

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.244/TT/2018

Coram:

Shri P.K. Pujari, Chairperson

Dr M. K. Iyer, Member

Shri I.S. Jha, Member

Date of Order: 25.04.2019

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 31.03.2019 for Asset-I: Chittorgarh – Ajmer 765 KV D/C line along with associated bays and 240 MVAR Switchable Line reactors at both end under “Green Energy Corridors: Inter State Transmission Scheme (ISTS)-Part-B” in Northern Region.

And in the matter of

Power Grid Corporation of India Limited

"Saudamini", Plot No.2,

Sector-29, Gurgaon -122 001

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005 (Rajasthan)
2. Ajmer Vidyut Vitran Nigam Ltd.
132 Kv, Gss Rvpnl Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)
3. Jaipur Vidyut Vitran Nigam Ltd.
132 Kv, Gss Rvpnl Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)
4. Jodhpur Vidyut Vitran Nigam Ltd.
132 Kv, Gss Rvpnl Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)



5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building
Shimla-171 004 (Hp)
6. Punjab State Power Corporation Ltd.
Thermal Shed Tia, Near 22 Phatak,
Patiala - 147 001
7. Haryana Power Purchase Centre
2 Nd Floor, Shakti Bhawan, Sector-6
Panchkula-134 109 (Haryana)
8. Power Development Deptt., J&K
Janipura Grid Station,
Jammu (Tawi)-180 007
9. Uttar Pradesh Power Corporation Ltd.(UPPCL),
10th Floor, Shakti Bhawan Extn,
14, Ashok Marg,
Lucknow - 226 001 (Up)
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road (Near ITO),
New Delhi-110 002
11. BSES Yamuna Power Ltd,
Shakti Kiran Bldg., Karkardooma,
Delhi-110 092.
12. BSES Rajdhani Power Ltd (BRPL),
BSES Bhawan, Nehru Place,
New Delhi
13. Tata Power Delhi Distribution Limited (TPDDL),
33 Kv Substation Bldg., Hudson Lane, Kingsway Camp
Delhi – 110009
14. Chandigarh Administration
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Roaddehradun.



16. North Central Railway
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

Parties present:

- For Petitioner: Shri S.K.Niranjan, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri S.S.Raju, PGCIL
Shri S.K. Venkatesh, PGCIL
Shri B.Dash, PGCIL
Smt Anshul Garg, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Kashish Bhambhani, PGCIL
- For Respondent: Shri R.B. Sharma, Advocate, BRPL
Shri Mohit Mudgal, Advocate, BRPL

ORDER

The petitioner, Power Grid Corporation of India Ltd. (PGCIL) has filed the present petition seeking approval of transmission tariff for Asset-I: Chittorgarh – Ajmer 765 KV D/C line along with associated bays and 240 MVAR Switchable Line reactors at both end under “Green Energy Corridors: Inter State Transmission Scheme (ISTS) - Part-B”.

2. The petitioner has made the following prayers:-
 - (i) Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.
 - (ii) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.
 - (iii) 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.



- (iv) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of the Tariff Regulations, 2014.
- (v) Approve the Additional ROE as claimed in the Petition.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) Allow to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards.
- (x) 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.
- (xi) 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.
- (xii) 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.

Background:

3. The Investment Approval (IA) for implementation of “Green Energy Corridors: Inter State Transmission Scheme (ISTS) - Part B” was accorded by the Board of Directors of the petitioner in its 313th meeting held on 17.4.2015 (communicated vide its Memorandum No. C/CP/GEC:ISTS Part B dated 22.4.2015) at an estimated cost of ₹ 3705.61 crores including Interest During Construction of ₹ 199.94 crores based on December, 2014 price level. As per the investment approval dated 22.4.2015, the instant asset was scheduled to be put into commercial operation within 36 months



from the date of investment approval, i.e., by 16.4.2018. The petitioner has claimed that the asset was put into commercial operation on 30.12.2017.

4. The project “Green Energy Corridors: Inter State Transmission Scheme (ISTS)- Part B” was discussed and agreed in 32nd Standing Committee meeting on Transmission System planning of Northern Region held on 31.08.2013. Further the scheme was also discussed in the 29th & 40th meeting of Northern Regional Power Committee (NRPC) meetings held on 13.09.2013 & 11.01.2018 respectively.

5. The Commission vide Order dated 31.12.2018 allowed the provisional tariff in the instant petition as under:

“After carrying out preliminary prudence check of the AFC claimed by the petitioner and there being no time and cost over-run, the Commission has decided to allow tariff in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations as given in paragraph 7 of this order. The issues raised by BRPL will be considered at the time of final order.

xxx

xxx

B. Annual transmission charges allowed are given below:-

(₹ in lakh)	
2017-18 (pro-rata)	2018-19
3291.47	13906.08

8. The tariff allowed in this order shall be applicable from the actual COD of instant asset and the billing, collection and disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended from time to time. Further, the transmission charges allowed in this order shall be subject to adjustment as per Regulation 7(7) of the 2014 Tariff Regulations.”



