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: 19.10.2016

In the matter of:

Determination of Point of Connection (PoC) rates and transmission losses for the period of October to December, 2016 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 4.10.2016 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, 2016, 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	327380
II	297503
III	267625
IV	237748
V	207871
VI	177994
VII	148116
VIII	118239
IX	88362

- 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)
1	22.61
II	20.21
III	17.82
IV	15.43
V	13.03
VI	10.64
VII	8.25
VIII	5.85
IX	3.46

- 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
	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 July-September, 2016 (Q2 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 24.10.2016. 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/-

(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	Slabs for PoC Rates-Northern Region (October 2016- December 2016)				
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	327380	25321	18423	
2	Uttar Pradesh	297503	25321	18423	
3	Haryana	237748	25321	18423	
4	Uttarakhand	237748	25321	18423	
5	Anpara-C	207871	25321	18423	
6	Lanco Budhil	207871	25321	18423	
7	Delhi	148116	25321	18423	
8	Karcham Wangtoo	148116	25321	18423	
9	Punjab	118239	25321	18423	
10	AD hydro	88362	25321	18423	
11	Chandigarh	88362	25321	18423	
12	Himachal Pradesh	88362	25321	18423	
13	Jammu & Kashmir	88362	25321	18423	

Slabs for PoC Rates- Southern Region (October 2016- December 2016) Reliability **HVDC Charges** SI. **PoC Slab Rate** Name of Entity Support Charges Rate for SR No. (₹/MW/Month) Rate (₹/MW/Month) (₹/MW/Month) Andhra Pradesh 327380 16010 1 25321 25321 2 Karnataka 327380 16010 3 Telangana 267625 25321 16010 4 Kerala 177994 25321 16010 5 Tamil Nadu 148116 25321 16010 Thermal Powertech 6 148116 25321 16010 SEPL 7 118239 25321 16010 8 Goa-SR 88362 16010 25321 8 88362 25321 Pondicherry 16010

	Slabs for PoC Rates -North Eastern Region (October 2016- December 2016)			mber 2016)
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	327380	25321	6985
2	Meghalaya	327380	25321	6985
3	Mizoram	327380	25321	6985
4	Nagaland	327380	25321	6985
5	Manipur	177994	25321	6985
6	Arunachal Pradesh	148116	25321	6985
7	Tripura	88362	25321	6985

Sla	bs for PoC Rates - W	estern Regio	n (October 2016	6- December 201	16)
SI. No.	Name of Entity	PoC Slab Rate (₹/MW/M onth)	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	327380	25321	6985	
2	Jindal Power Limited	327380	25321	6985	
3	Maharashtra	327380	25321	6985	
4	Maruti CCPL	327380	25321	6985	
5	MB Power	327380	25321	6985	
6	ACBIL	297503	25321	6985	
7	APL Mundra	267625	25321	6985	₹287711355/ month
8	Gujarat	267625	25321	6985	
9	Spectrum Coal and	177994	25321	6985	
10	Chhattisgarh	148116	25321	6985	
11	Korba	148116	25321	6985	
12	Madhya Pradesh	148116	25321	6985	
13	D&D	118239	25321	6985	
14	DNH	118239	25321	6985	
15	Torrent-Sugen	88362	25321	6985	

Slabs for PoC Rates - Eastern Region (October 2016- December 2016) Reliability Support **HVDC Charges Rate** Charges Rate SI. PoC Slab Rate for ER (₹/MW/Month) Name of Entity (₹/MW/Month) No. (₹/MW/Month) West Bengal Bihar DVC Odisha GMR Kamalanga Jharkhand

MPL

Bangladesh

Farraka

Sikkim

Annexure-II

	PoC Rates for STOA purpose			
Slabs fo	Slabs for PoC Rates-Northern Region (October 2016- December 2016) Sl.			
No.	Name of Entity	(paise/kWH)	Rate (paise/kWH)	
1	Haryana Inj	22.61	3.52	
2	Rajasthan Inj	22.61	3.52	
3	Rajasthan W	22.61	3.52	
4	UP Inj	20.21	3.52	
5	UP W	20.21	3.52	
6	Haryana W	17.82	3.52	
7	Uttarakhand W	17.82	3.52	
8	Rihand	15.43	3.52	
9	Chamera I	13.03	3.52	
10	Chamera II	13.03	3.52	
11	Chamera Pooling	13.03	3.52	
12	Parbati III	13.03	3.52	
13	Uttarakhand Inj	10.64	3.52	
14	Nathpa Jhakri	10.64	3.52	
15	Singrauli	10.64	3.52	
16	Karcham Wangtoo	10.64	3.52	
17	Dulhasti	10.64	3.52	
18	Rampur HEP	10.64	3.52	
19	Koldam	10.64	3.52	
20	Delhi W	10.64	3.52	
21	Tehri	8.25	3.52	
22	RAAP C	8.25	3.52	
23	Punjab W	8.25	3.52	
24	J&K Inj	5.85	3.52	
25	Uri II	5.85	3.52	
26	Chandigarh W	5.85	3.52	
27	J&K W	5.85	3.52	
28	Delhi Inj	3.46	3.52	
29	Punjab Inj	3.46	3.52	
30	HP Inj	3.46	3.52	
31	Dadri	3.46	3.52	
32	Koteshwar	3.46	3.52	
33	Uri I	3.46	3.52	
34	Jhajjar	3.46	3.52	
35	Sree Cement	3.46	3.52	
36	BBMB	3.46	3.52	
37	HP W	3.46	3.52	
38	Chandigarh Inj	3.46	3.52	

