# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 289/TT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Hearing: 09.02.2016
Date of Order: 08.07.2016

#### In the matter of:

Approval of transmission tariff for 400 kV Vadodra-Pirana T/L alongwith associated bays at Pirana S/S (for direct inter connection with 400 kV D/C Vadodra-Asoj T/L under interim contingency scheme) under "Transmission System for IPP Generation projects in Madhya Pradesh & Chhattisgarh" in Western Region from COD to 31.3.2014 under Regulation-86 of Central Electricity Regulatory Commission (Conduct of business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

#### And in the matter of:

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

.....Petitioner

Vs

- 1. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur-482 008
- Maharashtra State Electricity Distribution Company Limited, Prakashgad, 4th floor, Andheri (East), Mumbai-400 052
- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390 007
- Electricity Department,
   Government of Goa, Vidyut Bhawan,
   Panaji, Near Mandvi Hotel, Goa-403 001



- 5. Electricity Department, Administration of Daman and Diu, Daman-396 210
- Electricity Department,
   Administration of Dadra Nagar Haveli,
   U.T., Silvassa-396 230
- 7. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Bombay Road Indore-452 008
- 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
- 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
- 14. Punjab State Electricity Board, The Mall, Patiala-147 001
- Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula, Haryana-134 109
- 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
- 18. Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi-110 002
- BSES Yamuna Power Limited,
   BSES Bhawan, Nehru Place,
   New Delhi
- 20. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi
- 21. 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 – 110 034
- 22. Chandigarh Administration, Sector-9, Chandigarh
- 23. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun
- 24. North Central Railway, Allahabad
- 25. New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110 002
- 26. Maruti Clean Coal and Power Limited, Hira Arcade, Ground Floor, New Bus Stand, Pandri, Raipur, Chhattisgarh-492 001
- 27. Dheeru Power Generation Private Limited, 2<sup>nd</sup> Floor, Capital Court, Olof Palme Marg, Munirka, New Delhi-110 067



- 28. Aryan MP Power Generation Private Limited, 7<sup>th</sup> Floor, Ambience Mall, NH-8, Gurgaon-122 001
- Jaiprakash Power Ventures Limited, Sector-128, Gautam Buddh Nagar, Noida-201 034
- 30. Bina Power Supply Company Limited, Sector-128, Gautam Buddh Nagar, Noida-201 034
- 31. Chhattisgarh State Power Trading Company Limited, 2<sup>nd</sup> Floor, Vidyut Sewa Bhawan, Danganiya, Raipur-492 013

..... Respondents

For petitioner : Shri A.M. Pavgi, PGCIL

Shri M.M. Mondal, PGCIL Shri Amit Yadav, PGCIL

Shri Subash C. Taneja, PGCIL Shri Mohd. Mohsin, PGCIL

For respondents : None

#### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) seeking approval of transmission tariff for 400 kV Vadodra-Pirana T/L alongwith associated bays at Pirana S/S (for direct inter connection with 400 kV D/C Vadodra-Asoj T/L under interim contingency scheme) (hereinafter referred to as "transmission asset") under "Transmission System for IPP Generation projects in Madhya Pradesh & Chhattisgarh" in Western Region from COD to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 Tariff Regulations").

2. The Investment Approval (IA) for the project was accorded by the Board



of Directors of the petitioner's company vide Memorandum No. C/CP/IPP/MP-CH dated 2.9.2011 for ₹136634 lakh including IDC of ₹6477 lakh, based on 2<sup>nd</sup> Quarter, 2011 price level and revised cost estimate (RCE) of ₹160638 lakh including ₹11371 lakh, based on June, 2014 price level. The project was scheduled to be commissioned within 27 months from the date of IA. Therefore, the scheduled date of commissioning (COD) of the transmission system works out to 1.12.2013.

3. The broad scope of work covered under the project is as follows:-

## **Transmission Lines:**

- 1) Vadodra-Pirana 400 kV D/C (quad) line.
- 2) Indore-Vadodra 765 kV S/C line.