Scope of Work:

6. The scope of work of the transmission elements covered under the transmission system are broadly as follows:-

Transmission Lines

- i. Banaskanta – Chittorgarh (New) 765 kV D/c line – **285 km**
- ii. Chittorgarh (New) –Ajmer (New) 765 kV D/c line – **199 km**
- iii. Banaskanta - Sankhari 400 kV D/c Line – **26 km**

Substation

a) 765/400/220kV Banaskanta Substation (New)

765kV

- | | |
|---|----------|
| – Line Bays | : 2 nos. |
| – Transformer bays | : 2 nos. |
| – 1500MVA, 765/400kV transformer | : 2 nos. |
| – 330 MVAR Switchable Line reactor bays | : 2 nos. |
| – Bus reactor bay | : 1 no. |
| – 330 MVAR Bus reactor | : 1 no. |
| – 330 MVAR Switchable Line reactors | : 2 nos. |

400kV

- | | |
|---------------------------------|----------|
| – Line Bays | : 2 nos. |
| – Transformer bays | : 4 nos. |
| – 500MVA, 400/220kV transformer | : 2 nos. |
| – Bus reactor bay | : 1 no. |
| – 125 MVAR Bus reactor | : 1 no. |

220kV

- | | |
|--------------------|----------|
| – Transformer bays | : 2 nos. |
| – TBC Bay | : 1 no. |
| – Bus Coupler Bay | : 1 no. |

b) 765/400kV Chittorgarh (New) Substation Extn.

765kV



- Line Bays : 4 nos.
- 240 MVAR Switchable Line reactor : 4 nos.

c) 765/400kV Ajmer (New) Substation Extn.

765kV

- Line Bays : 2 nos.
- 240 MVAR Switchable Line reactor : 2 nos.

d) 400/220kV Sankhari (GETCO) Substation Extn.*

400kV

- Line Bays : 2 nos.

*** Note:** Bay Extn. work at these Substations to be carried out by GETCO on Deposit work basis for POWERGRID.

Reactive Compensation

• **Bus Reactors**

S. No.	Bus	Reactor (MVAR)
1	765/400/220kV Banaskanta (Gujarat)	1X330 MVA _r (765kV) 1x125 MVA _r (400kV)

• **Line Reactors**

S. No.	Transmission Lines		
	Gujarat		
		From end (each ckt)	To end (each ckt)
1	Banaskanta – Chittorgarh 765kV D/C	1x330 (Switchable) (each ckt.)	1x240 (Switchable) (each ckt.)
	Rajasthan		
1	Chittorgarh – Ajmer (New) 765kV D/C	1x240 (Switchable) (each ckt.)	1x240 (Switchable) (each ckt.)



7. The scope of the instant petition covered under the project is as under:

Name of Asset	Schedule Commissioning as per IA	COD	Transmission Tariff approval prayed for
Asset-1: Chittorgarh – Ajmer 765 KV D/C line along with associated bays and 240 MVAR Switchable Line reactors at both end	16.4.2018	30.12.2017	DOCO to 31.03.2019
Remaining Assets	16.4.2018	-	Shall be claimed by filing separate petition.

8. Petitioner has submitted the DOCO Letter, RLDC Certificate dated 12.1.2018, CEA Certificate dated 11.12.2017 & CMD certificate dated 6.2.2018 for Asset-I along with the petition.

9. The petition was heard on 31.12.2018 and 19.2.2019. The Commission (vide RoP dated 31.12.2018 and 19.2.2019) also directed the petitioner to submit additional information on affidavit. The information sought for has been furnished by the petitioner vide affidavit dated 15.1.2019 and 13.3.2019.

10. The petitioner has claimed the Annual Transmission Charges (ATC) for the asset as follows:-

(₹ In lakh)

Sl. No	Name of the asset	2017-18 (pro-rata)	2018-19
1	Asset-I	3872.32	16360.09



11. The petitioner has claimed the Interest on Working Capital as follows:

(₹ In lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	148.82	153.77
O&M expenses	82.68	85.43
Receivables	2527.20	2726.68
Total	2758.70	2965.88
Interest	90.18	379.63
Rate of Interest	12.80%	12.80%

12. 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. 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 Act.

Submissions of the Petitioners in the pleadings and during the hearings

13. During the hearing on 31.12.2018, the representative of the petitioner submitted that all the relevant documents/information required to be filed under 2014 Tariff Regulations have been furnished.

14. The petitioner has submitted that in case of the instant asset there is neither any cost over-run nor time over-run. The information sought has been furnished vide affidavit dated 15.1.2019. Petitioner further submitted that it has filed rejoinder to the replies of UPPCL and BRPL and prayed that the tariff as claimed in the petition may be granted.



15. The petitioner has submitted that the Commission vide order dated 12.12.2018 in Petition No. 160/TT/2018 observed that in terms of Regulation 13 of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 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.

16. The petitioner has also furnished the additional information regarding Cash IDC statement along with the drawl details of the Foreign Loans vide affidavit dated 15.1.2019. The petitioner in its affidavit dated 13.3.2019 has submitted that in Form 5D (sic.9D) enclosed with the petition it has been inadvertently mentioned US\$ instead of EURO. The Loan is KfW loan drawn in EURO. Enclosing the revised Form 5D (sic.9D), the petitioner has prayed to condone the inadvertent error.

Submissions of the Respondents in the pleadings and during the hearings

17. Respondent No. 12, BRPL, submitted that the petitioner has not submitted the TSA and hence it is difficult to find out who are the beneficiaries of the instant asset. BRPL also submitted that the petitioner has not given any information about the OPGW links.

18. The respondent further submitted that the petitioner's claim for additional return of 0.5% on equity for early COD is not maintainable as RoE is applicable only on the completion of the whole project within a specified time period and in the



instant case, the petitioner has not completed all the elements of the scheme contained in the investment approval.

19. The respondent, BRPL, has submitted that before the 32nd SCM, the petitioner had claimed that renewable capacity of 8100 MW in Rajasthan and 8300 MW in Gujarat is anticipated to come up and accordingly the petitioner had proposed strengthening of the existing transmission system. The petitioner has simply stated that transmission charges will be shared in terms of Regulation 43 of the 2014 Tariff Regulations without identifying the beneficiaries for the renewable capacity of 8100 MW in Rajasthan and 8300 MW in Gujarat. He submitted that incomplete information has been furnished by the petitioner.

