# 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: 27.01.2017

### In the matter of:

Determination of Point of Connection (PoC) rates and transmission losses for the period of January to March, 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 have come 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 13.1.2017 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 January to March, 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	333036
II	301880
III	270724
IV	239568
V	208412
VI	177256
VII	146100
VIII	114943
IX	83787

- 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	(paisa/unit)
I	24.86 22.06 19.26 16.46
II	22.06
III	19.26
IV	16.46
V	13.67
VI	10.87
VII	8.07
VIII	5.28 2.48
IX	2.48

- 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 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 October December, 2016 (Q3 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 above PoC rates shall be subject to the outcome of the Petition No. 242/MP/2016 pending before the Commission.

The Implementing Agency is directed to endorse a copy of this order to all DICs 10. 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/-(Dr. M.K. lyer) (A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan) Member Chairperson Member Member

### Annexure-I

	PoC Rates for LTA/MTOA billing				
Slabs	Slabs for PoC Rates-Northern Region (January 2017- March 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	Rajasthan	333036	26182	19712	
2	Anpara-C	239568	26182	19712	
3	Haryana	239568	26182	19712	
4	Uttar Pradesh	239568	26182	19712	
5	Uttarakhand	208412	26182	19712	
6	Karcham Wangtoo	177256	26182	19712	
7	Delhi	146100	26182	19712	
8	Lanco Budhil	146100	26182	19712	
9	Punjab	114943	26182	19712	
10	AD hydro	83787	26182	19712	
11	Chandigarh	83787	26182	19712	
12	Himachal Pradesh	83787	26182	19712	
13	Jammu & Kashmir	83787	26182	19712	

#### Slabs for PoC Rates- Southern Region (January 2017- March 2017) Reliability **HVDC Charges** SI. Name of Entity **PoC Slab Rate Support Charges** Rate for SR No. (₹/MW/Month) Rate (₹/MW/Month) (₹/MW/Month) 26182 Andhra Pradesh 17580 1 333036 26182 Karnataka 333036 17580 2 270724 26182 17580 Telangana 3 Kerala 239568 26182 17580 17580 Tamil Nadu 177256 26182 5 Thermal Powertech 146100 26182 17580 6 SEPL 114943 26182 17580 7 Goa-SR 83787 26182 17580 8 Puducherry 83787 26182 17580 9 Udupi Power Corporation Limited 26182 17580 83787 10

	Slabs for PoC Rates -North Eastern Region (January 2017- March 2017)			2017)
SI. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NER (₹/MW/Month)
1	Assam	333036	26182	8632
2	Meghalaya	333036	26182	8632
3	Mizoram	333036	26182	8632
4	Nagaland	333036	26182	8632
5	Manipur	146100	26182	8632
6	Arunachal Pradesh	114943	26182	8632
7	Tripura	83787	26182	8632

SI. 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	ACBIL	333036	26182	8632	
2	Maharashtra	333036	26182	8632	
3	Maruti CCPL	333036	26182	8632	
4	MB Power	333036	26182	8632	
5	Goa-WR	301880	26182	8632	
6	APL Mundra	270724	26182	8632	₹287147939/ month
7	Gujarat	270724	26182	8632	
8	Jindal Power Limited	270724	26182	8632	
9	Spectrum Coal & Power Limited	208412	26182	8632	
10	Chhattisgarh	177256	26182	8632	
11	Korba	146100	26182	8632	
12	Madhya Pradesh	146100	26182	8632	
13	D&D	114943	26182	8632	
14	DNH	83787	26182	8632	
15	Torrent	83787	26182	8632	



#### Slabs for PoC Rates - Eastern Region (January 2017- March 2017) Reliability Support **HVDC Charges Rate** Charges Rate for ER (₹/MW/Month) SI. PoC Slab Rate Name of Entity No. (₹/MW/Month) (₹/MW/Month) **GMR** Kamalanga West Bengal Bihar Odisha DVC Jharkhand Bangladesh Farakka MPL Sikkim

