CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 217/TT/2017

Coram:

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

Date of Order : 22 .05.2019

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Asset-I: LILO of 400 kV D/C Baspa-Nathpa-Jhakri transmission line and Asset-II: Karcham Wangtoo Abdullapur 400 kV D/C Quad transmission line under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

Jaypee Powergrid Limited
'JA House', 63,
BasantLok,
Vasant Vihar,
New Delhi - 110057 **………Petitioner**

Vs

1. U.P.Power Corporation Limited
   Import Export & Payment Circle
   14th Floor, Shakti Bhawan Extn. Building
   14, Ashok Marg
   Lucknow-226001.

2. AD Hydro Power Limited
   Bhilwara Towers, A-12
   Sector-1,
   Noida-201301
   Uttar Pradesh.

3. Haryana Power Purchase Centre
Shakti Bhawan, Energy Exchange
Room No.446, Top Floor, Sector-06
Punchkula-134109

4. Punjab State Power Corporation Ltd.
Thermal Sheds, T 1-A, Thermal design
Near 22 No.Phatak
Patiala-147 001.

5. Himachal Sorang Power Pvt. Limited
901 B, 9th Floor, Time Tower, M.G. Road
Gurgaon-122009.

6. Adani Power Limited
3rd Floor, Achalaraj ,Opp Mayor Bunglow
Law Garden
Ahemdabad-380006.

7. Rajasthan Discoms Power Procurement Centre
Shed No.5/4, Vidyut Bhawan
Janpath, Jyoti Nagar
Jaipur-302 005.

8. Jaipur Vidyut Vitran Nigam Limited
Vidyut Bhawan
Janpath, Jyoti Nagar
Jaipur-302 005.

9. Ajmer Vidyut Vitran Nigam Limited
Vidyut Bhawan, Panchsheel Nagar
Makarwali Road
Ajmer-305 004.

10. Jodhpur Vidyut Vitran Nigam Limited
New Power House
Industrial Area
Jodhpur-342 003.

11. Lanco Anpara Power Limited
Plot No.397, Udyog Vihar Phase-3
Gurgaon-122 016.

12. Lanco Green Power Pvt. Limited
Plot No.397, Udyog Vihar Phase-III
Gurgaon-122016.

13. Power Development Department
Govt. of J&K, Srinagar
SLDC Building, 1st Floor
Gladani Power House
Narwal, Jammu.

14. North Central Railway, Allahabad
DRM Office, Nawab Yusuf Road
Subedarganj
Allahabad-211 001.

15. Himachal Baspa Power Company Limited
Sholtu Colony, P.O. Tapri - 172104
District Kinnaur (Himachal Pradesh).

16. BSES Yamuna Power Limited
2nd Floor, B Block, Shakti Kiran Building
(Near Karkadooma Court)
New Delhi-110092.

17. BSES Rajdhani Power Limited
2nd Floor, B-Block, Behind Nehru Place Bus Terminal
Nehru Place
New Delhi-110019.

18. Tata Power Delhi Distribution Limited
NDLP House, Hudson Lane
Kingsway Camp
New Delhi-110009.

19. New Delhi Municipal Corporation
NDMC, Palika Kendra, Sansad Marg
New Delhi-110001.

20. Electricity Wing of Engineering Department
Union Territory of Chandigarh
Electricity OP Circle
Chandigarh-160011.

21. PTC (Budhil), PTC India Limited
2nd Floor, NBCC Tower
15, Bhikaji Cama Place
New Delhi-110066.

22. PTC(Everest), PTC India Limited
2nd Floor, NBCC Tower

15 Bhikaji Cama Place
New Delhi-110066.

23. Uttrakhand Power Corporation Limited
Urja Bhawan, Kanwali Road
Near BalliWaliChowk
Dehradun-248001.

24. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building-II
Shimla-171 004.

25. Power Grid Corporation of India Limited
HVDC Dadri &HVDC Rihand
"Saudamini" Plot No-2, Sector-29
Gurgaon-122 001. ……**Respondents**

For Petitioner : Shri Siddharth Agarwal, Advocate, JPL

For Respondents : Shri S.K. Venkatesan, PGCIL
Shri S. K. Niranjan, PGCIL

ORDER

The present petition has been filed by Jaypee Powergrid Limited ("the petitioner") for truing up of the tariff of Asset-I: LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line and Asset-II: Karcham Wangtoo-Abdullapur 400 kV D/C Quad transmission line (hereinafter referred to as "asset") under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual capital expenditure for the period from COD to 31.3.2014, and for determination of tariff for the period from 1.4.2014 to 31.3.2019 under 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 prayers:-

> “a) That this Hon’ble Commission may be pleased to admit the petition and true-up the transmission tariff of LILO of 400 KV D/C Baspa-NathpaJhakri transmission line at Wangtoo (Asset-I) for the period 01.06.2011 to 31.03.2014 and 400 KV D/C Karcham-Wangtoo Abdullapur transmission line (Asset-II) for the period 01.04.2012 to 31.03.2014 which forms part of the Inter-State Transmission System , taking into account the submissions made herein above, in the forms and annexures filed herewith; and
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> b) That this Hon’ble Commission may be pleased to admit the petition and determine the Transmission Tariff of LILO of 400 KV D/C Baspa-NathpaJhakri transmission line at Wangtoo (Asset-I) and 400 KV D/C Karcham-Wangtoo Abdullapur transmission line (Asset-II) of the Petitioner for the Tariff Block FY 2014-19 which forms part of the Inter-State Transmission System, taking into account the submissions made herein above, in the forms and annexures filed herewith; and
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> c) That this Hon’ble Commission may be pleased to allow the Petitioner to recover filing fees of this Petition, license fees, charges for publication in newspapers, charges of RLDC and legal fees as more fully stated in the Petition; and
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> d) allow additions / alterations / changes / modifications to the Petition at a future date; and
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> e) pass such further order or orders as this Hon’ble Commission may deem fit and proper in the circumstances of the case.”

3. 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 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 23.10.2018. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

Background

4. The petitioner was granted license for transmission of electricity vide order dated 17.8.2007 in Petition No. 44/2007. The schedule attached to the aforesaid license provided the details of transmission lines as under:-

a) LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line at Wangtoo, and

b) 400 kV D/C Karcham Wangtoo-Abdullapur transmission line (Quad conductor).

c) 400/200 kV sub-station (Extension) (PGCIL/CTU) at Abdullapur.

5. The Commission, vide order dated 7.5.2015 in Petition No. 37/TT/2011, had determined the transmission tariff for the following assets from their date of commercial operation (COD) to 31.3.2014:-

Name of Asset	SCOD	COD
LILO of both ckt 400 kV D/C Baspa-Nathpa Jhakri transmission line D/C (triple snowbird) at Karcham Wangtoo HEP	1.9.2011	1.6.2011
Karcham Wangtoo-Abdullapur 400 kV D/C quad transmission line along with associated bays at Abdullapur Sub-station		1.4.2012

6. The following transmission charges were approved for the instant assets for the period from COD to 31.3.2014 vide order dated 7.5.2015 in Petition No. 37/TT/2011.

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12	2012-13	2013-14	2012-13	2013-14
Depreciation	102.54	125.63	128.23	5006.01	5118.38
Interest on Loan	151.21	191.47	167.18	8156.72	7165.85
Return on Equity	116.53	142.78	147.48	5692.99	5890.89
Interest on Working Capital	6.31	9.40	9.07	464.61	450.69
O & M Expenses	4.20	4.44	4.70	533.80	585.35

Total	**380.79**	**473.72**	**456.66**	**19874.13**	**19211.16**

7. The petitioner has claimed the following trued up transmission charges in the instant petition for the period from COD to 31.3.2014: -

(₹ in lakh)

Particulars	**Asset-I**			**Asset-II**	
	2011-12 (pro-rata)	**2012-13**	**201314**	**2012-13**	**201314**
Depreciation	102.54	125.63	128.23	5001.11	5017.87
Interest on Loan	151.21	191.48	168.25	8154.83	7146.48
Return on Equity	112.89	138.32	142.88	5513.35	5658.65
Interest on Working Capital	6.25	9.31	9.00	450.06	432.98
O&M Expenses	4.20	4.44	4.70	368.04	388.97
Total	377.09	469.18	453.05	19487.38	18698.94

8. The petitioner has claimed the following trued up interest on working capital in the instant petition for the period from COD to 31.3.2014: -

(₹ in lakh)

Particulars	**Asset-I**		
	2011-12 (pro-rata)	**2012-13**	**2013-14**
Maintenance Spares	0.63	0.67	0.70
O & M expenses	4.20	4.44	4.70
Receivables	62.85	78.20	75.51
Total	63.83	79.23	76.60
Interest (11.75%)	6.25	9.31	9.00

(₹ in lakh)

Particulars	**Asset-II**	
	2012-13	**2013-14**
Maintenance Spares	55.21	58.34
O & M expenses	368.04	388.97
Receivables	3247.90	3116.49
Total	3333.77	3207.25
Interest (13.50%)	**450.06**	**432.98**

TRUING UP OF ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14

9. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

> "(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors".

10. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

Capital Cost

11. Regulation 7(1) of the 2009 Tariff Regulations provides as follows:-

> "(1) Capital cost for a project shall include:
>
> (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (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, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;
>
> (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
>
> (c) additional capital expenditure determined under regulation 9:
>
> Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost."

12. The details of the capital cost considered by the Commission in Petition No.37/TT/2011 and the capital cost claimed by the petitioner in the instant petition are as under:-

(₹ in lakh)

	Asset	Capital cost as on COD	2012-13	2013-14	Cost as on 31.3.2014
As per order in Petition No. 37/TT/2011	Asset I	1601.00	0.00	0.00	1601.00
As claimed in the instant petition		2477.64	0.00	0.00	2477.64
As per order in Petition No. 37/TT/2011	Asset-II	90186.24	1321.57	859.07	92366.88
As claimed in the instant petition		*95331.56	2360.99	1.85	97694.40

*In addition, petitioner has claimed ₹183.85 lakh towards company formation and increase in authorised capital.