SI. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Maharashtra W	22.61	3.52
2	Goa W	22.61	3.52
3	Chhattisgarh Inj	22.61	3.52
4	Balco	22.61	3.52
5	JPL+JSPL	22.61	3.52
6	KSK Mahanadi	22.61	3.52
7	JPL Extn.	22.61	3.52
8	MB Power	22.61	3.52
9	TRN Energy	22.61	3.52
10	ACBIL+ Spectrum	20.21	3.52
11	SASAN	20.21	3.52
12	APL Mundra	20.21	3.52
13	Raikheda	20.21	3.52
14	Gujarat W	17.82	3.52
15	Sipat	17.82	3.52
16	Lanco	17.82	3.52
17	Jhabua Power	17.82	3.52
18	Essar Steel W	15.43	3.52
19	Vindhyachal	15.43	3.52
20	Essar Mahan	15.43	3.52
21	RKM	15.43	3.52
22	Mauda	13.03	3.52
23	EMCO	13.03	3.52
24	KWPCL	13.03	3.52
25	DB Power	13.03	3.52
26	Madhya Pradesh W	10.64	3.52
27	Chhattisgarh W	10.64	3.52
28	D&D W	10.64	3.52
29	Korba	10.64	3.52
30	Dhariwal	10.64	3.52
31	DNH W	8.25	3.52
32	JP Nigrie	8.25	3.52
33	Gujarat Inj	5.85	3.52
34	Maharashtra Inj	5.85	3.52
35	Madhya Pradesh Inj	3.46	3.52
36	NSPCL	3.46	3.52
37	CGPL	3.46	3.52

38	SSP	3.46	3.52
39	TAPS 3 & 4	3.46	3.52
40	Torrent-Sugen	3.46	3.52
41	RGPPL	3.46	3.52
42	D&D Inj	3.46	3.52
43	DNH Inj	3.46	3.52
44	Essar Steel Inj	3.46	3.52
45	Goa-WR Inj	3.46	3.52

SI. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Suppor Charges Rate (paise/kWH)
1	Orissa Inj	22.61	3.52
2	Sikkim Inj	22.61	3.52
3	Teesta	22.61	3.52
4	Talcher-2	22.61	3.52
5	Barh	20.21	3.52
6	West Bengal W	17.82	3.52
7	Orissa W	17.82	3.52
8	Kahalgaon	15.43	3.52
9	Talcher	15.43	3.52
10	JITPL	15.43	3.52
11	Bihar W	15.43	3.52
12	Bhutan	13.03	3.52
13	Sterlite	13.03	3.52
14	GMR Kamalanga	13.03	3.52
15	Jharkhand W	13.03	3.52
16	DVC W	13.03	3.52
17	MPL	8.25	3.52
18	Bangladesh W	8.25	3.52
19	DVC	5.85	3.52
20	Farakka	5.85	3.52
21	West Bengal Inj	3.46	3.52
22	Bihar Inj	3.46	3.52
23	Jharkhand Inj	3.46	3.52
24	Aadhunik	3.46	3.52
25	Sikkim W	3.46	3.52
26	Bangladesh Inj	3.46	3.52

Slabs	s for PoC Rates- Southern F	Region (October 2016- Dec	ember 2016)
SI. No.	Name of Entity	PoC Slab Rate (paise /kWH)	Reliability Support Charges Rate (paise/kWH)
1	Andhra Pradesh W	22.61	3.52
2	Karnataka W	22.61	3.52
3	Telangana W	17.82	3.52
4	Karnataka Inj	15.43	3.52
5	Tamil Nadu Inj	13.03	3.52
6	SEPL+MEPL	13.03	3.52
7	NCC Power Project	13.03	3.52
8	Kerala W	13.03	3.52
9	Kaiga	10.64	3.52
10	Coastal Energy	10.64	3.52
11	Thermal Power Tech	10.64	3.52
12	IL&FS	10.64	3.52
13	Tamil Nadu W	10.64	3.52
14	Lanco Kondapallli	8.25	3.52
15	Kudankulam	8.25	3.52
16	NTPL	8.25	3.52
17	Ramagundam	5.85	3.52
18	Simhadri 2	5.85	3.52
19	Goa-SR W	5.85	3.52
20	Andhra Pradesh Inj	3.46	3.52
21	Telangana Inj	3.46	3.52
22	Kerala Inj	3.46	3.52
23	NLC	3.46	3.52
24	Vallur	3.46	3.52
25	Pondicherry W	3.46	3.52
26	Goa-SR Inj	3.46	3.52
27	Pondicherry Inj	3.46	3.52