# **Annexure-II**

	PoC Rates for STOA purpose			
Slabs fo	Slabs for PoC Rates-Northern Region (January 2017- March 2017)			
SI. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)	
1	Haryana Inj	24.86	3.64	
2	Rajasthan Inj	24.86	3.64	
3	Rajasthan W	24.86	3.64	
4	UP Inj	24.86	3.64	
5	Rihand	19.26	3.64	
6	Chamera I	16.46	3.64	
7	Chamera Pooling Point	16.46	3.64	
8	Haryana W	16.46	3.64	
9	UP W	16.46	3.64	
10	Chamera II	13.67	3.64	
11	RAAP C	13.67	3.64	
12	Singrauli	13.67	3.64	
13	Uttarakhand W	13.67	3.64	
14	Delhi W	10.87	3.64	
15	Dulhasti	10.87	3.64	
16	Karcham Wangtoo	10.87	3.64	
17	Nathpa Jhakri	10.87	3.64	
18	Parbati III	10.87	3.64	
19	Rampur HEP	10.87	3.64	
20	Uttarakhand Inj	10.87	3.64	
21	Koldam	8.07	3.64	
22	Koteshwar	8.07	3.64	
23	Punjab W	8.07	3.64	
24	Sree Cement	8.07	3.64	
25	Tehri	8.07	3.64	
26	HP Inj	5.28	3.64	
27	J&K Inj	5.28	3.64	
28	J&K W	5.28	3.64	
29	Punjab Inj	5.28	3.64	
30	Uri I	5.28	3.64	
31	Uri II	5.28	3.64	
32	BBMB	2.48	3.64	
33	Chandigarh W	2.48	3.64	
34	Dadri	2.48	3.64	
35	Delhi Inj	2.48	3.64	
36	HP W	2.48	3.64	
37	Jhajjar	2.48	3.64	
38	Chandigarh Inj	2.48	3.64	

SI. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Balco	24.86	3.64
2	Chattisgarh Inj	24.86	3.64
3	JPL Extn.	24.86	3.64
4	Maharastra W	24.86	3.64
5	ACBIL+Spectrum	22.06	3.64
6	Goa W	22.06	3.64
7	JPL+JSPL	22.06	3.64
8	MB Power	22.06	3.64
9	Raikheda	22.06	3.64
10	APL Mundra	19.26	3.64
11	Gujarat W	19.26	3.64
12	Jhabua Power	19.26	3.64
13	KSK Mahanadi	19.26	3.64
14	Lanco	19.26	3.64
15	SASAN	19.26	3.64
16	Sipat	19.26	3.64
17	DB Power	16.46	3.64
18	Essar Mahan	16.46	3.64
19	Essar Steel W	16.46	3.64
20	KWPCL	16.46	3.64
21	RKM	16.46	3.64
22	Chattisgarh W	13.67	3.64
23	TRN Energy	13.67	3.64
24	Vindhyachal	13.67	3.64
25	DGEN	10.87	3.64
26	Dhariwal	10.87	3.64
27	GMR WARORA	10.87	3.64
28	JP Nigrie	10.87	3.64
29	Korba	10.87	3.64
30	Madhya Pradesh W	10.87	3.64
31	Mauda	10.87	3.64
32	D&D W	8.07	3.64
33	DNH W	8.07	3.64
34	CGPL	5.28	3.64
35	Gujarat Inj	5.28	3.64
36	Maharastra Inj	5.28	3.64
37	NSPCL	5.28	3.64

38	SSP	5.28	3.64
39	Madhya Pradesh Inj	2.48	3.64
40	RGPPL	2.48	3.64
41	TAPS 3&4	2.48	3.64
42	Torrent_Sugen	2.48	3.64
43	Goa Inj	2.48	3.64
44	D&D Inj	2.48	3.64
45	DNH Inj	2.48	3.64
46	Essar Steel Inj	2.48	3.64

SI.		PoC Slab Rate	Reliability Suppor
No.	Name of Entity	(paise/kWH)	Charges Rate (paise/kWH)
1	Orissa Inj	24.86	3.64
2	Talcher-2	24.86	3.64
3	Bihar W	22.06	3.64
4	West Bengal W	22.06	3.64
5	Barh	19.26	3.64
6	GMR	19.26	3.64
7	JITPL	19.26	3.64
8	Orissa W	19.26	3.64
9	Teesta	19.26	3.64
10	DVC W	16.46	3.64
11	Sikkim Inj	16.46	3.64
12	Kahalgaon	13.67	3.64
13	Talcher	13.67	3.64
14	Jharkhand W	10.87	3.64
15	Bangladesh W	8.07	3.64
16	DVC Inj	8.07	3.64
17	Farakka	8.07	3.64
18	MPL	8.07	3.64
19	Aadhunik	5.28	3.64
20	Bhutan	5.28	3.64
21	Bihar Inj	2.48	3.64
22	Jharkhand Inj	2.48	3.64
23	Sikkim W	2.48	3.64
24	West Bengal Inj	2.48	3.64
25	Bangladesh Inj	2.48	3.64

SI.	Name of Entity	PoC Slab Rate	Reliability Support
No.	,	(paise /kWH)	Charges Rate (paise/kWH)
1	Andhra Pradesh W	24.86	3.64
2	Karnataka W	24.86	3.64
3	Tamil Nadu Inj	22.06	3.64
4	Telangana W	19.26	3.64
5	Karnataka Inj	16.46	3.64
6	Kerala W	16.46	3.64
7	Coastal Energy	13.67	3.64
8	Sembcorp Gayatri Power Ltd.	13.67	3.64
9	SEPL+MEPL	13.67	3.64
10	Tamil Nadu W	13.67	3.64
11	NTPL	10.87	3.64
12	Thermal Power Tech	10.87	3.64
13	Kaiga	8.07	3.64
14	Lanco Kondapallli	8.07	3.64
15	Goa- SR W	5.28	3.64
16	IL&FS	5.28	3.64
17	NLC	5.28	3.64
18	Pondicherry W	5.28	3.64
19	Ramagundam	5.28	3.64
20	Simhadri 2	5.28	3.64
21	Telangana Inj	5.28	3.64
22	Andhra Pradesh Inj	2.48	3.64
23	Kerala Inj	2.48	3.64
24	Vallur	2.48	3.64
25	Goa-SR Inj	2.48	3.64
26	Pondicherry Inj	2.48	3.64

