

**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: 28 .04.2017

In the matter of:

Determination of Point of Connection (PoC) rates and transmission losses for the period of April to June, 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

ORDER

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 came in to 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 18.4.2017 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 April to June, 2017 quarter, 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	317357
II	289275
III	261193
IV	233111
V	205029
VI	176947
VII	148865
VIII	120783
IX	92701

b. The Reliability Support Charges, HVDC Charges for all Regions and HVDC Charges for Mundra-Mohindergarh are given in 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	(paise/unit)
I	23.35
II	20.86
III	18.36
IV	15.86
V	13.36
VI	10.86
VII	8.37
VIII	5.87
IX	3.37

d. Reliability Support Charge Rate in respect of STOA as per the details at Annexure-II to this order.

e. Transmission losses are 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 change over for 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 January - March, 2017 (Q4 of 2016 -17) 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 PoC rates in respect of UPPCL for additional 18.5 MW LTA shall be subject to the outcome of the Petition No. 242/MP/2016 pending before the Commission.



10. The assets of BBMB and LTA in respect of BBMB shall not be included under PoC mechanism and a view on inclusion of these assets under PoC shall be taken after determination of final tariff of these assets.

11. 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/-
(Dr. M.K. Iyer)
Member**

**Sd/-
(A.S. Bakshi)
Member**

**Sd/-
(A.K. Singhal)
Member**

**Sd/-
(Gireesh B. Pradhan)
Chairperson**



PoC Rates for LT/MTOA billing				
Slabs for PoC Rates-Northern Region (April 2017- June 2017)				
Sl. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NR (₹/MW/Month)
1	Haryana	317357	27764	40468
2	Rajasthan	317357	27764	40468
3	Uttar Pradesh	261193	27764	40468
4	Uttarakhand	261193	27764	40468
5	Anpara-C	205029	27764	40468
6	Karcham Wangtoo	205029	27764	40468
7	Punjab	205029	27764	40468
8	Delhi	176947	27764	40468
9	Lanco Budhil	176947	27764	40468
10	AD hydro	92701	27764	40468
11	Chandigarh	92701	27764	40468
12	Himachal Pradesh	92701	27764	40468
13	Jammu & Kashmir	92701	27764	40468

Slabs for PoC Rates- Southern Region (April 2017- June 2017)				
Sl. 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	317357	27764	17616
2	Karnataka	317357	27764	17616
3	Telangana	233111	27764	17616
4	Kerala	205029	27764	17616
5	Tamilnadu	148865	27764	17616
6	SEPL	120783	27764	17616
7	Thermal Powertech	120783	27764	17616
8	Goa-SR	92701	27764	17616
9	Puducherry	92701	27764	17616
10	Udupi Power Corporation Limited	92701	27764	17616



Slabs for PoC Rates -North Eastern Region (April 2017- June 2017)				
Sl. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NER (₹/MW/Month)
1	Assam	317357	27764	8880
2	Mizoram	317357	27764	8880
3	Meghalaya	233111	27764	8880
4	Arunachal Pradesh	205029	27764	8880
5	Nagaland	205029	27764	8880
6	Manipur	176947	27764	8880
7	Tripura	92701	27764	8880

Slabs for PoC Rates - Western Region (April 2017- June 2017)					
Sl. No.	Name of Entity	PoC Slab Rate (₹/MW/ Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for WR (₹/MW/Month)	HVDC Charges for Mundra - Mohindergarh (amount payable by Adani for 1495 MW LTA to Haryana)
1	Goa-WR	317357	27764	8880	
2	Jindal Power Limited	317357	27764	8880	
3	Maharashtra	317357	27764	8880	
4	Spectrum Coal &	317357	27764	8880	
5	ACBIL	289275	27764	8880	
6	Gujarat	289275	27764	8880	
7	APL Mundra	233111	27764	8880	₹287711355/ month
8	MB Power	233111	27764	8880	
9	Chhattisgarh	176947	27764	8880	
10	Korba	176947	27764	8880	
11	D&D	148865	27764	8880	
12	Madhya Pradesh	148865	27764	8880	
13	DNH	120783	27764	8880	
14	Torrent	92701	27764	8880	



