

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 205/TT/2017**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Dr. M.K. Iyer, Member**

**Date of Order : 06.11.2018**

**In the matter of:**

Approval of transmission tariff form COD to 31.3.2019 for Asset: Pole-II of the  $\pm 800$  kV, 3000 MW Champa and Kurukshetra HVDC terminals along with associated bays under "WR-NR HVDC Interconnector for IPP Projects in Chhattisgarh" in Northern Region and Western Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

**And in the matter of:**

Power Grid Corporation of India Limited  
"Saudamini", Plot No.2,  
Sector-29, Gurgaon -122 001

**.....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasan Nigam Limited  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Limited  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board  
Vidyut Bhawan  
Kumar House Complex Building II  
Shimla-171004
6. Punjab State Electricity Board  
The Mall, Patiala-147001



7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134109
8. Power Development Department  
Government of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan, 14, Ashok Marg  
Lucknow - 226001
10. Delhi Transco Ltd.  
Shakti Sadan, Kotla Road,  
New Delhi-110002
11. BSES Yamuna Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi
13. Tata Power Distribution Ltd.  
33 kV Sub-station, Building  
Hudson Lane, Kingsway Camp  
New Delhi-110 009.
14. Chandigarh Administration  
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.  
Urja Bhawan, Kanwali Road,  
Dehradun.
16. North Central Railway,  
Allahabad.
17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg,  
New Delhi-110002
18. Madhya Pradesh Power Management Company Ltd.  
Shakti Bhawan, Rampur Jabalpur – 482008
19. Maharashtra State Electricity Distribution Co. Ltd.  
4<sup>th</sup> Floor, Prakashgad,  
Andheri (East), Mumbai – 400052



20. Gujarat Urja Vikas Nigam Ltd.  
Sardar Patel Vidyut Bhawan,  
Race Course Road, Vadodara - 390 007
21. Electricity Department  
Govt. Of Goa, Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa - 403 001
22. Electricity Department  
Administration Of Daman & Diu  
Daman - 396 210
23. Electricity Department  
Administration of Dadra Nagar Haveli  
U.T., Silvassa - 396 230
24. Chhattisgarh State Electricity Board  
P.O. Sunder Nagar, Dangania, Raipur  
Chhattisgarh-492 013
25. Madhya Pradesh Audyogik Kendra  
Vikas Nigam (Indore) Ltd.  
3/54, Press Complex, Agra-Bombay Road, Indore-452 008
26. KORBA STPS, NTPC  
NTPC Ltd, Western Region Head,  
Quarter-I, 2<sup>nd</sup> Floor, Samruddhi  
Venture Park, Marol, Andheri East,  
Mumbai, 400093, Maharashtra
27. RKM Powergen Pvt. Ltd.  
No. 14, Dr. Giriappa Road  
T. Nagar, Chennai-600017
28. Jindal Power Ltd  
2<sup>nd</sup> Floor, DCM Building, Plot No. 94  
Sector-32, Gurgaon
29. Athena Chattisgarh Power Ltd  
7-1-24/1/RT, G-1, B-block  
1<sup>st</sup> Floor, "Rexona Towers", Greenlands  
Begumpet, Hyderabad-500016
30. SKS Power Generation Ltd  
2<sup>nd</sup> Floor, DCM Building, Plot No. 94  
Sector-32, Gurgaon
31. Korba West Power Co. Ltd  
6<sup>th</sup> & 7<sup>th</sup> Floor, Vatika City Point M.G. Road  
Gurgaon-122002



32. KSK Mahanadi Power Co. Ltd  
8-2/293/821N431 IA, Road No. 22  
Jubilee Hills, Hyderabad-500033
33. D.B. Power Ltd  
Opp. Dena Bank, C-31, G- Block,  
3<sup>rd</sup> Floor, Naman Corporate Link,  
Bandar - Kurla Complex, Bandra (East)  
Mumbai, 400051, Maharashtra
34. Lanco Amarkantak Power Pvt. Ltd  
Plot No. 397, Udyog Vihar , Phase-III  
Gurgaon-122016
35. Vandana Vidyut Ltd.  
Vandana Bhawan, M. G. Road  
Raipur -Chhattisgarh

.....Respondents

**For Petitioner** : Shri S.K. Niranjan, PGCIL  
Shri S.K. Venkatesan, PGCIL  
Shri S.S. Raju, PGCIL

**For Respondents** : Shri R.B. Sharma, Advocate, BRPL

### **ORDER**

The present petition has been filed by the petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff of Pole-II of the  $\pm 800$  kV, 3000 MW Champa and Kurukshetra HVDC terminals along with associated bays (hereinafter referred to as "transmission assets") under "WR-NR HVDC Interconnector for IPP Projects in Chhattisgarh" in Northern Region and Western Region (hereinafter referred to as "transmission system") from COD to 31.3.2019 under Central Electricity Regulation Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The petitioner has made the following prayers:-

"(1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para -9.2 above;



- (2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred;
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014;
- 4) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of the Tariff Regulations, 2014;
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition;
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014;
- 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents;
- 8) Allow to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 1.1.2017 onwards;
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if at any time GST on transmission is withdrawn from negative list at any time in future. Further, any taxes and duties including cess etc. imposed by any statutory/Govt./ Municipal authorities shall be allowed to be recovered from the beneficiaries.
- 10) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.
- 11) Allow the petitioner to bill Tariff from actual DOCO and also the petitioner may be allowed to submit revised Auditor Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.”

3. The Investment Approval for the transmission project was accorded by the Board of Directors of the petitioner on 26.3.2012 which was conveyed vide Memorandum No. C/CP/ Chhattisgarh-IPP dated 27.3.2012, at an estimated cost of ₹956976 lakh including an IDC of ₹51177 lakh at February, 2012 price level. The project was scheduled to be put under commercial operation within 39



months from the date of Investment approval i.e. by 25.6.2015. The Revised Cost Estimate (RCE) for the transmission system was accorded by the Board of Directors of the petitioner in the meeting held on 10.3.2017 vide letter dated 12.4.2017 at ₹929193 lakh including IDC of ₹86416 lakh.