20. The Respondent, BRPL, vide affidavit dated 30.11.2018, has raised issue of Cost Variation, TSA, Additional RoE, Optical Ground Wire (OPGW), effective tax rate, wage revision, reimbursement of expenditure towards filing fee, license fee etc. BRPL submitted that the petitioner has not mentioned the effective tax rate for each year of tariff period for all the assets. The petitioner may be directed to furnish details in the working of effective tax rate along with tax audit report for financial year 2014-15 and the reasons for opting MAT. The petitioner may also be directed to submit the details of deferred tax liability and its treatment in the books of account for the period 2014-19. Since the petitioner is entitled for Tax Holiday for new transmission project, the petitioner may be directed to supply the information from the date the petitioner intends to claim the benefits of section 80 IA of the Income Tax Act, 1961.

21. Respondent No. 9, UPPCL, vide affidavit dated 9.10.2018, has raised the



issue of Cost variation, Additional ROE, IOL, wage revision and Add. Cap. details.

22. We have heard the learned counsels for the Petitioners and the Respondents and after considering petitioner's petition and affidavits dated 2.8.2018, 7.12.2018, 12.12.18, 15.1.2019 and 13.3.2019 and respondents' affidavits dated 9.10.2018 & 30.11.18. Based on the above, we proceed to decide the petition in the succeeding paragraphs.

23. The Commission observes that the petitioner has made the application as per Annexure-I of the 2014 Tariff Regulations. The petitioner has also complied with the requirements of 2004 Regulations, such as service of the copy of the application on the beneficiaries, publication of notice and web hosting of the application, etc. Accordingly, this Commission allowed the provisional tariff vide Order dated 31.12.2018 as per proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for the purpose of inclusion in POC charges in accordance with the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses), Regulation, 2010.

Date of Commercial Operation (DOC0)

24. The petitioner claimed actual date of commercial operation of Asset-I as 30.12.2017 in its petition. Petitioner has submitted RLDC charging certificate, CEA clearance certificate, CMD certificate and DOC0 letter for the instant asset in its original petition.

25. Petitioner has submitted the details of Power flow of 765 kV Ajmer-Chittorgarh



T/L vide its rejoinder affidavit dated 7.12.2018 in reply to UPPCL affidavit. Therefore, the date of commercial operation of Asset-I is approved as 30.12.2017. Petitioner has also submitted Auditor certificates for this asset along with tariff forms in its original petition.

Capital Cost

26. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

- (a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Increase in cost in contract packages as approved by the Commission;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*
- (e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*
- (f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39*
- (g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*
- (h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”*

27. The petitioner has submitted the Auditor Certificate dated 14.3.2018 on actual COD of 30.12.2017 along with the tariff forms for Asset-I along with the petition. The details of approved apportioned cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be



incurred during 2017-18, 2018-19 and 2019-20 along with estimated completion cost for the instant asset covered in the petition as claimed by the petitioner and considered for the purpose of computation of tariff are as under:-

(₹ in lakh)

Asset	Appor- tioned Approved Cost (FR)	Exp. Up to DOCO	Proposed Exp. For FY 2017-18	Proposed Exp. For FY 2018-19	Estimated completi on Cost	Spares	
						S/Stn.	TL
Asset-I	138577.14	98755.24	9384.74	9193.62	117333.61	535.00 (3.63%)	948.50 (0.99%)

28. Petitioner has also submitted the revised FR apportioned approved cost along with Revised Forms (Form 5, Form 4C, Form 4A, Form 6 & Form 7) vide affidavit dated 7.12.2018. Petitioner has revised apportioned cost (₹ 129279.87 Lakhs) due to inadvertent error in apportionment of IDC value from FR .

29. We have considered the submissions of the petitioner. It is observed that the petitioner has submitted the apportioned approved cost and estimated completion cost claimed for all the assets. It is observed that estimated completion cost for all the assets is within the FR apportioned approved cost.

Cost Over-Run/Variation

30. As compared with apportioned approved cost, there is cost under run in this asset. The petitioner in its original petition, its rejoinders dated 7.12.2018, in response to affidavits of BRPL and UPPCL, has submitted the reasons of cost overrun variation along with Form-5 with detailed item-wise cost variation. The petitioner has made following submissions:



Reasons for Cost Variation:

a) Against the total apportioned approved cost as per FR of ₹ 1385.77 Cr., the estimated completion cost is ₹ 1173.33 Cr. Hence, there is a cost variation of ₹ 212.43 Cr. as compared to FR cost which mainly due low is bid price received through competitive bidding. However, item wise cost variation details are given in Form-5. Further, justification of cost variation on major heads is as under:

i) **Tower Steel & Insulators (Cost Variation of about ₹ 22.18 Cr.):** Cost variation is mainly due to decrease of quantity of towers as most of the tension towers envisaged in FR was replaced by suspension towers in actual. Accordingly no. of insulators was also reduced as only one stack is used in suspension tower.

ii) **Preliminary Investigation, ROW, forest clearance, PTCC, general civil works, etc. (Cost Variation of about ₹ 10.81 Cr.):** This variation is mainly due to actual payment made to statutory authorities.

iii) **Conductor & Earthwire accessories, Erection & Civil works including foundation (Cost Variation of about ₹ 41.65 Cr.):** This variation is mainly due to actual high rate in award received through bidding process.

iv) **IDC/IEDC (Cost Variation of about ₹ 156.25 Cr.):** This variation is mainly because of the fact that instant asset got commissioned before scheduled DOCO and cost considered for IDC/IEDC is as per actual expenditure.

