# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 58/TT/2018

Coram: Shri P.K.Pujari, Chairperson Dr. M. K. Iyer, Member

Date of Hearing: 20.9.2018 DateofOrder: 19.11.2018

#### In the matter of:

Approval under Regulation- 86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from DOCO to 31.3.2019 for Asset: 400Kv D/C (Quad) Kurukshetra-Jind TL alongwith associated bays under "Transmission System Strengthening in WR-NR Transmission Corridor for IPPs in Chhattisgarh"

#### And in the matter of

# **Power Grid Corporation of India Limited,**

"Saudamani", Plot No.2, Sector-29, Gurgaon -122 001

#### Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Limited Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005
- Ajmer Vidyut Vitran Nigam Ltd
   Kv, GSSRVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- JaipurVidyutVitran Nigam Ltd
   132 Kv, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- JodhpurVidyutVitran Nigam Ltd
   132 Kv, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)



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- Himachal Pradesh State Electricity Board VidyutBhawan Kumar House Complex Building II Shimla-171 004
- 6. Punjab State Electricity Board Thermal Shed Tia Near 22Phatak, Patiala-147001
- 7. Haryana Power Purchase Centre Shakti Bhawan, Sector-6 Panchkula (Haryana) 134 109
- Power Development Deptt.
   Govt. Of Jammu & Kashmir
   Mini Secretariat, Jammu
- Uttar Pradesh Power Corporation Ltd.
   (Formerly Uttar Pradesh State Electricity Board)
   Shakti Bhawan, 14, Ashok Marg
   Lucknow 226 001
- 10. Delhi Transco LtdShakti Sadan, Kotla Road,New Delhi-110 002
- 11. BSES Yamuna Power Ltd, BSES Bhawan, Nehru Place, New Delhi
- 12. BSESRajdhani Power Ltd, BSES Bhawan, Nehru Place, New Delhi
- 13. North Delhi Power Ltd,Power Trading & Load Dispatch GroupCennet Building,Adjacent To 66/11 Kv Pitampura-3



Grid Building, Near PP Jewellers Pitampura, New Delhi – 110034

# 14. Chandigarh Administration Sector -9, Chandigarh

15. Uttarakhand Power Corporation Ltd.UrjaBhawanKanwali RoadDehradun

# 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, RampurJabalpur - 482 008

19. Madhya Pradesh Power Transmission Company Ltd. Shakti Bhawan, Rampur Jabalpur - 482 008

20. Madhyapradesh Audyogik KendraVikas Nigam (Indore) Ltd.3/54, Press Complex, Agra-Bombay Road, Indore-452 008

21. Maharashtra State Electricity Distribution Co. Ltd. Hongkong Bank Building, 3rd Floor M.G. Road, Fort, Mumbai-400 001

22. Maharashtra State Electricity Transmission Co. Ltd. Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400 051

23. Gujarat Urja Vikas Nigam Ltd.



Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007

24. Gujarat Energy Transmission Corporation Limited Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007

25. Electricity Department Govt. Of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa - 403 001

26. Electricity Department Administration Of Daman & Diu Daman - 396 210

27. Electricity Department Administration Of Dadra Nagar Haveli U.T., Silvassa - 396 230

28. Chhattisgarh State Electricity Board P.O.Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013

29. Chhattisgarh State Power Transmission Co. Ltd. Office Of The Executive Director (C&P) State Load Despacth Building, Dangania, Raipur – 492 013

ForPetitioner: ShriRakesh Prasad, PGCIL

Shri S.K. Niranjan, PGCIL Shri V.P. Rastogi, PGCIL Shri S. K. Venkatesan, PGCIL

Shri S. S. Raju, PGCIL



Shri B. Dash, PGCIL ShriAmitYadav, PGCIL

For respondent:

Shri R.B. Sharma, Advocate, BRPL& BYPL ShriMohitMudgal, Advocate, BRPL & BYPL

#### **ORDER**

Power Grid Corporation of India Limited (PGCIL) has filed this petition for approval of Transmission Tariff for Asset: 400Kv D/C (Quad) Kurukshetra-Jind TL alongwith associated bays under "Transmission System Strengthening in WR-NR Transmission Corridor for IPPs in Chhattisgarh"from DOCO to 31.3.2019 for 2014-19 period in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

- 2. The petitioner has made the following prayer:-
- a) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per petition.
- b) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
- c) Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7
   (i) of Regulation 7 CERC (Terms and Conditions of tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.
- d) 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 Page 5

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.

