

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 111/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 : 20.10.2015

Date of Order : 31.03.2016

In the matter of:

Approval of transmission tariff for **Asset-1:** 400/220 kV 315 MVA ICT-II alongwith 3 nos. 220 KV Line bays at New Wanpoh, **Asset-2:** 400 kV, 125 MVAR Bus Reactor alongwith the associated bays at New Wanpoh associated with Northern Region Strengthening Scheme-XVI (NRSS-XVI) of Northern Region for tariff block 2014-19 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. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005
2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. 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



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004
6. Punjab State Power Corporation Limited,
Inter State Building, Thermal Shed T-1A,
Patiala-147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula, Haryana-134 109
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
10th Floor, Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002
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 – 110 034
14. Chandigarh Administration,
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun
16. North Central Railway,
Allahabad



17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002

..... Respondents

For petitioner : Shri S.S. Raju, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Ms. Manju Gupta, PGCIL

For respondents : None

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission tariff for **Asset-1**: 400/220 kV, 315 MVA ICT-II alongwith 3 nos. 220 KV Line bays at New Wanpoh, **Asset-2**: 400 kV, 125 MVAR Bus Reactor alongwith the associated bays at New Wanpoh (hereinafter referred to as “transmission assets”) associated with Northern Region Strengthening Scheme-XVI (NRSS-XVI) of Northern Region for the period from the date of commercial operation 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. Investment approval (IA) of the project was accorded by Board of Directors of the petitioner vide Memorandum No. C/CP/NRSS-XVI dated 6.7.2010 at an estimated cost of ₹75264 lakh including IDC of ₹6331 lakh (based on 1st Quarter, 2010 price level). The project was scheduled to be commissioned within 36 months from the date of investment approval i.e. by 5.7.2013.

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



Transmission Lines:

- i) LILO of both circuits of Kishenpur-Wagoora 400 kV D/C line
at New Wanpoh : 8 km
- ii) Kishenpur-New Wanpoh 400 kV line : 132 km
(125 km Double circuit+7 km Multi circuit in Pir Panjal Mountain Range)

Sub-stations:

- i) New 2x315 MVA, (7x105 MVA single phase units considered), 400/220 kV
New Wanpoh Sub-station;
- ii) Extension of 400/220 kV Kishenpur Sub-station;

Reactive Compensation:

- i) 1x125 MVAR bus reactor at New Wanpoh;

4. Annual Fixed Cost for the transmission asset was allowed vide order dated 22.9.2014 under Regulation 7(7) of the 2014 Tariff Regulations, subject to adjustment as per the said Regulation.

5. The petitioner initially claimed transmission tariff for the instant assets from the anticipated date of commercial operation of 1.6.2013 to 31.3.2014 in tariff block 2009-14. Subsequently, the petitioner vide affidavit dated 28.5.2014 submitted that the instant assets were actually anticipated to be commissioned in tariff block 2014-19. Further, the petitioner vide affidavit dated 7.10.2014 has submitted the actual date of commercial operation of the instant assets with changed nomenclature of both the assets and they are- **Asset-1:** 400 kV, 125 MVAR Bus Reactor alongwith the associated bays at New Wanpoh and **Asset-2:** 400/220 kV 315 MVA ICT-II alongwith 3 nos. 220 KV Line bays at New Wanpoh actually commissioned on 16.6.2014 and 3.7.2014 respectively. Accordingly, tariff of Asset-1 and Asset-2, commissioned during 2014-19 is now allowed in the



instant petition. The details of the assets considered in the instant order are as follows:-

Srl. No.	Particulars	Scheduled COD	Actual COD	Time over-run
1	Asset-1: 400 kV, 125 MVAR Bus Reactor alongwith the associated bays at New Wanpoh	5.7.2013	16.6.2014	11 months and 11 days
2	Asset-2: 400/220 kV 315 MVA ICT-II alongwith 3 nos. 220 KV Line bays at New Wanpoh		3.7.2014	11 months and 28 days

6. This order has been issued after considering petitioner's affidavits dated 16.12.2013, 28.3.2014, 28.5.2014, 11.9.2014, 7.10.2014, 15.10.2015, 16.10.2015 and 5.2.2016.