4. The scope of the scheme was discussed and agreed in 28<sup>th</sup> Standing Committee Meeting of Northern region dated 23.2.2010, 30<sup>th</sup> Standing Committee Meeting of Western Region dated 8.7.2010, 16<sup>th</sup> NRPC meeting dated 4.5.2010 and 14<sup>th</sup> WRPC meeting dated 19.8.2010. The BPTA agreement between PGCIL and various IPPs was done on 21.2.2010. The scope of work covered under the transmission system is broadly as follows:-

#### **Part A: WR-NR HVDC Interconnector for IPP Projects in Chhattisgarh**

##### **Transmission Line:**

- a)  $\pm$  800 kV,3000MW HVDC bipole between Champa Pooling Station (WR) – Kurukshetra (NR) [with provision to upgrade HVDC Terminal to 6000 MW at a later date]

##### **Sub-station:**

- (a)  $\pm$  800 kV HVDC Station
- HVDC Rectifier module of 3000 MW Capacity at Champa Pooling Station
  - HVDC Inverter module of 3000 MW Capacity at Kurukshetra
- (b) Establishment of 2 x 500 MVA, 400/220 kV Kurukshetra Sub-station (GIS) alongwith 125 MVAR Bus Reactor
- (c) Augmentation of 765/400 kV Champa Pooling Station by 2 x 200 MVA 400/132/33kV transformation capacity.

#### **Part B: Transmission System Strengthening in Northern Region for IPP Projects in Chhattisgarh**

##### **Transmission Line:**

- (a) Kurukshetra (NR) – Jalandhar 400 kV D/C (Quad) line, One Ckt via 400/220 kV Nakodar (PSTCL) Substation.
- (b) LILO of Abdullapur-Sonepat 400 kV D/C (Triple) at Kurukshetra Substation.



**Sub-station:**

- (a) Extension of 400/220 kV Nakodar (PSTCL) Substation alongwith 50 MVAR line reactor
- (b) Extension of 400/220 kV Jallandhar Substation alongwith 50 MVAR line reactor

5. The subject transmission system was planned as a part of High Capacity Power Transmission Corridor-V, for evacuation and transfer of power from IPP generation projects in Raigarh (Kotra), Champa, Raigarh (Tamnar) and Raipur generation complex in Chhattisgarh. Out of the estimated 15000-16000 MW quantum of power transfer requirement, 5000 MW power was planned for transfer to Northern Region and balance power was to be consumed within Western region. For evacuation and transfer of power from these generation projects, 765/400 kV high capacity pooling stations viz. at Raigarh (Kotra), Raigarh (Tamnar), Raipur and Champa have been established. The said pooling stations have been interconnected through high capacity 765 kV transmission lines. However, considering the quantum of power transfer requirement (about 5000 MW) to Northern Region over a long distance, a high capacity transmission corridor viz.  $\pm 800$  kV, 6000 MW HVDC bipole line between Champa Pooling Station and Kurukshetra with 3000 MW terminals at either end was planned and is being put under commercial operation.

6. The HVDC bipole has been developed considering the large quantum of power transfer over a long distance from IPP generation projects in Chhattisgarh to Northern Region. This system has been developed to facilitate controlled power flow requirement, flexibility of operation as well as maintaining system parameters within limits through its control mechanism. For dispersal of power from Kurukshetra, Kurukshetra (NR)-Jallandhar 400 kV D/C (Quad) line (one Ckt.



via 400/220 kV Nakodar (PSTCL) Substation) and LILO of Abdullapur-Sonepat 400 kV D/C line at Kurukshetra sub-station have already been put into commercial operation on 3.12.2015.

7. The details of the transmission charges claimed by the petitioner are as under:-

	(₹ in lakh)	
	2017-18	2018-19
Depreciation	2395.72	4915.70
Interest on Loan	1024.30	1978.09
Return on Equity	2715.88	5565.09
Interest on Working Capital	165.48	335.03
O&M Expenses	606.53	1212.75
<b>Total</b>	<b>6907.91</b>	<b>14006.66</b>

8. The details of the interest on working capital claimed by the petitioner are as under:-

	(₹ in lakh)	
	2017-18	2018-19
Maintenance Spares	167.69	181.91
O&M expenses	93.31	101.06
Receivables	2125.51	2334.44
<b>Total</b>	<b>2386.79</b>	<b>2617.42</b>
Interest	12.80%	12.80%
Rate of Interest	305.51	335.03

9. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. BSES Rajdhani Power Limited (BRPL), Respondent No.12, Madhya Pradesh Power Management Company Limited (MPPMCL) and Korba West Power Company Limited (KWPCCL) have filed replies vide affidavit dated 15.11.2017, 30.12.2017 and 1.3.2018 respectively and the petitioner has filed rejoinder dated 10.1.2018 to the reply of BRPL and MPPMCL and has filed rejoinder dated 12.3.2018 to the reply filed by KWPCCL. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.





10. As the instant order could not be issued before one of the three Members who heard the matter earlier demitted the office, the matter was heard on 23.10.2018 and accordingly the instant order is issued. The representative of the petitioner present during the hearing requested to allow the tariff as prayed in the petition.

**Date of Commercial Operation (COD)**

11. As per the investment approval (IA), the schedule completion is within 39 months from the date of IA i.e. 26.3.2012 and accordingly the schedule of completion work out to 25.6.2015. Initially, the assets were anticipated to be put into commercial operation on 31.8.2018, the petitioner vide affidavit dated 22.9.2017 submitted that the actual COD of the instant asset was 16.9.2017.

12. The petitioner vide affidavit dated 22.9.2017 has submitted the COD letters, CMD certificate as required under Grid code and RLDC certificate. The petitioner has submitted CEA certificate under Regulation 43 of CEA (Measures related to Safety and Electricity supply) Regulations, 2010 for the instant assets, vide affidavit dated 19.1.2018.

13. BRPL has submitted that the instant petition is for determination of tariff of Pole-II of the  $\pm$  800 kV HVDC bi-pole line which was anticipated to be put into commercial operation on 31.8.2017 and Pole-I of the  $\pm$  800 kV HVDC bi-pole line was put into commercial operation on 24.3.2017. As per IA, both the poles were scheduled to be put into commercial operation by 25.6.2015. However, the petitioner has claimed that there is always a gap of few months in the COD of the Pole-I and Pole-II of HVDC as per international practice. No such documents have been filed by the petitioner in support of such a practice and in the absence



of such documents it is difficult to accept such a proposition. Moreover, the IA is silent on this issue which clearly states the scheduled date for completion of the assets was 25.6.2016. The delay in COD of Pole-II is also attributable to the time required for stabilization of Pole-I HVDC. The petitioner has declared that the COD of the Pole-I was 24.3.2017 when the system was yet to stabilize and provide regular service as per Regulation 4(3) of the 2014 Tariff Regulations. Further, the petitioner has also not furnished the power flow on Pole-I from the date of COD till date although the same can be controlled.

14. We have considered the submissions of the petitioner and respondent. The petitioner has submitted the CEA energisation certificate, RLDC certificate regarding the trial operation, and the CMD certificate as required under the Grid Code. Accordingly, the COD of the instant asset is approved as 16.9.2017.