- e) 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.
- f) 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.
- g) 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.
- h) Allow the approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards
- i) Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (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.

- j) Allow the petitioner to recover FERV on the foreign loan deployed as provided under clause 50 of the Tariff Regulation, 2014.
- 3. The scheme was agreed by the NR constituents on connectivity and Long term access in 31<sup>st</sup> Standing Committee meeting of NR held on 2.1.2013. The scope of the scheme was discussed and agreed in 17<sup>th</sup> meeting of WR constituents regarding LTOA application in WR/35<sup>th</sup> meeting of Standing Committee on Power system planning in WR held on 3.1.2013. The scheme has also been agreed in the 22<sup>nd</sup> WRPC meeting held on 26.2.2013.
- 4. The Investment approval and expenditure sanction to the transmission project was accorded by Board of Directors of POWERGRID in its 303<sup>rd</sup> meeting held on 21.6.2014 and the same was conveyed vide Memorandum dated 24<sup>th</sup> June 2014 at an estimated cost of ₹5151.37 crore including an IDC of ₹278.75 crore based on February 2014 price level.
- 5. The scope of work covered under "Transmission System Strengthening in WR-NR Transmission Corridor for IPPs in Chhattisgarh" in Northern Region& Western Region is as follows:

**Transmission Line:** 

- (i) Kurukshetra (NR)- Jind 400 kV D/C (Quad) line: 95 km Substation:
- (i) Extension of Champa substation
  - ±800 kV HVDC station



- Upgradation of existing ± 800 kV HVDC converter station of 3000 MW capacity at Champa Pooling Station to 6000 MW capacity
- (ii) Extension of Kurukshetra Substation
  - ±800 kV HVDC station
    - Upgradation of existing ± 800 kV HVDC converter station of 3000 MW capacity at Champa Pooling Station to 6000 MW capacity
    - 400 kV AC Substation
    - 400 kV Line Bays: 2 nos.
- (iii) Extension of 400/220 kV Jind Substation
  - 400 kV Line Bays: 2 nos.
- 6. Annual Fixed Cost was granted for the instant transmission asset vide order dated 13.2.2018 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges.
- 7. The details of the transmission charges claimed by the petitioner vide affidavit dated 28.12.2017 as under:-

(₹in lakh)

Particulars	Ass	et
	2017-18 (pro-rata)	2018-19
Depreciation	405.62	1433.79
Interest on Loan	362.16	1222.43
Return on Equity	467.43	1652.63
Interest on Working Capital	32.90	114.05
O&M Expenses	114.12	384.76
Total	1382.23	4807.66

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



(₹in lakh)

Particulars	Asset		
	2017-18	2018-19	
	(pro-rata)		
Maintenance Spares	31.03	32.06	
O&M expenses	55.86	57.71	
Receivables	751.74	801.28	
Total	838.63	891.05	
Interest	107.34	114.05	
Rate of Interest	12.80%	12.80%	

9. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as the Act). 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. Madhya Pradesh Power Management Co. Ltd (MPPMCL), Respondent No. 18, has filed reply vide affidavit dated 13.3.2018. MPPMCL has raised issue of additional capitalization, GST and wage revision etc. The petitioner has filed rejoinder dated 23.3.2018 to the reply of MPPMCL. UPPCL, Respondent No. 9, has raised issue of Additional Capitalization, floating rate etc vide reply dated 25.4.2018. The petitioner has filed rejoinder dated 8.6.2018 to the reply of UPPCL. BRPL, Respondent No. 12, has raised issue of TSA, time overrun, filing fee etc. vide reply dated 13.9.2018. The petitioner has filed rejoinder dated 14.9.2018 to the reply of BRPL. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

- 10. Further, queriesraised in Commission's order dated 7.5.2018 were replied by the petitioner vide affidavit dated 16.5.2018.
- 11. The petitioner's submission vide affidavit dated 28.12.2017, 23.3.2018, 18.4.2018, 16.5.2018, 8.6.2018, 11.9.2018, 14.9.2018 and replies from the respondents vide affidavit dated 13.3.2018, 25.4.2018, 13.9.2018 have been considered while determining the tariff in the petition. Accordingly, we proceed to determine the tariff of the asset in terms of the provisions of the 2014 Tariff Regulations.