Slabs for PoC Rates - Eastern Region (April 2017- June 2017)

Sl. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for ER (₹/MW/Month)
1	GMR Kamalanga	317357	27764	8880
2	Odisha	289275	27764	8880
3	Bihar	261193	27764	8880
4	West Bengal	261193	27764	8880
5	DVC	233111	27764	8880
6	Jharkhand	176947	27764	8880
7	MPL	120783	27764	8880
8	Bangladesh	92701	27764	8880
9	Farakka	92701	27764	8880
10	Sikkim	92701	27764	8880



PoC Rates for STOA purpose			
Slabs for PoC Rates-Northern Region (April 2017- June 2017)			
Sl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Haryana Inj	23.35	3.86
2	Rajasthan Inj	23.35	3.86
3	Uttar Pradesh Inj	23.35	3.86
4	Haryana W	23.35	3.86
5	Rajasthan W	23.35	3.86
6	Uttarakhand W	18.36	3.86
7	Uttar Pradesh W	18.36	3.86
8	Dulhasti	15.86	3.86
9	Rihand	15.86	3.86
10	Delhi W	13.36	3.86
11	Punjab W	13.36	3.86
12	Chamera I	13.36	3.86
13	Chamera Pooling Point	13.36	3.86
14	Karcham Wangtoo	13.36	3.86
15	RAAP C	13.36	3.86
16	Jammu & Kashmir Inj	10.86	3.86
17	Chamera II	10.86	3.86
18	Nathpa Jhakri	10.86	3.86
19	Singrauli	10.86	3.86
20	Uttarakhand Inj	8.37	3.86
21	Parbati III	8.37	3.86
22	Rampur HEP	8.37	3.86
23	Sree Cement	8.37	3.86
24	Himachal Pradesh Inj	5.87	3.86
25	Chandigarh W	5.87	3.86
26	Koldam	5.87	3.86
27	Koteshwar	5.87	3.86
28	Tehri	5.87	3.86
29	Uri II	5.87	3.86
30	Delhi Inj	3.37	3.86
31	Punjab Inj	3.37	3.86
32	Himachal Pradesh W	3.37	3.86
33	Jammu & Kashmir W	3.37	3.86
34	BBMB	3.37	3.86
35	Dadri	3.37	3.86
36	Jhajjar	3.37	3.86
37	Uri I	3.37	3.86
38	Chandigarh Inj	3.37	3.86



Slabs for PoC Rates-Western Region (April 2017- June 2017)			
Sl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Goa-WR W	23.35	3.86
2	Maharashtra W	23.35	3.86
3	Raikheda	23.35	3.86
4	Balco	23.35	3.86
5	Jindal Power Limited	23.35	3.86
6	MB Power	23.35	3.86
7	TRN Energy	23.35	3.86
8	Gujarat W	20.86	3.86
9	Sipat	20.86	3.86
10	JPL Extn.	20.86	3.86
11	APL Mundra	18.36	3.86
12	Jhabua Power	18.36	3.86
13	Essar Mahan	18.36	3.86
14	RKM	18.36	3.86
15	SASAN	18.36	3.86
16	ACBIL+Spectrum	18.36	3.86
17	DB Power	18.36	3.86
18	KSK Mahanadi	18.36	3.86
19	KWPCL	18.36	3.86
20	Lanco	18.36	3.86
21	Essar Steel W	15.86	3.86
22	Vindhyachal	15.86	3.86
23	Chhattisgarh W	10.86	3.86
24	D&D W	10.86	3.86
25	Madhya Pradesh W	10.86	3.86
26	Dhariwal	10.86	3.86
27	GMR WARORA	10.86	3.86
28	JP Nigrie	10.86	3.86
29	Korba	10.86	3.86
30	DNH W	8.37	3.86
31	Mauda	8.37	3.86
32	NSPCL	8.37	3.86
33	Chhattisgarh Inj	5.87	3.86
34	Gujarat Inj	5.87	3.86
35	Maharashtra Inj	5.87	3.86
36	[SSP	5.87	3.86
37	Madhya Pradesh Inj	3.37	3.86