#### **Optical Ground Wire (OPGW)**

15. BRPL has submitted that the petitioner has not filed the details of the communication system in the tariff forms related to Transmission and Communication System. The petitioner is using OPGW in place of earth wire in all projects and hence should file the details of OPGW. The petitioner should clarify as to whether all the fibers are used by the petitioner or some dark fibers (spares) are leased or sold to third parties to serve as high speed fiber inter-connection between two points. The petitioner should file the information pertaining to the spare dark fibers as required under Section 41 of the Electricity Act, 2003.

16. In response, the petitioner has submitted that OPGW was used in place of earthwire. There are 24 fibers out of which no links are shared by the petitioner

with others. The cost will be shared as per prevailing norms in case fibers are shared by the petitioner with others in future.

### **Transmission Service Agreement**

17. During the hearing on 8.8.2018, BRPL sought a copy of the TSA pertaining to the instant assets. The petitioner vide affidavit dated 8.8.2018 has submitted a copy of the Model TSA dated 19.8.2011 entered into between the petitioner and BRPL. The Commission has already dealt with the issue of TSA raised by BRPL in order dated 19.9.2018 in Petition No.206/TT/2017. The relevant portion of the order dated 19.9.2018 is as follows:-

“17. As regards TSA, BRPL has submitted that as per Regulation 3(63) of the 2014 Tariff Regulations, TSA means the agreement between transmission license and designated inter-State transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as the “2010 Sharing Regulations”) and any other agreement between the transmission licensee and the long term transmission customer where the payment of transmission charges is not made through PoC mechanism under the 2010 Sharing Regulations. BRPL has submitted that accordingly, there is need to enter into another agreement for recovery of the transmission charges through PoC mechanism. In response, the petitioner has submitted that the petitioner has complied with the provisions of 2010 Sharing Regulations and the terms of the model TSA entered into with the designated customers including BRPL.

18. We have considered the submissions of the petitioner and BRPL. As per Regulation 2(u) of the 2010 Sharing Regulations, TSA means an agreement to be entered into between the designated ISTS customers and ISTS licensee in terms of the said Regulation. Regulation 2(u) provides as under:-

“(u) Transmission Service Agreement (TSA) shall mean the agreement to be entered into between the Designated ISTS Customer(s) and ISTS Licensee(s) in terms of Chapter 6;”

As per Regulation 13 of the 2010 Sharing Regulations, the designated ISTS customers and the CTU have to enter into new TSA or modify the existing BPTA to incorporate the new tariff and related conditions and it shall govern the provisions of transmission services and the charges for the same and the agreement be called TSA. Further, as per the said Regulation, the CTU shall notify a model TSA and it shall be the default transmission agreement and shall mandatorily apply to all the designated ISTS customers. The relevant provisions of Regulation 13 of the 2010 Sharing Regulations are as under:-

“(1) The Designated ISTS Customers and the CTU shall enter into new transmission services agreement or modify the existing Bulk Power Transmission Agreements to incorporate the new tariff and related conditions. Such agreement shall govern the provision of transmission services and charging for the same



and shall be called the Transmission Service Agreement (TSA) and shall, inter-alia, provide for:”

“(4) The final version of the Model Transmission Service Agreement, as approved by the Commission shall be notified and used as the base transmission service agreement by the ISTS Licensees.

(5) The notified Model Transmission Service Agreement shall be the default transmission agreement and shall mandatorily apply to all Designated ISTS Customers.”

Accordingly, the petitioner and all the DICs entered into model TSA and the petitioner signed the model TSA with BRPL on 19.8.2011. As per clause 4 of the model TSA, the existing ISTS owned, operated and maintained by it are given in Schedule II of the model TSA. Any new ISTS, on approval of the concerned RPC, shall be intimated to the DICs and shall become part of Schedule-II of the TSA. Clause 4 of the TSA provides as follows:-

#### **“4.0 Description of inter-State Transmission System (ISTS)**

##### **4.1 Existing ISTS**

4.1.1 The list of ISTS presently owned, operated and maintained by ISTS Licensees in the country is detailed in Schedule-II

##### **4.2 Deemed ISTS**

4.2.1 The provisions of the Agreement shall be applicable to Deemed ISTS, as detailed in **Schedule-II**.

4.2.2 Any additions/deletions to the existing list as certified by the RPCs and approved by the Commission shall be intimated to the DICs by the Regional Power Committee (RPC). Such modifications shall form part of **Schedule-II** of the Agreement and shall be governed by the terms and conditions contained herein.

##### **4.3 New ISTS Schemes**

4.3.1 New ISTS Schemes shall be as identified in consultation with the stakeholders, by CEA and CTU.

4.3.2 Any element that may be added to the ISTS detailed in Article 4.1.1 and declared for commercial operation by the concerned ISTS Licensee will be intimated to the DICs by the ISTS Licensee or the CTU, as and when these are declared under commercial operation. Such addition shall form a part of Schedule-II of this Agreement and shall be governed by the terms and conditions as contained herein.

4.3.3 CTU shall notify all the ISTS Licensees and the DICs, as and when such element, as mentioned in Article 4.3.2 comes into operation.”

The petitioner has submitted that the DICs are intimated about the COD of the new ISTS and are included in the Scheduled II of the TSA. The petitioner has submitted that the TSA is posted on the petitioner’s website and has also submitted a copy of the same. It is observed that the petitioner has entered into a TSA as required



under the provisions of 2010 Sharing Regulations and has complied with the requirement of the TSA by including the new ISTS in Schedule-II of the TSA.”

The petitioner has complied with the 2010 Sharing Regulations by entering into a TSA with BRPL and has also complied with the requirement of the TSA by including the new ISTS in Schedule-II of the TSA.

### **Capital Cost**

18. The petitioner in the petition and the management certificate submitted alongwith the petition has submitted the capital cost incurred as on COD and additional capital expenditure for the period 2017-18, 2018-19 and 2019-20 and they are as under:-

Approved cost for the asset as per FR	Approved cost for the asset as per RCE	Exp. up to COD (Anticipated COD: 31.8.2017)	Proposed Exp.		Estimated completion cost
			2018- 2019	2019- 2020	
169298.00	108652.00	84120.29	11505.32	7905.32	103531.53

19. The petitioner in management certificate has given the COD cost as on 1.7.2017. However, the petitioner has claimed COD as 31.8.2017. Therefore, we have considered the COD cost till 31.8.2017 and further additional capital expenditure has been considered after 31.8.2017 for the period from 2018-19 to 2019-20.