## **Sub-stations:**

- 1) Establishment of 765/400 kV, 2x1500 MVA GIS Sub-station at Vadodra.
- 2) Extension of 765/400 kV Indore Sub-station.
- 3) Extension of 400 kV Pirana Sub-station
- 4. The petitioner has been entrusted with the implementation of High Capacity Power Transmission Corridor pursuant to Long Term Access agreement entered into between the petitioner and IPPs situated in Chattisgarh and Madhya Pradesh complex and regulatory approval vide order dated 31.5.2010. The Transmission System was also discussed and agreed in by the beneficiaries for implementation by the petitioner in the 29<sup>th</sup> SCM of Western Constituents held on 10.9.2009. The contingency arrangement was agreed in 36<sup>th</sup> SCM of Western Region Constituents held on 29.8.2013. The details of the assets for which the petitioner has claimed tariff in the instant

petition are as given below:-

Particulars	Scheduled COD	Actual COD	Delay
400 kV D/C (quad) Vadodra-Pirana T/L alongwith bays at Pirana S/S (for direct interconnection with 400 kV Vadodra-Asoj T/L under interim contingency scheme)	1.12.2013	1.4.2014	121 days

- 5. This order has been issued after considering the petitioner's affidavits dated 24.3.2014, 7.5.2014, 18.6.2014, 5.8.2015, 9.11.2015 and 9.3.2016.
- 6. The petitioner initially claimed the transmission tariff for the instant asset as per the anticipated COD of 1.1.2014 under the 2009 Tariff Regulations. However, the petitioner vide affidavit dated 16.5.2014 has submitted the actual COD as 1.4.2014. Accordingly, the transmission tariff for instant asset is allowed under the 2014 Tariff Regulations. Subsequently, the petitioner vide affidavit dated 5.8.2015 submitted the revised cost estimate (RCE) and it has been noted as per Form-5B that the instant asset was split into two assets namely Asset-1: 400 kV D/C (quad) Pirana-Vadodra T/L and 400 kV bay extension at Pirana S/S for Pirana-Vadodra T/L and Asset-2: PLCC Equipment at Pirana S/S only for Vadodra T/L, date of commercial operation being 1.4.2014 and 5.5.2014 respectively. Further, the petitioner vide affidavit dated 9.3.2016 has submitted the revised Form-5B, indicating separate revised cost estimate (RCE) of split assets but without indicating any date of commercial operation and without submission of RLDC certificate for charging of Assets and CEA certificate under Regulation 43 of CEA (Measures Related to Safety

- & Electricity Supply) Regulations, 2010. Relying on the submission of the petitioner that the combined asset as a whole was put under commercial operation on 1.4.2014, the tariff is being allowed in this order.
- 7. The petitioner is directed that it must submit the actual COD of asset/(s) alongwith RLDC certificate for charging of Assets and CEA certificate under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010 regarding declaration of COD at the time of truing-up.
- 8. The provisional tariff was granted vide order dated 18.12.2013 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.
- 9. The details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh) 2014-15 **Particulars** 2015-16 2016-17 2017-18 2018-19 Depreciation 1811.38 1847.23 1856.06 1856.06 1856.06 2053.95 1446.79 Interest on Loan 1932.98 1777.36 1611.08 2017.59 2057.27 2067.05 2067.05 2067.05 Return on equity Interest on Working Capital 140.04 149.83 149.26 146.60 143.29 O & M Expenses 261.04 278.57 287.88 297.44 269.67 6293.79 6256.41 6125.64 5965.36 5807.38 Total

10. The details submitted by the petitioner in support of its claim for interest on working capital are as follows:-

					(₹ in lakh)
<b>Particulars</b>	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	39.16	40.45	41.79	43.18	44.62
O & M expenses	21.75	22.47	23.21	23.99	24.79

Receivables	1048.97	1042.74	1020.94	994.23	967.90
Total	1109.88	1105.66	1085.94	1061.40	1037.31
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	149.83	149.26	146.60	143.29	140.04