13. The Commission in order dated 7.5.2015 had considered capital cost of ₹1601 lakh and ₹92366.88 lakh as on 31.3.2014 for Asset-I and Asset-II respectively. The petitioner has now claimed capital cost of ₹2477.64 lakh and ₹97694.40 lakh as on 31.3.2014 for Asset-I and Asset-II respectively and in support has submitted Auditor's Certificate dated 6.7.2018. In order dated 7.5.2015, the Commission had disallowed the following expenses while determining the tariff for the 2009-14 period: -

(₹ in lakh)

Srl. No.	Disallowance Head	Amount
1.	Cost Over-run Asset-I Asset-II	 876.63 1655.94
	Total	**2532.57**
2.	Expenses towards Company formation and increase in Authorised capital	184.00
	Half of total cost of Sub-station	908.00
	Cost of reactors	1648.00
	Pro-rata IDC and IEDC of cost of reactors	939.45
	Total	**3679.45**
3.	IDC after commercial operation date	63.59
4.	IDC as on commercial operation	221.79
5.	IEDC after commercial operation 2012-13	 89.28

	2013-14	168.75

14. The Petitioner had filed a Review Petition No. 17/RP/2015 seeking a review of the order dated 7.5.2015 in Petition No. 37/TT/2011. The Commission had partially allowed the review petition vide order dated 24.2.2017. As regards disallowance of 50% cost of sub-station, it was held as under:-

> "7……..We have considered the submissions of the review petitioner. We accept the contention of the review petitioner and are inclined to consider the cost of two bays at Abdullapur Sub-station as given by the review petitioner. However, we are of the view that `1816 lakh for two bays at Abdullapur Sub-station are on a higher side and needs to be justified with reference to the benchmark capital cost or the capital cost of bays of similar configuration. The review petitioner is directed to submit detailed justification alongwith supporting documents for such high cost at the time of truing-up."

As regards disallowance of cost of reactors and pro-rata IDC and IEDC, it was held as follows:-

> "8….we allow the review of the impugned order to the extent of disallowance of cost of the two line reactors and allow consideration of the line reactors as part of the transmission system. The claim of the review petitioner for tariff of the line reactor shall be considered at the time of truing up subject to the following:-
>
> a. The petitioner should establish on the basis of documentary proof that the line reactors and associated equipments have not been executed as part of the generation project and have not been included within the scope of the generation project;
>
> b. The cost of the line reactor claimed by the petitioner appears to be on the higher side and accordingly, the petitioner is directed to submit the detailed justification for such high cost".

15. Further, the Commission had allowed the capitalisation of IDC ₹63.59 lakh, subject to submission of certain information regarding IDC and liability statements at the time of truing-up.

16. The petitioner has claimed the following capital cost for the instant assets

and has submitted the Auditor's certificate dated 20.9.2017 in support: -

(₹ in lakh)

Srl. No.	Particulars	Cost other than IEDC and IDC	IEDC	IDC	Total Capital Cost
A	Expenditure up to COD i) LILO – Asset –I ii)Transmission Line Asset –II iii) Company formation Exp.	 1914.25 601718.67	 288.93 18580.89 183.85	 274.46 16032.00	 2477.64 95331.56 183.85
	Sub Total (A)	**62632.92**	**19053.67**	**16306.46**	**97993.05**
B	Additional Capitalization during FY 2012-13 i) LILO – Asset –I ii) Transmission Line Asset –II	1952.06	345.64	63.59	2360.99
	Sub Total (B)	**1952.06**	**345.34**	**63.59**	**2360.99**
C	Additional Capitalization during FY 2013-14 i) LILO – Asset –I ii) Transmission Line Asset –II	-18.08	19.94	0.00	1.85
	Sub Total (C)	**-18.08**	**19.94**	**0.00**	**1.85**
D	Additional Capitalization during FY 2014-15 i) LILO – Asset –I ii) Transmission Line Asset –II	557.58	186.96	0.00	744.54
	Sub Total (D)	**557.58**	**186.96**	**0.00**	**744.54**
	Grand Total (A+B+C+D)	**65124.48**	**19605.91**	**16370.05**	**101100.43**

17. The petitioner's claim of capital cost has been examined on following counts:-

(a) Expenses of ₹183.85 lakh towards company formation and expense towards increase in authorized share capital;

(b) Expenditure of ₹908.00 lakh towards half of total cost of sub-station;

(c) Expenditure of ₹2587.45 lakh towards cost of two Reactors (₹1648.00 lakh) and pro-rata IDC and IEDC of cost of Reactors (₹939.45 lakh);

(d) Expenditure of ₹63.59 lakh as IDC after commercial operation date;

(e) Expenditure of ₹221.79 lakh towards IDC;

(f) Expenditure of ₹89.28 lakh in the year 2012-13 and ₹168.75 lakh in the year 2013-14, towards excess IEDC after the date of commercial operation;

(g) Expenditure of ₹2532.57 lakh due to cost over-run.

(a) <u>Expenditure of ₹183.85 lakh towards company formation and expense towards increase in Authorized Share Capital;</u>

(i) The petitioner has claimed company formation expenses and the expenses amounting to ₹183.85 lakh incurred towards increase in the authorized share capital and it is duly certified by the Auditor dated 11.9.2017. The petitioner has submitted that this is a single project company formed exclusively for the development and operation of the instant transmission system. The petitioner does not have any other business and this expenditure is solely incurred for construction of Asset-I and Asset-II. The petitioner has requested to consider this cost, either as a part of the tariff or as a one-time reimbursement.

(ii) We have considered the submission of the Petitioner. The Commission has already dealt with the issue of expenses towards company formation in order dated 7.5.2015 in Petition No. 37/TT/2011. The relevant portion of the order is extracted below:-

> "37. The petitioner has submitted that Rs.184 lakh has been incurred towards company formation expenses and fees for increase in authorized capital which were completely written off in the books of account in the financial year 2010-11 itself. According to the petitioner, these expenditure were not included in the capitalization as per accounting practice and the said expenses are not the part of capital of Assets-I and II on the date of capitalization but the same has been considered as cash outflow and included in the capital cost claimed for tariff. The Government of Himachal Pradesh has submitted that the statutory expenses of Rs.184 lakh claimed by the petitioner is not justified and may not be allowed.

> 38. As Rs. 184 lakh was not considered for capitalisation, this expenditure of Rs.184 lakh has not been considered as part of capital cost for the purpose of tariff calculations."

(iii) Further, in order dated 24.2.2017 in Petition No. 17/RP/2015, the Commission has rejected the petitioner's request for reconsideration of the same. The relevant portions of the said order is as follows:-

> "6. We have considered the submissions of the review petitioner. The case of the review petitioner is that even though these expenditure on formation/incorporation of the company and increase in authorized capital do not form part of the capital cost as per the Accounting Standards, since these expenditure have resulted in capital outflow, the petitioner has included the said expenditure in the capital cost while claiming tariff……"
>
> "As per the above regulation, expenditure incurred or projected to be incurred upto the date of commercial operation of the project shall be included in the capital cost for the purpose of determination of tariff. The expenditure on account of incorporation of the company and for increase in the authorized capital has not been capitalised in the books of account as per the Accounting Standards. As per Regulation 5(2) of the 2009 Tariff Regulations, the expenditure has to be certified by the Statutory Auditors. The Auditor's certificate does not certify that the expenditure on company formation and increase in authorized capital as part of the capital cost. Therefore, as per the Regulations, the said expenditure is not admissible for capitalisation. Merely because there is a cash outflow on account of certain expenditure, they by themselves do not qualify for capitalisation in terms of Regulation 7 of the 2009 Tariff Regulations. We do not find any error in the impugned order directing the expenditure on company formation and increase in authorized capital from being capitalised for the purpose of tariff."

(iv) The petitioner has submitted, vide certificate dated 11.9.2017, break-up of company formation expenses and the increase in authorized capital duly certified by Auditor. The petitioner has further submitted Auditor certificates dated 20.9.2017 and 6.7.2018 with the note that the company has incurred an amount of ₹1.84 crore towards statutory expenses which are not included in the capitalisation as per accounting practices.

(v) It is observed that there is no change in the qualifying remarks in the certificates dated 20.9.2017 and 6.7.2018 vis-à-vis the certificate considered earlier while issuing order dated 7.5.2015 in the main petition and 24.2.2017 in the review petition. Therefore, we do not find any reason to revisit our earlier decision in orders dated 7.5.2015 and 24.2.2017. Accordingly, the aforesaid amount is not considered as part of the capital cost.

(b) Expenditure of ₹908.00 lakh towards half of total cost of sub-station;

(i) The Commission in order dated 24.2.2017 in Review Petition No.17/RP/2015 had observed as follows:-

> "7………We accept the contention of the review petitioner and are inclined to consider the cost of two bays at Abdullapur Sub-station as given by the review petitioner. However, we are of the view that Rs.1816 lakh for two bays at Abdullapur Sub-station are on a higher side and needs to be justified with reference to the benchmark capital cost or the capital cost of bays of similar configuration. The review petitioner is directed to submit detailed justification alongwith supporting documents for such high cost at the time of truing-up."

(ii) The break-up of cost of sub-station of ₹1816 lakh as submitted by the Petitioner in the Petition No. 37/TT/2011 is as follows: -

(₹ in lakh)

Srl No.	Description	Amount
1	Land	63.00
2	Site preparation	192.00
3	Sub-station Equipment	1217.00
4	Liabilities	47.00
5	Apportioned IDC	298.00
Total		**1816.00**

The Commission, vide order dated 24.2.2017 in the Review Petition No. 17/RP/2015, has allowed the cost of two bays at Abdullapur Sub-station subject to justification with reference to the benchmark capital cost or the capital cost of bays of similar configuration and the petitioner was directed to submit detailed justification along with supporting documents for such high cost at the time of truing-up.

(iii) Accordingly, the petitioner has submitted the following justification for the high cost of two bays at Abdullapur Sub-station:-

a) The petitioner had inadvertently included the cost of land of ₹63 lakh, cost of site preparation ₹192 lakh and liabilities of ₹47 lakh in the cost of sub-station in Form 5B in Petition No. 37/TT/2011. The above cost totals to ₹302 lakh, pertaining to cost of construction of store area for operation and maintenance of Asset-I and Asset-II. The same has now been removed in Form 5B filed in the instant petition.

b) Further, the cost of sub-station equipment of ₹1217 lakh was provisional. The final cost of bays at sub-station extension is ₹1168 lakh and the break-up of sub-station cost is as follows:-

(₹ in lakh)

Description	**Amount**
Final cost Sub-station Equipment	1168.00
Final apportioned IDC	296.00
Total	**1464.00**

(c) The petitioner has re-submitted a letter dated 11.3.2013, submitted in the main petition (37/TT/2011), mentioning the receipt of the payment i.e. ₹1168 lakh (Hard Cost), made against these 2 x 400 kV bays at Abdullapur Sub-station to PGCIL by the petitioner. Therefore, the petitioner has claimed to capitalise ₹1464 lakh (Including IDC) as the cost of these two bays.

