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: 06.05.2016

In the matter of:

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

<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 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 as amended 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); and
- 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 3.5.2016 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 Power 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, Power Flow, Assumptions used for computation of the final PoC rates and final transmission losses, their fitment in to slabs and schedule of charges payable by each DIC for April to June, 2016, as submitted by the 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.
- b. The Reliability Support Charges, HVDC Charges for all Regions and HVDC

Charges for Mundra-Mohindergarh are also indicated at 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.
- 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.

7. We also direct the Implementing Agency to publish zonal PoC Rates and zonal Transmission Losses and associated details that will enable a clear understanding of the calculations used for arriving at these rates, along with underlying network information and base case of power 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, 2015 (Q4 of 2015 -16) 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. In keeping with the application of weekly losses, we direct that the application of the new PoC loss slabs would be made applicable from 9.5.2016. 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.

S/d (Dr. M.K. Iyer) Member

S/d (A.S. Bakshi) Member S/d (A.K. Singhal) Member S/d (Gireesh B. Pradhan) Chairperson

Annexure-I

		PoC Rates for LTA/M	TOA billing	
Slabs	for PoC Rates-North	ern Region (April 2016	- June 2016)	
SI. No.			Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for NR (₹/MW/Month)
1	Haryana	320069	23671	20905
2	Rajasthan	320069	23671	20905
3	Uttarakhand	289215	23671	20905
4	UP	227506	23671	20905
5	Lanco Budhil	196652	23671	20905
6	Delhi	165797	23671	20905
7	Karcham Wangtoo	165797	23671	20905
8	Punjab	134943	23671	20905
9	AD hydro	73234	23671	20905
10	Chandigarh	73234	23671	20905
11	HP	73234	23671	20905
12	J&K	73234	23671	20905

Slabs	Slabs for PoC Rates- Southern Region (April 2016- June 2016)				
SI. No.	Name of Entity	PoC Slab Rate (₹/MW/Month)	Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for SR (₹/MW/Month)	
1	Karnataka	320069	23671	17192	
2	Andhra Pradesh	289215	23671	17192	
3	Telangana	258360	23671	17192	
4	Kerala	134943	23671	17192	
5	Tamil Nadu	104089	23671	17192	
6	Goa-SR	73234	23671	17192	
7	Pondicherry	73234	23671	17192	

	Slabs for PoC Rates -North Eastern Region (April 2016- June 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	320069	23671	7497
2	Meghalaya	320069	23671	7497
3	Mizoram	320069	23671	7497
4	Nagaland	289215	23671	7497
5	Manipur	134943	23671	7497
6	Arunachal Pradesh	104089	23671	7497
7	Tripura	104089	23671	7497

SI. No.	Name of Entity	PoC Slab Rate (₹/MW/M onth)	Reliability Support Charges Rate (₹/MW/Month)	Charges Rate for WR (₹/MW/Month)	HVDC Charges for Mundra - Mohindergarh (amount payable by M/s Adani for 1495 MW LTA to Haryana)
1	ACBIL	320069	23671	7497	
2	Goa	320069	23671	7497	
3	JPL	320069	23671	7497	
4	Maharastra	320069	23671	7497	
5	MB Power	289215	23671	7497	
6	APL Mundra	227506	23671	7497	₹ 251050367/month
7	Gujarat	227506	23671	7497	
8	Spectrum	227506	23671	7497	
9	Maruti CCPL	196652	23671	7497	
10	Chattisgarh	134943	23671	7497	
11	D&D	104089	23671	7497	
12	DNH	104089	23671	7497	
13	Madhya Pradesh	104089	23671	7497	
14	Torrent-Sugen	73234	23671	7497	

	Slabs for PoC Rates - Eastern Region (April 2016- June 2016)				
SI. No.	Name of Entity		Reliability Support Charges Rate (₹/MW/Month)	HVDC Charges Rate for ER (₹/MW/Month)	
1	Jharkhand	227506	23671	7497	
2	West Bengal	227506	23671	7497	
3	Bihar	196652	23671	7497	
4	Orissa	196652	23671	7497	
5	DVC	134943	23671	7497	
6	Bangladesh	73234	23671	7497	
7	Sikkim	73234	23671	7497	

