Power	1
2	Essar Steel W	II
3	Dhariwal	II
4	ACB+Spectrum Coal and Power Limited	III
5	Vindhyachal	III
6	Sasan UMPP	III
7	JPL Extn.	III
8	Jindal Power Limited+Jindal Steel Power	III
9	Raikheda	III
10	Jhabua Power	III
11	TRN Energy	III
12	Mauda	IV
13	GMR Warora	IV
14	Korba	IV
15	Lanco	IV
16	Sipat	IV
17	Maharashtra W	IV
18	JP Nigrie	IV
19	Madhya Pradesh W	IV
20	Chhattisgarh W	V
21	Balco	V
22	Coastal Gujarat Power Limited	V
23	Gujarat W	V
24	APL Mundra	V
25	Goa-WR W	VI
26	DB Power	VI
27	Chhattisgarh Inj	VI
28	Sardar Sarovar Project	VI
29	DNH W	VI
30	Maharashtra Inj	VI
31	RKM	VI
32	Sholapur NTPC	VI
33	KSK Mahanadi	VII
34	NSPCL, Bhilai	VII
35	D&D W	VII
36	Madhya Pradesh Inj	VII
37	RGPPL	VII
38	Gujarat Inj	VIII
39	Tarapur Atomic Power Station 3&4	IX
40	Goa-WR Inj	IX
41	D&D Inj	IX
42	DNH Inj	IX
43	Essar Steel Inj	IX
44	Torrent Power	IX



Slabs for PoC Losses-Eastern Region (October 2017- December 2017)		
Srl. No.	Zone	Slab w.r.t Weighted Average
1	Talcher Stg-2	Ī
2	Teesta III	I
3	Teesta	II
4	Talcher	III
5	Injection from Bhutan	III
6	Bihar W	III
7	Sikkim Inj	III
8	Odisha W	IV
9	Jharkhand W	IV
10	JITPL	V
11	GMR Kamalanga	V
12	Orissa Inj	V
13	Barh	V
14	Kahalgaon	V
15	BRBCL	V
16	West Bengal W	VI
17	Maithon Power Limited	VI
18	Farakka	VI
19	DVC Inj	VI
20	Aadhunik Power	VI
21	DVC W	VI
22	Jharkhand Inj	VI
23	Bihar Inj	VII
24	West Bengal Inj	VII
25	Bangladesh W	VIII
26	Sikkim W	VIII
27	Bangladesh Inj	IX



Slabs for PoC Losses- Southern Region (October 2017- December 2017)		
Srl. No.	Zone	Slab using Weighted Average
1	Kerala W	I
2	Pondicherry W	II
3	Karnataka W	III
4	Coastal Energy	IV
5	Thermal Powertech	IV
6	Kudankulam	IV
7	NTPL	IV
8	IL&FS	IV
9	Kerala Inj	V
10	Kaiga	V
11	SEPL+MEPL	V
12	Tamil Nadu W	V
13	NLC	V
14	Telangana W	V
15	Sembcorp Gayatri Power Ltd.	V
16	Simhadri 2	VI
17	Andhra Pradesh W	VI
18	Ramagundam	VI
19	Karnataka Inj	VI
20	Telangana Inj	VI
21	Simhadri 1	VI
22	Kudgi NTPC	VI
23	Andhra Pradesh Inj	VII
24	Tamil Nadu Inj	VII
25	Vallur	VII
26	Goa-SR W	VII
27	Pondicherry Inj	IX
28	Goa-SR Inj	IX

Slabs for PoC Losses -North Eastern Region (October 2017- December 2017)		
Srl. No.	Zone	Slab w.r.t Weighted Average
1	Mizoram W	Ī
2	Mizoram Inj	II
3	Assam W	IV
4	Arunachal Pradesh W	V
5	Manipur W	V
6	Assam Inj	V
7	Ranganadi	V
8	Palatana	V
9	Bongaigaon	V
10	Meghalaya W	VI
11	Manipur Inj	VI
12	Meghalaya Inj	VI
13	Tripura Inj	VI
14	Nagaland W	VII
15	Tripura W	VIII
16	Nagaland Inj	VIII
17	Arunachal Pradesh Inj	IX