b) Further the petitioner submitted that, increase/decrease in award cost



received in competitive bidding w.r.t. initial estimates (FR cost) is mainly due to open competitive bidding route which is followed 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.

c) Petitioner has submitted following additional justification of cost variation vide its rejoinders dated 7.12.2018 in response to respondents' (UPPCL & BRPL) affidavits:

i) With regard to justification of reduction in no. of towers with the increase of line length it is submitted that positive Correlation of line length with vis-a-vis no. of towers does not exist in all the scenarios. In present context, the line length has increased whereas no. of towers has decreased because the average tower span has increased in case of actual deployment w.r.t the tower span envisaged during preparation of DPR. This can be validated from the fact that the no. of tension towers envisaged during FR was 191. However, during actual deployment, the no. of tension towers reduced to 107. From the aforementioned fact, it can be concluded that the actual site conditions were much simpler than envisaged. Therefore, no. of towers got reduced even after increase in line length because of overall increase of tower span.

ii) Further, with regard to cost variation in Conductor and Earth wire, it is submitted that line length for the subject transmission line has been increased from 199 kms to 211.17 kms and awarded price is also higher than the price



envisaged at the time of preparation of FR cost. As per FR, the cost envisaged under this head was ₹ 226.30 Lakhs. However, the actual cost has increased to ₹ 1621.69 lakhs. Further, with regard to cost variation in erection, stringing & civil works including foundation, it is submitted that line length for the subject transmission line has increased from 199 kms to 211.17 kms and also awarded price is higher than the price envisaged at the time of preparation of FR cost.

iii) It is further submitted that FR is prepared based on broad information available about the transmission system and for many of the components. The estimated price is prepared by taking percentage of the main equipment's quantity / cost. However, the final pricing is contingent on the market dynamics. For a particular contract, the comparison happens on the total price and vendor has leverage to increase or decrease costing of a particular item. So comparing item to item is not prudent under the instant circumstances.

iv) Further, with regard to cost variation in certain items of the asset, it is submitted that as per policy of the Petitioner, the bid prices are invited for the complete scope of work on overall basis. The break-up of these prices are for the purpose of on-account payment only. The comparison of prices for a particular package is also done with its cost estimate on overall basis. The provision regarding this policy has been included in the 'Works & Procurement Policy and Procedure', Vol.-I of POWERGRID (para B4.11.3.7) which, inter-alia, stipulates that the qualified bidder, whose bid is determined as the lowest evaluated, techno-commercially responsive and, who is considered to have the capacity and capability to perform the Contract based on the assessment, if carried out, is recommended for award and the recommended price shall be



compared with the approved cost estimate. The comparison is done only between total recommended price and the total cost estimate. Price of individual items is not compared for the above purpose. Here it may also be noted that the procurement framework of POWERGRID, which adopts best procurement practices, has been assessed by the World Bank.

v) In above regard, it may also be mentioned that similar items may not always have the same rate in different contracts awarded during the same period or even within the same contract. The difference of rates may be because of various market forces and the pricing strategies followed by bidder(s) to decide the spread of their total prices over different items. Further, such pricing strategies may be different in case of different bidders and different packages.

vi) As such comparing the prices of individual items would not serve much purpose once the purpose of ensuring the comparative positions of bidder on overall basis gets served during the Evaluation Stage.

vii) In view of the foregoing, it has been submitted that a more realistic approach for analyzing the prices would be to examine the prices for complete FR cost vis-à-vis the actual completed cost of the project instead of analyzing the same on price component-wise basis as the procurement by the Petitioner is done on the overall basis.

viii) For 'Cost Plus' projects undertaken by the Petitioner, the capital cost is discovered through a transparent Open Competitive Bidding process. The Petitioner has also introduced e-reverse auction for all equipment/transmission line procurements except where it is not permitted as per the guidelines of funding agency. Thus, the cost represents the lowest



prices available at the time of bidding of various packages.

ix) In view of the foregoing, petitioner has prayed to allow the tariff based on the cost claimed in the instant petition.

31. We have considered the submissions made the petitioner, BRPL & UPPCL and based on the reasons submitted by the petitioner, the cost variation for this asset is allowed. Details of capital cost considered for Tariff Determination is as under:

Name of the element	Approved Cost (Apportioned)	Exp. Up to act. DOCO	Proposed Exp. For FY 2017-18	Proposed Exp. For FY 2018-19	Estimated completion Cost
Asset I:	129279.87	98334.56	9590.29	9408.75	117333.60

Time over-run

32. As per the investment approval dated 17.4.2015, the instant assets were scheduled to be commissioned within 36 months from the date of investment approval. Accordingly, the scheduled date of commercial operation was 16.4.2018 against which, subject asset covered in the instant petition was commissioned on 30.12.2017. Accordingly there is no time over-run in commissioning of the asset covered in this petition.

Interest During Construction (IDC)

33. As per Auditor Certificates dated 14.3.2018 submitted by the petitioner IDC of



₹ 4627.32 lakh has been claimed for Asset-I. Petitioner has submitted the statement showing discharged of IDC liability as on COD and thereafter. Petitioner has also submitted the drawl details along with the IDC statements for all the assets in its petition and additional information vide affidavit dated 15.1.2019. In affidavit dated 15.1.2019 petitioner has submitted that foreign loan in case of asset-I is as per the following:

Loan	Currency	Asset I (Deployed as on DOCO in Lakhs)
kfw	USD (sic. EURO)	880.245#
	In INR (Exchange Rate on DOCO date : 77.56)	68, 271.80

(# Loans in foreign currency as per Form D submitted along with petition.)