No comments have been received from the general public in response to the notices published in newspapers by the petitioner under Section 64 of the Electricity Act, 2003 (the Act). MP Power Management Company Limited (MPPMCL), Respondent No. 1, Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 2 and Aryan MP Power Generation Private Limited (AMPGPL), Respondent No. 28 have filed replies dated 2.12.2013, 4.1.2014 and 6.6.2014 respectively. MPPMCL had submitted that the copies of the petition were received late and it required sufficient time to submit a proper reply. However, MPPMCL has not submitted any further reply. MSEDCL has raised issues like correctness of claim, cost variation, claim for recovery or refund of shortfall/excess of annual fixed charges, filing fees, floating rate of interest on loan, service tax and licence fees etc. AMPGPL has submitted that due to occurrence of force majeure events it has not been able to commission its project and should not be liable to pay proportionate transmission charges in accordance with BPTA and sharing regulations. AMPGPL has further submitted that it has filed Petition No. 69/MP/2014 for relinquishment of BPTA dated 29.7.2009 with the petitioner. The petitioner has not filed rejoinder to the replies of MPPMCL, MSEDCL and AMPGPL. The objections raised by the respondent are addressed in the relevant paragraphs of this order.

12. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition.

## **Capital cost**

- 13. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-
  - "(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."
  - (2) The Capital Cost of a new project shall include the following:
  - (a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
  - (c) Increase in cost in contract packages as approved by the Commission;
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
  - (e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
  - (f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39
  - (g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
  - (h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.
- 14. The details of approved apportioned cost, cost as on date of commercial operation and estimated/projected additional capital expenditure incurred/to be



incurred (as per the Auditors certificate dated 23.4.2014) submitted by the petitioner vide affidavit dated 16.5.2014 and considered for the purpose of determination of transmission tariff for the instant asset are as under:-

				(₹ in lakh)
<b>Apportioned</b>	Capital	Projected	additional	Total estimated
approved	cost as	Capital expenditure		completion
cost	on COD	2014-15	2015-16	cost
38911.84	33786.88	1016.62	332.43	35135.93

## Cost over-run

15. The estimated completion cost is ₹35135.93 lakh against the approved apportioned cost of ₹38911.84 lakh. As such, there is no cost over-run in the commissioning of the asset in the instant petition.

## Time over-run

- 16. As per the Investment Approval dated 2.9.2011, the scope of work in the project was to be commissioned within 27 months from the date of investment approval and the date of scheduled completion works out to 1.12.2013. However, the instant asset was commissioned on 1.4.2014. Thus, there is time over-run of 121 days.
- 17. As regards time over-run, the petitioner vide affidavit dated 17.5.2014 has submitted that the delay in commissioning of the instant asset was on account of severe RoW issues due to court cases at the tower locations no. 81/1, 81/2, 82/2, 94/5, 94/6 and 95/0 resulting in the hampering of construction work. Subsequently, the RoW issues in the above portion of line were resolved on 12.2.2014 and immediately after court order work started on war footing

and the line was commissioned and put under commercial operation on 1.4.2014.

- 18. We have considered the submission of the petitioner and on perusal of the documents submitted by the petitioner, it is noted that 6 farmers from Bhadarva, Tundav, village Taluka Savali, filed case in Civil Court Savali on 18.5.2012. The hearings in these cases by the court / High Court/ District Magistrate Court took place on various dates from 15.8.2012 to 18.12.2013 and the matter was resolved by 12.2.2014. The petitioner started the construction work on the site, under the protection of Police force, even though no interim relief was granted in favour of the petitioner by the Gujarat High Court.
- 19. Thus, the delay of 121 days in commissioning of the instant asset due to severe RoW problem and Court cases, which took about 21 months to resolve the issue, is condoned.

#### **Treatment of IDC & IEDC**

20. As per the Auditors Certificate dated 23.4.2014 submitted by the petitioner, an amount of ₹2190.63 lakh on account of IDC has been claimed. Further, the petitioner has submitted statement showing IDC discharged upto COD as ₹1756.03 lakh alongwith loan wise drawl dates. The petitioner has also stated that the balance amount of accrued IDC shall be discharged during 2014-15. In view of the statement submitted by the petitioner, assuming the loan wise drawl date as date of infusion of fund, the claim of ₹1756.03 lakh as on COD on account of IDC has been allowed. However, the petitioner is

directed to submit loan wise date of infusion of debt and segregated claim of additional capital expenditure towards the discharge of liability corresponding to the liability as on COD and towards cash expenditure pertaining to the addition of Gross block added to books of account after COD at the time of truing-up. Thus, the IDC discharged after COD shall be subject to review on submission of adequate information alongwith computation in soft copy in excel format.

