CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO.364/TT/2014

Coram:

Shri A.S. Bakshi, Member Dr. M. K. Iyer, Member

Date of Hearing: 23.11.2015 Date of Order : 11.12.2015

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block and determination of transmission tariff for 2014-19 tariff block for400 kV D/C Dhauliganga HEP - Bareilly (UPPCL) Transmission Line along with its associated bays at Bareilly(UPPCL) in Northern Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014

And in the Matter of:

Power Grid Corporation of India Ltd, SAUDAMINI, Plot No.-2, Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner

Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur - 302005
- Ajmer Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- Jaipur Vidyut Vitran Nigam Limited,
 400 kV GSS Building (Ground Floor),
 Ajmer Road, Heerapura, Jaipur
- 4. Jodhpur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor),



Ajmer Road, Heerapura, Jaipur

- Himachal Pradesh State Electricity Board,
 Vidyut Bhawan, Kumar House Complex Building II,
 Shimla-171 004
- Punjab State Electricity Board, Thermal Shed TIA, Near 22 Phatak, Patiala-147001
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula, Haryana - 134109
- 8. Power Development Department, Government of Jammu & Kashmir, Mini Secretariat, Jammu
- Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow - 226 001
- 10. Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi-110002
- 11. BSES Yamuna Power Limited, BSES Bhawan, Nehru Place, New Delhi.
- 12. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi
- 13. North Delhi Power Limited, Power Trading & Load Dispatch Group Cennet Building, Adjacent To 66/11 kV Pitampura-3, Grid Building, Near PP Jewellers Pitampura, New Delhi - 110034
- 14. Chandigarh Administration, Sector -9, Chandigarh
- 15. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun
- North Central Railway, Allahabad
- 17. New Delhi Municipal Council,



Palika Kendra, Sansad Marg, New Delhi-110002

.....Respondent(s)

The following were present:

For Petitioner: Shri S.K. Niranjan, PGCIL

Shri S.S. Raju, PGCIL Shri Jasbir Singh, PGCIL Shri Anshul Garg, PGCIL Shri Rakesh Prasad, PGCIL Shri M.M. Mondal, PGCIL Shri S.K Venkatesan, PGCIL Smt. Sangeeta Edwards, PGCIL

For Respondents: Shri B.L. Sharma, JVVNL

Shri Vinod Yadav, JVVNL

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as "the petitioner"), a transmission licensee, for revision of tariff 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 truing up of capital expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 in respect of 400 kV D/C Dhauliganga HEP - Bareilly (UPPCL) Transmission Line along with its associated bays at Bareilly(UPPCL) in Northern Region (hereinafter referred to as "the transmission asset").

2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.



- 3. The brief facts of the case are as follows:
 - a) The approval for the revised cost estimate for the transmission asset was accorded by Board of Directors of the petitioner company vide Memorandum dated 25.10.2006 at an estimated cost of ₹18207 lakh, which included IDC of ₹1004 lakh.
 - b) The transmission asset was put to commercial operation on 1.8.2005. The Commission vide its order dated 10.2.2011 in Petition No. 233/2010 had approved the capital cost of ₹17205.45 lakh as on 31.3.2009 as under:-

Admitted as on 31.3.2009	Amount (₹ in lakh)	Percentage (%)
Debt	12716.81	73.91
Equity	4488.64	26.09
Capital Cost	17205.45	100.00

- c) The petitioner had approached the Commission vide Petition No. 233/2010 for approval of additional capital expenditure of ₹83.94 lakh towards balance and retention payments during 2010-11 and determination of tariff for 2009-14 tariff period.
- d) The commission had allowed the additional capital expenditure of ₹83.94 lakh in view of the reasons recorded and decision taken in its order dated 8.2.2011 in Petition No. 176/2010.
- e) The Commission determined the tariff for the transmission asset for tariff period 2009-14, based on admitted capital cost of ₹17205.45 lakh as on 31.3.2009 and estimated additional capital expenditure of ₹83.94 lakh for 2010-11 as given below:-



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	908.67	910.89	913.10	913.10	913.10
Interest on Loan	403.62	368.09	332.25	295.43	258.82
Return on Equity	784.66	786.86	789.06	789.06	789.06
Interest on Working Capital	58.40	58.60	58.83	59.00	59.23
O & M Expenses	293.81	310.65	328.45	347.19	366.96
Total	2449.16	2435.08	2421.69	2403.78	2387.17

- 4. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.
- 5. In this context, the petitioner has filed the instant petition on 4.9.2014, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.
- 6. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/objections have been received from the public in response to the notice in newspaper. No submissions have been made by the respondents. The hearing in this matter was held on 23.11.2015. During the hearing the Commission had directed the petitioner to submit additional information against the additional capital expenditure claimed by the petitioner for 2009-14 tariff period and 2014-19 tariff period. In response to the Commission's directions the petitioner has submitted its replies vide affidavit dated 20.11.2015. Having heard the representatives



of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

- 7. 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".
- 8. 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

- 9. The petitioner has claimed admitted capital cost of ₹17205.45 lakh as on 31.3.2009 for the purpose of tariff determination.
- 10. The last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that:-
 - "Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff".
- 11. The capital cost of ₹17205.45 lakh admitted by the Commission as on 31.3.2009 has been considered as opening capital cost as on 1.4.2009 for determination of trued up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.