38	CGPL	3.37	3.86
39	RGPPL	3.37	3.86
40	TAPS 3&4	3.37	3.86
41	Torrent	3.37	3.86
42	D&D Inj	3.37	3.86
43	DNH Inj	3.37	3.86
44	Goa-WR Inj	3.37	3.86
45	Essar Steel Inj	3.37	3.86



Slabs for PoC Rates-Eastern Region (April 2017- June 2017)			
Sl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Odisha Inj	23.35	3.86
2	Sikkim Inj	23.35	3.86
3	BRBCL Nabinagar	23.35	3.86
4	Talcher-2	23.35	3.86
5	Teesta III	23.35	3.86
6	Odisha W	20.86	3.86
7	Teesta	20.86	3.86
8	Bihar W	18.36	3.86
9	West Bengal W	18.36	3.86
10	DVC W	15.86	3.86
11	Barh	15.86	3.86
12	GMR Kamalanga	15.86	3.86
13	JITPL	15.86	3.86
14	Talcher	15.86	3.86
15	Bhutan Inj	13.36	3.86
16	Jharkhand W	10.86	3.86
17	Kahalgaon	10.86	3.86
18	DVC Inj	8.37	3.86
19	MPL	8.37	3.86
20	Bangladesh W	5.87	3.86
21	Adhunik Power	5.87	3.86
22	Farakka	5.87	3.86
23	Bihar Inj	3.37	3.86
24	Jharkhand Inj	3.37	3.86
25	West Bengal Inj	3.37	3.86
26	Sikkim W	3.37	3.86



Slabs for PoC Rates- Southern Region (April 2017- June 2017)

Sl. No.	Name of Entity	PoC Slab Rate (paise /kWH)	Reliability Support Charges Rate (paise/kWH)
1	Tamil Nadu Inj	23.35	3.86
2	Andhra Pradesh W	23.35	3.86
3	Karnataka W	23.35	3.86
4	Karnataka Inj	20.86	3.86
5	Kerala W	15.86	3.86
6	Telangana W	15.86	3.86
7	Coastal Energy	13.36	3.86
8	NCC Power Project	13.36	3.86
9	SEPL+MEPL	13.36	3.86
10	Tamil Nadu W	10.86	3.86
11	Thermal Powertech	10.86	3.86
12	IL&FS	8.37	3.86
13	Kaiga	8.37	3.86
14	Kudankulam	8.37	3.86
15	NTPL	8.37	3.86
16	Goa-SR W	5.87	3.86
17	Ramagundam	5.87	3.86
18	Simhadri 2	5.87	3.86
19	Andhra Pradesh Inj	3.37	3.86
20	Kerala Inj	3.37	3.86
21	Telangana Inj	3.37	3.86
22	Puducherry W	3.37	3.86
23	NLC	3.37	3.86
24	Vallur	3.37	3.86
25	Goa-SR Inj	3.37	3.86
26	Puducherry Inj	3.37	3.86



Slabs for PoC Rates- North Eastern Region (April 2017- June 2017)			
Sl. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Mizoram W	23.35	3.86
2	Bongaigaon-NTPC	23.35	3.86
3	Ranganadi	23.35	3.86
4	Assam W	20.86	3.86
5	Tripura Inj	15.86	3.86
6	Meghalaya W	15.86	3.86
7	Palatana	15.86	3.86
8	Arunachal Pradesh W	13.36	3.86
9	Manipur W	13.36	3.86
10	Nagaland W	13.36	3.86
11	Assam Inj	10.86	3.86
12	Mizoram Inj	10.86	3.86
13	Manipur Inj	5.87	3.86
14	Nagaland Inj	5.87	3.86
15	Meghalaya Inj	3.37	3.86
16	Tripura W	3.37	3.86
17	Arunachal Pradesh Inj	3.37	3.86



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



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



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



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



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