21. The petitioner has not made any claim on account of Incidental Expenditure During Construction (IEDC) for the instant asset. Hence, no amount on account of IEDC has been considered for the purpose of tariff calculation in the instant petition.

## **Initial spares**

22. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

#### "13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

- (d) Transmission system
- (i) Transmission line 1.00%
- (ii) Transmission Sub-station (Green Field) 4.00%
- (iii) Transmission Sub-station (Brown Field) 6.00%
- (iv) Series Compensation devices and HVDC Station 4.00%
- (v) Gas Insulated Sub-station (GIS)-5.00%
- (vi) Communication system-3.5%

#### Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:



- (ii) -----
- (iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:
- (iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application."
- 23. The petitioner has claimed initial spares for an amount of ₹22.90 lakh and ₹320.28 pertaining to sub-station and transmission line respectively for the instant asset. Initial spares so claimed are within the ceiling limit specified in the 2014 Tariff Regulations. However, the petitioner was directed to clarify whether or not the entire liability pertaining to initial spares was discharged as on COD. In response, the petitioner vide affidavit dated 9.11.2015 submitted the year wise of the liability pertaining to initial spares, but it is not clear whether the balance un-discharged liability is included in the amount of additional capital expenditure incurred/to be incurred as claimed in Form-7. Thus, the petitioner is directed to clarify whether the year wise discharge of liability towards initial spares is included in the additional capital expenditure incurred/to be incurred at the time of truing-up. The admissible initial spares shall be subject to review on submission of necessary information by the petitioner at the time of truing up.
- 24. Accordingly, capital cost as on the date of commercial operation for the instant transmission assets after adjustment of IDC/IEDC and initial spares is

considered as per Regulation 9(2) of the 2014 Tariff Regulations as given under:-

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## **Additional Capital Expenditure**

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

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

26. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines "cutoff" date as under:

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



- 27. The cut-off date in the case of instant transmission asset is 31.3.2017.
- 28. The petitioner has claimed additional capital expenditure of ₹1016.62 lakh and ₹332.43 lakh for 2014-15 and 2015-16. The claim for additional capital expenditure is mainly on account of balance/retention payment, which is admissible under the 2014 Tariff Regulations and is allowed. However, the petitioner is directed to submit the actual capital expenditure clearly by bifurcating the cost towards new additions to the gross block and the cost towards discharge of liability i.e. pertaining to IDC and initial spares, out of the liability outstanding as on COD at the time of truing-up.

## Capital cost as on COD and as on 31.3.2019

29. The details of the capital cost considered as on COD and as on 31.3.2019 after the necessary adjustment in respect of IDC are as follows:-

			(₹ in lakh)
Capital cost as on COD	DD expenditure allowed		Admissible completion
allowed			capital cost as on 31.3.2019
33352.28	1016.62	332.43	34701.33

## **Debt- Equity ratio**

- 30. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-
  - "(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

#### Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual

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equity shall be considered for determination of tariff:

- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

- "(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."
- 31. The petitioner has claimed debt equity ratio of 70:30 as on COD of the instant asset and for additional capitalization which is in accordance with the above regulations. The debt: equity ratio of 70:30 has been considered to allow the tariff. The details of debt: equity ratio considered as on COD and as on 31.2019 are as under:-

Particulars	As on COD	%age	As on 31.3.2019	%age
	Amount (₹ in lakh)		Amount (₹ in lakh)	
Debt	23346.60	70.00	24290.93	70.00
Equity	10005.68	30.00	10410.40	30.00
Total	33352.28	100.00	34701.33	100.00

## **Return on Equity (RoE)**

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



- " 24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
- (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

#### Provided that:

- (i) in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50** % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:
- (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- (iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
- (v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:
- (vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."
- "25. Tax on Return on Equity:
- (1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".