Additional Capital Expenditure

12. Regulation 6(1) of the 2009 Regulations provides that:-

"The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014"

13. The petitioner has submitted that it has incurred an additional capital expenditure of ₹5.30 lakh in 2010-11 towards final payment of undischarged liabilities as depicted below:-

(₹ in lakh)

Capital cost		Addition	Total cost			
admitted as on 31.3.2009	Particulars	2009-10	2010-11	2011-14	as on 31.3.2014	
17205.45	Approved vide order dated 10.2.2011	-	83.94	-	17289.39	
17205.45	Actual incurred during 2009-14	-	5.30	-	17210.75	

14. The petitioner has submitted the Auditor's Certificate dated 21.6.2014 certifying the actual capital cost. The Commission had directed the petitioner to submit an undertaking or certificate depicting whether the additional capital expenditure claimed by the petitioner for 2009-14 tariff period is towards the same scheme. The petitioner vide its affidavit dated 20.11.2015 has clarified that the additional capital expenditure claimed for 2009-14 tariff period is towards the same scheme covered under this petition.



- 15. We have considered the submissions of the petitioner with regard to the actual capital expenditure in 2010-11. Since the capital addition of ₹5.30 lakh is based on actual capital expenditure incurred as per the Auditor Certificate dated 21.6.2014, and is within the original scope of work and the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure, the same is allowed for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations.
- 16. The debt:equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

Debt: Equity

- 17. Regulation 12 of the 2009 Tariff Regulations provides as under:-
 - "12. Debt-Equity Ratio. (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:

- (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.
- (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."
- 18. The debt:equity ratio of 73.91:26.09 admitted by the Commission vide order dated 10.2.2011 in Petition No. 233/2010 as on 31.3.2009 has been considered as on



- 1.4.2009 for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.
- 19. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

Funding	Capital Cost as on 31.3.2009	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	12716.81	73.91	3.71	70.00	12720.52	73.91
Equity	4488.64	26.09	1.59	30.00	4490.23	26.09
Total	17205.45	100.00	5.30	100.00	17210.75	100.00

Return on Equity (ROE)

- 20. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that
 - "(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."

21. The variation in 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 return on equity (ROE) has been furnished as follows:-

Year	MAT Rate claimed in the current petition	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition
2009-10	16.995%	18.674%
2010-11	19.931%	19.358%
2011-12	20.008%	19.377%
2012-13	20.008%	19.377%
2013-14	20.961%	19.610%

- 22. The Commission had directed the petitioner to indicate the actual equity infused for the 2009-14 tariff period. The petitioner has submitted that no actual loan has been deployed for the additional capital expenditure during 2010-11 and the entire amount of additional capital expenditure i.e. ₹5.30 lakh is funded through equity. However the petitioner has claimed the additional capital expenditure in the debt:equity ratio of 70:30, which is in line with Regulation 12 of the 2009 Tariff Regulations.
- 23. The ROE as trued up and allowed is as follows:-

(₹ in lakh)

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 10.2.2011	784.66	786.86	789.06	789.06	789.06
Claimed by the petitioner	838.21	869.07	870.07	870.07	880.53
Allowed after truing up in this order	838.19	869.08	870.07	870.07	880.55

The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate.



Interest on Loan (IoL)

- 24. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and held that:-
 - "...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up".
- 25. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed in Annexure-1. The IoL worked out is as follows:-

(₹ in lakh)

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 10.2.2011	403.62	368.09	332.25	295.43	258.82
Claimed by the petitioner	403.32	367.52	332.35	295.22	258.22
Allowed after truing up in this order	403.32	367.52	332.35	295.21	258.22

The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Depreciation

26. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-



Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 10.2.2011	908.67	910.89	913.10	913.10	913.10
Claimed by the petitioner	908.67	908.84	909.01	909.01	909.01
Allowed after truing up in this order	908.67	908.84	909.01	909.01	909.01

The difference in the approved depreciation and that allowed after truing up is on account of change gross block during the 2009-14 tariff period.

Interest on Working Capital (IWC)

27. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and allowed as under:-

(₹ in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 10.2.2011	58.40	58.60	58.83	59.00	59.23
Claimed by the petitioner	59.51	60.26	60.44	60.60	61.04
Allowed after truing up in this order	59.51	60.25	60.43	60.60	61.03

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

Operation & Maintenance Expenses (O&M Expenses)

28. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M expenses for the instant



assets have been worked out based on norms of O&M Expenses and the details are as follows:-

(₹in lakh)

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 10.2.2011	293.81	310.65	328.45	347.19	366.96
Claimed by the petitioner	293.81	310.65	328.45	347.19	366.96
Allowed after truing up in this order	293.81	310.65	328.45	347.19	366.96

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

29. The detailed computation of the various components of the trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is summarised below:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	17205.45	17205.45	17210.75	17210.75	17210.75
Additional Capitalisation	0.00	5.30	0.00	0.00	0.00
Closing Gross Block	17205.45	17210.75	17210.75	17210.75	17210.75
Average Gross Block	17205.45	17208.10	17210.75	17210.75	17210.75
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	15484.91	15487.29	15492.06	15489.68	15489.68
Balance useful life of the asset	31.00	30.00	29.00	28.00	27.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	13852.04	12945.75	12039.30	11130.30	10221.29
Depreciation during the year	908.67	908.84	909.01	909.01	909.01
Cumulative depreciation (incl.					
of AAD)	2541.54	3450.37	4359.38	5268.39	6177.39
Interest on Loan					
Gross Normative Loan	12716.81	12716.81	12720.52	12720.52	12720.52
Cumulative Repayments upto					
Previous Year	1690.54	2599.21	3508.05	4417.05	5326.06
Net Loan-Opening	11026.27	10117.60	9212.47	8303.47	7394.46
Additions	0.00	3.71	0.00	0.00	0.00
Repayment during the year	908.67	908.84	909.01	909.01	909.01
Net Loan-Closing	10117.60	9212.47	8303.47	7394.46	6485.45