## **Date of Commercial Operation ("COD")**

- 12. The petitioner vide affidavit dated 23.5.2018 has submitted that the asset has been commissioned and the date of the commercial operation of the said transmission asset is 11.12.2017. The petitioner has submitted CEA certificate dated 14.11.2017 and 17.11.2017 under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010,RLDC certificate dated 15.1.2018 issued by NRLDC in support of the claim of commercial operation in accordance with Regulation 6.3A (5) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 which indicates the completion of successful trial operation. The petitioner has also submitted the CMD certificate vide affidavit dated 23.3.2018.
- 13. Accordingly, taking into consideration the RLDC certificate, CEA certificate and CMD certificate for the instant asset, the COD of the asset under consideration

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is approved as 11.12.2017 and has been considered for the purpose of tariff computation from COD till 31.3.2019.

## <u>Transmission Service Agreement (TSA):</u>

- 14. As regards TSA, BSES Rajdhani Power Limited (BRPL) vide affidavit dated 13.9.2018 has submitted that as per Regulation 3(63) of the 2014 Tariff Regulations, TSA means the agreement between transmission licensee 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. In response, the petitioner vide affidavit dated 14.9.2018 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.
- 15. 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;"
- 16. Regulation 13 of the 2010 Sharing Regulations are also quoted 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."

Thus, 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.

17. 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 ISTS licensee, 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 License 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."
- 18. The petitioner has submitted that the DICs are intimated about the COD of the new ISTS and are included in the Schedule 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.

#### **Time Overrun**

19. As per the investment approval, the scheduled completion time is within 45 months from the date of investment approval. The date of investment approval is 21.6.2014. Hence, the commissioning date comes to 20.3.2018 against which, the



instant asset has been put to use w.e.f. 11.12.2017. Hence, there is no time overrun in the asset.

SI.	Asset	Time	Investment	SCOD	COD Date	Delay
No.		line	Approval date			
1	Asset: 400Kv D/C (Quad) Kurukshetra-Jind TL alongwith associated bays	45 months	21.6.2014	20.3.2018	11.12.2017 (Actual)	Nil

# **Capital Cost**

20. The details of capital cost claimed by the petitioner in terms of the auditor's certificate dated 24.3.2018 (submitted vide affidavit dated 18.4.2018) as on actual COD and the estimated additional capital expenditure projected to be incurred for the said transmission asset is summarized below:-

(₹ in Lakhs)

Apportioned	Expenditure	Proje	ected Exp. f	Estimated Completion	
Approved Cost	Up to DOCO	2017-18	2018-19	2019-20	Cost
30635.20	24826.73	1513.53	2157.08	555.96	29053.30

## **Cost Variation**

21. As compared with apportioned approved cost, the estimated completion cost is well within the apportioned approved cost hence there is no cost overrun. The petitioner in its petitionhas provided reasons for variation in the estimated completion cost and approved cost:-



- Increase of ₹5.94 Cr in Preliminary Investigation, Right of way, forest clearance,
   PTCC, general civil works etc. and is as per actual.
- ii. Increase of ₹5.86 Cr in transmission line material due to quantity variation between FR and as per actual site condition and also due to price variation based on price quoted by the bidder in competitive bidding.
- iii. Increase of ₹1.85 Cr in Substation equipment is due to price variation based on price quoted by the bidder in competitive bidding.
- iv. Decrease of ₹3.38 Cr in taxes and duties of transmission line material and Decrease of ₹4.74 Cr in taxes and duties of Substation equipment is on actual basis.
- v. Decrease of ₹14.96Cr in Overheads and decrease of ₹10.66 Cr in IDC is on actual basis
- vi. There is increase/decrease in award cost received in competitive bidding compared to initial estimates (FR cost). For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.
  - 22. We have considered the submissions of the petitioner. The cost variation is beyond the control of the petitioner since it was obtained through competitive bids. Further, the total estimated completion cost is within the FR cost and hence, the

cost variation is approved.