"(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."

- 33. The petitioner has submitted that RoE has been calculated after grossing up the RoE with MAT rate. The petitioner has further submitted that it may be allowed to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission.
- 34. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, RoE has been computed @ 19.610% based at the MAT rate applicable during 2013-14 @ 20.961% for the purpose of return on

equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations.

35. Therefore, the RoE determined is as given under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	10005.68	10310.67	10410.40	10410.40	10410.40
Addition due to Additional					
Capitalization	304.99	99.73	1		1
Closing Equity	10310.67	10410.40	10410.40	10410.40	10410.40
Average Equity	10158.17	10360.53	10410.40	10410.40	10410.40
Return on Equity (Base					
Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-					
14 (MAT)	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)	1992.02	2031.70	2041.48	2041.48	2041.48

#### **Interest on Loan**

- 36. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies as under:-
  - "(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.
  - (2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.
  - (3)The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.
  - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the



project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."
- 37. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-
  - (a) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form-9C submitted vide affidavit dated 16.5.2014;
  - (b) The normative repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period; and
  - (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 38. The petitioner has prayed to be allowed to bill and adjust impact of



Interest on loan due to change in interest rate on account of floating rate of interest applicable, if any, during the tariff period from the respondents. The interest on loan has been calculated on the basis of prevailing rate of actual loan applicable as on COD. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

- 39. Detailed calculation of the weighted average rate of interest has been given at Annexure to this order.
- 40. Details of interest on loan calculated are as given under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	23346.60	24058.23	24290.93	24290.93	24290.93
Cumulative Repayment upto					
Previous Year	-	1788.43	3612.70	5445.81	7278.91
Net Loan-Opening	23346.60	22269.80	20678.23	18845.13	17012.02
Addition due to Additional					
Capitalization	711.63	232.70	-	1	
Repayment during the year	1788.43	1824.67	1833.10	1833.10	1833.10
Net Loan-Closing	22269.80	20678.23	18845.13	17012.02	15178.92
Average Loan	22808.20	21474.02	19761.68	17928.58	16095.47
Weighted Average Rate of					
Interest on Loan	8.8912%	8.8898%	8.8830%	8.8753%	8.8780%
Interest	2027.93	1909.00	1755.43	1591.21	1428.96

## **Depreciation**

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

#### "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
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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



- 42. The instant asset has been put under commercial operation on 1.4.2014. Accordingly, the instant asset will complete 12 years beyond 2018-19. Accordingly, the depreciation for the assets covered in the instant petition has been calculated annually based on Straight Line Method and at rates specified in Appendix-II to the 2014 Tariff Regulations.
- 43. Details of the depreciation worked out are as below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	33352.28	34368.90	34701.33	34701.33	34701.33
Additional Capital					
Expenditure	1016.62	332.43	-	-	_
Closing Gross Block	34368.90	34701.33	34701.33	34701.33	34701.33
Average Gross Block	33860.59	34535.12	34701.33	34701.33	34701.33
Rate of Depreciation	5.2818%	5.2824%	5.2825%	5.2825%	5.2825%
Depreciable Value	30473.97	34416.83	31230.64	31230.64	31230.64
Remaining Depreciable					
Value	30473.97	28685.54	26861.27	25028.17	23195.06
Depreciation	1788.43	1824.27	1833.10	1833.10	1833.10

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

44. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as follows:-

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
D/C quad T/L (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
400 kV bays (₹ lakh per bay)	60.30	62.30	64.37	66.51	68.71

45. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out and is as follows:-

Elements	COD	Length of line/No. of bays
400 kV D/C Quad Vadodra-Pirana T/L		122.918 km
400 kV (Quad)-Pirana T/L (D/C T/L on M/C towers)	1.4.2014	9.326 km
Pirana S/S-400 kV bay Extn. at Pirana for Vadodra	1.4.2014	
1 & 2		2 nos.