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Average Loan	10571.93	9665.04	8757.97	7848.96	6939.96
Weighted Average Rate of					
Interest on Loan (%)	3.8150	3.8026	3.7948	3.7612	3.7208
Interest on Loan	403.32	367.52	332.35	295.21	258.22
Return on Equity					
Opening Equity	4488.64	4488.64	4490.23	4490.23	4490.23
Additions	0.00	1.59	0.00	0.00	0.00
Closing Equity	4488.64	4490.23	4490.23	4490.23	4490.23
Average Equity	4488.64	4489.44	4490.23	4490.23	4490.23
Return on Equity (Base Rate)					
(%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (%)	18.674	19.358	19.377	19.377	19.610
	838.19				880.55
Return on Equity	030.19	869.08	870.07	870.07	000.00
Interest on Working Capital					
O & M Expenses	24.47	25.88	27.36	28.92	30.57
Maintenance Spares	44.07	46.60	49.27	52.08	55.04
Receivables	417.25	419.39	416.72	413.68	412.63
Total Working Capital	485.79	491.87	493.34	494.68	498.24
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest of working capital	59.51	60.25	60.43	60.60	61.03
Annual Transmission					
Charges					
Depreciation	908.67	908.84	909.01	909.01	909.01
Interest on Loan	403.32	367.52	332.35	295.21	258.22
Return on Equity	838.19	869.08	870.07	870.07	880.55
Interest on Working Capital	59.51	60.25	60.43	60.60	61.03
O & M Expenses	293.81	310.65	328.45	347.19	366.96
Total	2503.50	2516.35	2500.31	2482.08	2475.78

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

30. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	912.06	915.09	915.09	915.09	261.77
Interest on Loan	223.05	188.11	153.12	119.84	98.68
Return on Equity	883.93	887.32	887.32	887.32	887.32
Interest on Working Capital	64.96	64.93	64.75	64.64	49.79
O & M Expenses	334.70	345.93	357.36	369.18	381.48
Total	2418.70	2401.38	2377.64	2356.07	1679.04

31. 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
O & M Expenses	27.89	28.83	29.78	30.77	31.79
Maintenance Spares	50.21	51.89	53.60	55.38	57.22
Receivables	403.12	400.23	396.27	392.68	279.84
Total	481.22	480.95	479.65	478.83	368.85
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	64.96	64.93	64.75	64.64	49.79

Capital Cost

- 32. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-
 - "(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."
 - "(6) The following shall be excluded or removed from the capital cost of the existing and new project:
 - (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;"
- 33. The capital cost of ₹17210.75 lakh worked out by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.



Additional Capital Expenditure

- 34. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-
 - "(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Undischarged liabilities recognized to be payable at a future date;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
 - (v) Change in law or compliance of any existing law:"
- 35. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines

"Cut - off Date" means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation:"

- 36. The petitioner has claimed additional capital expenditure amounting to ₹115.31 lakh during 2014-15under Regulation 14(1) of 2014 Tariff Regulations on account of balance retention payments.
- 37. The Commission had directed the petitioner to file the revised Form 4A and Form 9A duly depicting the un-discharged liabilities. The petitioner vide its affidavit dated 20.11.2015 has submitted that the Form 9A is not applicable as the asset was commissioned in 2004-09 tariff period. The petitioner has submitted the Form 4A, but the same is not revised as desired by the Commission.
- 38. The Commission had directed the petitioner to submit an undertaking or certificate depicting whether the additional capital expenditure claimed by the petitioner for 2009-



14 tariff period is towards the same scheme. The petitioner vide its affidavit dated 20.11.2015 has clarified that the additional capital expenditure claimed for 2009-14 tariff period is towards the same scheme covered under this petition.

39. We have considered the submission of the petitioner. As the additional capital expenditure is within the original scope of work and the total completion cost of the project ₹17326.06 lakh, as provide in Auditors Certificate dated 21.6.2014, is within the revised cost estimate ₹18207 lakh. Hence, the same is allowed.

Debt: Equity

- 40. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide as under:-
 - "19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:"
 - "(3) In case of the generating station and the transmission system including communication 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."
 - "(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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."
- 41. The petitioner has considered the debt:equity ratio of 73.91:26.09 as on 31.3.2014, which is in line with the 2014 Tariff Regulations.
- 42. In respect of the additional capital expenditure, debt:equity ratio of 70:30 has been adopted as mandated by clause (5) read with clause (1) of Regulation 19 of the 2014



Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Total Cost as on 31.3.2014	(%)	Additional Capital Expenditur e during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	12720.52	73.91	80.72	70.00	12801.24	73.88
Equity	4490.23	26.09	34.59	30.00	4524.82	26.12
Total	17210.75	100.00	115.31	100.00	17326.06	100.00

Return on Equity (ROE)

- 43. Clause (1) and (2) of Regulations 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-
 - "24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system"
 - "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."

44. The Commission had directed the petitioner to submit the actual equity infused for the 2014-19 tariff period. The petitioner has submitted that the additional capital expenditure during 2014-15 is based on estimates. The actual expenditure for 2014-19



tariff period along with actual funding shall be submitted at the time of truing up for 2014-19 tariff period.

45. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate 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 (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4490.23	4524.82	4524.82	4524.82	4524.82
Additions	34.59	0.00	0.00	0.00	0.00
Closing Equity	4524.82	4524.82	4524.82	4524.82	4524.82
Average Equity	4507.53	4524.82	4524.82	4524.82	4524.82
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	883.95	887.34	887.34	887.34	887.34

Interest on Loan (IoL)

- 46. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-
 - "(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."
- 47. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2 and the IoL has been worked out and allowed as follows:-

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	12720.52	12801.24	12801.24	12801.24	12801.24
Cumulative Repayment upto Previous Year	6235.07	7147.12	8062.21	8977.30	9892.40
Net Loan-Opening	6485.45	5654.12	4739.03	3823.93	2908.84
Additions	80.72	0.00	0.00	0.00	0.00
Repayment during the year	912.05	915.09	915.09	915.09	261.76
Net Loan-Closing	5654.12	4739.03	3823.93	2908.84	2647.08
Average Loan	6069.79	5196.57	4281.48	3366.39	2777.96
Weighted Average Rate of Interest on Loan (%)	3.6747	3.6198	3.5764	3.5601	3.5523
Interest on Loan	223.05	188.10	153.12	119.85	98.68

Depreciation

48. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-



[&]quot;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."
- 49. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The asset will be completing 12 years in 2018-19; hence the remaining depreciable value is spread over the balance useful life of the transmission assets. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	17210.75	17326.06	17326.06	17326.06	17326.06
Additional Capitalization	115.31	0.00	0.00	0.00	0.00
Closing Gross Block	17326.06	17326.06	17326.06	17326.06	17326.06
Average Gross Block	17268.41	17326.06	17326.06	17326.06	17326.06
Freehold Land (Av. Cost)	-	•	1	-	-
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	1.51
Elapsed life	8	9	10	11	12
Balance Useful life of the asset	26	25	24	23	22
Remaining Depreciable Value	9364.17	8504.01	7588.92	6673.82	5758.73
Depreciation during the year	912.05	915.09	915.09	915.09	261.76

Operation & Maintenance Expenses (O&M Expenses)

50. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specify the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets have been worked out and allowed are as follows:-



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19					
220 kV Bays:										
No. of Bays	4	4	4	4	4					
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10					
Line: D/C Twin/Triple C	onductor:									
Line Length (km)	234.59	234.59	234.59	234.59	234.59					
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806					
Total O&M Expenses (₹ lakh)	334.70	345.93	357.36	369.18	381.48					

51. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

Interest on Working Capital (IWC)

52. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies 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;"



- 53. The petitioner has submitted that it has computed interest on working capital for the tariff block 2014-19 considering the SBI Base Rate plus 350 basis points as on 1.4.2014. The rate of interest on working capital considered is 13.50%.
- 54. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The components of the working capital and interest thereon have been worked as follows:-

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	27.88	28.82	29.77	30.75	31.78
Maintenance Spares	50.20	51.89	53.60	55.38	57.22
Receivables	403.12	400.23	396.28	392.68	279.84
Total	481.20	480.94	479.65	478.81	368.84
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	64.96	64.93	64.75	64.64	49.79

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

55. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	17210.75	17326.06	17326.06	17326.06	17326.06
Additional Capitalisation	115.31	0.00	0.00	0.00	0.00
Closing Gross Block	17326.06	17326.06	17326.06	17326.06	17326.06
Average Gross Block	17268.41	17326.06	17326.06	17326.06	17326.06
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	1.51
Depreciable Value	15541.56	15645.34	15593.45	15593.45	15593.45
Balance useful life of the asset	26	25	24	23	22
Elapsed life	8	9	10	11	12
Remaining Depreciable Value	9364.17	8504.01	7588.92	6673.82	5758.73
Depreciation during the year	912.05	915.09	915.09	915.09	261.76
Cumulative depreciation (incl. of					
AAD)	7089.44	8004.54	8919.63	9834.72	10096.48



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	12720.52	12801.24	12801.24	12801.24	12801.24
Cumulative Repayments upto					
Previous Year	6235.07	7147.12	8062.21	8977.30	9892.40
Net Loan-Opening	6485.45	5654.12	4739.03	3823.93	2908.84
Additions	80.72	0.00	0.00	0.00	0.00
Repayment during the year	912.05	915.09	915.09	915.09	261.76
Net Loan-Closing	5654.12	4739.03	3823.93	2908.84	2647.08
Average Loan	6069.79	5196.57	4281.48	3366.39	2777.96
Weighted Average Rate of					
Interest on Loan (%)	3.6747	3.6198	3.5764	3.5601	3.5523
Interest on Loan	223.05	188.10	153.12	119.85	98.68
Return on Equity					
Opening Equity	4490.23	4524.82	4524.82	4524.82	4524.82
Additions	34.59	0.00	0.00	0.00	0.00
Closing Equity	4524.82	4524.82	4524.82	4524.82	4524.82
Average Equity	4507.53	4524.82	4524.82	4524.82	4524.82
Return on Equity (Base Rate)	45 500	45.500	45.500	45.500	45.500
(%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	883.95	887.34	887.34	887.34	887.34
Interest on Working Capital					
O & M Expenses	27.88	28.82	29.77	30.75	31.78
Maintenance Spares	50.20	51.89	53.60	55.38	57.22
Receivables	403.12	400.23	396.28	392.68	279.84
Total Working Capital	481.20	480.94	479.65	478.81	368.84
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	64.96	64.93	64.75	64.64	49.79
Annual Transmission Charges					
Depreciation	912.05	915.09	915.09	915.09	261.76
Interest on Loan	223.05	188.10	153.12	119.85	98.68
Return on Equity	883.95	887.34	887.34	887.34	887.34
Interest on Working Capital	64.96	64.93	64.75	64.64	49.79
O & M Expenses	334.70	345.93	357.36	369.18	381.48
Total	2418.70	2401.39	2377.66	2356.10	1679.05

Deferred Tax Liability

56. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as



amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

Filing Fee and the Publication Expenses

57. 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 Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

58. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

Service Tax

59. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

Foreign Exchange Rate Variation

60. The petitioner has sought recovery of FERV on foreign loans deployed under clause 50 of 2014 Tariff Regulations. The petitioner is entitled to recover the FERV directly from the beneficiaries or the long term transmission customers / DICs, as the case may be, in accordance with Regulation 51(1) of the 2014 Tariff Regulations



Sharing of Transmission Charges

61. 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.