7. The details of the transmission charges claimed by the petitioner are as under:-

Particulars	(₹ in lakh)				
	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	38.84	51.60	56.67	59.21	59.21
Interest on Loan	47.21	58.57	59.75	57.37	51.79
Return on equity	43.27	57.49	63.14	65.97	65.97
Interest on Working Capital	5.61	7.30	7.69	7.88	7.87
O & M Expenses	47.74	62.30	64.37	66.51	68.71
Total	182.67	237.26	251.62	256.94	253.55
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	86.81	124.49	136.66	142.41	142.41
Interest on Loan	101.97	136.68	139.28	133.27	120.29
Return on equity	96.62	138.52	151.98	158.34	158.34
Interest on Working Capital	15.99	22.28	23.36	23.95	24.12
O & M Expenses	170.62	236.74	244.61	252.71	261.11
Total	472.01	658.71	695.89	710.68	706.27



8. The details submitted by the petitioner in support of its claim for Interest on Working Capital are as follows:-

(₹ in lakh)					
Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
O & M expenses	5.03	5.19	5.36	5.54	5.73
Receivables	38.84	39.54	41.94	42.82	42.26
Total	52.92	54.08	56.96	58.34	58.30
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	5.66	7.30	7.69	7.88	7.87
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	34.37	35.51	36.69	37.91	39.17
O & M expenses	19.10	19.73	20.38	21.06	21.76
Receivables	105.65	109.79	115.98	118.45	117.71
Total	159.12	165.03	173.05	177.42	178.64
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	16.01	22.28	23.36	23.95	24.12

9. No comments have been received from the general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited, Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Limited (JhVVNL), Respondent No.4 (collectively referred to as "Rajasthan Discoms") have filed a combined reply vide affidavit 26.6.2013. Punjab State Power Corporation Limited (PSPCL), Respondent No. 6 has filed its reply vide affidavit dated 5.9.2014. AVVNL has raised issues like late filing of petition, claim for higher O&M Expenses and confirmation of the petitioner that all works in the scope have been completed in view of claim of additional capital expenditure being towards balance and retention payments. PSPCL has raised issues of utilisation of loading of line ckt. breakers, track record /experience of ICT supplier and reason of procuring 125 MVAR bus reactor under a single bid as it is a widely



used equipment. The petitioner has not filed rejoinder to the replies of Rajasthan Discoms and PSPCL. The objections raised by the respondents are addressed in the relevant paragraphs of this order.

10. Rajasthan Discoms in their reply have submitted that Regulation 5(1) of the 2009 Tariff Regulations provides for filing of application for determination of tariff before six months of projected date of commercial operation. The petitioner has filed the petition under the 2009 Tariff Regulations on 13.5.2013 when the assets were anticipated to be commissioned on 1.6.2013. Thus, there has been a delay in filing the petition by the petitioner. However, Asset-1 and Asset-2 were actually commissioned on 16.6.2014 and 3.7.2014 respectively. Thus, Rajasthan Discoms contention that the petitioner's has delayed the filing of the petition does not sustain.

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

Capital Cost

12. 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.

13. The details of apportioned approved cost, actual expenditure incurred as on the date of commercial operation and details of additional capital expenditure (hereinafter “add cap”) incurred/projected to be incurred for the instant assets as claimed by the petitioner vide affidavit dated 16.10.2015 (Auditors’ Certificate dated 13.10.2015) are summarized below:-

Particulars	Revised apportioned approved cost	Cost as on COD	Add-cap			(₹ in lakh)
			2014-15	2015-16	2016-17	Estimated completion cost
Asset-1	1178.71	929.15	-	96.10	96.10	1121.35
Asset-2	3836.79	2177.31	56.42	241.56	216.10	2691.39

14. As per the Auditors’s Certificate submitted by the petitioner, expenditure upto 31.3.2015 has been verified from the “Books of Account” of the project and the balance expenditure is on the basis of details furnished by the Management.

