CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 07/SM/2017

Coram:

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

Date of Order : 12 .5.2017

In the matter of:

Determination of tariff of the inter-State transmission lines connecting two states.

And in the matter of:

- 1. Chairman & Managing Director, Delhi Transco Ltd., Shakti Sadan Building, New Delhi.
- 2. Chairman & Managing Director, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.
- 3. Chairman & Managing Director, Punjab State Transmission Corporation Ltd, Patiala.
- 4. Managing Director, Power Transmission Corporation of Uttarakhand, Dehradun.
- 5. Chairman & Managing Director, Himachal Pradesh State Electricity Board, Shimla.
- 6. Managing Director, Haryana Vidyut Prasaran Nigam Ltd. Haryana.
- 7. Chairman & Managing Director, Uttar Pradesh Power Transmission Corporation Ltd, Lucknow
- 8. Development Commissioner, Power Development Department (J&K), Srinagar
- 9. Chief Engineer, UT of Chandigarh (Electricity Department 1st Floor), Sector 9-D, Chandigarh.

- 10. Chairman, Bhakhra Beas Management Board, Sector-19B, Madhya Marg, Chandigarh.
- 11. Chairman & Managing Director, West Bengal State Electricity Transmission Co. Ltd., Vidyut Bhavan, Kolkata.
- 12. Chairman, Bihar State Electricity Board, Vidyut Bhavan, Patna.
- 13. Chairman, Jharkhand State Electricity Board, Engineering Bhawan, Ranchi.
- 14. Chairman, Damodar Valley Corporation, DVC Tower, Kolkata.
- 15. Chairman & Managing Director (O&M), Orissa Power Transmission Corporation Ltd., Bhubaneswar.
- 16. Secretary, Energy & Power Department, Government of Sikkim, Gangtok.
- 17. Chairman, ASEB, Bijili Bhawan, Paltan Bazar, Guwahati.
- 18. Chairman, MeECL, Short Round Road, Meter Factory, Shillong.
- 19. Chief Engineer (Power), Electricity Department, Government of Nagaland, Kohima.
- 20. Chief Engineer (Elect.), Electricity Department, Government of Manipur, Imphal.
- 21. Chief Engineer, Power & Electricity Department, Government of Mizoram, Khatla Aizawl.
- 22. Chairman & Managing Director, TSECL, Bidyut Bhawan, Government of Tripura, Agartala.
- 23. Chief Engineer (Power), Department of Power, Government of Arunanchal Pradesh, Vidyut Bhawan, Itanagar.
- 24. Chairman & Managing Director, MSETCL, 'Prakashganga', C-19, E-Block, Bandra Kurla Complex, Bandra (E), Mumbai.
- 25. Managing Director, Gujarat Energy Transmission Corporation Ltd (GETCO), Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat.
- 26. Chairman, Chhattisgarh State Power Transmission Co. Ltd, Banganiya, Raipur.
- 27. Chairman & Managing Director, Madhya Pradesh Power Transmission Company Ltd, MPPTCL, Nayagaon, Jabalpur.



- 28. Chief Electrical Engineer, Electricity Department, Government of Goa, Vidyut Bhavan, Goa.
- 29. Chairman & Managing Director, APTRANSCO, Vidyut Soudha, Hyderabad.
- 30. Managing Director, KPTCL, Cauvery Bhavan, Bangalore
- 31. Chairman, KSEB, Vidyuthi Bhavanam, Pattom, Thiruvananthapuram.
- 32. Managing Director, TANTRANSCO, Anna Salai, Chennai.
- 33. Superintending Engineer-I (Elecy), Electricity Department, Government of Puducherry, Puducherry.
- 34. Secretary (P), UT of Dadra Nagar Haveli Silvassa.
- 35. Secretary (P), UT of Daman & Du, Moti Daman, D&D.

.....Respondents

<u>Order</u>

The Commission has been entrusted with the following functions in respect of inter-State transmission system under Section 79(1) (c) and (d) of the Electricity Act, 2003 (hereinafter referred to as "the Act").