62. This order disposes of Petition No.364/TT/2014.

sd/-

(Dr. M.K. lyer) Member (A.S. Bakshi) Member



Annexure – 1

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹in lakh)

Particulars 2009-10 2010-11 2011-12 2012-13 2013-14 2010-14 2010-14 2011-12 2012-13 2013-14 2010-14 2010-14 2011-12 2012-13 2013-14 2010-14	(₹in lak						
Gross Opening Loan 225.00 168.75 168.75 168.75 150.00 168.75 168.75 75.00 56.25 36.25 36.25 36.25 36.25 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 36.25 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.5	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	
Gross Opening Loan 225.00 168.75 168.75 168.75 150.00 168.75 168.75 75.00 56.25 36.25 36.25 36.25 36.25 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 36.25 37.50 36.25 37.50 37.50 36.25 37.50 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.50 36.25 37.5							
Cumulative Repayments of Loans upto Previous Year 93.75 112.50 131.25 150.00 168.75 Net Loans Opening 131.25 112.50 93.75 75.00 56.25 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 18.75 19.80	BOND X-DOCO-						
Loans upto Previous Year 93.75 112.50 131.25 130.00 168.75	Gross Opening Loan	225.00	225.00	225.00	225.00	225.00	
Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 18.75 18.75 18.75 18.75 Net Closing Loan 112.50 93.75 75.00 56.25 37.50 Average Net Loan 121.88 103.13 84.38 65.63 46.88 Rate of Interest on Loan (%) 10.90 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00		93.75	112.50	131.25	150.00	168.75	
Less: Repayments of Loan during the year 18.75 18.75 18.75 18.75 18.75 18.75 Net Closing Loan 112.50 93.75 75.00 56.25 37.50 Average Net Loan 121.88 103.13 84.38 65.63 46.88 Rate of Interest on Loan (%) 10.90 10.90 10.90 10.90 10.90 10.90 Interest on Loan 13.28 11.24 9.20 7.15 5.11	Net Loans Opening	131.25	112.50	93.75	75.00	56.25	
Net Closing Loan 112.50 93.75 75.00 56.25 37.50	Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00	
Average Net Loan 121.88 103.13 84.38 65.63 46.88 Rate of Interest on Loan (%) 10.90 7.15 5.11 5.10 5.10 5.10 5.10	. ,	18.75	18.75	18.75	18.75	18.75	
Rate of Interest on Loan (%) 10.90 7.15 5.11 BOND XI-option-DOCO- Caross Opening Loan 240.00 160.00 30.00 100.00 30.00 100.00 30.00 100.00 30.00 0.00	Net Closing Loan	112.50	93.75	75.00	56.25	37.50	
Interest on Loan	Average Net Loan	121.88	103.13	84.38	65.63	46.88	
BOND XI-option-DOCO- 240.00 160.00	Rate of Interest on Loan (%)	10.90	10.90	10.90	10.90	10.90	
Gross Opening Loan 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 160.00	Interest on Loan	13.28	11.24	9.20	7.15	5.11	
Gross Opening Loan 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 160.00							
Gross Opening Loan 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 240.00 160.00	BOND XI-option-DOCO-						
Cumulative Repayments of Loans upto Previous Year 80.00 100.00 120.00 140.00 160.00 Net Loans Opening 160.00 140.00 120.00 100.00 80.00 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 20.00 20.00 20.00 20.00 20.00 Net Closing Loan 140.00 120.00 100.00 80.00 60.00 Average Net Loan 150.00 130.00 110.00 90.00 70.00 Rate of Interest on Loan (%) 9.80 9.80 9.80 9.80 9.80 Interest on Loan 14.70 12.74 10.78 8.82 6.86 BOND XII-DOCO- Interest on Loan 17.00	<u> </u>	240.00	240.00	240.00	240.00	240.00	
Net Loans Opening 160.00 140.00 120.00 100.00 80.00 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 20.00 20.00 20.00 20.00 20.00 Net Closing Loan 140.00 120.00 100.00 80.00 60.00 Average Net Loan 150.00 130.00 110.00 90.00 70.00 Rate of Interest on Loan (%) 9.80 9.80 9.80 9.80 9.80 Interest on Loan 14.70 12.74 10.78 8.82 6.86 BOND XII-DOCO- Total Company Company 17.00	Cumulative Repayments of						
Less: Repayments of Loan during the year 20.00 60.00 60.00 60.00 20.00 60.00 70.00 70.00 70.00 70.00 70.00 70.00 70.00 70.00 9.80 9		160.00	140.00	120.00	100.00	80.00	
during the year 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 60.00 60.00 60.00 60.00 70.00	Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00	
Net Closing Loan 140.00 120.00 100.00 80.00 60.00 Average Net Loan 150.00 130.00 110.00 90.00 70.00 Rate of Interest on Loan (%) 9.80 9.80 9.80 9.80 9.80 Interest on Loan 14.70 12.74 10.78 8.82 6.86 BOND XII-DOCO- Gross Opening Loan 17.00	Less: Repayments of Loan	20.00	20.00	20.00	20.00	20.00	
Average Net Loan 150.00 130.00 110.00 90.00 70.00 Rate of Interest on Loan (%) 9.80 9.80 9.80 9.80 9.80 Interest on Loan 14.70 12.74 10.78 8.82 6.86 BOND XII-DOCO- Gross Opening Loan 17.00	-						
Rate of Interest on Loan (%) 9.80 9.93 17.00	Net Closing Loan	140.00	120.00	100.00	80.00	60.00	
Interest on Loan 14.70 12.74 10.78 8.82 6.86 BOND XII-DOCO- Gross Opening Loan 17.00<	Average Net Loan	150.00	130.00	110.00	90.00	70.00	
BOND XII-DOCO- 17.00	Rate of Interest on Loan (%)	9.80	9.80	9.80	9.80	9.80	
Gross Opening Loan 17.00 <td>Interest on Loan</td> <td>14.70</td> <td>12.74</td> <td>10.78</td> <td>8.82</td> <td>6.86</td>	Interest on Loan	14.70	12.74	10.78	8.82	6.86	
Gross Opening Loan 17.00 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Cumulative Repayments of Loans upto Previous Year 5.67 7.09 8.51 9.93 11.35 Net Loans Opening 11.33 9.91 8.49 7.07 5.65 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 1.42 1.42 1.42 1.42 1.42 Net Closing Loan 9.91 8.49 7.07 5.65 4.23 Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	BOND XII-DOCO-						
Loans upto Previous Year 5.67 7.09 8.51 9.93 11.35 Net Loans Opening 11.33 9.91 8.49 7.07 5.65 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 1.42 1.42 1.42 1.42 1.42 Net Closing Loan 9.91 8.49 7.07 5.65 4.23 Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	Gross Opening Loan	17.00	17.00	17.00	17.00	17.00	
Net Loans Opening 11.33 9.91 8.49 7.07 5.65 Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 1.42 1.42 1.42 1.42 1.42 Net Closing Loan 9.91 8.49 7.07 5.65 4.23 Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	· ·	5.67	7 00	8 51	0 03	11 35	
Add: Draw(s) during the Year 0.00 0.00 0.00 0.00 0.00 Less: Repayments of Loan during the year 1.42 1.42 1.42 1.42 Net Closing Loan 9.91 8.49 7.07 5.65 4.23 Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	•						
Less: Repayments of Loan during the year 1.42 <td< td=""><td></td><td>11.33</td><td></td><td>8.49</td><td>7.07</td><td>5.65</td></td<>		11.33		8.49	7.07	5.65	
during the year 1.42 1.42 1.42 1.42 1.42 Net Closing Loan 9.91 8.49 7.07 5.65 4.23 Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	` '	0.00	0.00	0.00	0.00	0.00	
Average Net Loan 10.62 9.20 7.78 6.36 4.94 Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70		1.42	1.42	1.42	1.42	1.42	
Rate of Interest on Loan (%) 9.70 9.70 9.70 9.70 9.70	Net Closing Loan	9.91	8.49	7.07	5.65	4.23	
	Average Net Loan	10.62	9.20	7.78	6.36	4.94	
Interest on Loan 1.03 0.89 0.75 0.62 0.48	Rate of Interest on Loan (%)	9.70	9.70	9.70	9.70	9.70	
	Interest on Loan	1.03	0.89	0.75	0.62	0.48	