34. The petitioner has submitted that POWERGRID is borrowing its loans as a common pool of loans. In case of Foreign Loans (WB, ADB etc.), these are contracted for a basket of projects. Loans are drawn based on the periodical expenditure incurred for all the projects covered under the loan. Loans get accumulated at every drawl till the total sanctioned limit is drawn. Loans are drawn in the respective foreign currency. Repayment of loan and interest is also done in respective foreign currency. Loans drawn for a specific project is apportioned to the individual elements in proportion to the expenditure of the elements periodically. The actual debt servicing in respect of the foreign loan has to be released to the lender as per schedule of repayment agreed for the loan as a whole consisting of the entire basket of projects. IDC as a whole is allocated to all the various projects covered under the subject loan in proportion to the loans drawn. Interest during construction



allocated to construction project as per policy is kept as a separate item under CWIP and apportioned to the assets being capitalised in proportion to the closing balance of WIP. While the overall IDC/IEDC of the project will remain the same, allocation of IDC is done pro rata to the element matching the allocation of loans up to DOCO.

35. The petitioner has submitted that various tranches of foreign loans drawn during construction phase are converted into INR at the Exchange rate prevailing on DOCO date by CERC to determine the D/E ratio of the element/project subject to overall ceiling of 70:30 permitted under Tariff regulations. While as per the tariff regulations, annual FERV during construction phase is considered as part of capital cost, the exchange rate as on DOCO forms the basis for determination of FERV, post DOCO. The value of the loan is considered in equivalent INR as on DOCO date in Tariff forms. In the statement showing IDC discharged up to DOCO, Exchange rate is considered according to the interest servicing date after DOCO for calculation of IDC discharged subsequent to DOCO (un-discharged as on DOCO). In case of foreign loans, Loan under Kfw is allocated to the project (Asset I). The details of various Domestic Loans deployed in this Asset (Asset I) has been given under the Cash IDC statement submitted for this asset and also given in the respective Forms.

36. Petitioner has also furnished the drawl details of foreign loans which is matching with the Form 9D submitted along with the respective Forms. In compliance of Commission's directions, the petitioner has submitted the additional information vide affidavit dated 13.3.2019 revising the Form 9D. The petitioner in its affidavit dated 13.3.2019 has submitted that in Form 9D enclosed with the petition, it has been inadvertently mentioned US\$ instead of EURO. The Loan is KfW loan



drawn in EURO. The petitioner has prayed to condone the inadvertent error.

37. Petitioner has also furnished the details of IDC for Domestic loans and foreign loans along with the IDC discharged and Accrued IDC discharged subsequent to DOCO as per the following:

Asset	IDC Domes- -tic Loans	IDC Foreign Loans	Total IDC	IDC- Domestic loan Dischar- ged up to DOCO	IDC- Foreign loan Discharged up to DOCO	Accrued IDC Discharged			
						Domestic	Foreign	Domestic	Foreign
₹ in Lakh						2017-18	2017-18	2018-19	2018-19
Asset I	3.27	4624.05	4627.32	0.00	4617.74	0.00	0.00	3.27	6.31
Total	3.37	4624.05	4627.32	0.00	4617.74	0.00	0.00	3.27	6.31

38. The above breakup, showing the IDC discharged subsequent to DOCO has been submitted in the statement along with the petition showing IDC discharged up to DOCO and the Accrued IDC and the year in which the same is discharged.

39. In similar cases with regard to foreign loans, this Commission has passed orders dated 4.9.2018 & 10.12.2018 Petition nos. 245/TT/2017 & 101/TT/2018 respectively. Issues decided in these petitions being similar, the relevant portion of the order dated 10.12.2018 in Petition no. 101/TT/2018 reads as under:

“11. Treatment of IDC

j) As per the petition, the IDC amount mentioned in Auditor certificate of concerned assets are on accrual basis. The claimed IDC consist of foreign and domestic loan.



The petitioner vide ROP dated 24.05.2018 was directed to submit the computation of IDC for the IBRD-V loan. The petitioner vide affidavit dated 26.06.2018 has provided the information which is not sufficient to work out the IDC on foreign loan. However, the petitioner vide affidavit dated 05.11.2018 has submitted the asset wise allocated IDC on foreign loan (including Guarantee Fees). Therefore, in the absence of IDC computation, the asset wise allocated IDC as provided by the petitioner vide affidavit dated 05.11.2018 has been considered.

xxx

xxx

12. FERV

The petitioner has infused foreign loan (i.e. IBRD V) while funding the capital cost of the instant project. The auditor certificate does not mention the amount of FERV included in the claimed capital cost. The petitioner has not mentioned the amount of FERV neither in Form 5B nor in Form 9A. In the absence of the details of FERV, it is difficult to verify the FERV amount included in the capital cost. However, the petitioner vide affidavit dated 05.11.2018 has submitted that the annual FERV during construction phase is considered as part of capital cost, the exchange rate as on DOCO forms the basis for determination of FERV, post DOCO.”

40. In line with the above order, it is observed that the petitioner has calculated IDC on foreign loan and then allocated the same to project/asset in the instant petition. Hence, the asset level IDC computation is not verifiable. The petitioner has submitted the drawl amount of loan in foreign currency and its exchange rate and converted into INR as on COD. This information is useful only for determining the value of foreign loan in INR but not for computation of IDC. Therefore, the IDC mentioned for foreign loan as provided by the petitioner has been considered as it is and is subject to true up. Accordingly, the petitioner is directed to submit, at the time of true up, the IDC calculation of all foreign loans and its allocation to projects/assets and allocation to P&L account so that that documents shall be referred to allow IDC claimed for the concerned projects. We have considered the submissions of the petitioner and entire IDC have been allowed as on COD and in Additional Capitalisation as per the IDC statement submitted by the petitioner. The IDC



considered as on COD for the purpose of tariff determination is as below:-

(₹ in lakh)

Asset	IDC claimed	IDC disallowed (on account of time overrun not condoned)	IDC disallowed (Un-discharged liability)	IDC allowed (As on COD)
Asset-A	4627.32	0.00	9.58	4617.74

Incidental Expenditure During Construction (IEDC)

41. The petitioner has claimed IEDC of ₹ 1613.29 lakhs in respect of Asset-I. The petitioner has claimed IEDC as on COD, which is within the percentage on hard cost as indicated in the abstract cost estimate. In the instant petition, 5% of hard cost is indicated as IEDC in the abstract cost estimate. Hence the entire IEDC claimed by the petitioner is allowed.