46. Accordingly, the allowable O & M Expenses for the elements of the instant asset are as under:-

(₹ in lakh)

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
132.244 km D/C quad T/L	140.44	145.07	149.83	154.85	160.02
2 nos., 400 kV bays	120.60	124.60	128.74	133.02	137.42

- 47. The petitioner as per original petition has submitted that O&M Expenses for the year 2009-14 had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms for the years of tariff period. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period. The petitioner has further submitted that it may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike is more than 50%.
- 48. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay

revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. Further, the O&M Expenses in this order have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

## Interest on working capital

- 49. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-
  - "28. Interest on Working Capital: (1) The working capital shall cover: (a)-----
  - (c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:
  - (i) Receivables equivalent to two months of fixed cost;
  - (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
  - (iii) Operation and maintenance expenses for one month"
  - (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later"
  - "(5) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"



50. 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 interest on working capital as determined is as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	39.16	40.45	41.79	43.18	44.62
O & M expenses	21.75	22.47	23.21	23.99	24.79
Receivables	1036.26	1030.37	1008.93	982.56	956.58
Total	1097.17	1093.30	1073.93	1049.73	1025.98
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	148.12	147.59	144.98	141.71	138.51

# **Transmission charges**

51. The transmission charges being allowed for the transmission asset are as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1788.43	1824.27	1833.10	1833.10	1833.10
Interest on Loan	2027.93	1909.00	1755.43	1591.21	1428.96
Return on equity	1992.02	2031.70	2041.48	2041.48	2041.48
Interest on Working Capital	148.12	147.59	144.98	141.71	138.51
O & M Expenses	261.04	269.67	278.57	287.87	297.44
Total	6217.54	6182.24	6053.56	5895.38	5739.49

## Filing Fee and the Publication Expenses

52. 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**

53. The petitioner in the original petition has submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

## **Service Tax**

54. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

## **Sharing of Transmission Charges**

- 55. AMPGPL has submitted that due to occurrence of force majeure events it has not been able to commission its project and should not be made liable to pay proportionate transmission charges in accordance with BPTA and sharing regulations. AMPGPL has further submitted that it has filed Petition No. 69/MP/2014 for relinquishment of BPTA dated 29.7.2009 with the petitioner.
- 56. The transmission charges approved by the Commission in this order are payable by the beneficiaries in accordance with the provisions of the Central

Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations). Accordingly, the billing, collection and disbursement of the transmission charges shall be governed by the provisions of 2010 Sharing Regulations, as amended from time to time subject to order of the Commission in Petition No. 69/MP/2014.

57. This order disposes of Petition No. 289/TT/2013.

sd/- sd/- sd/- sd/- (M.K. Iyer) (A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan) Member Member Chairperson

# **Annexure**

(₹ in lakh)

	(₹ in lakh)							
	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN							
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19		
1	SBI (21.03.2012)							
	Gross loan opening	690.00	690.00	690.00	690.00	690.00		
	Cumulative Repayment							
	upto DOCO/previous year	0.00	0.00	0.00	62.73	125.45		
	Net Loan-Opening	690.00	690.00	690.00	627.27	564.55		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	62.73	62.73	62.73		
	Net Loan-Closing	690.00	690.00	627.27	564.55	501.82		
	Average Loan	690.00	690.00	658.64	595.91	533.18		
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%		
	Interest	70.73	70.73	67.51	61.08	54.65		
	Rep Schedule	22	2 Annual Ins	stalment fror	n 31.08.201	6		
2	Bond-XL							
	Gross loan opening	3150.00	3150.00	3150.00	3150.00	3150.00		
	Cumulative Repayment							
	upto DOCO/previous year	0.00	0.00	0.00	262.50	525.00		
	Net Loan-Opening	3150.00	3150.00	3150.00	2887.50	2625.00		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	262.50	262.50	262.50		
	Net Loan-Closing	3150.00	3150.00	2887.50	2625.00	2362.50		
	Average Loan	3150.00	3150.00	3018.75	2756.25	2493.75		
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%		
	Interest	292.95	292.95	280.74	256.33	231.92		
	Rep Schedule			stalment fror				
3	BOND XLIII							
	Gross loan opening	2076.00	2076.00	2076.00	2076.00	2076.00		
	Cumulative Repayment							
	upto DOCO/previous year	0.00	0.00	0.00	0.00	173.00		
	Net Loan-Opening	2076.00	2076.00	2076.00	2076.00	1903.00		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00	173.00	173.00		
	Net Loan-Closing	2076.00	2076.00	2076.00	1903.00	1730.00		
	Average Loan	2076.00	2076.00	2076.00	1989.50	1816.50		
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%		
	Interest	164.63	164.63	164.63	157.77	144.05		
	Rep Schedule			stalment from				
4	BOND XLIV							
	Gross loan opening	5230.82	5230.82	5230.82	5230.82	5230.82		
	Cumulative Repayment					<b></b>		
	upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00		
	Net Loan-Opening	5230.82	5230.82	5230.82	5230.82	5230.82		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00	0.00	1743.61		
	Net Loan-Closing	5230.82	5230.82	5230.82	5230.82	3487.21		
	Average Loan	5230.82	5230.82	5230.82	5230.82	4359.02		
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%		
	. 10.0 01 11101001	3.1070	3.1070	3.1070	3.1070	5.1 5 /0		