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XXII-ADDCAP FOR 2008-2009					
Gross Opening Loan	185.00	185.00	185.00	185.00	185.00
Cumulative Repayments of					
Loans upto Previous Year	0.00	0.00	15.42	30.84	46.26
Net Loans Opening	185.00	185.00	169.58	154.16	138.74
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan	0.00	15.42	15.42	15.42	15.42
during the year					
Net Closing Loan	185.00	169.58	154.16	138.74	123.32
Average Net Loan	185.00	177.29	161.87	146.45	131.03
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	16.06	15.39	14.05	12.71	11.37
Oriental Bank of Commerce-					
DOCO-					
Gross Opening Loan	110.00	110.00	110.00	110.00	110.00
Cumulative Repayments of	45.83	55.00	64.17	73.34	82.51
Loans upto Previous Year					
Net Loans Opening	64.17	55.00	45.83	36.66	27.49
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	9.17	9.17	9.17	9.17	9.17
Net Closing Loan	55.00	45.83	36.66	27.49	18.32
Average Net Loan	59.59	50.42	41.25	32.08	22.91
Rate of Interest on Loan (%)	9.60	10.22	12.32	12.37	12.35
Interest on Loan	5.72	5.15	5.08	3.97	2.83
Punjab National Bank-II-DOCO-					
Gross Opening Loan	132.00	132.00	132.00	132.00	132.00
Cumulative Repayments of Loans upto Previous Year	55.00	66.00	77.00	88.00	99.00
Net Loans Opening	77.00	66.00	55.00	44.00	33.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	11.00	11.00	11.00	11.00	11.00
Net Closing Loan	66.00	55.00	44.00	33.00	22.00
Average Net Loan	71.50	60.50	49.50	38.50	27.50
Rate of Interest on Loan (%)	8.89	9.65	11.80	11.84	11.60
Interest on Loan	6.36	5.84	5.84	4.56	3.19
JBIC/OECF-ADDCAP FOR 04- Nov-2005 EX RATE:.3891 -					