20. The completion cost for the assets covered under the petition works out to ₹103531.53 lakh, which is within the approved (Revised Cost Estimates) RCE of ₹108652.00 lakh and hence there is no cost over-run. Further, reason of cost variation w.r.t. RCE cost is mainly on account of change of exchange rate of foreign currency.



21. BRPL has submitted that the petitioner has considered the apportioned approved cost of “Pole-II of the ±800 kV, 300 MV Champa and Kurukshetra HVDC terminals along with ± 800 kV Champa and Kurukshetra HVDC Terminal along with associated bays as ₹169298 lakh which was subsequently revised to ₹108652 lakh. The assets as mentioned in the petition have not been put under commercial operation and the petitioner should submit the exact date of commercial operation. The petitioner should explain the reason for RCE when there was no cost over-run in respect of the instant assets. In response, the petitioner has submitted that the instant asset was put into commercial operation on 16.9.2017 and has already submitted the documents in support of COD vide affidavit dated 22.9.2017. As regards RCE, the petitioner has submitted that RCE was accorded by the competent authority due to cost over-run in case of the other assets under the transmission system which are covered in Petition Nos.256/TT/2017 and 13/TT/2017.

22. MPPMCL has submitted that the petitioner has claimed the cost on the basis of management certificates and same may be allowed only on submission of Auditor’s certificate. In response, the petitioner has submitted that Auditor certificate on the basis of the actual COD shall be submitted. It is clarified that the tariff for the instant assets will be allowed only on submission and on the basis of the Auditor certificate.

23. The petitioner vide affidavit dated 16.2.2018 has submitted capital cost of the instant asset as on COD of 16.9.2017 and estimated expenditure from COD to 2019-20 and they are as under:-

(₹ in lakh)					
Approved FR cost	Approved RCE	Expenditure		Estimated expenditure	
		upto COD 16.9.2017	COD to 31.3.2018	2018-19	2019-20
169298.00	108652.00	81455.25	7696.19	10889.22	7289.22



24. We have examined the submissions of petitioner and respondents. The petitioner has submitted the capital cost as on COD and the estimated additional capital from COD to 31.3.2018 and 2018-19 and it is supported by Auditor certificate. The estimated completion cost of the instant is within the apportioned approved cost accordingly we approve the capital cost claimed by the petitioner. The estimated additional capital expenditure claimed by the petitioner during 2019-20 is not allowed as it is beyond the 2014-19 tariff period.

### **Time Over-run**

25. As per IA dated 26.3.2012, the schedule completion was within 39 months from the date of IA and accordingly the schedule COD was 25.6.2015. The COD of the instant asset was 16.9.2017. Thus, there is a time over-run of 26 months and 21 days. The petitioner has submitted that the time over-run was due to delay in grant of forest clearance, land acquisition at Champa Sub-station, ROW, law and order problems at sites and litigation. The reasons given by the petitioner for the time over-run are dealt in the following paragraphs:-

#### **a. Delay in getting forest clearance by Forest Authorities in Marwahi, Bilaspur forest Area in Madhya Pradesh (Forest Involvement 193.141 hectares of Belgahna, Khodari, Pendra , Marwahi, Ratanpnr, Kota, Bilaspur Forest Area):**

After the Investment Approval on 26.3.2012, the petitioner approached the concerned official on 24.4.2012 for collection of revenue maps and submitted the fees towards issuance of revenue map and after various communications, received all the maps as well as NOC for laying of the subject transmission line from 4.8.2012. The proposal for forest clearance was made on 6.8.2012 and it was registered on 29.8.2012. However, the Stage-I clearance was received from MoEF, Government of India on 28.8.2014, which is after 28 months from 24.4.2012. The total affected area is 193.161 Ha, due to which, approximately 80



no. tower locations and 57 km stringing was affected. After getting final clearance for construction activities in forest areas in January, 2015 from Forest Department, construction activities started with mobilization of “Men and Material” and by putting extra efforts all works have been completed. The forest proposal was made on 24.4.2012 and Stage I and II approval was granted on 25.11.2014 and 7.9.2015 respectively and it took 31 months for forest clearance in Marwahi and Bilaspur forest areas.

b. Delay in giving forest clearance by Forest Authorities in Damon forest Area in Madhya Pradesh (Forest Involvement; 196.01 Hactare; Forest Area : Damon, Chattarpur, Sagar, Anoopur, Shahdol, Dindori, Jabalpur & Chattarpur District of M.P.)

The petitioner requested DFO Damon, Chhatarpur for survey permission on 4.5.2012 and submitted the forest proposal on 30/31.7.2013 for Damoh, Sagar and Chhatarpur Division. Further, Ministry of Environment & Forest (MoEF) and Chief Conservator of Forests (CCF), Bhopal granted permission for cutting the trees and the work was started on 11.9.2015 and CCF Damoh-Sagar granted permission on 17/18.9.2015 and District Forest Officer (DFO), Jabalpur granted permission on 28.10.2015. The whole process of forest clearance took around 40 months from 4.5.2012 to 11.9.2015. The location no. 92B/0 is situated in forest land at height of 140 m where the benching of more than 7223 cum. was involved. The forest clearance was given on 11.9.2015 and it required huge quantity of benching and construction of approach road which took 3 months. Further, all the tower foundation works in non-forest area was completed in the month of March, 2015. However, the petitioner was able to start the work in the forest area only after receipt of permission from Forest Authorities in September, 2015.





c. Delay in giving forest clearance by Forest Authorities in Jabalpur & Shahdol forest Area in Madhya Pradesh

The petitioner requested the CCF, Jabalpur for survey permission in forest area on 27.6.2012 and submitted the forest proposal on 22.1.2013. However, MoEF and Chief Conservator, Bhopal accorded the first phase approval on 10.6.2015 and Additional Principal Chief Conservator of Forest (APCCF), Bhopal granted the permission for tree cutting and to start the work on 11.9.2015 while Conservator of Forest (CF), Jabalpur granted the permission to start the work on 28.10.2015. The Stage-II approval was received on 8.9.2016. The whole process of forest clearance took around 39 months from 27.6.2012 to 11.9.2015 for Stage-I and further about 12 months for getting Stage-II clearance. Therefore, the total time taken was more than 50 months.