Cost over-run

15. The total cost as on 31.3.2014 as well as the total estimated completion cost is within the approved apportioned cost. Thus, there is no cost over-run in



case of instant assets. However, there is cost variation of 38% in the cost of Structure for Switch Yard on a comparison of original estimates and completion cost of Asset-1.

16. The petitioner was directed to submit reasons for this variation. The petitioner vide affidavit dated 16.12.2013 submitted that the cost variation is mainly due to the fact that the structure for switchyard in FR is taken on normative bases whereas the actual cost has been incurred on the basis of award placed through open tender. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

17. The justification submitted by the petitioner for cost variation appears to be in order and therefore, we are inclined to accept it. However, as observed in other petitions, the cost estimates of the petitioner are not realistic. The petitioner is directed to adopt a prudent procedure to make cost estimates of different transmission projects more realistic.

Time over-run

18. The project was scheduled to be commissioned within 36 months from the date of IA i.e. 6.7.2010. Accordingly, the scheduled commissioning works out to 5.7.2013. The instant assets were commissioned on 16.6.2014 and 3.7.2014 respectively. Thus, there is time over-run of 11 months and 11 days in case of Asset-1 and 11 months and 28 days in case of Asset-2.



19. The petitioner vide affidavit dated 28.5.2014 has submitted reasons for delay in commissioning of the instant assets as under:-

a. The assets were to be commissioned at New Wanpoh Sub-station which is a remote location in Kashmir Valley and experiences on and off militancy activity, disturbances leading to intermittent stoppage of work, slowing down of pace of work. It also affects the transportation of men and material, fear among the workers completely stops the work or progress is slowed down considerably. Such situation is experienced intermittently throughout the year and sometimes it is so intensified that work gets stopped completely.

b. In the instant case, especially from May, 2012 till September, 2013, (16 Months) various militancy activities were intensified, which severely hampered the execution of the work as evidenced by various news paper cuttings indicating disturbance in Kashmir valley. These paper cuttings are the sample instances to indicate the militancy activities in that area. However, militancy activities have continuously affected the execution of the work. As most of the work force (skilled/semi-skilled) deployed in the project belonged to other parts of country, considering the threat perception to non-locals in such hostile conditions, the work force was to be withdrawn/de-mobilized from the site and again to be mobilized after return of normalcy in the Valley. The frequent demobilization/mobilization of work force had also affected the progress of work considerably.



c. There was unprecedented snow fall in the valley during winter period from November, 2013 to January, 2014, which completely stopped the work for about 4 months.

20. The petitioner has further submitted that mainly disturbance and unprecedented snow fall in Kashmir valley, which is entirely beyond the control of the petitioner led to delay in commissioning of the project. The petitioner tried to accelerate the pace of work by deploying more resources in the available time stretches to shorten the delay period to the extent possible and commission the instant assets expeditiously.

21. The petitioner, vide affidavit dated 16.10.2015, has further submitted that in addition to reasons submitted vide affidavit dated 28.5.2014, there was delay in acquiring land. The proposal for land acquisition was submitted on 19.3.2008, after carrying out joint survey in association with J&K Revenue Department in Damjan near Qazikund on NH1A and Deputy Commissioner (J & K Government) was requested to issue necessary instructions to the concerned authority for land acquisition. As no initiative was taken by Government of J&K, the petitioner again wrote a letter dated 24.7.2008 to start land acquisition proceedings. The concerned authorities vide notification called for objection from the interested person and Indenting Department. In response to the notice a few objections were required. As the land in Damjan village which was proposed for construction of 400 kV Sub Station was falling under the Devsar Assembly constituency which was being represented by the Deputy Speaker of J&K legislative assembly, no objection certificate was obtained from the Deputy Speaker on 5.3.2010. Finally, land acquisition was awarded by Collector Land Acquisition on 19.9.2012.