(d) The petitioner, vide affidavit dated 18.9.2018, has submitted that the advance payment made to PGCIL against the turn-key project of constructing 2 x 400 kV bays at Abdullapur Sub-station was ₹1215.06 lakh (Hard Cost) on estimate basis. However, the actual amount incurred/ claimed by the PGCIL for execution of the same is ₹1167.01 lakh and the balance amount of ₹48.05 lakh was refunded to the petitioner during 2012-13. The above is in reconciliation with the information submitted in the letter dated 11.3.2013 furnished by the petitioner vide the aforementioned affidavit and main petition. Accordingly, the cost of constructing 2 x 400 kV bays at Abdullapur Sub-station works out to ₹1167.01 lakh (Hard Cost). However, its capitalisation for the purpose of tariff calculations shall be ₹1215.06 lakh as on COD and ₹ (-) 48.05 lakh in 2012-13 i.e. the total cost to be allowed shall be ₹1167.01 lakh (₹1215.06 lakh - ₹48.05 lakh).

(iv) We have considered the submissions of the Petitioner. The commercial operation date of the associated bays at Abdullapur Sub-station was 1.4.2012. It is observed that the petitioner had awarded the turn-key project of construction of 2 x 400 kV bays at Abdullapur Sub-station on cost plus basis to PGCIL. As per the records submitted by the petitioner, the expenditure of the bays towards payment to PGCIL is ₹1168 lakh. The benchmark cost of ₹1080 lakh (Hard Cost) was worked out by considering COD in 2012. Similar benchmark norm was followed in case of Petition No. 184/TT/2013. In the present case, the actual amount charged by PGCIL is ₹1168 lakh. Thus, the capital cost of ₹1168 lakh is allowed.

(c) Expenditure of ₹2587.45 lakh towards cost of two Reactors (₹1648.00 lakh) and pro-rata IDC and IEDC of Reactors (₹939.45 lakh);

(i) The Commission in order dated 24.2.2017 in Review Petition No.17/RP/2015 had observed as follows: -

> "8…………we allow the review of the impugned order to the extent of disallowance of cost of the two line reactors and allow consideration of the line reactors as part of the transmission system. The claim of the review petitioner for tariff of the line reactor shall be considered at the time of truing up subject to the following:-
>
> a. The petitioner should establish on the basis of documentary proof that the line reactors and associated equipments have not been executed as part of the generation project and have not been included within the scope of the generation project;
>
> b. The cost of the line reactor claimed by the petitioner appears to be on the higher side and accordingly, the petitioner is directed to submit the detailed justification for such high cost."

(ii) The Commission in order dated 24.2.2017 has allowed capitalisation of the cost of 2x400 kV Line Reactors at Karcham-Wangtoo Switchyard along with the pro-rata IDC and IEDC, subject to submission of documentary proof that these reactors are not part of Karcham-Wangtoo HEP, along with the justification for the higher cost of these line reactors, at the time of truing up.

(iii) Pursuant to this order, the petitioner has submitted the following information in the instant petition:

a) Certificate obtained from the generator i.e. Himachal Baspa Power Company Limited (owner of Karcham-Wangtoo generation project) which states that reactors connected to the transmission line are owned by the petitioner and except these reactors, no other reactor has been provided by Himachal Baspa Power Company Limited in the pot head yard of the Karcham-Wangtoo generation project.

b) The petitioner did not have in-house technical expertise for construction of shunt reactors. Therefore, a contract for design, manufacture, supply, delivery at site, storage and erection, testing and COD of 2 nos. each of 3 phase 80 MVAR, 400 kV shunt reactor was awarded to Jaiprakash Associates Limited on turnkey basis. The said contract also included the consultancy services for execution.

(iv) As regards high cost, the petitioner has submitted that the cost of reactors in Form-B is ₹1648.46 lakh as on COD of Asset-II and an amount of ₹50.68 lakh has been incurred as additional capitalisation after COD and has been shown in statement of additional capitalisation, liabilities and payments. Accordingly, the claimed cost of these 2 x 400 kV shunt line reactors is ₹1699.14 lakh (excluding IDC). The petitioner has submitted that the actual cost of reactors of ₹1699.14 lakh (excluding IDC) is lower than the cost of reactors considered in DPR of ₹1853.85 lakh (excluding IDC & consultancy charges). Further, the cost of Reactors indicated in the DPR was for out-door installation whereas Reactors were installed in pot-head yard of Karcham-Wangtoo Sub-station being part of hydro power plant in-door, which required additional items like rolling shutters for fire doors, bus duct to integrate inter-connection of Reactors with the indoor GIS switch yard of generation plant etc., which was not considered in DPR.

(v) As per the Commission's 'Benchmark Capital Costs' at July, 2012 price level, the cost of a 400 kV bay with a shunt reactor is ₹989.56 lakh (excluding IDC). Therefore, the total cost of 2 Nos. 400 kV shunt reactor at Karcham-Wangtoo switchyard shall be ₹1979.12 lakh. However, the claimed total cost for the said reactors was ₹1699.14 lakh (excluding IDC) which is less than benchmark cost. Further, the actual capital expenditure incurred is within the cost envisaged under DPR.

(vi) We have considered the submissions of the petitioner. The petitioner granted the turn-key project of construction of 2 x 400 kV Line Reactors at Karcham-Wangtoo, on cost plus basis, to Jaiprakash Associates Ltd. (JAL). Since the petitioner's claim is within the benchmark capital cost and estimated cost as per DPR, the petitioner's claim is allowed for the purpose of tariff. However, since JAL is the group company of the petitioner, the consultancy fee and service tax towards consultancy services provided by the JAL is not justifiable**.** Therefore, the capital cost is allowed after deducting consultancy fee of ₹181.12 lakh and service tax of ₹33.38 lakh paid towards consultancy services.

(d) <u>Expenditure of ₹63.59 lakh as IDC after COD; and (e) Expenditure of ₹221.79 lakh towards IDC;</u>

(i) As regards the IDC after COD, the Commission in order dated 24.2.2017 in Review Petition No.17/RP/2015 had observed as follows:-

> "9. The review petitioner's claim of Rs. 63.59 lakh of IDC as additional capital expenditure during 2012-13 for Asset II was disallowed as it pertained to the period after the date of commercial operation. The relevant portion of the impugned order is extracted hereunder:-
>
> "42. There is an increase of 64.16% in overall IDC vis-à-vis the original estimate. During the hearing on 13.11.2014, the petitioner was directed to submit the reasons for the increase in IDC and for claiming IDC and IEDC after the date of commercial operation. The petitioner, vide affidavit dated 10.12.2014, submitted that the IDC claimed by the petitioner as additional capital expenditure pertain to the period before the date of commercial operation. It is just that the claims towards them were raised and are being paid in the later period i.e. after commercial operation date. The petitioner further submitted that the increase in IDC is mainly attributable to two factors viz. early phasing of funds vis-à-vis the estimated phasing and time over-run. It is observed that the IDC clamed after date of commercial operation did not seem to be pertaining to the period before date of commercial operation. Had it been so, these would be forming part of the liabilities as on date of commercial operation. Accordingly, IDC after the date of commercial operation of Asset-II amounting Rs. 6.59 lakh is not allowed."
>
> The review petitioner has submitted that Rs. 61.27 lakh of interest was in dispute with Indian Overseas Bank (IOB) and it was shown in the Balance Sheet for the year 2011- 12, which was submitted to the Commission alongwith the main petition. The review petitioner submitted that the amount was not finalized at the time of finalisation of the accounts for 2011-12, as the matter was under negotiations with IOB. Once the matter was resolved, the IDC was paid on 28.9.2012. We have considered the submissions of the review petitioner. As per the review petitioner, the IDC claimed as additional capitalisation pertain to the period before the date of commercial operation but raised and paid after the date of commercial operation. However, the liability statement submitted by the review petitioner does not reflect the same as mentioned in the impugned order. Accordingly, in para 45 of the impugned order, the review petitioner was directed to submit Form-6, Form-13, Form-14 and Form-14A separately for Asset-I and Asset-II after allocating the loan between Asset-I and Asset-II, at the time of filing the true-up petition. The review petitioner is directed to submit the said information at the time of truing up. The asset wise actual IDC to be allowed shall be finalized at the time of truing up. Accordingly, the ACE allowed in dated 7.5 2015 shall be revisited at that time."

(ii) As regards the IDC of ₹221.79 lakh, the Commission in order dated 7.5.2015 in Petition No.37/TT/2011, had observed as follows:-

> "44. However, in the absence of asset wise information, the allocated IDC of Rs. 274.00 lakh as indicated in auditor certificate dated 5.12.2014 has been considered for Asset-I. The capitalized borrowing cost for the year 2012-13 is shown as Rs. 15810.21 lakh for Asset-II, whereas the IDC claimed as per auditor's certificate is Rs. 16032.00 lakh. Hence, for Asset-II, the capitalized borrowing cost has been considered as IDC and FC cost for the purpose of determining capital cost as on date of commercial operation. Accordingly, the amount of Rs. 221.79 lakh (i.e. Rs. 16032.00 lakh – Rs. 15810.21 lakh) has been reduced from the IDC claimed as on date of commercial operation for Asset-II."

(iii) The petitioner has submitted the details of IDC calculation for both the assets together. As regards the directions of the Commission for submission of Form-6, Form-13, Form-14 and Form-14A separately for Asset-I and Asset-II after allocating the loan between Asset-I and Asset-II, at the time of filing the true-up petition, the petitioner has submitted that the financial institutions had financed the project in entirety i.e. there was no separate financing for Asset-I and Asset-II. Therefore, it is not possible for the petitioner to show allocation of gross loan and its deployment between Asset-I and Asset-II in Form 6, Form 13, Form 14 and Form 14A. However, the IDC was allocated between Asset-I and Asset-II based on the direct cost attributable to them on the commercial operation date of the Asset-I (LILO) i.e. 26.5.2011. Thereafter, all the IDC paid was totally on account of Asset-II (main transmission line). The allocation of IDC between Asset-I and Asset-II on COD of Asset-I (LILO) i.e. 26.5.2011 has been indicated in the Auditor certificate certifying allocation of IDC.

(iv) The petitioner has submitted that the line length of Asset-I is 4 km.

and that of Asset-II is 219.80 km and accordingly, the cost of Asset-I is ₹2478 lakh and cost of Assets-II is ₹98622 lakh and total cost of Asset-I and Asset-II is ₹101100 lakh. The cost of Asset-I is about 2.45% of the total cost of Asset-I and Asset-II and is very minor. The disbursement of loans for the project was neither done by the lenders on the basis of Asset-I and Asset-II nor the disbursed amount of loan was accounted by the petitioner in the books of account on the basis of Asset-I and Asset-II and the IEDC and IDC was allocated to the Asset-I as per the accounting practices. The petitioner has requested for exemption from submission of Form-6, Form-13, Form-14 and Form-14A separately for Asset-I and Asset-II after allocating the loan between Asset-I and Asset-II.