d. Delay due to land acquisition at Champa Sub-station

As per the L2 network, the petitioner had to handover leveled and compacted land by 10.11.2012. However, the petitioner got the permission to work at Champa sub-station after 15.4.2013 which caused a delay of 5 months to start the work. The petitioner started the land acquisition process much before the Investment Approval and the delay is due to the ROW problem faced during the land acquisition. Numerous Power Plants and other industries have already been set up and the process is continuing. Due to this acquisition of private land was possible only at much high rate leading to higher compensation amount as adequate government land was not available to meet the requirements. Acquiring land for laying of transmission lines in the district particularly in the proximity of Champa Sub-station, was extremely difficult resulting in severe ROW issues at certain locations. Some of the petitioner's officials were also assaulted while handling ROW issues. With close liaison with the administration, petitioner



however, tried its best to handle ROW issues progressively. Although government land was allocated after 2 years and 4 months prior to the allotment of private land, work could not be started till 15.4.2013, when the final settlement between the petitioner and the private land owners was reached. Pending these negotiations, the private land owners and the villagers were not allowing any construction work to take place at HVDC site. Two years (4.9.2009 to 30.9.2011) delay occurred due to rejection of initial process of allotment of government land and further one year (3.1.2012 to 30.11.2012) delay took place due administrative delay by revenue department in preparation of record of award process. Villagers/land oustees did not agree to hand over land for higher compensation for 5 months (30.11.2012 to 15.4.2013). Thus, the total delay in acquisition process was 3 years 5 months. The petitioner had approached the forest official at various locations and petitioner got the approvals to work in September, 2015 and the work was completed in forest area after getting the approval from the forest authorities. Meanwhile at Shamli Area in Uttar Pradesh severe ROW issues were faced by the petitioner which affected the work from 5.5.2014 to 29.9.2016. After resolving the ROW issue, the petitioner was able to start the work from October, 2016.

e. Delay due to ROW Problem at Shamli District of Uttar Pradesh

There were RoW issues at Shamli District. The ROW problem started on 5.5.2014 and continued upto 29.9 2016, which affected the work for 28 months at various locations in Shamli Area. After lot of persuasion and efforts, the petitioner was able to resolve the ROW issues. The line length passing through Shamli District is 42 km, where due to ROW problem total 10 nos. of tower foundation including tower erection and stringing was affected. The petitioner has carried on works pertaining to this project at all the unaffected areas and the work in area



affected by ROW problem was completed in December, 2016. Subsequently, after the completion of HVDC line in December, 2016 additional time was required due to various essential tests which were required to be done for COD of Pole-I of Champa-Kurukshetra HVDC Project.

26. The petitioner has further submitted that as per the approved procedure/ test protocol of HVDC link, several load tests are required to be performed at minimum power of 150 MW, 600 MW, 1000 MW, 1500 MW, reduced voltage mode etc. which require the completion of transmission line in all respect. Therefore, after completion of HVDC transmission line, the “On-load tests” were conducted at both terminal stations only in the month of December, 2016. About 30 tests were performed from last week of December, 2016 to 1<sup>st</sup> week of March, 2017. Dedicated Metallic Return (DMR) has been used in this project instead of conventional ground electrode which is first of its kind in the world. With DMR, a lot of combination of protective sequences is involved and therefore several modes of protection scheme had to be validated. Further, during the course of on line commissioning tests involving repeated de-block and block action of the pole, the issuance of code for de-blocking/blocking from NRLDC/NLDC also consumed a lot of time.

27. After successful completion of above tests, RLDC certificates for trial run was obtained and COD of Pole-I was declared on 24.3.2017. There was a gap in COD of Pole-I and Pole-II and it was because of international practice there is always a gap of few months in COD of Pole-I and Pole-II HVDC System. Accordingly, in the L2 network of the instant project, there is a gap of approximately 6 months in commercial operation of both the poles. This is mainly required for stabilization time for Pole-I HVDC and Bipole testing. Therefore, pre-

commissioning tests on Pole-II HVDC could be started only after completion of all tests on Pole-I HVDC and utilizing the experiences gained during commercial operation of Pole-I HVDC. Further, integration of Pole-I and Pole-II HVDC can be done after successful testing and commercial operation of individual Pole-I and Pole-II.

28. The petitioner has submitted that various sequence and protections functions and On-load testing (including Heat Run Test) is required at both ends which in-turn requires a lot of co-ordination activities between Champa and Kurukshetra ends. Further, completion of the entire test stated above also depends on necessary clearance from external agencies like NRLDC/WRLDC/NLDC which may get delayed due to grid conditions. Based on the Grid conditions, permission is granted by NRDL/ WRLDC/ NLDC.

29. BRPL has submitted that the petitioner is well conversant with the problems of the nature which were encountered during the construction of the transmission project such as delay in forest clearance, land acquisition and ROW issue. The alleged problems narrated by the petitioner are only an excuse for delay and the time over-run is entirely attributable to the slackness of the petitioner in the project management for which petitioner is responsible. Referring to the Hon'ble Appellate Tribunal in judgment dated 13.8.2015 in Appeal No. 281 of 2014, BRPL submitted that the petitioner could have provided more time for such eventualities while fixing the schedule for completion. If time period of 39 months was not sufficient, an appropriate time schedule should have been considered at the time of granting Investment Approval. As per Form-12 submitted by the petitioner, it is not possible to determine which activity is actually responsible for the time over-run in the absence of the PERT chart. The



petitioner has not submitted the statutory documents or proper justification for time over-run.

30. BRPL has submitted that nothing has been mentioned as to when the Pole-II of 800 kV HVDC will be put into commercial operation and what will be the gap between one pole and another pole. Further, there is nothing in the Investment Approval that the Pole-I and Pole-II will come one after the other. As per Investment Approval, both the poles are to be put into commercial operation within the timeline of 39 months. The petitioner should clarify this issue and explain whether all this is attributed on account of improper planning and improper management and ultimately causing problems in timely completion at different stages of the project.

31. MPPMCL has made the following submissions with regard to time over-run:-

a. The scheme was approved on 26.3.2012 and the petitioner was aware of topographical and agricultural/industrial conditions of area falling near Shamli District of U.P. The petitioner had started the work in May 2014 i.e. after passing of 2/3<sup>rd</sup> time of implementation schedule. This undue delay therefore is fully attributable to the petitioner.

b. The petitioner was aware that there is always a gap of few months in COD of Pole-I and Pole-II HVDC System. However, no authenticated document in support of this statement has been submitted. In absence of this, the petitioner has failed to justify delay of 6 months as the minimum gap required in between COD of Pole-I and Pole-II.

c. When petitioner was well aware of testing procedure with respect of



Pole II, due care had to be taken for early commissioning of Pole-I in view of delay already occurred in COD of Pole-II but no timely action was taken. Therefore, this delay is fully attributable to the petitioner.