	Interest	455.08	455.08	455.08	455.08	379.23			
	Rep Schedule								
5	BOND XLI	3 instalments 15.07.2018,15.07.2023 and 15.07.2028							
	Gross loan opening	3330.00	3330.00	3330.00	3330.00	3330.00			
	Cumulative Repayment	3330.00	3330.00	3330.00	3330.00	3330.00			
	upto DOCO/previous year	0.00	0.00	0.00	277.50	555.00			
	Net Loan-Opening	3330.00	3330.00	3330.00	3052.50	2775.00			
	Additions during the year	0.00	0.00	0.00	0.00	0.00			
	Repayment during the year	0.00	0.00	277.50	277.50	277.50			
	Net Loan-Closing	3330.00	3330.00	3052.50	2775.00	2497.50			
	Average Loan	3330.00	3330.00	3191.25	2913.75	2636.25			
	Rate of Interest	8.85%	8.85%	8.85%	8.85%	8.85%			
	Interest	294.71	294.71	282.43	257.87	233.31			
	Rep Schedule		294.71						
6	BOND XLII	12			11 19.10.201	0			
0	Gross loan opening	5709.00	5709.00	5709.00	5709.00	5709.00			
	Cumulative Repayment	3703.00	3703.00	3703.00	3703.00	3703.00			
	upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00			
	Net Loan-Opening	5709.00	5709.00	5709.00	5709.00	5709.00			
	Additions during the year	0.00	0.00	0.00	0.00	0.00			
	Repayment during the year	0.00	0.00	0.00	0.00	0.00			
	Net Loan-Closing	5709.00	5709.00	5709.00	5709.00	5709.00			
	Average Loan	5709.00	5709.00	5709.00	5709.00	5709.00			
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%			
	Interest	502.39	502.39	502.39	502.39	502.39			
	Rep Schedule	302.33		23 Bullet Pa		302.39			
7	BOND XXXIX		13.3.20		ayınıcını				
	Gross loan opening	1240.00	1240.00	1240.00	1240.00	1240.00			
	Cumulative Repayment	1240.00	1240.00	12-10.00	12-0.00	1240.00			
	Odifidiative Repayment		0.00	0.00	0.00	0.00			
	unto DOCO/previous vear	0.00	17-1717						
	upto DOCO/previous year	<b>0.00</b>			1240 00				
	Net Loan-Opening	1240.00	1240.00	1240.00	1240.00	1240.00			
	Net Loan-Opening Additions during the year	1240.00 0.00	1240.00 0.00	1240.00 0.00	0.00	1240.00 0.00			
	Net Loan-Opening Additions during the year Repayment during the year	1240.00 0.00 0.00	1240.00 0.00 0.00	1240.00 0.00 0.00	0.00	1240.00 0.00 0.00			
	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	1240.00 0.00 0.00 1240.00	1240.00 0.00 0.00 1240.00	1240.00 0.00 0.00 1240.00	0.00 0.00 1240.00	1240.00 0.00 0.00 1240.00			
	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	1240.00 0.00 0.00 1240.00 1240.00	1240.00 0.00 0.00 1240.00 1240.00	1240.00 0.00 0.00 1240.00 1240.00	0.00 0.00 1240.00 1240.00	1240.00 0.00 0.00 1240.00 1240.00			
	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	1240.00 0.00 0.00 1240.00 1240.00 9.40%	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>	0.00 0.00 1240.00 1240.00 <b>9.40%</b>	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>			
	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	1240.00 0.00 0.00 1240.00 1240.00	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	1240.00 0.00 0.00 1240.00 1240.00 9.40%	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>	0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 29.3.20	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening	1240.00 0.00 0.00 1240.00 1240.00 9.40%	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b>			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa <b>2225.00</b> <b>185.42</b>	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00	1240.