"79. Functions of Central Commission.-(1) The Central Commission shall discharge the following functions, namely:-

XXX

- (c) to regulate the inter-State transmission of electricity;
- (d) to determine tariff for inter-State transmission of electricity;

XXX"

- 2. In pursuance of the above provisions, the Commission has been determining tariff of the inter-State transmission lines developed, owned and operated by the Central Transmission Utility (CTU) and the transmission licensees i.e., who have been granted licence by the Commission.
- 3. "Inter-State transmission system" has been defined under Section 2(36) of the Act as under:-
 - "2(36) inter-State transmission system includes-
 - (i) Any system for the conveyance of electricity by means of main transmission line from the territory of one State to another state;
 - (ii) The conveyance of electricity across the territory of any intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;
 - (iii) the transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility;"
- 4. Under the above provision, the conveyance of electricity from territory of one state to another state is also considered to be a part of inter-state transmission system. In terms of Section 79(1)(d) of the Act, the tariff of these lines are also required to be determined by this Commission.
- 5. Accordingly, Commission vide order dated 14.3.2012 in Petition No. 15/SM/2012 directed the owners/developers of the inter-State transmission lines of 132 kV and above in North Eastern Region and 220 kV and above in Northern, Eastern, Western and Southern regions to file petitions under the Central Electricity Regulatory

Commission (Terms and Conditions of Tariff) Regulations, 2009 for including their transmission assets in computation of Point of Connection transmission charges and losses under the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 as some of the owners/developers of these lines have filed tariff petitions and tariff was allowed for the period from 2011-12 to 2013-14 period and in some cases for 2014-15 also.

- 6. Further, the owners/developers of these lines are required to file petitions for determination of tariff for the 2014-19 tariff period, if not done already. The list of the natural inter-state lines for which tariff was granted by the Commission for 2009-14 period is given in the Annexure. The owners/developers of these natural inter-State lines (mentioned in the Annexure) are directed to file petitions for determination of tariff for the 2014-19 tariff in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014
- 7. Further, Statement of Reason (SOR) dated 26.10.2015 of Sharing Regulations (Third Amendment) provides as follows:-
 - "15.21 A question arises for consideration is whether to fix a minimum percentage figure to consider a STU line as an ISTS line or not. As per Electricity Act and Tariff Policy, all lines which are incidental to Inter-state flow of power are to be considered as ISTS. In a meshed transmission system, many intra-State transmission lines carry inter-State power and therefore become incidental to inter-State transmission system. However, as Electricity Grid is being operated in a cooperative manner, for a minor fraction of ISTS power, it is expected that STU would not insist on considering its line(s) to be inter-State as on the one hand it will receive payment for its own lines, on the other it has to pay for usage of other States' lines. If a STU puts up a proposal for considering its line as ISTS and it is found that it is being utilized to a large extent by its own drawee nodes, then it would be merely an academic exercise as major part of tariff would be

allocated to home State only. So keeping in view the regulatory process involved in getting a line certified as carrying ISTS power, getting its tariff approved and then adjustment from STU's ARR, it is expected that this claim will be raised judiciously. An interesting situation happened during 2011 when in Eastern and Northern Regions, many lines were submitted to RPCs for approval as ISTS, Southern States realizing that they all are using each other State's line, decided that they will not put up any line for certification by RPC as ISTS. While Commission wants to consider legitimate claims but this must not result in making process too complex. The RPC may therefore uniformly decide a percentage below which (say 10%) such a line would not be considered as an ISTS. Further, it is intended that for assessment of a particular line being used for carrying inter-State power, technical knowhow and tools will be provided by Secretariat of RPCs and NLDC/ RLDCs shall provide all necessary support to States in this regard.