32. In response, the petitioner vide affidavit dated 10.1.2018 has submitted rejoinder to the reply of BRPL and MPPCL and submitted that that there was a delay of 26 months 21 days in COD of the instant asset. The justification submitted by the petitioner for the said time over-run is summarized below:-

Activity	Period of activity				Reason(s) for delay along with reference of documentary evidence submitted
	Planned		Achieved		
	From	To	From	To	
COD of Pole-II of the $\pm 800$ kV, 3000 MW Champa & Kurukshetra HVDC Terminals along with associated bays	26.3.2012	25.6.2015	26.3.2012	16.9.2017	1) Delay of 31 to 40 months in getting forest clearance (As per Para 7.1.1 of the petition) 2) Delay of 5 months as per L2 network in Land Acquisition at Champa S/s (As per Para 7.1.2 of the petition) 3) ROW Problem from 5.5.2014 to 29.9.2016 at Shamli District of Uttar Pradesh (As per Para 7.1.3 of the petition) After resolving ROW issues Petitioner completed the work in December, 2016 in the affected areas. 4) Delay from December, 2016 to March, 2017: Additional time Requirement for system testing after completion of HVDC Transmission Line (As per Para 7.1.4 of the petition) 5) Delay from March 2017 to 16.9.2017: Additional time requirement for stabilization of Pole-I HVDC and Bipole testing and delay in getting permission for shutdown by NRLDC / WRLDC / NLDC (As per Para 7.1.5 of the petition)

33. In response, the petitioner has submitted that gap of 6 months in commissioning of Pole I and Pole II is mainly required for stabilization time for Pole-I HVDC and Bipole testing. Therefore, pre-COD tests on Pole-II HVDC can



be started only after completion of all tests on Pole-I HVDC and utilizing the experiences gained during commissioning of Pole-I HVDC. Integration of Pole-I and Pole-II HVDC can be done after successful testing and commissioning of individual Pole-I and Pole-II. Therefore, while formulating the project itself based on the international practices, petitioner has taken a gap of approximately 6 months in commissioning of both the poles. The power is flowing through the HVDC system and it is continuously getting utilized after COD of Pole-I since 24.3.2017 and quantum of power flow for 6 months since 24.3.2017 is submitted.

34. We have considered the submissions of the petitioner and respondents with respect to time over-run. The instant assets were scheduled to be put into commercial operation within 39 months from the date of investment approval dated 26.3.2012. Accordingly, the scheduled COD works out to 25.6.2015. However, the instant assets were put into commercial operation on 16.9.2017. Therefore, there is a delay of 26 months and 21 days in commercial operation of the instant asset. The petitioner has attributed the time to the delay in getting forest clearance, ROW problems in Shamli District of Uttar Pradesh and delay in land acquisition at Champa Sub-station. The Pole-I of Champa-Kurukshetra HVDC line was put into commercial operation on 23.3.2017. There was time over-run of 20 months and 26 days in case of Pole-I which has already been condoned by the Commission in order dated 22.2.2018 in Petition No. 13/TT/2017. The relevant portion of the order is reproduced below:-

“35. It is observed that the petitioner submitted the proposal for forest clearance on 24.4.2012 for the forest area in Belgahna, Khodri, Pendra, Marwahi, Ratanpur, Kota and Bilaspur (referred to as Part I), on 30.7.2013 for the forest area in Damoh, Sagar, Anuppur, Shahdol, Dinduri, Jabalpur and Chhattapur district of Madhya Pradesh (referred to as Part II) and on 22.1.2013 for forest area in Jabalpur and Shahdol (referred to as Part III). The Stage II clearance was obtained on 7.9.2015, 18.9.2015 and 8.9.2016, for Stage I, II and III respectively. It took 40 months each for the petitioner to obtain forest clearance for Part I and II and 50 months in case of Part III. The total time consumed for obtaining forest clearance is from 24.4.2012 to 8.9.2016 as per the petitioner. However, it is



observed that the CCF, Jabalpur granted the permission to start the work for Part III on 28.10.2015 and hence the time consumed forest clearance is from 24.4.2012 to 28.10.2015, i.e. 42 months and 4 days. Besides, this the petitioner needed additional 3 months for tree felling. As per the Forest (Conservation) Amendment Rules, 2004 notified by MoEF dated 3.2.2004, the timeline for forest approval after submission of proposal is 210 days by State Government and 90 days by Forest Advisory Committee of Central Government i.e. total 10 months. Therefore, we are of the view that the petitioner should have factored these 10 months while arriving at the timeline of 39 months for the instant project. These 10 months are reduced from the total time over-run of 42 months. Accordingly, the remaining 32 months of time over-run cannot be attributed to the petitioner and thus, condonable. As the actual time over-run of 20 months and 26 days is less than 32 months, the said period is condoned. The IDC for the period of time over-run of 20 months and 26 days is allowed to be capitalised. As such, the time over-run on account of RoW issues and land acquisition is not dealt in this order since the entire delay has been condoned on account of delay in forest clearance.”

35. This above decision is applicable in case of Pole-II also and accordingly, the time over-run of 20 months and 26 days in case of Pole-II is condoned. However, there was further delay in the OCD of Pole-II. Therefore, it needs to be examined whether the time over-run from 23.3.2017 to the COD of Pole-II needs to be condoned. The petitioner has submitted that as per the approved procedure/test protocol of HVDC link, several load tests were conducted from last week of December, 2016 to the first week of March, 2017 and thereafter Pole-I was put into commercial operation on 23.3.2017. The petitioner has submitted that a gap of 6 months is required for stabilization of Pole-I and Bipole testing and pre-commissioning test of Pole-II could be done only after completion of all tests of Pole-I HVDC utilizing the experience gained in commissioning of Pole-I HVDC. The petitioner has submitted that therefore, a gap of 6 months is provided in commissioning of Pole-I and II, which is also reflected in L2 schedule filed alongwith the petition. Since a gap of 6 months has been provided in the L-2 network between the commercial operation of the two poles and the implementation of the two poles has been carried out by maintaining the said gap of 6 months between the commercial operation of the two poles, we condone the time over-run from 23.3.2017 to 16.9.2017.





**Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)**

36. The petitioner has claimed ₹4415.43 and 2030.41 lakh towards IDC and IEDC respectively (duly supported with CA Certificate) and the same has been allowed.

**Initial spares**

37. The initial spares claimed by the petitioner is as under:-

	(₹ in lakh)	
	Transmission Line	Sub-station
Total cost (P&M cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares)	0.00	97052.10
Initial spares included	0.00	3600 (4%)

38. BRPL has submitted that a consolidated amount of Rs.3600 lakh have been indicated in the management certificate for the HVDC transmission and terminal stations. This amount is required to be bifurcated amongst the transmission line and the terminal equipment to ensure that the amount incurred on the initial spares are within the ambit of Regulation 13 of the 2014 Tariff Regulations. In response, the petitioner has submitted that initial spares indicated in the management certificates are only for sub-stations and no cost of transmission line is covered. Therefore, contention of the respondent for not having bifurcation of initial spares for HVDC transmission and terminal station is not correct.