22. The petitioner has also submitted that there is delay of 16 months from May, 2012 to September, 2013 due to various militancy activities, which were intermittent during this period and severely hampered the execution of the work. Further, there was unprecedented snow fall in the valley during winter period from November, 2013 and January, 2014, which completely stopped the work for about 4 months. The petitioner has also stated that such situation is experienced intermittently throughout the year.

23. The petitioner was also directed vide RoP for hearing dated 20.10.2015 to submit detailed chronology of various events leading to time over-run alongwith documentary evidence by 30.11.2015. However, the petitioner after a delay of more than 2 months, vide affidavit dated 5.2.2016 submitted the information. The petitioner has submitted that the reasons for time over-run were already submitted vide affidavits dated 2.6.2014 and 16.10.2015 and the delay of 10 months is mainly due to delay in acquiring land due to late approval by J&K Government and delay due to disturbance caused by various factors such as weather disturbance, militant attacks, security threats, shutdown. The justification given by the petitioner is as follows:-

Activity	Period of activity	Reason(s) for delay
Land Acquisition	19.3.2008 to 19.9.2012	Delay in acquiring land due to late approval by J&K Government
Disturbances	May-2012 to June-2012 September-2012 to October-2013 November-2013 to December-2013 March-2014 to May-2014	Encounters, Protest, Militant attacks, Militant threats, Curfew etc.
Weather Disturbances	August-2012 to September-2012 November-2012 to December-2012 November-2013 to December-2013	Weather disturbances (as per detailed chronology already submitted vide affidavit dated 2.6.2014)



24. Regulation 12 of the 2014 Tariff Regulations, provides as follows:-

12. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project :

- (1) The "controllable factors" shall include but shall not be limited to the following:
 - (a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;
 - (b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and
 - (c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.
- (2) The "uncontrollable factors" shall include but shall not be limited to the following:
 - (i) Force Majeure events; and
 - (ii) Change in law.

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through Implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC [and IEDC] 6 or transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with second proviso of Clause 3 of Regulation 4 of these regulations till the generating station is commissioned:

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned."

25. We have considered the submissions of the petitioner. It is observed that the petitioner submitted the proposal for land acquisition to J&K Government on 19.3.2008. The investment approval was accorded on 6.7.2010. Therefore, the petitioner initiated action for land acquisition more than 2 years before the



investment approval. Perusal of the final award dated 19.9.2012 issued by Collector Land Acquisition/Additional Deputy Commissioner, Anantnag, shows that after receipt of the request from the petitioner for acquisition of land measuring 41.5 acres for establishment 400 kV Sub-Station at village Damjan for system strengthening and facilitating power supply in Kashmir Valley, the office of Deputy Commissioner, Anantnag, prepared shajra khasra got the same authenticated by Tehsildar Dooru and Manager(PGCIL) and then notified the proposed land particulars under Section 4(i) of the State Land Acquisition Act vide notification dated 23.4.2009. After considering the objection received, Deputy Commissioner submitted the report to the Administration Department recommending notification under Section 6 of the State Land Acquisition Act and seeking order under Section 7 of the State Land Acquisition Act. The Revenue Department of Government of J&K issued a notification under Section 6 of the State Land Acquisition Act on 24.6.2010. After that notices under Section 9 and 9A of the State Land Acquisition Act was issued on 7.5.2010 calling objection from the interested persons/Indenting Department regarding the nature of their respective claims/interest in the land and the amount of compensation. The office of Additional Deputy Commissioner determined the amount of compensation and sought the approval of the Divisional Commissioner through the Deputy Commissioner vide letter dated 5.11.2010. The Divisional Commissioner vide its letter 6.4.2012 conveyed the approval of the proposed rate of compensation. Additional Commissioner vide its letter dated 19.9.2012 notified the final award of compensation. The petitioner got the possession. It is noticed that it took almost 26 months for the approval of the Divisional Commissioner from the date of investment approval. It is further noticed that after case was submitted to Divisional Commissioner, it took 17 months to get



the approval of Divisional Commissioner and after that, the Deputy Commissioner took five months to issue the award. The petitioner has not explained as to why it took almost 22 months to get the approval of Divisional Commissioner and notification of the award. The petitioner has not placed on record the efforts made by it to get the notification of the award expedited. Therefore this delay of 22 months in land acquisition is not being allowed in this order. The petitioner is granted liberty to place on record the documentary evidence regarding the efforts made by the petitioner to get the possession of the land for the sub-station at the time of truing up.