Initial spares

42. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

“(d) Transmission System Transmission line: 1.00%

Transmission sub-station (Green Field): 4.00%

Transmission sub-station (Brown Field): 6.00%”

43. The initial spares for transmission line and sub-station claimed by the petitioner is as given below:



(₹ in lakhs)

Sl. No.	Asset Name	Plant & Machinery Cost as on cut-off date	Total capital after IDC/IE DC deduction	Spares claimed	Proportionate Spares claimed	Ceiling limit	% of Spares worked out	Excess Initial Spares
		a	b	c	$d=b*c/a$	e	$f=((b-d)*e)/(100-e)\%$	
1	Asset-I (T/L)	96338.87	96338.87	948.50	948.50	1%	1.00%	NIL
	Asset-I (S/s)	14754.13	14754.13	535.00	535.00	4%	3.63%	NIL

44. Based on the submissions of the petitioner, we observe that the initial spares for Asset-I is within specified limit under Regulation 13, Chapter-4, of the Tariff Regulations 2014 and is, therefore, allowed as claimed in the petition and the same shall be reviewed at the time of Truing up of this petition.

45. Petitioner has also submitted the statement of liability discharged in respect of the Initial Spares for Asset-I as below:

	Amt. in Lakhs
Total Spare Value as per CERC	1483.5
Spare Value Discharged up to DOCO	1072.4
Spare Value to be discharged (01.01.18 to 31.03.18)	205.55
Spare Value to be discharged (01.04.18 to 31.03.19)	205.55



Capital Cost allowed as on COD:

46. The following capital cost as on COD after taking into consideration the allowable IDC , IEDC and initial spare is considered for the computation of tariff for the instant assets :-

(₹ In lakh)

Capital Cost claimed as on COD (a)	Un-discharged IDC as on COD & IDC disallowed (b)	Un-discharged IEDC (c)	Un-discharged Initial Spare as on COD (d)	Capital Cost allowed as on COD [e=[a-(b+c+d)]
98755.24	9.58	0.00	411.10	98334.56

Additional Capital Expenditure (ACE)

47. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities recognised to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in Law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.”

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



“cut-off date” means 31st 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 31st March of the year closing after three years of the year of commercial operation”.

49. Accordingly, the cut-off date for the assets covered in the instant petition is 31.3.2020.

50. The petitioner has claimed ACE as per Auditor Certificate dated 14.3.2018, for Assets I. The petitioner has claimed the entire ACE under Regulation 14(1). Petitioner has also furnished Form 7 vide affidavit dated 7.12.2018 along with form 4A. The ACE claimed by the petitioner upto 31.03.2019 is summarized in the table below:-

(₹ In lakh)	
2017-18	2018-19
9384.74	9193.62

51. The un-discharged IDC as on COD has been allowed as Additional Capital Expenditure during the year of discharge. Accordingly, the Additional Capital expenditure allowed has been summarized as under, which shall be reviewed at the time of true up:-

(₹ In lakh)			
Particulars	2017-18	2018-19	Total Add Cap Allowed
Additional Capitalization Claimed	9384.74	9193.62	18578.36
Add : IDC Discharged	0.00	9.58	9.58
Add : Initial Spare Discharged	205.55	205.55	411.10
Total Add Cap allowed	9590.29	9408.75	18999.04



52. The capital cost considered for the purpose of computation of tariff is as follows:-

(₹ in lakh)				
Asset	Capital cost allowed as on COD	Add Cap for 2017-18	Add Cap for 2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset-I	98334.56	9590.29	9408.75	117333.60

Debt-Equity Ratio

53. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

(i) where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

(iii) any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.

Explanation - *The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.”*

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

54. The petitioner has claimed debt:equity ratio of 70:30 as on the date of commercial operation. Debt:equity ratio of 70:30 is considered as provided in



Regulation 19 of the 2014 Tariff Regulations. The details of debt:equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

Asset-I:

(₹ in lakh)

Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	68834.19	70.00	82133.52	70.00
Equity	29500.37	30.00	35200.08	30.00
Total	98334.56	100.00	117333.60	100.00

Return on Equity

55. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:



the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(iv) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(v) additional RoE shall not be admissible for transmission line having length of less than 50kilometers.

“25. Tax on Return on Equity:

The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

(1) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula givenbelow:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

56. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with



any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

Additional ROE:

57. Petitioner has invoked the provision of Regulation 24 (i) of CERC (Terms and Conditions of Tariff) Regulations, 2014 to grant additional ROE. As per Investment Approval dated 17.4.2015 scheduled DOCO is 16.4.2018 against which the DOCO of Asset-I is 30.12.2017, which is within the time line specified (40 months for new 765 kV D/C T/L in plain Area, i.e., by 23.4.2018) in the 2014 Tariff Regulations for claiming additional ROE of 0.5 %. Petitioner has prayed to allow the additional ROE for assets covered in the instant petition.