Annexure-II

	PoC R	ates for STOA purpose	Annexure
	Slabs for PoC Rates-N	lorthern Region (April 2016- J	une 2016)
SI. No.	Name of Entity	PoC Slab Rate (₹/paise/kWH)	Reliability Support Charges Rate (₹ /paise/kWH)
1	Haryana Inj	20.72	3.29
2	Haryana W	20.72	3.29
3	Rajasthan Inj	20.72	3.29
4	Rajasthan W	20.72	3.29
5	UP Inj	20.72	3.29
6	Uttarakhand W	20.72	3.29
7	Rihand	16.30	3.29
8	UP W	16.30	3.29
9	Chamera Pooling Point	14.09	3.29
10	Dulhasti	14.09	3.29
11	Chamera I	11.88	3.29
12	Chamera II	11.88	3.29
13	Delhi W	11.88	3.29
14	Karcham Wangtoo	11.88	3.29
15	RAAP C	11.88	3.29
16	Singrauli	11.88	3.29
17	HP Inj	9.66	3.29
18	J&K Inj	7.45	3.29
19	Koldam	7.45	3.29
20	Koteshwar	7.45	3.29
21	Nathpa Jhakri	7.45	3.29
22	Parbati III	7.45	3.29
23	Punjab W	7.45	3.29
24	Rampur HEP	7.45	3.29
25	Uttarakhand Inj	7.45	3.29
26	Chandigarh W	5.24	3.29
27	Sree Cement	5.24	3.29
28	Uri II	5.24	3.29
29	Dadri	3.03	3.29
30	Delhi Inj	3.03	3.29
31	, HP W	3.03	3.29
32	J&K W	3.03	3.29
33	Jhajjar	3.03	3.29
34	Punjab Inj	3.03	3.29
35	Tehri	3.03	3.29
36	Uri I	3.03	3.29
37	Chandigarh Inj	3.03	3.29

SI. No.	Name of Entity	PoC Slab Rate (₹ paise/kWH)	Reliability Support Charges Rate (₹ paise/kWH)
1	ACBIL+Spectrum	20.72	3.29
2	Chattisgarh Inj	20.72	3.29
3	DB Power	20.72	3.29
4	Goa W	20.72	3.29
5	JPL Extn.	20.72	3.29
6	JPL+JSPL	20.72	3.29
7	Maharastra W	20.72	3.29
8	MB Power	20.72	3.29
9	Raikheda	18.51	3.29
10	Sipat	18.51	3.29
11	APL Mundra	16.30	3.29
12	Essar Steel W	16.30	3.29
13	Gujarat W	16.30	3.29
14	Jhabua Power	16.30	3.29
15	KSK Mahanadi	16.30	3.29
16	Lanco	16.30	3.29
17	SASAN	16.30	3.29
18	Balco	14.09	3.29
19	KWPCL	14.09	3.29
20	RKM	14.09	3.29
21	Vindhyachal	14.09	
22	Chattisgarh W	9.66	
23	Dhariwal	9.66	
24	EMCO	9.66	
25	JP Nigrie	9.66	
26	Korba	9.66	
27	D&D W	7.45	
28	DNH W	7.45	
29	Madhya Pradesh W	7.45	
30	Mauda	7.45	
31	DGEN	5.24	
32	Madhya Pradesh Inj	5.24	
33	Maharastra Inj	5.24	
34	NSPCL	5.24	
35	SSP	5.24	
36	CGPL	3.03	
37	Gujarat Inj	3.03	

38	RGPPL	3.03	3.29
39	TAPS 3&4	3.03	3.29
40	Torrent_Sugen	3.03	3.29
41	D&D Inj	3.03	3.29
42	DNH Inj	3.03	3.29
43	Essar Steel Inj	3.03	3.29
44	Goa-WR Inj	3.03	3.29

	Slabs for PoC Rates-Eastern Region (April 2016- June 2016)			
SI. No.	Name of Entity	PoC Slab Rate (₹ paise/kWH)	Reliability Support Charges Rate (₹ paise/kWH)	
1	Orissa Inj	20.72	3.29	
2	Sikkim Inj	20.72	3.29	
3	Talcher-2	20.72	3.29	
4	West Bengal Inj	20.72	3.29	
5	Teesta	18.5	3.29	
6	Barh	16.30	3.29	
7	Jharkhand W	16.30	3.29	
8	Orissa W	16.30	3.29	
9	Talcher	16.30	3.29	
10	West Bengal W	16.30	3.29	
11	Bhutan	14.09	3.29	
12	Bihar W	14.09	3.29	
13	GMR Kamalanga	14.09	3.29	
14	JITPL	14.09	3.29	
15	Kahalgaon	11.88	3.29	
16	Sterlite	11.88	3.29	
17	DVC W	9.66	3.29	
18	DVC	7.45	5 3.29	
19	Aadhunik	5.24	1 3.29	
20	Farakka	5.24	1 3.29	
21	MPL	5.24	1 3.29	
22	Bangladesh W	3.03	3.29	
23	Bihar Inj	3.03	3.29	
24	Jharkhand Inj	3.03	3.29	
25	Sikkim W	3.03	3.29	
26	Bangladesh Inj	3.03	3.29	