SI. No.	Name of Entity	PoC Slab Rate (paise/kW H)	Reliability Support Charges Rate (paise/kWH)
1	Assam W	24.86	3.64
2	Bongaigaon- NTPC	24.86	3.64
3	Meghalaya W	24.86	3.64
4	Mizoram W	24.86	3.64
5	Nagaland W	24.86	3.64
6	Ranganadi	24.86	3.64
7	Palatana	16.46	3.64
8	Tripura Inj	16.46	3.64
9	Assam Inj	13.67	3.64
10	Manipur W	10.87	3.64
11	Mizoram Inj	10.87	3.64
12	Arunachal Pradesh W	8.07	3.64
13	Nagaland Inj	8.07	3.64
14	Manipur Inj	5.28	3.64
15	Meghalaya Inj	2.48	3.64
16	Tripura W	2.48	3.64
17	Arunachal Pradesh Inj	2.48	3.64

# **Annexure-III**

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

il. No.	Zone	Slab w.r.t Weighted Average
1	KSK Mahanadi	I
2	JPL Extn.	
3	Jindal Power Limited+Jindal Steel Power	
4	Raikheda	
5	TRN Energy	
6	GMR Warora	ll l
7	ACB+Spectrum Coal and Power Limited	ll l
8	Lanco	ll l
9	MB Power	ll l
10	Dhariwal	II
11	Essar Mahan	II
12	Goa-WR W	III
13	KWPCL	III
14	Mauda	III
15	DB Power	III
16	Korba	III
17	Sipat	III
18	Vindhyachal	III
19	Sasan UMPP	
20	Essar Steel W	III
21	RKM	III
22	Jhabua Power	III
23	Chhattisgarh W	IV
24	Maharashtra W	IV
25	Balco	IV
26	Chhattisgarh Inj	V
27	JP Nigrie	V
28	Gujarat W	V
29	Madhya Pradesh W	V
30	APL Mundra	V
31	DNH W	VI
32	Coastal Gujarat Power Limited	VI
33	Maharashtra Inj	VI
34	NSPCL, Bhilai	VII
35	Sardar Sarovar Project	VII
36 37	D&D W Madhya Pradoch Ini	VII
37 38	Madhya Pradesh Inj Gujarat Inj	IX
	· · · · · · · · · · · · · · · · · · ·	IX
39	Tarapur Atomic Power Station 3&4	
40	Goa-WR Inj	IX
41	D&D Inj	IX
42	DNH Inj	IX IX
43 44	Essar Steel Inj	IX
	Torrent Power	IX
45 46	RGPPL DGEN	IX

# Slabs for PoC Losses-Eastern Region (January 2017- March 2017)

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

# Slabs for PoC Losses- Southern Region (January 2017- March 2017)

		Slab using Weighted Average
SI. No.	Zone	3 . 3
1	Kerala W	I
2	Pondicherry W	I
3	Karnataka W	III
4	SEPL+MEPL	IV
5	Thermal Powertech	IV
6	Tamilnadu W	IV
7	IL&FS	IV
8	Sembcorp Gayatri Power	IV
9	Simhadri 2	V
10	Andhra Pradesh W	V
11	Coastal Energy	V
12	LANCO	V
13	NTPL	V
14	Telangana W	V
15	Kaiga	VI
16	NLC	VI
17	Vallur	VI
18	Telangana Inj	VI
19	Andhra Pradesh Inj	VII
20	Ramagundam	VII
21	Karnataka Inj	VII
22	Tamilnadu Inj	VII
23	Kerala Inj	VIII
24	Goa-SR W	IX
25	Pondicherry Inj	IX
26	Goa-SR Inj	IX

# Slabs for PoC Losses -North Eastern Region (January 2017- March 2017)

SI. No.	Zone	Slab w.r.t Weighted Average
1	Meghalaya W	
2	Mizoram W	1
3	Mizoram Inj	I
4	Tripura Inj	III
5	Palatana	IV
6	Bongaigaon	IV
7	Assam W	V
8	Manipur W	V
9	Nagaland W	V
10	Ranganadi	V
11	Arunachal Pradesh W	VI
12	Manipur Inj	VI
13	Nagaland Inj	VII
14	Assam Inj	VIII
15	Meghalaya Inj	VIII
16	Tripura W	IX
17	Arunachal Pradesh Inj	IX