(v) Further, the petitioner has referred to Regulation 6(1) of the 2014 Tariff Regulations, which provides as below:-

> "6. Tariff determination
>
> (1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or sub-station or communication system forming part of transmission system:
>
> Provided that:
>
> (i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmissions system for the purpose of determination of tariff for the period 2014-15 to 2018-19:"

(vi) In terms of the above regulation, the petitioner has prayed that consolidated petition is required to be filed, in respect of the entire transmission system for the purpose of determination of tariff for the period 2014-15 to 2018-19. Accordingly, the petitioner has requested for exemption from submission of Form-6, Form-13, Form-14 and Form-14A separately for Asset-I and Asset-II after allocating the loan between Asset-I and Asset-II for the period 2011-2014 also.

(vii) We have considered the submissions of the Petitioner. The petitioner has submitted detailed justification/ reconciliation of the IDC, which was disallowed earlier, along with the calculation of IDC, statement of discharge of liability in respect of IDC and Auditor's certificate indicating the IDC allocation to the Asset-I and Asset-II. Therefore, the IDC of ₹63.59 lakh and ₹221.79 lakh is allowed.

(f) <u>Expenditure of ₹89.28 lakh and ₹168.75 lakh in 2012-13 and 2013-14 respectively towards excess IEDC after the date of commercial operation;</u>

(i) The Commission in order dated 7.5.2015 in Petition No.37/TT/2011, had observed as below:-

> "48. We have considered the submissions made by the petitioner. The forest compensation paid in cash of Asset-II after date of commercial operation is being allowed as additional capital expenditure for the period 2012-13 and 2013-14. Therefore, the excess of IEDC claimed after date of commercial operation other than the forest compensation paid has been disallowed. The details of IEDC disallowed in case of Asset-II are as follows:

(₹ in lakh)

Year	**IEDC claimed after date of commercial operation**	**Forest compensation (included in IEDC) being allowed as additional capital expenditure**	**Additional Capital Expenditure being disallowed**

(a)	(b)	(c)	(d)=(b)-(c)
2012-13	298.21	208.93	89.28
2013-14	178.81	10.06	168.75

"

(ii) The petitioner vide Auditor's certificates dated 20.9.2017 and 6.7.2018, has submitted the IEDC discharged as on COD and after COD. Following is the details of the IEDC discharged by the petitioner:-

(₹ in lakh)

Details of IEDC discharged (claimed)			
As on 1.4.12	**2012-13**	**2013-14**	**2014-15**
19053.67*	345.34	19.94	186.96

*The IEDC related to company formation expenses has been included in the cost.

(iii) The details of compensation towards crops/ trees/ forest, vide petition is mentioned below: -

(₹ in lakh)

Details of part of IEDC discharged			
As on 1.4.12	**2012-13**	**2013-14**	**2014-15**
13061.35	208.92	16.01	186.87

(iv) The petitioner vide affidavit dated 28.12.2018 has submitted the liability discharge details of IEDC as on COD and post-COD, vide Auditor's certificate dated 27.12.2018. The petitioner has also submitted a separate Auditor certificate dated 27.12.2018 giving the details of the payments made to Tata Projects Limited. As regards disallowance of expenditure of ₹89.28 lakh in the year 2012-13, the petitioner has submitted that contract to Tata Projects Limited was awarded on 3.11.2009 for field quality services in respect of Asset-I and Asset-II for Civil Foundation of Towers, Tower Erection and Stringing. Considering the pendency of work, the said contract was further extended by the petitioner vide its letter dated

4.6.2012. The said amount of ₹89.28 lakh was booked and paid after the date of commercial operation but it is related to the original scope of works and is not related to Operation and Maintenance of the assets.

(v) We have considered the submissions of the Petitioner. An expenditure of ₹168.75 lakh during 2013-14 was disallowed earlier, as it was on projected basis. The petitioner has submitted the actual figures in the present petition and, therefore, the same is allowed as part of additional capitalization and is considered for the purpose of tariff calculation for 2014-19 period.

(g) <u>Cost over-run of ₹2532.57 lakh:</u>

(i) The Commission in order dated 7.5.2015 in Petition No.37/TT/2011 had made the following observations:-

> "30. We have considered the documentary evidence submitted by the petitioner in respect of delay in commissioning of Asset-II (Karcham Wangtoo HEP-Abdullapur 400 kV D/C T/L along with associated bays). The petitioner, vide affidavit dated 20.12.2013, has submitted details of court cases and orders passed by court in respect of delay due to RoW, newspaper cuttings in support of adverse weather condition in the region and documents in support of delay in getting forest clearances. On perusal of the documents submitted by the petitioner, it is observed that the delay of 7 months caused in completion of Asset-II was mainly due to delay in court proceedings and RoW issues, adverse weather conditions in the region and delay in getting forest clearance. Accordingly, the reasons mentioned herein above are not attributable to the petitioner and accordingly the time over-run of 7 months in completion of Asset-II is condoned."
>
> "35……..However, the petitioner did not submit any other details of RCE. Therefore, in the absence of detailed RCE, the capital cost of transmission assets is restricted to the original apportioned approved cost as submitted in revised Form-5B. However, the capital cost of the individual transmission assets shall be reviewed at the time of truing-up, subject to the petitioner filing the detailed RCE and justification for cost over-run."

"45. The petitioner is directed to submit a detailed analysis on the increase of IDC from its original estimates due to time over-run, due to increase in cost of debt and due to early phasing of fund etc. along with the revised cost estimates at the time of submission of truing up petition……………."

(ii) The main reasons submitted by the petitioner for the cost over-run are as follows:-

a) There was a time over-run of 7 months in completion of Asset-II mainly due to obtaining Right of Way, clearance from Forest Department and adverse weather conditions in hilly and snowbound areas that severely hindered the progress of work.

b) There is increase in compensation made towards crop, tree and PTCC amounting to ₹368 lakh and increase in compensation towards forest amounting to ₹6494 lakh when compared to estimates made in DPR. The petitioner has also submitted a certificate mentioning the details of the compensation paid towards crop, tree and forest clearances.

c) Increase in IDC and financial charges, increase in cost of debt, early phasing of the funds: -

(i) The petitioner has submitted that the total increase in the IDC is ₹6500 lakh and total increase in the finance charges is ₹8.32 lakh, in comparison to the estimated costs as per DPR.

(ii) The zero date for start of construction work was February 2008 as per the LOA but loans were deployed from August 2008 and interest was capitalized up to March 2012. Accordingly, total interest was capitalized for 44 months against 42 months considered in DPR. Thus, IDC was for 2 months more compared to DPR.

(iii) The interest calculated in DPR for the period from April 2010 to December 2010 (9 months) was ₹4497 lakh and if it is annualized (for 12 month) the same will be ₹5996 lakh. Accordingly, increase in IDC for 2 months has been worked out to ₹999 lakh.

(iv) At the DPR stage, no finance charges were considered in the cost estimates and it is an industry practice that obtaining funds from the lenders is subject to payment of finance charges such as underwriting fees, processing fees, facility agent fees and other miscellaneous fees. Accordingly, petitioner has also incurred a sum of `832 lakh on this account.

(v) Actual IDC paid based on actual deployment of loans is ₹16085 lakh as per books of account which is based on actual weighted average rate of interest during the construction at 11.06% p.a. At the DPR stage, the phasing of funds was on estimation basis whereas the actual deployment of funds was based on the progress of the works keeping in mind the completion of work at the earliest, so the COD can be achieved at the earliest.

d) Consultancy fees charged by PGCIL: The petitioner has submitted that PGCIL was given a contract for providing consultancy services for complete design, drawings, engineering (including post award), technical specifications, bidding documents etc. for the instant assets. In DPR, the completion cost projected was ₹98107 lakh (excluding consultancy fee). However, in actuals the completed cost is ₹101100 lakh (including consultancy fee of amount ₹2230 lakh). The impact of the consultancy fee is given below:-

(₹ in lakh)

Description	DPR	Actual
Total cost excluding consultancy fees	98107	98870
Consultancy fees	0.00	2230
Total	**98107**	**101100**

(iii) We have considered the submissions of the Petitioner. The time over-run in case of Asset-II has already been condoned by the Commission. Therefore, IDC for 7 months of time-over shall be capitalized.

(iv) The compensation paid towards crop, tree and forest clearances has already been allowed by the Commission as a part of IEDC and, therefore, it is also being allowed in the instant petition. In a similar case, the Commission in order dated 16.5.2016 in Petition No. 19/TT/2014 allowed consultancy fee as part of capital cost. The relevant portion of the order is extracted below: -

> "35. As regards, consultancy fee paid to PGCIL. The petitioner has submitted that as per the agreement signed with PGCIL, it had paid 90% of the consultancy fee to PGCIL and capitalized the entire amount in project cost before 31.3.2009. The petitioner subsequently had paid Rs.227.97 lakh to PGCIL on 4.12.2010, which has been capitalized in the transmission system in the ratio of the respective transmission line length. Accordingly, Rs.82.70 lakh has been capitalized for the instant assets by the petitioner and the Certificate of the Statutory Auditors" pertaining to such additional capitalization has been submitted. The petitioner has further submitted that as the nature of expenditure does not fall under specific norms of the 2009 Tariff Regulations, the amount has been claimed under Regulation 44 "Power to Relax", as a part of additional capital expenditure for the purpose of computing the ATC.
>
> 36. Regulation 9(2)(viii) of the 2009 Tariff Regulations provides as under:-
>
> ".... (viii) any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such with-holding of payment and release of such payments etc....."
>
> 37. The consultancy fee was paid by the petitioner after the cut-off date for the services rendered by PGCIL before the cut-off date. We are of the view that the petitioner is eligible for consultancy charges under Regulation 9(2)(VIII) of the 2009 Tariff Regulations. Therefore, we are inclined to allow consultancy fee of ₹82.70 lakh paid to PGCIL as additional capital expenditure for 2010-11."

In the above said order, consultancy fee was recognized as part of project and booked as a part of the project cost. Accordingly, the consultancy fees paid by the petitioner shall form part of project cost and allowed for the purpose of tariff.

18. The time over-run in case of Asset-II has already been condoned by the Commission. Therefore, IDC for 7 months delay is allowed to be capitalized.

Treatment of IDC and financing charges

Time over-run

19. As discussed above, the Commission, vide para 30 of order dated 7.5.2015 in Petition No.37/TT/2011, had already condoned the seven months' time over-run in case of the instant asset. Accordingly, adjustment of IDC and IEDC in the calculations of the assets is not required in the case of the assets.