	Slabs for PoC Rates- Southern Region (April 2016- June 2016)				
SI. No.	Name of Entity	PoC Slab Rate (₹ paise /kWH)	Reliability Support Charges Rate (₹ paise/kWH)		
1	Andhra Pradesh W	20.72	3.29		
2	Karnataka Inj	20.72	3.29		
3	Karnataka W	20.72	3.29		
4	Telangana W	18.51	3.29		
5	Tamil Nadu Inj	16.30	3.29		
6	SEPL+MEPL	14.09	3.29		
7	Thermal Power Tech	14.09	3.29		
8	Coastal Energy	9.66	3.29		
9	IL&FS	9.66	3.29		
10	Kerala W	9.66	3.29		
11	Kaiga	7.45	3.29		
12	Kudankulam	7.45	3.29		
13	Lanco-Kondapalli	7.45	3.29		
14	NTPL	7.45	3.29		
15	Ramagundam	7.45	3.29		
16	Simhadri 2	7.45	3.29		
17	Tamil Nadu W	7.45	3.29		
18	NLC	5.24	3.29		
19	Andhra Pradesh Inj	3.03	3.29		
20	Goa-SR W	3.03	3.29		
21	Kerala Inj	3.03	3.29		
22	Pondicherry W	3.03	3.29		
23	Telangana Inj	3.03			
24	Vallur	3.03	3.29		
25	Goa-SR Inj	3.03	3.29		
26	Pondicherry Inj	3.03	3.29		

	Slabs for PoC Rates- North Eastern Region (April 2016- June 2016)			
SI. No.	Name of Entity	PoC Slab Rate (₹ paise/kWH)	Reliability Support Charges Rate (₹ paise/kWH)	
1	Mizoram W	20.72	3.29	
2	Ranganadi	20.72	3.29	
3	Assam W	18.51	3.29	
4	Nagaland W	18.51	3.29	
5	Meghalaya W	16.30	3.29	
6	Assam Inj	14.09	3.29	
7	Palatana	11.88	3.29	
8	Manipur W	9.66	3.29	
9	Mizoram Inj	9.66	3.29	
10	Arunachal Pradesh W	7.45	3.29	
11	Nagaland Inj	5.24	3.29	
12	Tripura W	5.24	3.29	
13	Bongaigaon-NTPC	3.03	3.29	
14	Manipur Inj	3.03	3.29	
15	Meghalaya Inj	3.03	3.29	
16	Tripura Inj	3.03	3.29	
17	Arunachal Pradesh Inj	3.03	3.29	

Slabs for PoC Losses-Northern region (April 2016- June 2016)			
SI. No.	Zone	Slab w.r.t Weighted Average	
1	Rihand	I	
2	Uttarakhand W	1	
3	Singrauli	II	
1	Rajasthan W	II	
5	Uttar Pradesh W	II	
6	RAPP C		
7	Uttar Pradesh Inj	IV	
3	Uttarakhand Inj	IV	
9	Himachal Pradesh W	IV	
10	Himachal Pradesh Inj	IV	
11	Rajasthan Inj	V	
12	Chandigarh W	V	
13	Haryana W	V	
14	Tehri	V	
15	Koteshwar	V	
16	Delhi W	VI	
17	Shree Cement	VI	
18	Dulhasti	VII	
19	Rampur HEP	VII	
20	Nathpa Jhakri	VII	
21	Jammu & Kashmir Inj	VIII	
22	Punjab W	VIII	
23	Jammu & Kashmir W	VIII	
24	Chamera Pooling Point	VIII	
25	Chamera I	VIII	
26	Chamera II	VIII	
27	Karcham Wangtoo	VIII	
28	Punjab Inj	VIII	
29	Haryana Inj	VIII	
30	Uri I	VIII	
31	Uri II	VIII	
32	Parbati III	VIII	
33	Dadri	IX	
34	Jhajjar	IX	
35	Delhi Inj	IX	
36	Chandigarh Inj	IX	
37	Koldam	IX	

Annexure-III

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

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

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

Slabs for PoC Losses -North Eastern Region (April 2016- June 2016)				
SI.No.	Zone	Slab w.r.t Weighted Average		
1	Mizoram W	I		
2	Nagaland W	I		
3	Mizoram Inj	I		
4	Manipur W	I		
5	Nagaland Inj	II		
6	Palatana	III		
7	Meghalaya W	IV		
8	Manipur Inj	IV		
9	Bongaigaon	IV		
10	Arunachal Pradesh W	V		
11	Assam W	V		
12	Ranganadi	V		
13	Tripura W	VIII		
14	Assam Inj	VIII		
15	Meghalaya Inj	VIII		
16	Tripura Inj	VIII		
17	Arunachal Pradesh Inj	IX		