26. The petitioner has further submitted that intensified militant activities were prevailing during May, 2012 to June, 2012, September, 2012 to October-2013 and weather disturbance existed from August, 2012 to September, 2012, November, 2012 to December, 2012 and November, 2013 to December, 2013. We have also perused the documentary evidences submitted by the petitioner but these are only newspaper cuttings which are not sufficient to ascertain the period of disturbances. The information submitted by the petitioner on pursuant to directions of the Commission vide RoP of hearing dated 20.10.2015, regarding time over-run in specific format along with documentary evidence does not provide specific details about exact time over-run or delay due to disturbances in that area. In view of this, we are not inclined to condone the time over-run on account of non-availability of proper and specific information. There is a delay of 22 months in land acquisition which has not be explained by the petitioner. The delay on account of militant activities and weather conditions from 5.11.2010 to 19.9.2012 get subsumed therein. Further, delay beyond September, 2013 is mainly because of militancy activities and adverse weather. However, credible evidences have not



been provided by the petitioner to support its claim. However, there is an overall time over-run of 11 months & 11 days for Asset 1 and 11 months & 28 days for Asset-2 which has not been condoned. The petitioner is at liberty to approach the Commission with proper and specific chronology of events alongwith documentary evidence for time over-run such as police or military advisory for cessation of work, report of IMD for unprecedented or rare weather disturbance causing cessation of work in the work area etc. at the time of truing up for the consideration of the Commission.

Treatment of IDC and IEDC

27. As regards IDC and IEDC, Regulation 11 of the 2014 Tariff Regulations provides as follows:-

"11. Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)

(A) Interest during Construction (IDC):

(1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.

(2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds: Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check.

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds.

(B) Incidental Expenditure during Construction (IEDC):

(1) Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses upto SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.



(2) In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company or the transmission licensee, as the case may be, and is due to uncontrollable factors as specified in regulation 12, IEDC may be allowed after due prudence check:

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company or the transmission licensee, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost

(3) In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or the transmission licensee.

28. The petitioner has claimed Interest During Construction (IDC) amounting to ₹107.97 lakh and ₹260.58 lakh for Asset-1 and Asset-2 respectively. The petitioner has submitted the statement of IDC discharged upto COD for the instant assets wherein loan wise drawl date has been indicated. Thus, for the purpose of determining the IDC, the loan wise drawl date as provided by the petitioner has been assumed as date of infusion of debt for the concerned loan. Further, the petitioner has submitted that balance amount of IDC shall be discharged during 2014-15. However, the petitioner in Form-7 (Statement of additional capital expenditure) has claimed additional capital expenditure (ACE) towards balance/retention payments, but it is not clear whether or not the amount of (ACE) claimed in Form-7 is inclusive of the un-discharged IDC as on COD. Thus, on the basis of available information after considering the time over-run, which has not been condoned as discussed at para-23, IDC amounting to ₹68.87 lakh and ₹161.23 lakh has been worked out on cash basis and is allowed for Asset-1 and Asset-2 respectively which is subject to true-up. Therefore, the petitioner is



directed to submit loan wise date of infusion of debt and segregated details of ACE claim towards discharge of liability corresponding to liability as on COD and the amount of ACE claim towards cash expenditure pertaining to the addition of Gross block as per in the books of account after COD at the time of truing-up.