- 8. In view of the above, State utilities whose lines have been certified by respective RPCs to be considered under PoC should also file the tariff petition under the 2014 Tariff Regulations.
- 9. The respondents are directed to file the following information, on affidavit with a copy to the beneficiaries of the respective lines by 9.6.2017. The owners/developers of these lines are also directed to deposit the fee prescribed in the Central Electricity Regulatory Commission (Payment of fees) Regulations, 2012.
 - a) Line-wise capital cost, duly certified by an auditor, if available. In such cases, in line with Central Electricity Regulatory Commission (Terms and Conditions) of Tariff Regulations, 2014, utilities may be directed to submit historical cost, if available, duly certified by auditors and the information at (b) to (e) below.
 - b) Funding pattern of the assets, i.e. the actual debt and equity considered towards the transmission assets as on date of commercial operation;

- c) Repayment schedule and interest rates of the loan(s) availed as per Form-9C
 of Central Electricity Regulatory Commission (Terms and Conditions) of Tariff
 Regulations, 2014, alongwith supporting documents;
- d) Cumulative depreciation against the assets as on 31.3.2014;
- e) Date of commercial operation of respective assets.
- f) Details of ARR approved by the SERC or projected ARR for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 alongwith the details as per table given below, separately containing total ARR approved/projected for the respective years 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19. In case approved ARR are not available, ARR as filed to SERC;

	(FY) ARR	(₹ in lakh)
S. No.	Line Type	Length* (CKt-Km)
1.	<u>+</u> 500 kV HVDC	
2.	<u>+</u> 800 kV HVDC	
3.	765 kV D/C	
4.	765 kV S/C	
5.	400 kV D/C	
6.	400 KV D/C Quad. Moose	
7.	400 kV S/C	
8.	220 kV D/C	
9.	220 kV S/C	
10.	132 kV D/C	
11.	132 kV S/C	
12.	66 kV	

^{*} Total length in the State for which ARR has been approved

g) In case norms for O&M have not been finalized by the SERC, actual audited O&M expenses for that fiscal year.