# **Interest During Construction (IDC)**

- 23. The petitioner has claimed IDC of ₹606.91lakh respectively. The IDC on cash basis up to COD has been worked out on the basis of the loan details given in Form-9C. It has been submitted by petitioner that there has not been any default in the payment of interest. Further, the petitioner has submitted the statement showingdischarged of IDC liability as on COD and thereafter.
- 24. The IDC considered as on COD for the purpose of tariff determination is as below:-

# (₹inlakh)

Asset	IDC claimed	IDC disallowed (on account of time overrun not condoned)	IDC disallowed (Un-discharged liability)	IDC allowed (As on COD)
Asset	606.91	0	522.29	84.32

<sup>\*</sup>Out of the total IDC of₹522.29 lakhs, ₹111.50 lakhs to be discharged during 2017-18 &₹411.09 lakhs to be discharged during 2018-19. The un-discharged liability towards IDC has been considered in the additional capitalization of respective years.

## **Incidental Expenditure During Construction (IEDC)**

- 25. The petitioner has claimed ₹858.35lakhs, in respect of instant asset. The petitioner has claimed IEDC as on COD, which is within 5% of hard cost as indicated in the abstract cost estimate of approved cost.
- 26. The IEDC claimed and allowed are as follows:-

## (₹in lakh)

Asset	IEDC Claimed	IEDC disallowed	IEDC Allowed (as on COD)
Asset	858.35	0.00	858 35



### **Initial spares**

- 27. The Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system and has been dealt with accordingly.
- 28. MPPMCL vide affidavit dated 13.3.2018 has submitted that the initial spares claimed by petitioner is higher than cost allowed in regulation and same shall be restricted to the limit as mentioned in regulation, after computation of admissible completion cost by applying prudence check. In response, petitioner filed its rejoinder dated 23.3.2018 and submitted that initial spare claimed are within the limit as per Tariff Regulation, 2014.
- 29. We have considered the submissions submitted by the petitioner and MPPMCL. The initial spares are allowed as provided under Regulation 13 of the 2014 Tariff Regulations. The details of initial spares claimed and allowed are as follows:

Asset	Plant & Machinery Cost as on cut-off date	Total capital after IDC/IEDC deduction	Spares claimed	Proportionate Spares claimed	Ceiling limit	Spares worked out	Excess claimed
	а	b	С	d=b*c/a	e	f=((b- d)*e)/(100 -e)%	
Asset (S/s)	5522.80	0.00	161.08	0.00	6.00%	342.23	Nil
Asset (TL)	21790.79	0.00	199.00	0.00	1.00%	218.10	Nil

<sup>\*</sup>Plant & machinery cost excluding IDC, IEDC, Land Cost & Cost of Civil works

# Capital Cost allowed as on COD

30. Based on the above, the capital cost allowed as on COD under Regulation Page 17



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9(2) of the 2014 Tariff Regulationsis summarized as under:-

### (₹in lakh)

Assets	Capital Cost as on COD (A)	IDC disallowed as on COD (B)	IEDC Disallowed as on COD (C)	Excess Initial Spares disallowed as on COD (D)	Capital Cost as on COD considered for tariff calculation (E)=(A)-(B+C+D)
Asset	24826.73	522.59	0.00	0.00	24304.14

# **Additional Capital Expenditure (ACE)**

- 31. Projected additional capital expenditure have been dealt in line with Clause(1) of Regulation 14 of the 2014 Tariff Regulations
- 32. The cut-off date for the instant asset is 31.3.2020.
- 33. The petitioner has claimed ACE as per Auditor's certificate dated 24.03.2018. In addition, the petitioner has also claimed the discharge of IDC liability for 2017-18,2018-19 in respect of asset as ACE. Further the petitioner has claimed the entire ACE under Regulation 14(1) without specifying the sub-clause of the regulation. The ACE claimed by the petitioner is summarized in the table below:-