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
2004					
3891	22.22	22.22	22.22	20.00	
Gross Opening Loan	96.98	96.98	96.98	96.98	96.98
Cumulative Repayments of Loans upto Previous Year	6.05	11.10	16.15	21.20	26.25
Net Loans Opening	90.93	85.88	80.83	75.78	70.73
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	5.05	5.05	5.05	5.05	5.05
Net Closing Loan	85.88	80.83	75.78	70.73	65.68
Average Net Loan	88.41	83.36	78.31	73.26	68.21
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	3.09	2.92	2.74	2.56	2.39
JBIC/OECF-ADDCAP FOR 09- Sep-2005 EX RATE:.3998 - 3998					
Gross Opening Loan	611.17	611.17	611.17	611.17	611.17
Cumulative Repayments of Loans upto Previous Year	38.15	69.98	101.81	133.64	165.47
Net Loans Opening	573.02	541.19	509.36	477.53	445.70
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	31.83	31.83	31.83	31.83	31.83
Net Closing Loan	541.19	509.36	477.53	445.70	413.87
Average Net Loan	557.11	525.28	493.45	461.62	429.79
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	19.50	18.38	17.27	16.16	15.04
JBIC/OECF-ADDCAP FOR 20- Sep-2005 EX RATE:.398 - 398					
Gross Opening Loan	125.88	125.88	125.88	125.88	125.88
Cumulative Repayments of Loans upto Previous Year	7.86	14.42	20.98	27.54	34.10
Net Loans Opening	118.02	111.46	104.90	98.34	91.78
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	6.56	6.56	6.56	6.56	6.56
Net Closing Loan	111.46	104.90	98.34	91.78	85.22
Average Net Loan	114.74	108.18	101.62	95.06	88.50
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	4.02	3.79	3.56	3.33	3.10
JBIC/OECF-ADDCAP FOR 26- Dec-2005 EX RATE:.3916 -					



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
3916					
Gross Opening Loan	133.54	133.54	133.54	133.54	133.54
Cumulative Repayments of Loans upto Previous Year	8.34	15.30	22.26	29.22	36.18
Net Loans Opening	125.20	118.24	111.28	104.32	97.36
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	6.96	6.96	6.96	6.96	6.96
Net Closing Loan	118.24	111.28	104.32	97.36	90.40
Average Net Loan	121.72	114.76	107.80	100.84	93.88
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	4.26	4.02	3.77	3.53	3.29
JBIC/OECF-DOCO3909					
Gross Opening Loan	10981.91	10981.91	10981.91	10981.91	10981.91
Cumulative Repayments of Loans upto Previous Year	684.54	1256.62	1828.70	2400.78	2972.86
Net Loans Opening	10297.37	9725.29	9153.21	8581.13	8009.05
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	572.08	572.08	572.08	572.08	572.08
Net Closing Loan	9725.29	9153.21	8581.13	8009.05	7436.97
Average Net Loan	10011.33	9439.25	8867.17	8295.09	7723.01
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	350.40	330.37	310.35	290.33	270.31
Summary					
Summary Gross Opening Loan	12858.48	12858.48	12858.48	12858.48	12858.48
Cumulative Repayments of Loans upto Previous Year	1025.19	1708.01	2406.25	3104.49	3802.73
Net Loans Opening	11833.29	11150.47	10452.23	9753.99	9055.75
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	682.82	698.24	698.24	698.24	698.24
Net Closing Loan	11150.47	10452.23	9753.99	9055.75	8357.51
Average Net Loan	11491.88	10801.35	10103.11	9404.87	8706.63
Rate of Interest on Loan (%)	3.8150%	3.8026%	3.7948%	3.7612%	3.7208%
Interest on Loan	438.41	410.73	383.40	353.73	323.96



Annexure – 2

(₹in lakh)

	(₹in lakh					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
BOND X-DOCO-						
Gross Opening Loan	225.00	225.00	225.00	225.00	225.00	
Cumulative Repayments of	187.50	206.25	225.00	225.00	225.00	
Loans upto Previous Year						
Net Loans Opening	37.50	18.75	0.00	0.00	0.00	
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00	
Less: Repayments of Loan	40.75	40.75	0.00	0.00	0.00	
during the year	18.75	18.75	0.00	0.00	0.00	
Net Closing Loan	18.75	0.00	0.00	0.00	0.00	
Average Net Loan	28.13	9.38	0.00	0.00	0.00	
Rate of Interest on Loan (%)	10.90	10.90	10.90	10.90	10.90	
Interest on Loan	3.07	1.02	0.00	0.00	0.00	
DOND VI antion DOCO						
BOND XI-option-DOCO-						
Gross Opening Loan	240.00	240.00	240.00	240.00	240.00	
Cumulative Repayments of	400.00	200.00	222.00	040.00	040.00	
Loans upto Previous Year	180.00	200.00	220.00	240.00	240.00	
Net Loans Opening	60.00	40.00	20.00	0.00	0.00	
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00	
Less: Repayments of Loan	20.00	20.00	20.00	0.00	0.00	
during the year	20.00	20.00	20.00	0.00	0.00	
Net Closing Loan	40.00	20.00	0.00	0.00	0.00	
Average Net Loan	50.00	30.00	10.00	0.00	0.00	
Rate of Interest on Loan (%)	9.80	9.80	9.80	9.80	9.80	
Interest on Loan	4.90	2.94	0.98	0.00	0.00	
BOND XII-DOCO-						
	47.00	47.00	47.00	47.00	47.00	
Gross Opening Loan Cumulative Repayments of	17.00	17.00	17.00	17.00	17.00	
Loans upto Previous Year	12.77	14.19	15.61	17.03	17.03	
Net Loans Opening	4.23	2.81	1.39	0.00	0.00	
Add: Draw(s) during the Year						
Less: Repayments of Loan	0.00	0.00	0.00	0.00	0.00	
during the year	1.42	1.42	1.42	0.00	0.00	
Net Closing Loan	2.81	1.39	0.00	0.00	0.00	
Average Net Loan	3.52	2.10	0.70	0.00	0.00	
Rate of Interest on Loan (%)	9.70	9.70	9.70	9.70	9.70	
Interest on Loan	0.34	0.20	0.07	0.00	0.00	
· · · · · · - · · · ·	0.54	3.20	3.07	3.00	0.00	