Interest During Construction (IDC)

20. The petitioner, vide auditor's certificate dated 20.9.2017, has claimed the IDC (inclusive of financing charges and interest received) as ₹16370.05 lakh on accrual basis for the whole project in which ₹274.46 lakh is identified as IDC pertaining to Asset-I. However, the petitioner has submitted the reasons for its inability for not furnishing the calculations of IDC etc. separately for Asset-I and Asset-II.

21. The petitioner has submitted details of IDC calculation for both the assets together along with the statement of discharge of liability in respect of IDC. Further, the petitioner has submitted the loan-wise certificates, except the certificate from the United Bank of India, provided by the respective banks in respect of the IDC charged and paid by the petitioner. IDC, up to the allowable date, has been worked out based on the loans deployed for the assets as per Form-9C of the petition. Therefore, in view of these facts, IDC being considered for tariff computation is minimum of worked out IDC, IDC certified by the bankers and IDC claimed by the petitioner.

22. It may be observed that a negative figure of ₹(-)546.73 lakh, in respect of net interest received on FDRs, is included in the aforesaid IDC of ₹16370.05 lakh vide Auditor's certificate dated 20.9.2017. Notwithstanding the fact that the amount of interest received on FDRs is adjustable against IEDC and not against IDC; interest received is admissible here because there shall be no impact on the capital cost as on COD. Therefore, the IDC, financing charges and interest received claimed, allowable and disallowable are as below:-

(₹ In lakh)

Srl. No	**Particulars (a)**	**Claim (as per petition) (b)**	**As worked out (C)**	**As per certificate provided by the bank (D)**	**Allowable Expenses (Minimum of a, b & c)**
1	**Interest on Loan during construction (IDC)**				
a	ICICI Bank	1133.54	1133.55	1133.85	1133.54
b	Punjab National Bank	4666.64	4666.97	4666.64	4666.64
c	Central Bank of India	3487.03	3487.31	3487.03	3487.03
d	Indian Overseas Bank	2294.26	2294.59	2295.00	2294.26
e	Jammu & Kashmir Bank Ltd.	2282.72	2282.75	2282.73	2282.72
f	United Bank of India	1444.85	1445.07	1444.85	1444.85
g	State Bank of India	711.99	712.00	712.00	711.99
	Sub Total (A)	**16021.08**	**16022.29**	**16022.15**	**16021.08**
2	**Financing Charges (B)**	**832.11**			**832.11**
3	**Less: Interest received**				
a	Interest earned on FDRs	718.50			718.50
b	Less: TDS on Interest on FDRs	171.77			171.77
	Sub Total (C) = (a-b)	**546.73**			**546.73**
	TOTAL (A+B-C)	**16306.46**			**16306.46**
	IDC Liability as on COD (to be discharged during 2012-13)	63.59			63.59
	Total IDC Claimed / Allowed	**16370.05**			**16370.05**
	Total IDC / Financial Charges Disallowed on account of Excess Claim				**0.00**

Incidental Expenditure During Construction (IEDC)

23. The petitioner, vide Auditor's certificate dated 20.9.2017, has claimed Incidental Expenditure during Construction (IEDC) as ₹19605.91 lakh. This amount is inclusive of ₹183.85 lakh claimed as company formation expenses and ₹13473.15 lakh as compensation towards crops/trees/forest clearance. The company formation expenses of ₹183.85 lakh is disallowed. Further, expenditure of ₹13473.15 lakh as compensation towards crops/trees/ forest clearance is an expenditure to meet award of arbitration and/or to meet legal compliance. These expenses are not the part of IEDC. The petitioner has also not indicated these cost as a part of IEDC in DPR vide affidavit dated 26.9.2017. The remaining IEDC claimed, amounting to ₹5948.91 lakh is within the percentage of hard cost (i.e. 10%) as indicated in the abstract cost estimate.

24. Further, the petitioner has submitted the discharge details of the IEDC which is being discussed in the following paragraphs.

Initial Spares

25. Regulation 8(iv) of the 2009 Tariff Regulations provides as under:-

> "Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:
>
> (iv) Transmission system
>
> (a) Transmission line - 0.75%
> (b) Transmission Sub-station - 2.5%
> (c) Series Compensation devices and HVDC Station - 3.5%....."

26. As per the 2009 Tariff Regulations, the ceiling norms for a conventional sub-station are 2.5% and for a GIS sub-station is 3.5%. The Commission in order dated 7.5.2015 in Petition No. 37/TT/2011 had observed that no initial spares was claimed for Asset-I and initial spares claimed for Asset-II was within the ceiling limits specified in the 2009 Tariff Regulations. The relevant extract of the said order is as follows:-

> "50. The Commission had directed the petitioner to furnish the Auditor's certificate to certify the initial spares for Asset-I and Asset-II. However, the petitioner has submitted Auditor's certificate dated 5.12.2014 for Asset-II only. As no Auditor certificate has been provided by the petitioner regarding the initial spare for Asset-I (i.e. for LILO portion), the claim of initial spare for Asset-I is considered as nil. As per the Auditor's certificate, the initial spares included in capital cost of Asset-II is ₹622.33 lakh for transmission line and ₹53.83 lakh for sub-station. Based on the capital cost allowed in the instant petition, the claims of initial spare are within the limit specified in the 2009 Tariff Regulations."

27. The petitioner has claimed ₹622.00 lakh and ₹54.00 lakh as the initial spares corresponding to transmission line and sub-station for Asset-II in the instant petition, which is within the ceiling limits specified in the 2009 Tariff Regulations. Accordingly, the same is allowed and there is no requirement of adjustment of initial spares.

Undischarged Liability

28. Further, the petitioner has submitted the statement of discharge of liability in respect of Hard Cost, IDC and IEDC. The petition is silent in respect of the discharge details of the initial spare. Hence, it is assumed that initial spare claimed are discharged as on COD. The statement showing details of the discharge of liability in respect of Hard Cost, IDC and IEDC are as follows:-

(₹ in lakh)

Asset-I	Liability as on COD 1.6.2011	2011-12			2012-13		
		Addition during the year	Paid during the year	Outstand-ing as on year end	Addition during the year	Paid during the year	Outstand-ing as on year end
Hard Cost	184.32	-	98.26	86.06	-	86.06	-
I E D C	11.83	-	-	11.83	-	11.83	-
I D C	-	-	-	-	-	-	-
Total Cost	**196.15**	**-**	**98.26**	**97.89**	**-**	**97.89**	**-**

(₹ in lakh)

Asset-II	Liability as on COD 1.4.2012	2012-13			2013-14		
		Addition during the year	Paid during the year	Outstand-ing as on year end	Addition during the year	Paid during the year	Outstand-ing as on year end
Hard Cost	1,231.74	1,952.06	973.12	2,210.68	(18.09)	1,124.96	1,067.63
I E D C	119.72	345.34	400.18	64.88	19.94	40.54	44.28
I D C	76.63	63.59	140.22	-	-	-	-
Total Cost	**1,428.09**	**2,360.99**	**1,513.52**	**2,275.56**	**1.85**	**1,165.50**	**1,111.91**

29. Therefore, the capital cost considered for the purpose of computation of tariff in the present petition, after scrutiny of IDC, IEDC, Initial Spare and undischarged liability are as given below: -

(₹ in lakh)

Capital Cost as on COD	Asset-I	Asset-II	Total capital cost as on COD
Capital cost claimed by the petitioner	2477.64	95515.41	97993.05
LESS: Disallowed Hard Cost:			
Company Formation Expenses	-	183.85	183.85
Consultancy Fee Consultancy Fee (Towards Erection of Reactors)	-	181.12	181.12
Service Tax on Consultancy Charges, as above.	-	33.38	33.38
LESS: Disallowed Un-discharged Liability as on COD	196.15	1428.09	1624.24
Capital Cost allowable as on COD	**2281.49**	**93688.97**	**95970.46**

Additional Capital Expenditure

30. The petitioner has claimed additional capital expenditure under Regulation 9(1)(i) of the 2009 Tariff Regulations which provide as under: -

> "Additional Capitalisation:
>
> (1) The capital expenditure 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;
> (ii) Works deferred for execution;
> (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
> (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
> (v) Change in Law:"

31. The 2009 Tariff Regulations further define "cut-off" date as-

> "cut-off date means 31st March of the year closing after 2 years of the year of commercial operation of the project, and incase 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 3 years of the year of commercial operation".

32. The cut-off date of Assets-I and II is 31.3.2014 and 31.3.2015 respectively and the petitioner has claimed following Additional Capital Expenditure:-

(₹ in lakh)

Assets	**Additional Capital Expenditure**			
	2011-12	**2012-13**	**2013-14**	**Total**
Asset-I	0.00	0.00	0.00	0.00
Asset-II	0.00	2360.99	1.85	2362.84
Total	**0.00**	**2360.99**	**1.85**	**2362.84**

33. Further, the petitioner has submitted statement showing details of discharge of liability in respect of both the assets. Hence, the additional capital expenditure allowable for the instant assets is given below:-

(₹ in lakh)

Assets	Additional Capital Expenditure			
	2011-12	**2012-13**	**2013-14**	**Total**
Asset-I	98.26	97.89	0.00	196.15
Asset-II	0.00	1513.52	1165.50	2679.02
Total	**98.26**	**1611.41**	**1165.50**	**2875.17**

34. This has been considered for the purpose of tariff calculation. Accordingly, the capital cost considered for the purpose of truing up of the 2009-14 tariff period as on COD and thereafter upto 31.03.2014 are as follows:-

(₹ in lakh)

Assets	Capital Cost allowed as on COD	Additional Capital Expenditure			Capital Cost allowed as on 31.3.2014
		2011-12	**2012-13**	**2013-14**	**Total**
Asset-I	2281.49	98.26	97.89	0.00	2477.64
Asset-II	93688.97	0.00	1513.52	1165.50	96367.99
Total	**95970.46**	**98.26**	**1611.41**	**1165.50**	**98845.63**

<u>Debt: Equity</u>

35. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provides as under:-

> "(1) For a project declared under commercial operation on or after 1.4.2009, 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 where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:
> Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
>
> .....
>
> (3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 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."

36. The petitioner has claimed debt-equity ratio of 70:30 as on COD and for additional capital expenditure and the same was considered in order dated 24.2.2017 in Petition No.17/RP/2015. We have considered the same ratio of 70:30 in the instant order.