#### (₹in lakh)

Asset	2017-18	2018-19	2019-20
Asset	1625.03	2568.17	555.96
	(1513.53+*111.50)	(2157.08+*411.09)	

<sup>\*</sup>Discharge of IDC added in respective year

34. MPPMCL vide affidavit dated 13.3.2018 has submitted that petitioner has claimed the additional expenditure without providing proper details and justification and such claims of the petitioner may only be allowed in true-up when it comes up with actual numbers. In response, petitioner filed its rejoinder dated 23.3.2018 and submitted that add-cap is mainly on account of balance and retention payments as covered under Regulation 14(1)(i) and same may be allowed.



- 35. We have considered the submissions submitted by petitioner and MPPMCL. The date of commercial operation of the instant asset is 11.12.2017. Accordingly, the cut-off date in the case of instant transmission asset is 31.3.2020. The petitioner has claimed additional capital expenditure of ₹1513.537 lakh, ₹2157.08 lakh and ₹555.96 lakh during FY 2017-18, FY 2018-19 and FY 2019-20 respectively. The petitioner has submitted that the additional capitalization incurred/projected to be incurred is on account of balance and retention payments covered under Regulation 14(1)(i) of the 2014 Tariff Regulations. The additional capitalization claimed by the petitioner for period 2017-18 of ₹ 1513.53 lakh and ₹ 2157.08 lakh for period 2018-19 is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. However, the additional capitalization for period 2019-20 of ₹ 555.96 lakh is not being considered as the tariff period is ending on 31.3.2019 and same will be considered in tariff period 2019-24 in terms of prevailing regulation at that time.
- 36. The capital cost considered for the purpose of computation of tariff is as follows:-

(₹in lakh)

	Expenditure up to COD	2017-18	2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset	24304.14	1625.03	2568.17	28497.34

## **Debt- equity ratio**

- 37. Debt-equity ratio is allowed for the instant assets in terms of Regulation 19 of the 2014 Tariff Regulations.
- 38. Details of debt-equity in respect of the assets as on the date of commercial



operation i.e. 11.12.2017 and as on 31.3.2019 are asfollows:-

(₹in lakh)

Asset					
Particulars	%	As on COD	As on 31.3.2019		
Debt	70.00	17012.90	19948.14		
Equity	30.00	7291.24	8549.20		
Total	100.00	24304.14	28497.34		

Additional capital expenditure has been considered in the debt-equity ratio of 70:30.

## **Return on equity**

- 39. Return on equity is allowed for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations.
- 40. 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 financialyear.

#### **Additional ROE**

The petitioner vide affidavit dated 18.4.2018 has prayed to allow additional RoE of 0.5% and to include this prayer as part of the petitioner. The petitioner has further submitted that as per para -24(2) of CERC tariff Regulation, 2014, additional RoE of 0.5% is allowed if project is completed within the timeline provided in Appendix-I. Also additional RoE of 0.5% is allowed if any element of the transmission project is completed within the specified timeline and it is certified by the concerned RPC that commissioning of the particular element will benefit the system operation/national grid. Further, in Appendix-I of the 2014 Tariff Regulation, it is provided that in case of a scheme having combination of different types of Page 20



projects, the qualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole. The present scheme consists of  $\pm$  800 kV HVDC station and a 400 kV D/C (Quad) line. Thus the time line of activity having maximum time period i.e.  $\pm$  800 kV HVDC station is taken as base and additional RoE has been claimed in the present petition. The timeline provided by the petitioner is as follows:

Asset	Investment	COD	Time taken	Time to
	approval			qualify for
				additional
				RoE as per
				Appendix-I
Asset	21.6.2014	11.12.2017	41 months	42 months
			20 days	