29. The petitioner has also claimed Incidental Expenditure During Construction (IEDC) upto COD of ₹32.22 lakh and ₹73.69 lakh for Asset-1 and Asset-2 respectively, which is within the percentage on Hard Cost as indicated in the Abstract Cost Estimate but details of actual IEDC discharged have not been submitted by the petitioner. Thus, IEDC upto COD has been considered for computing tariff in this order as claimed. However, the petitioner is directed to submit Form-12A i.e. year wise details of actual IEDC discharged till COD of the instant assets at the time of true-up. Consequently, the impact of time over-run on IEDC shall be reviewed at that time.

Initial Spares

30. 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) where the generating station has any transmission equipment forming part of the generation project, the ceiling norm for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations:

(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.”

31. The petitioner has claimed initial spares of ₹24.94 lakh and ₹30.61 lakh pertaining to sub-station in the case of Asset-1 and Asset-2 respectively, which are within the ceiling limit of the 2014 Tariff Regulations. However, the petitioner was directed to clarify whether or not the entire liability pertaining to initial spares was discharged. In response, the petitioner vide affidavit dated 5.2.12016 submitted year wise discharge of liability of initial spares, but without clarifying if the un-discharged liability of initial spares is included in the amount of ACE claimed as per Form-7. Thus, initial spares have been considered as claimed for the instant assets. However, the petitioner is directed to submit clarification whether or not the year wise discharge of liability of initial spares is included in ACE at the time of truing-up.

Capital cost allowed as on COD

32. The details of the capital cost considered as on the date of commercial operation after allowing capitalization of IDC, for the purpose of the determination of transmission tariff are as follows:-



Particulars	Capital cost claimed as on COD	Disallowed			(₹ in lakh)
		IDC	IEDC	Initial spares	Capital cost allowed as on COD
Asset-1	929.15	39.10	-	-	890.05
Asset-2	2177.31	99.35	-	-	2077.96

Additional Capital Expenditure

33. 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.

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

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

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;”



35. The cut-off date in the case of instant transmission assets is 31.3.2017.

36. AVVNL has submitted that the petitioner should confirm that all works in the scope have been completed in view of claim of additional capital expenditure being towards balance and retention payments. It is noted that the additional capital expenditure claimed by the petitioner for 2014-15 for Asset-2 and for 2015-16 and 2016-17 for the instant assets, which falls within the cut-off date and is mainly on account of balance and retention payments. Thus, additional capital expenditure claimed from the date of commercial operation to 31.3.2017 has been allowed for tariff computation. However, the petitioner is directed to submit the actual capital expenditure by clearly indicating the bifurcated cost of new addition to the gross block (i.e. additional capitalisation made during the year) and the cost towards the discharge of liability (i.e. pertaining to IDC and initial spares) out of the liability outstanding as on COD. The details of estimated completion capital cost as on 31.3.2019 are as follows:-

(₹ in lakh)

Particulars	Capital cost allowed as on COD	Add-cap allowed for			Estimated capital cost allowed as on 31.3.2019
		2014-15	2015-16	2016-17	
Asset-1	890.05	-	96.10	96.10	1082.25
Asset-2	2077.96	56.42	241.56	216.10	2592.04

Debt- Equity Ratio

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

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually



deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

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

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

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

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

38. The petitioner has claimed debt: equity ratio of 70:30 as on the date of commercial operation of the instant assets. The details of debt: equity in respect of the assets covered in this petition as on date of commercial operation and as on 31.3.2019 respectively are as under:-

(₹ in lakh)

Particulars	Asset-1			
	Cost as on COD		Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	623.03	70.00	757.57	70.00
Equity	267.01	30.00	324.67	30.00
Total	890.05	100.00	1082.25	100.00
Particulars	Asset-2			
	Cost as on COD		Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1454.58	70.00	1814.43	70.00
Equity	623.39	30.00	777.61	30.00
Total	2077.96	100.00	2592.04	100.00



39. The capital cost on the dates of commercial operation and as on 31.3.2019 as arrived above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30 for the purpose of tariff calculation in this order.

Return on Equity (RoE)

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

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

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

Provided that:

- (i) in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:
- (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- (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.”