Return on Equity ("ROE")

37. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provides that:-

> "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
>
> (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:
>
> Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:
>
> Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.
>
> (3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.
>
> (4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:
>
> Rate of pre-tax return on equity = Base rate / (1-t)
>
> Where "t" is the applicable tax rate in accordance with clause (3) of this regulation.
>
> (5) The generating company or the transmission licensee, as the case maybe, shall recover the shortfall or refund the excess Annual Fixed Charge 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:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

38. As per Form-3, the petitioner has submitted the MAT rate applicable during the various years. Return on equity has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations. The tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of ROE is as follows:-

Year	**MAT Rate (in %)**	**Grossed up ROE (Base rate/(1-t) (in %)**
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.960	19.610

39. The details of return on equity calculated are as follows:-

(₹ in lakh)

Particulars	**Asset-I**		
	2011-12 (pro-rata)	**2012-13**	**2013-14**
Opening Equity	684.45	713.93	743.29
Addition due to additional capitalization	29.48	29.37	0.00
Closing Equity	713.93	743.29	743.29
Average Equity	699.19	728.61	743.29
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.0080%	20.0080%	20.9605%
Rate of Return on Equity (Pre-tax)	19.377%	19.377%	19.610%
Return on Equity (Pre-tax)	112.90	141.18	145.76

(₹ in lakh)

Particulars	Asset-II	
	2012-13	2013-14
Opening Equity	28106.69	28560.75
Addition due to additional capitalization	454.06	349.65
Closing Equity	28560.75	28910.40
Average Equity	28333.72	28735.57
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.0080%	20.9605%
Rate of Return on Equity (Pre-tax)	19.377%	19.610%
Return on Equity (Pre-tax)	5490.22	5635.05

Interest on Loan ("IOL")

40. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The petitioner has not submitted the loan amount separately for the assets. The year wise weighted average rate of interest (WARI) of combined loans have been applied in calculations of interest of loan for the instant assets.

41. In the calculations, the interest on loan has been worked out as detailed below:-

(i) Gross amount of loan and repayment of instalments have been considered as per Form-13 given in the petition for working out the weighted average rate of interest. For the years 2012-13 and 2013-14, the WARI has been verified/derived from the financial statements for the respective years.

(ii) The normative repayment for the tariff period 2009-14 has been considered 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 on loan.

42. Detailed calculations in support of the weighted average rates of interest have been given in Annexure-I to this order. Based on the above, interest on loan has been calculated as under:-

(₹ in lakh)

Particulars	Asset-I		
	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	1597.04	1665.83	1734.35
Cumulative Repayment upto previous year	0.00	94.59	213.24
Net Loan-Opening	1597.04	1571.24	1521.11
Addition due to Additional Capitalization	68.78	68.52	0.00
Repayment during the year	94.59	118.65	130.82
Net Loan-closing	1571.24	1521.11	1390.29
Average loan	1584.14	1546.17	1455.70
Weighted average rate of Interest on Loan	11.4847%	12.7636%	11.9521%
Interest	151.61	197.35	173.99

(₹ in lakh)

Particulars	Asset-II	
	2012-13	2013-14
Gross Normative Loan	65582.28	66641.74
Cumulative Repayment upto previous year	0.00	4886.50
Net Loan-Opening	65582.28	61755.25
Addition due to Additional Capitalization	1059.46	815.85
Repayment during the year	4886.50	4957.20
Net Loan-closing	61755.25	57613.90
Average loan	63668.76	59684.57
Weighted average rate of Interest on Loan	12.7636%	11.9521%
Interest	8126.44	7133.59

Depreciation

43. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“‘**useful life’** in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-
....

(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years**”**

44. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. Depreciation:
...
(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III 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 date of commercial operation shall be spread over the balance useful life of the assets.”

45. Assets-I and II were put under commercial operation on 1.6.2011 and 1.4.2012 respectively and depreciation has been worked out, based on Straight Line Method, as per regulation. Based on the above, the depreciation considered is as follows:-

(₹ in lakh)

Particulars	**Asset-I**		
	2011-12 (pro-rata)	**2012-13**	**2013-14**
Opening Gross Block	2281.49	2379.75	2477.64
Additional Capital Expenditure	98.26	97.89	0.00
Closing Gross Block	2379.75	2477.64	2477.64
Average Gross Block	2330.62	2428.70	2477.64
Rate of Depreciation	4.8701%	4.8854%	5.2800%
Depreciable Value	2097.56	2185.83	2406.41
Remaining Depreciable Value	2097.56	2091.24	2193.17
Depreciation	94.59	118.65	130.82

(₹ in lakh)

Particulars	**Asset-II**	
	2012-13	**2013-14**
Opening Gross Block	93688.97	95202.49
Additional Capital Expenditure	1513.52	1165.50

Closing Gross Block	95202.49	96367.99
Average Gross Block	94445.73	95785.24
Rate of Depreciation	5.1739%	5.1753%
Depreciable Value	84944.21	86149.77
Remaining Depreciable Value	84944.21	81263.28
Depreciation	4886.50	4957.20

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

46. The petitioner has claimed O&M charges for Asset-I and II, which is as under:-

(₹ in lakh)

Asset		Line length (km)/ No. of Bays	O&M Expenses		
			2011-12	2012-13	2013-14
Asset-I	**T/L**	4 km	4.20	4.44	4.70
Asset-II	**T/L & S/S**	219.80 km / 2 nos.	0.00	368.04	388.97

47. The allowable O&M Expenses as per Regulation 19(g) of the 2009 Tariff Regulations are as under:-

(₹ in lakh)

Asset		Line length (km)/ No. of Bays	O&M Expenses		
			2011-12	2012-13	2013-14
Asset-I	**T/L**	4 km	2.34	2.96	3.13
Asset-II	**T/L / S/S**	219.80 km / 2 nos.	0.00	368.04	388.97

The O&M Expenses allowed for the instant assets in order dated 7.5.2015 in Petition No. 37/TT/2011 is the same as worked out above.

Interest on Working Capital (IWC)

48. Interest on working capital is worked as provided under Regulation 18 of the 2009 Tariff Regulations as detailed below:-

(i) Receivables

The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

(ii) Maintenance spares

Regulation 18(1)(c)(ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M Expenses. The value of maintenance spares has accordingly been worked out.

(iii) O & M Expenses

Regulation 18(1)(c)(iii) of the 2009 Tariff Regulations provides for O&M Expenses 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 working capital:

As per the second amendment to the Tariff Regulations 2009, dated 21st June 2011, SBI Base Rates have been considered as the rate of interest on working capital for various assets.

49. The components of the working capital and interest thereon have been worked out as follows:-

(₹ in lakh)

Particulars	**Asset-I**		
	2011-12 (pro-rata)	**2012-13**	**2013-14**
Maintenance Spares	0.42	0.44	0.47
O & M expenses	0.23	0.25	0.26
Receivables	73.74	78.24	77.14
Total	74.40	78.93	77.87
Interest (11.75%)	**7.28**	**9.27**	**9.15**

(₹ in lakh)

Particulars	Asset-II	
	2012-13	2013-14
Maintenance Spares	55.21	58.35
O & M expenses	30.67	32.41
Receivables	3219.57	3090.72
Total	3305.45	3181.48
Interest (13.50%)	**446.24**	**429.50**

Annual Transmission charges

50. In view of above, the trued up annual transmission charges of the instant assets for the tariff period 2009-14 are as under:-

(₹ in lakh)

Particulars	Asset-I		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	94.59	118.65	130.82
Interest on Loan	151.61	197.35	173.99
Return on Equity	112.90	141.18	145.76
Interest on Working Capital	7.28	9.27	9.15
O & M Expenses	2.34	2.96	3.13
Total	**368.72**	**469.42**	**462.85**

(₹ in lakh)

Particulars	Asset-II	
	2012-13	2013-14
Depreciation	4886.50	4957.20
Interest on Loan	8126.44	7133.59
Return on Equity	5490.22	5635.05
Interest on Working Capital	446.24	429.50
O & M Expenses	368.04	388.97
Total	**19317.44**	**18544.30**

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

51. The Commission in order dated 29.2.2016 in Petition No. 181/TT/2014 had approved the following methodology of allowing combined single tariff for individual assets as provided in Regulation 6 of the 2014 Tariff Regulations.

52. The final tariff for the instant assets for the 2009-14 period was worked out

on the basis of the COD of individual assets irrespective of the fact whether the other assets covered in the project was completed or not. This has resulted in award of multiple tariffs for the assets covered under the single project/transmission system. In this petition too, the tariff for 2009-14 period has been allowed for individual assets. Regulation 6 the 2014 Tariff Regulations requires submitting single consolidated petition where all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, so that the Commission may grant single tariff for all the assets covered under the project. In order to determine a single transmission tariff, the concept of effective date of commercial operation and, weighted average life has been introduced under Regulation 27 of the 2014 Tariff Regulations.

53. The relevant portions of Regulation 6 and Regulation 27 of the 2014 Tariff Regulations are as under:-

> **“6. Tariff determination**
>
> (1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or sub-station or communication system forming part of transmission system:
>
> Provided that:
> (i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmissions system for the purpose of determination of tariff for the period 2014-15 to 2018-19:
> Xxx
> Xxx”
>
> **“27. Depreciation:**

(1) 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.

(2) 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.
Xxx
Xxx"

"(5) 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.
Xxx
Xxx"

54. The instant petition includes Asset-I:LILO of both ckt 400 kV D/C Baspa–Nathpa Jhakri transmission line D/C (triple snowbird) at Karcham wangtoo HEP and Asset-II: Karcham Wangtoo-Abdullapur 400 kV D/C quad transmission line along with associated bays at Abdullapur Sub-station Jaypee Powergrid Limited (JPL). The Commission in order dated 7.5.2015 in Petition No. 37/TT/2011 read with order dated 24.2.2017 in Review Petition No. 17/RP/2015, had approved the

final tariff for the assets separately. Hence, the tariff for the assets for period 2009-14 has been trued-up in the foregoing paragraphs.

55. The petitioner has informed that the project is complete. The petitioner has submitted the tariff forms, combining the instant two assets into single asset. Accordingly, single tariff for the combined assets has been worked out for the tariff period 2014-19 by applying the concepts of effective date of commercial operation and weighted average life.