- 42. Petitioner has submitted that early charging of present asset i.e. 400kV D/C (Quad) Kurukshetra-Jind TL alongwith associated bays was discussed and agreed in 40th NRPC meeting held on 28.10.2017 in view of increase in reliability on account of interconnection between two major sources at Kurukshetra HVDC and 765kV Bhiwani S/S.
- 43. We have considered the submission made by the petitioner. The petitioner has prayed for additional RoE of 0.5% as per 24(2) of the 2014 Tariff Regulations. NRPC in 40<sup>th</sup> NRPC meeting held on 28.10.2017 concurred the proposal of early charging of the 400kV D/C (Quad) Kurukshetra-Jind line. The instant petition covers 400kV D/C (Quad) Kurukshetra-Jind line which has taken more than 41 months forcompletion against the 38 months' time line specified for 400 kV D/C (Quad) line in 24(2) of the 2014 Tariff regulations. The time line of 42 months considered by the

petitioner is for  $\pm$  800 kV HVDC station which is not a part of present petition. Accordingly, we are of the view that additional RoE of 0.5% cannot be allowed for this asset.

44. Wehave computed ROE at the rate of 19.610% for tariff period 2014-19 after grossing up the ROE with MAT rate as per the above Regulation. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossingupof return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE allowed is given below:-

#### **Asset**

(₹in lakh)

		(XIII IAINI
Particulars	2017-18	2018-19
Opening Equity	7291.24	7778.75
Addition due to Additional Capitalization	487.51	770.45
Closing Equity	7778.75	8549.20
Average Equity	7535.00	8163.98
Return on Equity (Base Rate)	15.500%	15.500%
Tax rate (MAT for 2013-14)	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%
Return on Equity (Pre Tax)	449.36	1600.96

#### **Interest on loan**

45. Interest on Loan is allowed for the instant assets in terms of Regulation 26 of



the 2014 Tariff Regulations.

- 46. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner entitlement to interest on loan has been calculated on the followingbasis:-
  - (i) Gross amount of loan, repayment of installments and rate of interest and weighted average rate of interest on actual average loan have been considered as per Form 9C given in the petition;
  - (ii) The normative repayment for the tariff period 2014-19 shall deemed to be equal to the depreciation allowed for that period;
  - (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest onloan.
- 47. Based on the above, interest on loan has been calculated as follows:-

#### **Asset**

(₹ in lakh)

Particulars	2017-18	2018-19
Gross Normative Loan	17012.90	18150.42
Cumulative Repayment up to Prev. year	0.00	402.56
Net Loan-Opening	17012.90	17747.85
Addition due to Additional Capitalization	1137.52	1797.72
Repayment during the year	402.56	1434.25
Net Loan-Closing	17747.85	18111.32
Average Loan	17380.38	17929.59
WARI on Loan	6.8001%	6.8189%
Interest	359.42	1222.61

### **Depreciation**

48. Depreciation is allowed for the instant assets in terms of Regulation 27 of the



2014 Tariff Regulations.

- 49. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-III to the 2014 TariffRegulations.
- 50. Based on the above, the depreciation has been considered asfollows:-

#### **Asset**

(₹ in lakh)

Particulars	2017-18	2018-19
Opening Gross Block	24304.14	25929.17
Projected Addition during 2014-19	1625.03	2568.17
Closing Gross Block	25929.17	28497.34
Average Gross Block	25116.66	27213.26
Rate of Depreciation	5.27%	5.27%
Depreciable Value	22604.99	24491.93
Remaining Depreciable Value	22604.99	24089.36
Depreciation	402.56	1434.25

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

51. As per Regulation 29(4) of the 2014 Tariff Regulation, the normative O&M Expenses specified for the instant transmission assets are as under:-

Element	2017-18	2018-19
D/C (Bundled conductor with four or more sub-conductors) transmission line (₹ lakh/KM)	1.171	1.210
M/C (Bundled conductor with four or more sub-conductors) transmission line (₹ lakh/KM)	2.055	2.123
400 kV bays (₹ lakh/bays)	66.51	68.71
400 kV bays (GIS)-₹ lakh/bays)	56.84	58.73