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa <b>2225.00</b> <b>185.42</b> 2039.58	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 27 Bullet Pa 2225.00 185.42 2039.58 0.00	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 0.00 0.00	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa <b>2225.00</b> <b>185.42</b> 2039.58 0.00 185.42	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 <b>2225.00</b> <b>556.25</b> 1668.75 0.00 185.42			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00 0.00 2225.00	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42 2039.58	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa <b>2225.00</b> <b>185.42</b> 2039.58 0.00 185.42 1854.17	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42 1668.75	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00 185.42 1483.33			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00 0.00 2225.00 2225.00 2225.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42 2039.58 2132.29	1240.00 0.00 0.00 1240.00 1240.00 <b>9.40%</b> 116.56 27 Bullet Pa <b>2225.00</b> <b>185.42</b> 2039.58 0.00 185.42 1854.17 1946.88	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42 1668.75 1761.46	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00 185.42 1483.33 1576.04			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00 0.00 2225.00 2225.00 9.25%	1240.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42 2039.58 2132.29 9.25%	1240.00 0.00 1240.00 1240.00 9.40% 116.56 27 Bullet Pa 2225.00 185.42 2039.58 0.00 185.42 1854.17 1946.88 9.25%	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42 1668.75 1761.46 9.25%	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00 185.42 1483.33 1576.04 9.25%			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00 0.00 0.00 2225.00 2225.00 2225.00 2225.00 2225.00 2225.00	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42 2039.58 2132.29 9.25% 197.24	1240.00	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42 1668.75 1761.46 9.25% 162.93	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00 185.42 1483.33 1576.04 9.25% 145.78			
8	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXXVII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	1240.00 0.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 0.00 2225.00 0.00 0.00 2225.00 2225.00 2225.00 2225.00 2225.00 2225.00	1240.00 0.00 1240.00 1240.00 9.40% 116.56 29.3.20 2225.00 0.00 185.42 2039.58 2132.29 9.25%	1240.00	0.00 0.00 1240.00 1240.00 9.40% 116.56 ayment 2225.00 370.83 1854.17 0.00 185.42 1668.75 1761.46 9.25% 162.93	1240.00 0.00 1240.00 1240.00 9.40% 116.56 2225.00 556.25 1668.75 0.00 185.42 1483.33 1576.04 9.25% 145.78			



Total Loan						
Gross loan opening	23650	0.82 236	50.82	23650.82	23650.82	23650.82
Cumulative Repaym	ent					
upto DOCO/previous	s year (	0.00	0.00	185.42	973.56	1934.70
Net Loan-Opening	23650	0.82 236	50.82	23465.40	22677.26	21716.12
Additions during the	year (	0.00	0.00	0.00	0.00	0.00
Repayment during th	ne year (	0.00	85.42	788.14	961.14	2704.75
Net Loan-Closing	23650	).82   234	65.40	22677.26	21716.12	19011.36
Average Loan	23650	).82   235	58.11	23071.33	22196.69	20363.74
Rate of Interest	8.891	2% 8.8	898%	8.8830%	8.8753%	8.8780%
lı lı	nterest 2102	2.85 20	94.28	2049.43	1970.01	1807.90