39. The initial spares claimed by the petitioner are within the limits specified under Regulation 13 of Tariff Regulation 2014. Therefore the same is allowed.

**Capital cost allowed as on COD**

40. Based on the above, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulations is summarized as under:-



(₹ in lakh)			
Cost as on COD	2017-18	2018-19	Total
81455.25	7696.19	10889.22	100040.66

### **Additional Capital Expenditure (ACE)**

41. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off date” as under:-

“cut-off date” means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation.”

42. Accordingly, the cut-off date in case of the instant asset is 31.3.2020. The petitioner has claimed ACE of ₹7848.16 and ₹10889.22 during 2017-18 and 2018-19 respectively under Regulation 14(1) (i) of the 2014 Tariff Regulations. The petitioner has claimed the same towards balance and retention payments and the same is allowed.

### **Capital Cost summary from COD to 31.3.2019**

43. Based on the above, the capital cost as on COD and the additional capital expenditure considered for tariff computation for instant assets is summarized as below:-

(₹ in lakh)		
Considered Capital Cost as on COD	2017-18	2018-19
81303.29	7848.16	10889.22

### **Debt- Equity Ratio**

44. The capital cost on the dates of commercial operation arrived at as above and additional capital expenditure allowed have been considered in the normative debt-equity ratio of 70:30. Accordingly, the Debt-Equity Ratio for the instant assets is as under:-



(₹ in lakh)

Particular	As on COD		Additional capital expenditure		As on 31.3.2019	
	Amount	%	Amount	%	Amount	%
Debt	56912.30	70.00	13116.17	70.00	70028.47	70.00
Equity	24390.99	30.00	5621.21	30.00	30012.20	30.00
<b>Total</b>	<b>81303.30</b>	<b>100.00</b>	<b>18737.38</b>	<b>100.00</b>	<b>100040.67</b>	<b>100.00</b>

### Return on Equity (ROE)

45. The petitioner has claimed ROE at the rate of 19.61% for the 2017-19 period after grossing up the ROE of 20.961% with MAT rate as per the above said Regulation. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.

46. The ROE has been worked out in accordance with Regulations 24 and 25 of the 2014 Tariff Regulations. The Return on Equity has been computed @ 19.610% p.a. on average equity. The MAT Rate for the financial year 2013-14 is considered for computing return on Equity for the tariff period 2014-19 and is subject to true up based on the effective tax rate of respective financial year applicable to the petitioner company. Accordingly, the RoE allowed is as follows:-

(₹ in lakh)

	2017-18	2018-19
Opening Equity	24390.99	26745.44
Addition due to Additional Capitalization	2354.45	3266.77
Closing Equity	26745.44	30012.20
Average Equity	25568.21	28378.82
Return on Equity (Base Rate )	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
<b>Return on Equity (Pre-tax)</b>	<b>2706.15</b>	<b>5565.09</b>

### Interest on Loan (IOL)

47. In these calculations, IOL has been worked out as under:-



- i) Gross amount of loan, repayment of installments and rate of interest have been considered as per Form 9C given in the petition.
- ii) The Normative repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- iii) Weighted average rate of interest on actual average loan considered as per (i) above, is applied on the notional average loan during the year to arrive at the interest on loan.

48. Based on above, details of IOL calculated are as follows:-

	(₹ in lakh)	
	2017-18	2018-19
Gross Normative Loan	56912.30	62406.02
Cumulative Repayment upto previous Year	0.00	2387.14
Net Loan-Opening	56912.30	60018.88
Addition due to Additional Capitalization	5493.71	7622.45
Repayment during the year	2387.14	4915.70
Net Loan-Closing	60018.88	62725.63
Average Loan	58465.59	61372.25
Weighted Average Rate of Interest on Loan	3.23%	3.22%
<b>Interest on Loan</b>	<b>1020.71</b>	<b>1978.03</b>

### **Depreciation**

49. The depreciation for tariff period i.e. 2014-19 has been worked out based on Straight Line Method as specified in Regulation 27 and at rates specified in Appendix-II to 2014 Tariff Regulations.

50. Details of the depreciation allowed are as under:-

	(₹ in lakh)	
	2017-18	2018-19
Opening Gross Block	81303.29	89151.45
Additional Capital expenditure	7848.16	10889.22
Closing Gross Block	89151.45	100040.67
Average Gross Block	85227.37	94596.06
Rate of Depreciation	5.19%	5.20%
Depreciable Value	76704.63	85136.45
Remaining Depreciable Value	76704.63	74317.50
<b>Depreciation</b>	<b>2387.14</b>	<b>4915.70</b>



### **Operation and Maintenance Expenses (O&M Expenses)**

51. The O&M Expenses claimed by the petitioner for 2014-19 are as under:-

(₹ in lakh)	
2017-18	2018-19
606.53	1212.75

52. The petitioner has submitted that O&M Expenses for the period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

53. The respondent BRPL vide affidavit dated 15.11.2017 has submitted that the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the Tariff Regulations, 2014.

54. MPPCL vide affidavit dated 30.12.2017 as submitted that as per 6<sup>th</sup> pay Commission CPSE has to bear the financial implication on account of pay revision of employees from the own resource and no budgetary support will be provided. Therefore, petitioner is to bear the financial implication due to wage revision and respondents are not liable to bear the burden under this count.

55. In response, the petitioner in its rejoinder has submitted that the wage revision of the employees of the petitioner company is due w.e.f. 1.1.2017 and



actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner reserves the right to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 1.1.2017 onwards.

56. We have examined the submission of respondents and petitioner. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

57. The O&M Expenses norms specified in Regulation 29(4) of the 2014 Tariff Regulations. Accordingly, the O&M Expenses allowed is as under:-

(₹ in lakh)	
2017-18	2018-19
604.36	1212.75

### **Interest on Working Capital (IWC)**

58. The petitioner is entitled to claim interest on working capital as per Regulation 28 of the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

#### **(a) Receivables**

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

### **(b) Maintenance spares**

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses. The value of maintenance spares has accordingly been worked out.

### **(c) O&M expenses**

O&M Expenses have been considered for one month of the allowed O&M Expenses.

### **(d) Rate of interest on working capital**

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base rate of 9.30% as on 1.4.2017 plus 350 Bps i.e. 12.80% has been considered for the asset, as the rate of IWC.