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

<u>Annexure</u>

List of inter-State lines where tariff was granted for the 2009-14 period

	List of inter-State lines where tariff was granted for the 2009-14 period			
SI.No	Name of the line	Conecting states		
<u>SR</u>				
(i) Inter-state lines of TANTRANSCO				
1	230 kV S/C Chitoor-Thiruvalam	Tamil Nadu-AP		
2	230 kV S/C Sulurpet-Gummidipoondi	Tamil Nadu-AP		
3	230 kV S/C Yeerandahalli-Hosur	Tamil Nadu-Karnataka		
4	230 kV S/C Mooziyar-Theni	Tamil Nadu-Kerala		
5	230 kV S/C ldukki-Udumalpet	Tamil Nadu-Kerala		
(ii) Int	er-state lines of KSEBL			
1	Kaniyampetta-Kadakola 230 kV S/C line	Kerala-Karnataka		
2	Moozhiyar-Theni 230 kV S/C line	Kerala-Tamil Nadu		
3	ldukki-Udumalpet 230 kV S/C line	Kerala-Tamil Nadu		
(iii) Inter-state lines of KPTCL				
1	220kV S/C Line from Ambewadi-Ponda	Karnataka- Goa		
2	220kV S/C Line from Ambewadi- Xyldom	Karnataka- Goa		
3	220kV D/C Line from Chikkodi- Kolhpur	Karnataka -Maharashtra		
4	220kV S/C Line from Sedam- Tandur	Karnataka –Andhra		
5	220 kV S/C line from Yerandanahalli- Hosur	Karnataka-TN		
6	220kV S/C Line from Kadakola- Kaniyampet	Karnataka -Kerala		
7	220kV S/C Line from Alipura-Raghulapadu	Karnataka-AP		
NER				
(i) Inte	r-state lines of AEGCL			
1	132 kV D/C Kahelipara- Umtru I & II	Assam-Meghalaya		
2	132 kV S/C Mariani-Dimapur	Assam-Nagaland		
3	132 kV S/C Panchgram-Lumshnong	Nagaland-Assam		
4	132 kV S/C Mokokchang-Mariani	Assam-Nagaland		
5	132 kV S/C Ziribum-Pailapool	Assam-Mizoram		
6	132 kV S/C Dullavcherra-Dharmanagar	Assam-Tripura		
7	132 kV D/C Sarusajai-Umium	Assam-Meghalaya		
(ii) Inte	er-state lines of TSECL			
1	132 kV Dharmanagar-Durlavcherra	Assam-Tripura		
(iii) Int	er-state lines of MePTCL			
1	132 kV D/C Umtru-Sarusajai	Assam-Meghalaya		
2	132 kV D/C Kahelipara-Umtru	Assam-Meghalaya		
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(iv) Inter-state lines of ED, Manipur					
1	Karong-Kohima 132 kV line	Manipur - Nagaland			
<u>NR</u>		-			
(i) Inte	(i) Inter-state lines of DTL				
1	400 kV D/C Mandaula-Bawana	Uttar Pradesh-Delhi			
2	400 kV D/C BamnauliBallabhgarh	Delhi-Haryana			
(ii) Inter-state lines of UPPTCL					
1	220 kV Khodri-Saharanpur-1 Line	Uttarakhand-Uttar Pradesh			
2	220 kV Khodri-Saharanpur-2 Line	Uttarakhand-Uttar Pradesh			
3	220 kV Bareilly-Pantnagar Line	Uttarakhand-Uttar Pradesh			
4	220 kV Sahibabad-Patarganj Line	Delhi- Uttar Pradesh			
5	220 kV Noida Sec 62- Gazipur line	Uttar Pradesh -Delhi			
6	220 kV Noida Sec 20- Gazipur Line	Delhi- Uttar Pradesh			
7	220 kV Noida Sec 20- BTPS Line	Uttar Pradesh -Delhi			
8	220 kV Sahupuri-Pasauli Line	Power Grid(ER) - Uttar Pradesh			
(iii) Int	er-state lines of RVPNL				
1	220kV S/C MIA (Alwar) – Badarpur Line	Rajasthan-Delhi			
2	220kV S/C Agra-Bharatpur Line	Rajasthan-Uttar Pradesh			
3	220kV S/C Kota (Sakatpura)-Badod	Rajasthan- Madhya Pradesh			
4	220kV S/C Modak-Badod	Rajasthan- Madhya Pradesh			
5	220kV S/C Khetri-Dadri Line I	Rajasthan-Haryana			
6	220kV S/C Khetri-Dadri Line II	Rajasthan-Haryana			
(iv) Int	er-state lines of HPPTCL				
1	220 kV S/C Jessore-Ranjitsagar	Himachal Pradesh-Punjab			
	220 kV D/C Majri-Khodri	Himachal Pradesh-Uttarakhand			
3	220 kV D/C Kunihar-Panchkula	Himachal Pradesh-Haryana			
(v) Inte	er-state lines of PTUCL				
1	400 kV S/C Roorkee-Muzafarnagar	Uttrakhand -Uttar Pradesh			
2	400 kV S/C Kashipur – Muradabad	Uttrakhand -Uttar Pradesh			
3	220 kV S/C Panthnagar - Baikanthpur	Uttrakhand -Uttar Pradesh			
<u>WR</u>	<u>WR</u>				
(i) Inte	r-state lines of MSETCL				
1	220 kV Kamleshwar-Pandurna S/C line	(Maharashtra -M.P.)			
2	220 kV Mudshingi-Amona S/C line	(Maharashtra -Goa)			
3	220 kV Tillari-Amona-2 S/C line	(Maharashtra -Goa)			
4	220 kV Nasik-Navsari D/C line	(Maharashtra -Gujarat)			
5	220 kV Nasik-Navsari-2 D/C line	(Maharashtra -Gujarat)			
6	220 kV Kolhapur-Chikkodi ckt-1 S/C line	(MaharashtraKarnataka)			

7	220 kV Kolhapur (Mudshingi)-Chikkodi ckt-2 S/C line	(Maharashtra - Karnataka)		
ER				
(i) Inter-state lines of OPTCL				
1	220 kV S/C Joda-Ramachandrapur	OPTCL-JSEB		
2	220 kV S/C Jindal-Jamshedpur	OPTCL-DVC		
(ii) Inter-state lines of WBSTCL				
1	400 kV S/C Kolaghat - Baripada	WBSETCL-POWERGRID		
2	220 kV S/C Santaldih - Chandil	WBSETCL-JSEB		
(iii) Inter-state lines of DVC				
1	220 kV D/C Waria-Bidhannagar Line 1&2	DVC-WBSETCL		
2	220 kV S/C Jindal-Jamshedpur Line	DVC-OPTCL		