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXII-ADDCAP FOR 2008-2009					
Gross Opening Loan	185.00	185.00	185.00	185.00	185.00
Cumulative Repayments of	100.00	100.00	100.00	100.00	100.00
Loans upto Previous Year	61.68	77.10	92.52	107.94	123.36
Net Loans Opening	123.32	107.90	92.48	77.06	61.64
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan					
during the year	15.42	15.42	15.42	15.42	15.42
Net Closing Loan	107.90	92.48	77.06	61.64	46.22
Average Net Loan	115.61	100.19	84.77	69.35	53.93
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	10.03	8.70	7.36	6.02	4.68
Oriental Bank of Commerce- DOCO-					
Gross Opening Loan	110.00	110.00	110.00	110.00	110.00
Cumulative Repayments of	04.00	400.05	440.00	440.00	440.00
Loans upto Previous Year	91.68	100.85	110.02	110.02	110.02
Net Loans Opening	18.32	9.15	0.00	0.00	0.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	9.17	9.17	0.00	0.00	0.00
Net Closing Loan	9.15	0.00	0.00	0.00	0.00
Average Net Loan	13.74	4.58	0.00	0.00	0.00
Rate of Interest on Loan (%)	12.35	12.35	12.35	12.35	12.35
Interest on Loan	1.70	0.57	0.00	0.00	0.00
Punjab National Bank-II-DOCO-					
*	400.00	400.00	400.00	400.00	400.00
Gross Opening Loan Cumulative Repayments of	132.00	132.00	132.00	132.00	132.00
Loans upto Previous Year	110.00	121.00	132.00	132.00	132.00
Net Loans Opening	22.00	11.00	0.00	0.00	0.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan	0.00	0.00	0.00	0.00	0.00
during the year	11.00	11.00	0.00	0.00	0.00
Net Closing Loan	11.00	0.00	0.00	0.00	0.00
Average Net Loan	16.50	5.50	0.00	0.00	0.00
Rate of Interest on Loan (%)	11.60	11.60	11.60	11.60	11.60
Interest on Loan	1.91	0.64	0.00	0.00	0.00
JBIC/OECF-ADDCAP FOR 04- Nov-2005 EX RATE:.3891 -					



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
0004					
3891					
Gross Opening Loan	96.98	96.98	96.98	96.98	96.98
Cumulative Repayments of Loans upto Previous Year	31.30	36.35	41.40	46.45	51.50
Net Loans Opening	65.68	60.63	55.58	50.53	45.48
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	5.05	5.05	5.05	5.05	5.05
Net Closing Loan	60.63	55.58	50.53	45.48	40.43
Average Net Loan	63.16	58.11	53.06	48.01	42.96
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	2.21	2.03	1.86	1.68	1.50
JBIC/OECF-ADDCAP FOR 09- Sep-2005 EX RATE:.3998 - 3998					
Gross Opening Loan	611.17	611.17	611.17	611.17	611.17
Cumulative Repayments of Loans upto Previous Year	197.30	229.13	260.96	292.79	324.62
Net Loans Opening	413.87	382.04	350.21	318.38	286.55
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	31.83	31.83	31.83	31.83	31.83
Net Closing Loan	382.04	350.21	318.38	286.55	254.72
Average Net Loan	397.96	366.13	334.30	302.47	270.64
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	13.93	12.81	11.70	10.59	9.47
JBIC/OECF-ADDCAP FOR 20- Sep-2005 EX RATE:.398 - 398					
Gross Opening Loan	125.88	125.88	125.88	125.88	125.88
Cumulative Repayments of Loans upto Previous Year	40.66	47.22	53.78	60.34	66.90
Net Loans Opening	85.22	78.66	72.10	65.54	58.98
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	6.56	6.56	6.56	6.56	6.56
Net Closing Loan	78.66	72.10	65.54	58.98	52.42
Average Net Loan	81.94	75.38	68.82	62.26	55.70
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	2.87	2.64	2.41	2.18	1.95
JBIC/OECF-ADDCAP FOR 26-					



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Dec-2005 EX RATE:.3916 - 3916					
Gross Opening Loan	133.54	133.54	133.54	133.54	133.54
Cumulative Repayments of Loans upto Previous Year	43.14	50.10	57.06	64.02	70.98
Net Loans Opening	90.40	83.44	76.48	69.52	62.56
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	6.96	6.96	6.96	6.96	6.96
Net Closing Loan	83.44	76.48	69.52	62.56	55.60
Average Net Loan	86.92	79.96	73.00	66.04	59.08
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	3.04	2.80	2.56	2.31	2.07
JBIC/OECF-DOCO3909					
Gross Opening Loan	10981.91	10981.91	10981.91	10981.91	10981.91
Cumulative Repayments of Loans upto Previous Year	3544.94	4117.02	4689.10	5261.18	5833.26
Net Loans Opening	7436.97	6864.89	6292.81	5720.73	5148.65
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	572.08	572.08	572.08	572.08	572.08
Net Closing Loan	6864.89	6292.81	5720.73	5148.65	4576.57
Average Net Loan	7150.93	6578.85	6006.77	5434.69	4862.61
Rate of Interest on Loan (%)	3.50	3.50	3.50	3.50	3.50
Interest on Loan	250.28	230.26	210.24	190.21	170.19
Summary					
Gross Opening Loan	12858.48	12858.48	12858.48	12858.48	12858.48
Cumulative Repayments of Loans upto Previous Year	4500.97	5199.21	5897.45	6556.77	7194.67
Net Loans Opening	8357.51	7659.27	6961.03	6301.71	5663.81
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	698.24	698.24	659.32	637.90	637.90
Net Closing Loan	7659.27	6961.03	6301.71	5663.81	5025.91
Average Net Loan	8008.39	7310.15	6631.37	5982.76	5344.86
Rate of Interest on Loan (%)	3.6747	3.6198	3.5764	3.5601	3.5523
Interest on Loan	294.28	264.61	237.16	212.99	189.87