58. We have considered the submission of the petitioner and observed that there is no information furnished by the petitioner regarding COD of remaining assets pertaining to the subject Project i.e. "Green Energy Corridors: Inter State Transmission Scheme (ISTS)- Part-B. Therefore, additional ROE for this asset is not allowed. However, same shall be reviewed at the time of truing up when the details regarding remaining assets shall be furnished by the petitioner.

59. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of 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. 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 as follows:-

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Equity	29500.37	32377.45
Addition due to Additional Capitalization	2877.09	2822.63
Closing Equity	32377.45	35200.08
Average Equity	30938.91	33788.77
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	1529.25	6625.98

Interest on loan (IOL)

60. Regulation 26 of the 2014 Tariff Regulations provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:



Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

61. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents.

62. The interest on loan has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest subsequent to the tariff date of commercial operation will be considered at the time of truing-up.

63. Accordingly, Interest on Loan has been worked out as under:-

(i) Gross amount of loan, repayment of instalments and rate of interest on actual average loan have been considered as per the petition;

(ii) *The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; and*

(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 on loan.*

64. Based on above, details of Interest on Loan considered and allowed for the subject Asset are as follows:-



(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	68834.19	75547.40
Cumulative Repayment upto previous Year	0.00	1373.02
Net Loan-Opening	68834.19	74174.37
Addition due to Additional Capitalization	6713.20	6586.13
Repayment during the year	1373.02	5948.91
Net Loan-Closing	74174.37	74811.59
Average Loan	71504.28	74492.98
Weighted Average Rate of Interest on Loan	2.8904%	2.8906%
Interest on Loan	520.93	2153.31

Depreciation

65. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as below:-

"27. Depreciation:

Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:



Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

66. The instant transmission asset was put under commercial operation on 30.12.2017. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

67. In accordance with Regulation 27, the depreciation with respect to the subject Asset is as follows:-

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	98334.56	107924.85
Additional Capital expenditure	9590.29	9408.75
Closing Gross Block	107924.85	117333.60
Average Gross Block	103129.71	112629.23
Rate of Depreciation	5.2820%	5.2819%
Depreciable Value	92816.73	101366.30
Remaining Depreciable Value	92816.73	99993.28
Depreciation	1373.02	5948.91

(₹ in lakh)



Operation and Maintenance Expenses (O&M Expenses)

68. Regulation 29(4) 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. The petitioner in this petition has claimed the O&M Expenses for 2014-19 period as under:

Particulars	2017-18	2018-19
O&M Expenses	253.37	1025.12

69. 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 from 01.01.2017 onwards.

70. BRPL has submitted that any increase in the employee cost due to wage revision must be taken care by increasing the productivity levels of the petitioner company and the beneficiaries should not be burdened over and above the provisions in the 2014 Tariff Regulations. In response petitioner submitted that 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 01.01.2017 onwards.

71. The O&M Expenses norms specified in Regulation 29(4) of the 2014 Tariff Regulations for the instant assets are as follows:-

(₹ In lakh)

Element	2017-18	2018-19
765 KV Sub-station (₹ In lakh per bay)	93.11	96.20
AC (₹ In lakh per km)		
Double circuit (Bundled conductor with four or more sub-conductors)	1.171	1.210

72. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. We have considered the submissions of the petitioner. The O&M Expenses have been allowed as under:-

(₹ in lakh)

Element	2017-18	2018-19
765 KV bays (8 nos.)	$92/365 \times 93.11 \times 8 = 187.75$	$96.20 \times 8 = 769.60$
Chittorgarh-Ajmer 765 KV T/L (211.17 kms)	$92/365 \times 1.17 \times 211.17 = 62.32$	$1.210 \times 211.17 = 255.51$
Total	250.07	1025.11

73. We observe that 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.

Interest on Working Capital (IWC)

74. Clause 1(c) and clause (3) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-



“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29;and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

75. As per 2014 Tariff Regulations the components of the working capital and the interest thereon is mentioned below:-

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.

O & M expenses:

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.

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.

Rate of interest on working capital:

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base Rate Plus 350 bps as on 1.04.2017 (i.e.12.60%) for the Asset covered in the petition has been considered for the instant assets, as the rate of interest on working capital.



76. Accordingly, the interest on working capital is summarized as under:-

Particulars	(₹ in lakh)	
	Asset-I	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	148.82	153.77
O & M expenses	82.68	85.43
Receivables	2485.95	2687.00
Total	2717.45	2926.19
Interest	86.30	368.70

Annual Transmission Charges

77. In view of the above, the annual transmission charges being allowed for the instant asset is summarized hereunder:-

Particulars	(₹ In lakh)	
	Asset-I	
	2017-18 (pro-rata)	2018-19
Depreciation	1373.02	5948.91
Interest on Loan	520.93	2153.31
Return on Equity	1529.25	6625.98
Interest on Working Capital	86.30	368.70
O&M Expenses	250.07	1025.11
Total	3759.58	16122.01

Filing Fee and Publication Expenses

78. 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. BRPL has submitted that filing fee and other expenses may not be allowed. Since the claim is as per the Regulation 52, 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

79. The petitioner has requested to allow it 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

80. 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 have considered the submission of the petitioner. Service tax is not levied on transmission. Further, service tax is subsumed by GST and hence petitioner's prayer is infructuous.

Goods and Services Tax

81. 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 recovering GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. GST is not levied on transmission service at present and we are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

82. BRPL, vide its affidavit dated 30.11.2018 has submitted that the petitioner has not furnished the Transmission Service Agreement (TSA) and as per Regulation



3(63) of the 2014 Tariff Regulations, the petitioner is required to submit the TSA. BRPL has also submitted that there are no identified beneficiaries for the renewable capacity of 8100 MW in Rajasthan or for the matter 8300 MW in Gujarat in Northern region.