SI. No.	Name of Entity	PoC Slab Rate (paise/kWH)	Reliability Support Charges Rate (paise/kWH)
1	Assam W	22.61	3.52
2	Mizoram W	22.61	3.52
3	Nagaland W	22.61	3.52
4	Ranganadi	22.61	3.52
5	Meghalaya W	20.21	3.52
6	Assam Inj	17.82	3.52
7	Mizoram Inj	15.43	3.52
8	Manipur W	13.03	3.52
9	Palatana	13.03	3.52
10	Tripura Inj	13.03	3.52
11	Arunachal	10.64	3.52
12	Nagaland Inj	10.64	3.52
13	Bongaigaon-	5.85	3.52
14	Tripura W	5.85	3.52
15	Manipur Inj	3.46	3.52
16	Meghalaya Inj	3.46	3.52
17	Arunachal Pradesh Ini	3.46	3.52

Annexure-III

Slabs for PoC Losses-Northern region (October 2016- December 2016) Slab w.r.t Weighted Average SI. No. Zone RAPP C 2 Rajasthan W Ī Rihand Ш 3 4 Uttar Pradesh W Ш 5 Rajasthan Inj Ш Shree Cement II 6 7 Singrauli Ш Uttarakhand W 8 IV Uttar Pradesh Inj 9 V Himachal Pradesh W VI 10 Tehri V١ 11 12 Koteshwar VΙ 13 Chandigarh W VII Uttarakhand Inj VΙΙ 14 15 Harvana W VII Delhi W VIII 16 Himachal Pradesh Inj VIII 17 18 Dulhasti VIII 19 Rampur HEP VIII 20 Parbati III VIII 21 Jammu & Kashmir Inj IX 22 Puniab W IX 23 <u>Jammu & Kashmir W</u> IX 24 Chamera Pooling Point ΙX 25 Chamera I IX Chamera II IX 26 ΙX 27 Nathpa Jhakri IX 28 Karcham Wangtoo 29 Punjab Inj IX IX 30 Haryana Inj IX 31 Uri I 32 Uri II IX 33 Dadri IX IX 34 Jhaijar ΙX 35 Delhi Ini Chandigarh Inj IX 36 Koldam IX 37 38 BBMB IX

Slabs for PoC - Western Region (Octobe		Slab w.r.t Weighted	
		Average	
1	KSK Mahanadi		
2	Sasan UMPP	l l	
3	JPL Extn.		
4	MB Power	<u> </u>	
5	Raikheda		
6	TRN Energy	<u> </u>	
7	Goa-WR W	<u> </u>	
8	Mauda	<u> </u>	
9	EMCO	III	
10	ACB+Spectrum Coal and Power Ltd.	III	
11	Lanco	III	
12	Vindhyachal	III	
13	Jindal Power Ltd+Jindal Steel Power Ltd.	III	
14	Dhariwal	III	
15	Essar Mahan		
16	KWPCL	IV	
17	DB Power	IV IV	
18	Korba	IV IV	
19	Chhattisgarh W	IV IV	
20	Sipat	IV IV	
21	Maharashtra W	IV IV	
22	Chhattisgarh Inj	IV	
23	Essar Steel W	IV	
24	Balco	IV	
25	JP Nigrie	IV	
26	APL Mundra	IV	
27	RKM	IV	
28	Jhabua Power	IV	
29	DNH W	V	
30	Gujarat W	V	
31	D&D W	V	
32	NSPCL, Bhilai	VI	
33	Sardar Sarovar Project	VI	
34	Coastal Gujarat Power Limited	VI	
35	Maharashtra Inj	VI	
36	Madhya Pradesh W	VI	
37	Madhya Pradesh Inj	VII	
38	Gujarat Inj	VIII	
39	RGPPL	VIII	
40	Tarapur Atomic Power Station 3&4	IX	
41	Goa-WR Inj	IX IX	
42	D&D Inj	IX IX	
43	DNH Inj	IX IX	
43 44	Essar Steel Inj	IX IX	
45	Torrent Power	IX IX	

Slabs for PoC Losses-Eastern Region (October 2016- December 2016)

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

Slabs for PoC Losses- Southern Region (October 2016- December 2016)

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

Slabs for PoC Losses -North Eastern Region (October 2016- December 2016)

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