52. The O&M Expenses claimed by petitioner are as under:

(₹in lakh)

Particulars	2017-18	2018-19
O&M Expenses	114.12	384.76

53. The petitioner has submitted that O&M Expenses for the tariff 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.

- 54. MPPMCL vide affidavit dated 13.3.2018 and BRPL vide affidavit dated 13.9.2018 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 2014 Tariff Regulations. In response, the petitioner filed its rejoinder dated 23.3.2018 and reply dated 14.9.2018 and submitted that the wage revision of the employees of the petitioner 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 is binding on the petitioner and hence it would approach the Commission for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike from 1.1.2017 onwards.
- 55. We have considered the submissions both by petitioner and MPPMCL. The
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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. Accordingly, the O&M Expenses allowed is given as under:-

(₹in lakh)

Element	2017-18	2018-19
	(pro-rata)*	
98.11KM Kurukshetra-Jind D/C (Bundled conductor	111/365x1.171X98.11	1.210x98.11
with four or more sub-conductors) transmission line	=34.93	= 118.71
5.26 KM Kurukshetra-Jind M/C (Bundled conductor	111/365x 2.055x5.26	2.123x5.26
with four or more sub-conductors) transmission line	=3.28	= 11.16
2 nos. 400 kV bays (Conventional)	111/365x66.51X2	68.71x2
	=40.45	= 137.42
2 nos. 400 kV bays (GIS)	111/365x56.84x2	58.73x2
	=34.57	=117.46
Total O&M Expenses Allowed	113.23	384.75

<sup>\*</sup>Pro-rata has been considered from 11.12.2017 to 31.3.2018=111 days

- 56. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition.
- 57. We have considered the submissions made by the petitioner MPPMCL. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff

# Regulations

- 58. The petitioner vide affidavit 18.4.2018 has claimed the O&M Expenses for 2014-19 period.
- 59. We have considered the submissions of the petitioner. The O&M Expenses have been allowed as under:-

(₹ in lakh)

Element	2017-18	2018-19
Total	113.23	384.75

# **Interest on working capital**

- 60. Interest on working capital is allowed for the instant assets in terms of Regulation 28 of the 2014 Tariff Regulations.
- 61. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussedhereunder:-

#### (i) 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 beingallowed, receivables have been worked out on the basis of 2 months' transmission charges.

#### (ii) Maintenancespares

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

# (iii) O & Mexpenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

# (iv) Rate of interest on workingcapital

The rate of interest on working capital considered is 12.80% (SBI Base Rate of 9.30% as on 1.4.2016 plus 350 basispoints).

62. The interest on working capital as determined is shown in the table given below:-

#### **Asset**

(₹ in lakh)

Particulars	2017-18	2018-19
Maintenance Spares	55.85	57.71
O & M expenses	31.03	32.06
Receivables	743.65	792.58
Total	830.53	882.36
Interest	32.33	112.94

# **Transmission charges**

63. The transmission charges being allowed for the assets are asfollows:-

#### **Asset**

(₹ in lakh)

Particulars	2017-18	2018-19
Depreciation	402.56	1434.25
Interest on Loan	359.42	1222.61
Return on Equity	449.36	1600.96
Interest on Working Capital	32.33	112.94



O & M Expenses	113.23	384.75
Total	1356.90	4755.50

## Filing fee and the publication expenses

64. The petitioner has sought reimbursement of fee paid by it for filing thepetition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing feesand 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.

#### License fee and RLDC Fees and Charges

65. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that 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 TariffRegulations.

#### Service tax

66. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. Accordingly, the transmission charges is exclusive of service tax and the same shall be borne and additionally paid by the

respondents to the petitioner, if at any time service tax on transmission is withdrawn from negative list in future. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

# **Deferred tax liability**

67. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when the same gets materialized. However, since, the COD of the asset is in 2017, the claim of the petitioner is notadmissible.

# **Sharing of Transmission Charges**

- 68. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.
- 69. This order disposes of Petition No.58/TT/2018.

Sd/-(Dr. M.K.lyer) **Member**  Sd/-(P.K.Pujari) **Chairperson**