83. In response, the petitioner in its rejoinder has submitted that as per clause 8 of Model TSA, signing of TSA is not mandatory. Further, the petitioner has stated that, vide affidavit dated 7.12.2018, it has submitted complete copy of TSA signed by BRPL on 19.8.2011.

84. The petitioner has also submitted that present system was approved as System Strengthening Scheme in 32nd Standing Committee meeting on Power System Planning of Northern Region held on 31.08.2013. Copy of the subject SCM has been submitted along with the petition. The petitioner has submitted that the transmission tariff for the subject assets will be governed by POC mechanism and assets are not identified for particular beneficiaries. It is a pool mechanism and each licensee shall bear the transmission tariff as per provisions of CERC (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010. Accordingly, petitioner has prayed that transmission tariff needs to be shared as per Regulation-43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges are to be recovered on monthly basis and the billing collection and disbursement of Transmission Charges are to be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010.

85. In response to the Commission's directions to the petitioner to submit list of



the beneficiaries of the renewable generating stations who are exempted to pay the charges for the instant asset; who are not exempted to pay the charges; and details of system strengthening scheme linking with the beneficiaries of the lines, if any, the petitioner vide affidavit dated 13.3.2019 has submitted that instant scheme is a system strengthening scheme. Therefore, beneficiaries are governed by All India PoC Pool mechanism.

86. Petitioner has further submitted that instant scheme was discussed and agreed in the 32nd Standing Committee meeting of Northern Region held on 31.08.2013, 36th Standing Committee meeting of Western Region held on 26.09.2013 as well as in respective RPCs. Due to urgent requirement of strengthening for Mundra UMPP/Adani Mundra generation complexes as well as short generation period of Renewables, comprehensive ISTS strengthening was identified. Asset – I is part of the above comprehensive ISTS strengthening scheme under Green Energy Corridors scheme. Therefore, Transmission charges w.r.t. Asset I should be in POC pool.

87. The petitioner has also submitted the details of Connectivity and LTA applications in respect of RE generators received in ISTS along with corresponding Stage-II details at Green Energy Corridor. It has also submitted details of RE Projects which will be feeding power to GEC substation through Solar Park developer/RE power project pooling stations.

88. Further, petitioner vide affidavit dated 13.3.2019 has submitted that the GEC scheme is a System Strengthening scheme which was planned in advance



considering the short gestation period of RE generations. However, LTAs have been subsequently granted on these corridor as per the details given. It has submitted that only 226MW generation of Ostro Kutch Wind Pvt. Ltd. (at Bachau) has been commissioned.

89. Further the petitioner has submitted that with regard to waiver of ISTS & losses an undertaking for M/s Ostro Kutch Wind Pvt. Ltd. has also been obtained. Regarding exemption from payment of transmission charges, petitioner has submitted that the same shall be considered on the basis of Ministry of Power's (MoP) Order regarding waiver of transmission charges and losses dated 13.02.2018. Accordingly, the petitioner prays that since the subject element, i.e., Asset-I is a part of identified strengthening scheme viz. Green Energy Corridor, the petitioner is entitled for grant the transmission charges of Asset-I of instant petition, in POC pool.

90. We have considered the submissions of the BRPL and the details submitted by the petitioner regarding clarification of subject Scheme as System Strengthening Scheme and LTAs details submitted vide affidavit dated 13.3.2019. The petitioner has furnished the details of RE generators pertaining to Bhuj Pool Stations, Banaskantha, Bachau, Bhadla, Fatehgarh, Bikaner, along with their LTAs with the concerned States and Target Region. We also observe that out of the total list of RE generation, till date, only 226 MW generation {of Ostro Kutch Wind Pvt. Ltd. (at Bachau)} has been commissioned. Petitioner has also submitted the undertaking with regard to waiver of ISTS charges & losses for M/s Ostro Kutch Wind Pvt. Ltd. Petitioner has also submitted the Ministry of Power's Order dated 13.2.2018 with regard to waiver of inter-State transmission charges and losses on transmission of



electricity generated from solar and wind sources of energy under para 6.4 (6) of the revised Tariff Policy 2016.

91. It is worth noting that through 5th and 6th amendment to the 2010 Sharing Regulations, the Commission has extended waiver from transmission charges and losses till 31.03.2022. Relevant extract from the Regulations is as under:

“Amendment to Regulation 7 of the Principal Regulations:

xxx

xxx

(3) A new sub-clause (aa) to Clause (1) of Regulation 7 of Principal Regulations shall be added as under:-

(aa) No transmission charges and losses for the use of ISTS network shall be payable for the generation based on solar and wind power resources for a period of 25 years from the date of commercial operation of such generation projects if they fulfil the following conditions:

(i) Such generation capacity has been awarded through competitive bidding process in accordance with the guidelines issued by the Central Government;

(ii) Such generation capacity has been declared under commercial operation between 13.2.2018 till 31.3.2022;

(iii) Power Purchase Agreement(s) have been executed for sale of such generation capacity to all entities including Distribution Companies for compliance of their renewable purchase obligations.”

92. We observe that Green Energy Corridor scheme was discussed and agreed as comprehensive ISTS strengthening scheme in 32nd standing committee meeting of Northern Region held on 31.08.2013 as well as in respective RPCs, due to urgent requirement of strengthening for Mundra UMPP/Adani Mundra generation complexes as well as short generation period of Renewables. Therefore, the transmission charges for the asset allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The



billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

93. This order disposes of Petition No. 244/TT/2018.

Sd/-
(I.S. Jha)
Member

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(P. K. Pujari)
Chairperson