59. Accordingly, the IWC is summarized as under:-

	<b>(₹ in lakh)</b>	
	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	90.65	181.91
O & M expenses	50.36	101.06
Receivables	1147.21	2334.43
<b>Total</b>	<b>1288.22</b>	<b>2617.41</b>
Interest	<b>164.89</b>	<b>335.03</b>

### **Annual Transmission charges**

60. The annual transmission charges allowed for the instant assets are summarized hereunder:-

	<b>(₹ in lakh)</b>	
	<b>2017-18</b>	<b>2018-19</b>
Depreciation	2387.14	4915.70
Interest on Loan	1020.71	1978.03
Return on Equity	2706.15	5565.09
Interest on Working Capital	164.89	335.03
O&M Expenses	604.36	1212.75
<b>Total</b>	<b>6883.25</b>	<b>14006.59</b>

### **Filing Fee and Publication Expenses**

61. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

### **Licence Fee and RLDC Fees and Charges**

62. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) respectively of Regulation 52 of the 2014 Tariff Regulations.

### **Service Tax**

63. The petitioner has sought to recover Service Tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

### **Goods and Services Tax**

64. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.





## Sharing of Transmission Charges

65. The petitioner vide affidavit dated 7.8.2018 has submitted that total ATC enhanced on account of COD of Pole-I and Pole-II of Champa-Kurukshetra line is 4000 MW and total 3208 MW (1825 MW for Pole-I plus 1383 MW for Pole-II) LTA has been operationalized with the COD of Pole-I and Pole-II of Champa-Kurukshetra HVDC Bi-pole. The petitioner has submitted the details of the LTAs operationalized with Pole-II (1500 MW) of Champa-Kurukshetra HVDC Bi-pole and the details are as under:-

Sr. No.	LTA Customer Name	LTA on WR-NR Link	Firm (F)/ Target (T)
1.	SKS Power Gen. (CH) Ltd.*	364	T
2.	GMR Chhattisgarh Energy Pvt. Ltd.**	430	T
3.	Jindal Power Ltd.***	558	T
4.	MB Power (Madhya Pradesh) Ltd.	31	T
Total		1383	

\* LTA of SKS Power Gen. (CH) Ltd. has been kept under abeyance as per stay granted by Delhi High Court on 17.12.2017 and CERC ROP dated 09.01.2018 under Petition No. 253/MP/2017.

\*\*GMR Chattisgarh Energy Pvt. Ltd. Has filed petition no. 11/MP/2017 in CERC regarding relinquishment/ abeyance of LTA.

\*\*\*Jindal Power Ltd. Has relinquished 190 MW LTA w.e.f. 01.02.2018.

66. BRPL in its affidavit dated 10.8.2018, has requested to follow the dispensation adopted for determination of tariff of Pole-I of Champa-Kurukshetra HVDC Line in Petition 13/TT/2017 for determination of tariff of the instant assets.

67. The Commission in the order dated 22.2.2018 in Petition No. 13/TT/2017 observed as follows:-

“101. It is evident from the regulatory approval granted by the Commission, provisions of Long Term Agreement and the Minutes of the Standing Committee Meetings the instant transmission system has been developed on the request of the beneficiaries who were Long Term Customers as per LTA. The generators have also provisionally entered into PPAs with the beneficiaries. As per the record, PPAs exist for a capacity of 1825 MW, the balance capacity is for the beneficiaries in the target region. Regulation 11(4)(3)(iii) provides for sharing of transmission charges in case of HVDC lines where there is a mix of identified beneficiaries and

beneficiaries to a target region. The relevant portion of Regulation 11(4)(3)(iii) of the 2010 Sharing Regulations is extracted hereunder:-

“(iii) Where transmission charges for any HVDC system are to be partly borne by a DIC (injecting DIC or withdrawal DIC, as the case may be) under a PPA or any other arrangement, transmission charges in proportion to the share of capacity in accordance with the PPA or other arrangement shall be borne by such DIC and the charges for balance capacity shall be borne by the remaining DICs by scaling up of MTC of the AC system included in the PoC. Such HVDC shall not be considered under (i) above.”

102. In our view, the above regulation is applicable in this case and accordingly, the transmission charges of the subject HVDC line shall be borne as under:-

a) 10% of the transmission charges allowed shall be considered under Reliability charges which shall be borne by all DICs.

b) Where the generators as LTTC has tied up PPA with the beneficiaries, the transmission charges of the subject transmission system shall be apportioned to such beneficiaries for such tied up capacity.

c) Where the long term transmission customer has not firmed up the beneficiaries, the transmission charges shall be apportioned to such long term transmission customers in proportion to the capacity not tied up by each of the generators.

d) The capacity, if any, left out after considering the capacities under (b) and (c) above, the HVDC charges for such balance capacity shall be borne by the remaining DICs of the target region by scaling up of MTC of the AC system included in the PoC as per Regulation 11(4)(3)(iii) of the 2010 Sharing Regulations. In such an event, direction at (a) above shall not be effected.”

68. Pole-II of Champa-Kurukshetra has capacity of 1500 MW, out of which long term access has been operated for 1383 MW capacity as mentioned in para 65 above. For the remaining capacity, beneficiaries have not been tied up. In our view, the transmission charges shall be apportioned in accordance with the provisions of Regulation 11(4)(3)(iii) and our order dated 22.2.2018 in Petition No.13/TT/2017 as under :-

a) 10% of the transmission charges for the entire capacity allowed shall be considered as Reliability charges which shall be borne by all DICs.

b) Where the generators (as LTTCs) have tied up for sale of power through PPAs, such beneficiaries shall bear the transmission charges in

proportion to their tied up capacity provided that the beneficiaries are liable to bear the transmission charges as per the provisions of PPAs. If the PPAs provide that the generator shall bear the transmission charges, then the generators shall be liable to bear the transmission charges to the extent of the capacity tied up under respective PPAs.

c) For the capacity for which the generators (as LTTCs) have not firmed up the beneficiaries, the transmission charges for such capacity shall be borne by the generators.

d) In respect of the capacity left out after considering the capacities covered under (b) and (c), the HVDC charges for such capacity shall be borne by the remaining DICs of the target region by scaling up of MTC of the AC system included in the PoC as per Regulation 11(4)(3)(iii) of the 2010 sharing Regulations. In such an event, direction at (a) above shall not be effected.

69. It is further clarified that Para 102(b) of the order dated 22.2.2018 in Petition No.13/TT/2017 shall stand modified in accordance with the direction in para 68(b) above.

70. The Petition No. 205/TT/2017 is disposed in terms of the above.

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

sd/-  
**(P. K. Pujari)**  
**Chairperson**