Effective Date of Commercial Operation (E-COD)

56. The Effective Date of Commercial Operation (E-COD) for the combined assets has been worked out based on the admitted capital cost of individual assets as on 31.3.2014 and the COD of individual assets. Accordingly, the E-COD for the combined assets has been worked out as 24.3.2012 as shown below:-

Computation of Effective COD						
Asset	**COD**	**Admitted Capital Cost as on 31.3.2014 (₹ in lakh)**	**Weight of the cost**	**No. of days from last COD**	**Weighted days**	**Effective DOCO (latest COD - weighted days)**
Asset-I	1.6.2011	2477.64	2.51%	305	7.65	
Asset-II	1.4.2012	96367.99	97.49%	0	0.00	
Total		**98845.63**	100.00%			**24.3.2012**

57. The E-COD has been used to determine the elapsed life for the combined assets as on 1.4.2014 as two years. (i.e. the number of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

58. The life as defined in Regulation 27 of the 2014 Tariff Regulations has been considered for determination of Weighted Average Life (WAL). The combined assets, may have multiple elements (i.e. land, building, transmission line, sub-station and PLCC) and each element may have different span of life. Therefore, in the 2014 Tariff Regulations, the concept of WAL has been introduced which has been used as the useful life of the project as whole. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The element wise life as it was defined in Tariff Regulation prevailing at the time of COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, the WAL of the combined assets has been worked out as 35 years as shown below:-

Determination of Weighted Average Life			
Particulars	**Admitted capital cost as on 31.3.2014 for Combined Assets (a)**	**Life as per the 2014 Tariff Regulations (b)**	**Weight (a) x (b)**
Freehold Land*	63.27	25	1581.75
Leasehold Land	0.00	0	
Building & Other Civil Works	191.98	25	4799.50
Transmission Line	97077.83	35	3397724.05
Sub-Station Equipment	1386.42	25	34660.50
PLCC	126.13	25	3153.25
TOTAL (except Freehold Land)	**98782.36**		**3440337.30**
Weighted Average life = Total of Weight / Capital cost of project	**35 Years**		

*Freehold land has not been considered in calculation of weighted average life.

59. It is assumed that, the WAL of the assets as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2014 as 33 years.

60. The petitioner has claimed the following transmission charges for the 2014-19 tariff period:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Depreciation	5282.10	5330.79	5330.81	5330.81	5330.81
Interest on Loan	6934.20	6158.41	5406.78	4714.75	4112.37
Return on Equity	5892.95	5975.99	5975.99	5975.99	5975.99
Interest on Working Capital	436.63	422.46	405.83	390.61	377.47
O&M Expenses	358.28	370.11	382.31	395.09	408.22
Total	**18904.15**	**18257.76**	**17501.72**	**16807.25**	**16204.86**

61. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Maintenance Spares	53.74	55.52	57.35	59.26	61.23
O & M Expenses	29.86	30.84	31.86	32.92	34.02
Receivables	3150.68	3042.94	2916.94	2801.19	2700.80
Total	**3234.28**	**3129.30**	**3006.15**	**2893.37**	**2796.05**
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	436.63	422.46	405.83	390.60	377.47

<u>Capital Cost as on 1.4.2014</u>

62. Clause (1) and (3) 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."

"(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."

63. The element wise admitted capital cost (i.e. land, building, transmission line, sub-station and PLCC) as on 31.3.2014 for Asset-I and Asset-II are clubbed together and the combined capital costs has been considered as capital cost for combined assets as on 1.4.2014.

(₹ in lakh)

Particulars	**Combined cost of the two assets as on 1.4.2014**
Freehold Land	63.27
Leasehold Land	0.00
Building & Other Civil Works	191.98
Transmission Line	97077.83
Sub-Station Equipment	1386.42
PLCC	126.13
Total	**98845.63**

64. The total of such element wise capital cost of combined asset ₹98845.63 lakh has been considered as the admitted capital cost of the two instant assets in the instant petition as on 1.4.2014. Further, vide Auditor's certificate dated 20.9.2017, the petitioner has submitted the additional capital expenditure during 2014-19 tariff period. The petitioner has claimed the add-cap as "balance and

retention payment" under Regulation 9(i) of the 2014 Tariff Regulations. However, it should come under Regulation 14(i) of the 2014 Tariff Regulations.

(₹ in lakh)

Assets	**Projected Expenditure**				
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Combined Assets	744.54	0.00	0.00	0.00	0.00

65. The petitioner has submitted statement showing liability disbursement for 2014-19 tariff period, which is as follows:-

(₹ In lakh)

Combined Asset	**Outstanding as on 31.3.2014**	**2014-15**			**2015-16**		
		Addition during the year	**Paid during the year**	**Outstand-ing as on year end**	**Addition during the year**	**Paid during the year**	**Outstand-ing as on year end**
Hard Cost	1067.63	**557.58**	**1624.22**	**0.99**	**-**	**0.85**	**0.14**
IEDC	44.28	186.96	220.32	10.92	-	3.18	7.74
IDC	-	-	-	-	-	-	-
Total Cost	**1111.91**	**744.54**	**1844.54**	**11.91**	**-**	**4.03**	**7.88**

(₹ In lakh)

Combined Asset	**2016-17**			**2017-18**		
	Addition during the year	**Paid during the year**	**Outstanding as on year end**	**Addition during the year**	**Paid during the year**	**Outstanding as on year end**
Hard Cost	**-**	**-**	**0.14**	**-**	**-**	**0.14**
IEDC	-	1.13	6.61	-	-	6.61
IDC	-	-	-	-	-	-
Total Cost	**-**	**1.13**	**6.75**	**-**	**-**	**6.75**

66. Therefore, in view of the above, the following capital cost has been considered as on 1.4.2019 and thereafter for the purpose of determination of tariff for 2014-19 tariff period:-

(₹ In lakh)

Assets	Capital Cost as on 1.4.2014	Additional Capital Expenditure					Capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Assets	98845.63	1844.54	4.03	1.13	0.00	0.00	100695.33

Additional Capital Expenditure

67. Sub-clause (i) of Clause 1and sub-clause (ix) of Clause 3 of Regulation 14 of the 2014 Tariff Regulations provides as follows:-

> "(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 recognized to be payable at a future date;
>
> "(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
> …..
> (ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system;

68. The additional capitalization during the 2014-19 period is mentioned below:-

(₹ In lakh)

Asset	Additional Capitalisation on Cash Basis/ Paid		
	2014-15	2015-16	2016-17
Asset-I	0.00	0.00	0.00
Asset-II	1844.53	4.03	1.13

69. In case of Asset-II, the petitioner has claimed add-cap for release of pending liabilities/pending work execution under Regulation 9(1) of the 2014 Tariff Regulations. However, this pertained to 2014-19 period, therefore it is being considered under Regulation 14 of the 2014 Tariff Regulations. The petitioner has not claimed any additional capitalization in case of Asset-I. The COD of instant assets i.e. Asset-I and II is 1.6.2011 and 1.4.2012 respectively. Accordingly, their respective cut-off dates are 31.3.2014 and 31.3.2015 respectively. As per Regulation 14(1) of the 2014 Tariff Regulations, the petitioner's claim, on account of undischarged liabilities, is admissible upto cut-off date i.e. 31.3.2015. Accordingly, additional capitalization upto 2014-15 is only allowed. The undischarged liabilities of 2015-16 and 2016-17 are not admissible as per Regulation 14 of the 2014 Tariff Regulations.

Debt:Equity Ratio

70. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

> "(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered."

71. The petitioner has considered debt:equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. The details of the debt:equity as on 1.4.2014 considered for the purpose of

determination of tariff for the 2014-19 tariff period and as on 31.3.2019 are as follows:-

(₹ in lakh)

Particulars	**Ratio (%)**	**As on 1.4.2014**	**As on 31.3.2019**
Debt	70.00	69191.94	70486.73
Equity	30.00	29653.69	30208.60
Total	**100.00**	98845.63	100695.33

Return on Equity ("RoE")

72. Clause (1) and (2) of Regulation 24 and Clause (2) and (3) 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"
>
> **"25. Tax on Return on Equity:**
> (2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:
>
> 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.
>
> xxxx
>
> (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year 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 income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on

account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis."

73. The Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations, provides the grossing up of ROE with the effective tax rate for the purpose of RoE. Accordingly, the MAT rate of 20.961% applicable during the 2013-14 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations.

74. Accordingly, the following ROE is allowed for the combined assets for the 2014-19 tariff period:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Equity	29653.69	30207.05	30208.26	30208.60	30208.60
Additional Capitalization	553.36	1.21	0.34	0.00	0.00
Closing Equity	30207.05	30208.26	30208.60	30208.60	30208.60
Average Equity	29930.37	30207.66	30208.43	30208.60	30208.60
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the financial year 2013-14 (%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	**5869.35**	**5923.72**	**5923.87**	**5923.91**	**5923.91**

Interest on Loan ("IOL")

75. Clause (5) and (6) of Regulation 26 of the 2014 Tariff Regulations provides as under:-

"(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."

76. The interest on loan has been worked out as detailed below:

(i) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form-9C given in the petition. Accordingly, the weighted average rate of interest has been calculated on the basis of the actual loan portfolio of the combined asset.

(ii) The Normative repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.

(iii) Weighted average rate of interest on actual average loan worked out as per (i) above, is applied on the notional average loan during the year to arrive at the interest on loan.

77. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and is allowed as follows:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross loan opening	69191.94	70483.12	70485.94	70486.73	70486.73
Cumulative Repayment upto previous year	10187.75	15449.75	20760.56	26071.50	31382.48
Net Loan-Opening	59004.19	55033.36	49725.38	44415.23	39104.25

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additions during the year	1291.18	2.82	0.79	0.00	0.00
Repayment during the year	5262.00	5310.81	5310.94	5310.97	5310.97
Net Loan-Closing	55033.36	49725.38	44415.23	39104.25	33793.28
Average Loan	57018.78	52379.37	47070.30	41759.74	36448.77
Rate of Interest (%)	12.1585%	11.7580%	11.4895%	11.3000%	11.3000%
Interest	**6932.63**	**6158.75**	**5408.14**	**4718.85**	**4118.71**

Depreciation

78. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

> **"27. Depreciation:**
>
> (2) 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"
>
> "(5) 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.
>
> (6) 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."

79. For the 2014-19 period depreciation has been worked out based on Straight Line Method as per regulation. Asset shall complete its 12 years life beyond the current tariff period.

80. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	98845.63	100690.17	100694.20	100695.33	100695.33
Addition during 2014-19 due to Projected Additional Capitalisation	1844.54	4.03	1.13	0.00	0.00
Closing Gross Block	100690.17	100694.20	100695.33	100695.33	100695.33
Average Gross Block	99767.90	100692.19	100694.77	100695.33	100695.33
Rate of Depreciation	5.2742%	5.2743%	5.2743%	5.2743%	5.2743%
Depreciable Value	89734.17	90566.02	90568.35	90568.85	90568.85
Remaining Depreciable Value	79546.42	75116.27	69807.78	64497.35	59186.38
Depreciation	**5262.00**	**5310.81**	**5310.94**	**5310.97**	**5310.97**

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

81. The petitioner has claimed the following O&M charges for the period 2014-19 for the combined asset covered in the petition:-

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
358.28	370.11	382.31	395.09	408.22

82. The allowable O&M Expenses for the 2014-19 tariff period as per Regulation 29(4) of the 2014 Tariff Regulations for the assets covered in the instant petition are as follows:-

(₹ in lakh)

Element	2014-15	2015-16	2016-17	2017-18	2018-19
4 km D/C triple conductor T/L **(Asset-I)**	2.83	2.92	3.02	3.12	3.22
219.8 km D/C quad conductor T/L **(Asset-II)**	233.43	241.12	249.03	257.39	265.96
2 nos. 400 kV bays **(Asset-II)**	120.60	124.60	128.74	133.02	137.42
Total	**356.86**	**368.64**	**380.79**	**393.53**	**406.60**

Interest on Working Capital ("IWC")

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

> "**28. Interest on Working Capital**
>
> (c)(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"
>
> "(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;"

84. The interest on working capital worked out as per Regulation 28(1)(c) and 28(3) of the 2014 Tariff Regulations for the combined assets is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	53.53	55.30	57.12	59.03	60.99
O & M expenses	29.74	30.72	31.73	32.79	33.88
Receivables	3142.72	3030.44	2904.65	2789.37	2689.34
Total	3225.99	3116.46	2993.50	2881.19	2784.22
Interest	**435.51**	**420.72**	**404.12**	**388.96**	**375.87**

Annual Transmission Charges

85. The details of Annual Transmission Charges allowed for the combined assets for the 2014-19 tariff period is summarised below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	5262.00	5310.81	5310.94	5310.97	5310.97
Interest on Loan	6932.63	6158.75	5408.14	4718.85	4118.71
Return on Equity	5869.35	5923.72	5923.87	5923.91	5923.91
Interest on Working Capital	435.51	420.72	404.12	388.96	375.87
O & M Expenses	356.86	368.64	380.79	393.53	406.60
Total	**18856.34**	**18182.64**	**17427.87**	**16736.22**	**16136.06**

Filing Fee and Publication Expenses

86. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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

87. The petitioner has requested to allow the petitioner to recover license fee and RLDC fees and charges 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.

Sharing of Transmission Charges

88. 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, as provided in Regulation 43 of the 2014 Tariff Regulations.

89. This order disposes of Petition No. 217/TT/2017.

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

ANNEXURE-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR ASSET-I AND II COMBINED				
				((₹ in lakh)
	Details of Loan	**2011-12**	**2012-13**	**2013-14**
1	**Punjab National Bank**			
	Gross loan opening	**16630.00**	**19430.00**	**20000.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**1739.16**
	Net Loan-Opening	16630.00	19430.00	18260.84
	Additions during the year	2800.00	570.00	0.00
	Repayment during the year	0.00	1739.16	1739.16
	Net Loan-Closing	19430.00	18260.84	16521.68
	Average Loan	18030.00	18845.42	17391.26
	Rate of Interest	11.850%	13.380%	12.370%
	Interest	2136.56	2521.52	2151.30
	Rep Schedule	Re payment effective from 1.7.2012		
2	**Central Bank Of India**			
	Gross loan opening	**12472.00**	**14572.00**	**15000.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**1304.40**
	Net Loan-Opening	12472.00	14572.00	13695.60
	Additions during the year	2100.00	428.00	0.00
	Repayment during the year	0.00	1304.40	1304.40
	Net Loan-Closing	14572.00	13695.60	12391.20
	Average Loan	13522.00	14133.80	13043.40
	Rate of Interest	11.550%	13.130%	11.710%
	Interest	1561.79	1855.77	1527.38
	Rep Schedule	Re payment effective from 1.7.2012		
3	**J&K Bank**			
	Gross loan opening	**8315.00**	**9715.00**	**10000.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**869.60**
	Net Loan-Opening	8315.00	9715.00	9130.40
	Additions during the year	1400.00	285.00	0.00
	Repayment during the year	0.00	869.60	869.60
	Net Loan-Closing	9715.00	9130.40	8260.80
	Average Loan	9015.00	9422.70	8695.60
	Rate of Interest	11.010%	12.520%	11.540%
	Interest	992.55	1179.72	1003.47
	Rep Schedule	Re payment effective from 1.7.2012		

4	**ICICI Bank**			
	Gross loan opening	**4456.57**	**4987.57**	**4987.57**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**4987.57**	**4987.57**
	Net Loan-Opening	4456.57	0.00	0.00
	Additions during the year	531.00	0.00	0.00
	Repayment during the year	4987.57	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	2228.29	0.00	0.00
	Rate of Interest	19.350%	0.000%	0.000%
	Interest	431.17	0.00	0.00
	Rep Schedule	Loan closed during 2011-12		
5	**United Bank of India**			
	Gross loan opening	**5820.00**	**5820.00**	**5820.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**5820.00**	**5820.00**
	Net Loan-Opening	5820.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	5820.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	2910.00	0.00	0.00
	Rate of Interest	18.98%	0.00%	0.00%
	Interest	552.32	0.00	0.00
	Rep Schedule	Loan Closed during 2011-12		
6	**Indian Overseas Bank**			
	Gross loan opening	**9976.10**	**9976.10**	**9976.10**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**9976.10**	**9976.10**
	Net Loan-Opening	9976.10	0.00	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	9976.10	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	4988.05	0.00	0.00
	Rate of Interest	16.65%	0.00%	0.00%
	Interest	830.51	0.00	0.00
	Rep Schedule	Loan Closed during 2011-12		
7	**State Bank of India**			
	Gross loan opening	**0.00**	**24284.00**	**25000.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**437.50**
	Net Loan-Opening	0.00	24284.00	24562.50
	Additions during the year	24284.00	716.00	0.00
	Repayment during the year	0.00	437.50	1750.00
	Net Loan-Closing	24284.00	24562.50	22812.50
	Average Loan	12142.00	24423.25	23687.50

	Rate of Interest	5.86%	12.17%	11.93%
	Interest	711.52	2972.31	2825.92
	Rep Schedule	Re payment effective from 31.3.2013		
	Total Loan			
	Gross loan opening	57669.67	88784.67	90783.67
	Cumulative Repayment upto DOCO/previous year	0.00	20783.67	25134.33
	Net Loan-Opening	57669.67	68001.00	65649.34
	Additions during the year	31115.00	1999.00	0.00
	Repayment during the year	20783.67	4350.66	5663.16
	Net Loan-Closing	68001.00	65649.34	59986.18
	Average Loan	62835.34	66825.17	62817.76
	Rate of Interest	**11.4847%**	**12.7636%**	**11.9521%**
	Interest	7216.42	8529.32	7508.07

Annexure-II

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
						(₹ in lakh)
	Details of Loan	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
1	**Punjab National Bank**					
	Gross loan opening	20000.00	**20000.00**	**20000.00**	**20000.00**	**20000.00**
	Cumulative Repayment upto DOCO/previous year	3478.32	**5217.48**	**6956.64**	**8695.80**	**10434.96**
	Net Loan-Opening	16521.68	14782.52	13043.36	11304.20	9565.04
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1739.16	1739.16	1739.16	1739.16	1739.16
	Net Loan-Closing	14782.52	13043.36	11304.20	9565.04	7825.88
	Average Loan	15652.10	13912.94	12173.78	10434.62	8695.46
	Rate of Interest	12.170%	11.810%	11.520%	11.300%	11.300%
	Interest	1904.86	1643.12	1402.42	1179.11	982.59
	Rep Schedule	Re payment effective from 1.7.2012				
2	**Central Bank Of India**					
	Gross loan opening	15000.00	**15000.00**	**15000.00**	**15000.00**	**15000.00**
	Cumulative Repayment upto DOCO/previous year	2608.80	**3913.20**	**5217.60**	**6522.00**	**7826.40**
	Net Loan-Opening	12391.20	11086.80	9782.40	8478.00	7173.60
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1304.40	1304.40	1304.40	1304.40	1304.40
	Net Loan-Closing	11086.80	9782.40	8478.00	7173.60	5869.20
	Average Loan	11739.00	10434.60	9130.20	7825.80	6521.40
	Rate of Interest	12.17%	11.76%	11.50%	11.30%	11.30%
	Interest	1428.64	1227.11	1049.97	884.32	736.92
	Rep Schedule	Re payment effective from 1.7.2012				
3	**J&K Bank**					
	Gross loan opening	10000.00	**10000.00**	**10000.00**	**10000.00**	**10000.00**
	Cumulative Repayment upto DOCO/previous year	1739.20	**2608.80**	**3478.40**	**4348.00**	**5217.60**
	Net Loan-Opening	8260.80	7391.20	6521.60	5652.00	4782.40
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	869.60	869.60	869.60	869.60	869.60
	Net Loan-Closing	7391.20	6521.60	5652.00	4782.40	3912.80
	Average Loan	7826.00	6956.40	6086.80	5217.20	4347.60
	Rate of Interest	12.17%	11.76%	11.50%	11.30%	11.30%

	Interest	952.42	818.07	699.98	589.54	491.28
	Rep Schedule	Re payment effective from 1.7.2012				
4	**State Bank of India**					
	Gross loan opening	25000.00	**25000.00**	**25000.00**	**25000.00**	**25000.00**
	Cumulative Repayment upto DOCO/previous year	2187.50	**4000.00**	**6000.00**	**8000.00**	**10000.00**
	Net Loan-Opening	22812.50	21000.00	19000.00	17000.00	15000.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1812.50	2000.00	2000.00	2000.00	2000.00
	Net Loan-Closing	21000.00	19000.00	17000.00	15000.00	13000.00
	Average Loan	21906.25	20000.00	18000.00	16000.00	14000.00
	Rate of Interest	12.14%	11.72%	11.46%	11.30%	11.30%
	Interest	2659.42	2344.00	2062.80	1808.00	1582.00
	Rep Schedule	Re payment effective from 31.3.2013				
	Total Loan					
	Gross loan opening	70000.00	70000.00	70000.00	70000.00	70000.00
	Cumulative Repayment upto DOCO/previous year	10013.82	15739.48	21652.64	27565.80	33478.96
	Net Loan-Opening	59986.18	54260.52	48347.36	42434.20	36521.04
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	5725.66	5913.16	5913.16	5913.16	5913.16
	Net Loan-Closing	54260.52	48347.36	42434.20	36521.04	30607.88
	Average Loan	57123.35	51303.94	45390.78	39477.62	33564.46
	Weighted Average Rate of Interest	**12.1585%**	**11.7580%**	**11.4895%**	**11.3000%**	**11.3000%**
	Interest	6945.34	6032.30	5215.17	4460.97	3792.78