41. The petitioner has submitted that it may be allowed to recover the shortfall or refund the excess AFC, 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.

42. 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 MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the details of return on equity calculated are as given under:-

Particulars	(₹ in lakh)				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	267.01	267.01	295.84	324.67	324.67
Addition due to Additional Capitalisation	-	28.83	28.83	-	-
Closing Equity	267.01	295.84	324.67	324.67	324.67
Average Equity	267.01	281.53	310.26	324.67	324.67
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)	41.46	55.19	60.84	63.67	63.67
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	623.39	640.31	712.78	777.61	777.61
Addition due to Additional Capitalisation	16.93	72.47	64.83	-	-
Closing Equity	640.31	712.78	777.61	777.61	777.61
Average Equity	631.85	676.55	745.20	777.61	777.61
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)	92.34	132.67	146.13	152.49	152.49

Interest on Loan

43. 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.”

44. In these calculations, interest on loan has been worked out as hereinafter:-
- (a) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form-9C submitted vide affidavit dated 15.10.2015;
 - (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 normative average loan during the year to arrive at the interest on loan.

45. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on respective CODs and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff block. We would like to clarify that the interest on loan has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

46. Detailed calculations of the weighted average rate of interest have been given at Annexure-1 to Annexure-2 to this order.

47. Details of Interest on Loan calculated are as under:-

Particulars	(₹ in lakh)				
	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	623.03	623.03	690.30	757.57	757.57
Cumulative Repayment upto Previous Year	-	37.21	86.74	141.35	198.49
Net Loan-Opening	623.03	585.83	603.56	616.23	559.08
Addition due to Additional Capitalisation	-	67.27	67.27	-	-
Repayment during the year	37.21	49.53	54.61	57.14	57.14
Net Loan-Closing	585.83	603.56	616.23	559.08	501.94
Average Loan	604.43	594.69	609.90	587.66	530.51
Weighted Average Rate of Interest on Loan	9.4513%	9.4551%	9.4468%	9.4329%	9.4324%
Interest	45.23	56.23	57.62	55.43	50.04
Particulars	Asset-2				



	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1454.58	1494.07	1663.16	1814.43	1814.43
Cumulative Repayment upto Previous Year	-	82.96	202.20	333.61	470.77
Net Loan-Opening	1454.58	1411.11	1460.96	1480.82	1343.66
Addition due to Additional Capitalisation	39.49	169.09	151.27	-	-
Repayment during the year	82.96	119.24	131.41	137.16	137.16
Net Loan-Closing	1411.11	1460.96	1480.82	1343.66	1206.50
Average Loan	1432.84	1436.03	1470.89	1412.24	1275.08
Weighted Average Rate of Interest on Loan	9.1266%	9.1176%	9.1108%	9.0984%	9.0966%
Interest	97.45	130.93	134.01	128.49	115.99

Depreciation

48. 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.”

49. The transmission assets were put under commercial operation during 2014-15. Accordingly, the instant assets will complete 12 years beyond 2018-19. Thus, depreciation has been calculated annually based on Straight Line Method at rates specified in Appendix-II of the 2014 Tariff Regulations.



50. The details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	890.05	890.05	986.15	1082.25	1082.25
Additional Capital expenditure	-	96.10	96.10	-	-
Closing Gross Block	890.05	986.15	1082.25	1082.25	1082.25
Average Gross Block	890.05	938.10	1034.20	1082.25	1082.25
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	801.04	933.29	930.78	974.02	974.02
Remaining Depreciable Value	801.04	763.83	714.30	659.70	602.55
Depreciation	37.21	49.53	54.61	57.14	57.14
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	2077.96	2134.38	2375.94	2592.04	2592.04
Additional Capital expenditure	56.42	241.56	216.10	-	-
Closing Gross Block	2134.38	2375.94	2592.04	2592.04	2592.04
Average Gross Block	2106.17	2255.16	2483.99	2592.04	2592.04
Rate of Depreciation	5.2858%	5.2874%	5.2903%	5.2916%	5.2916%
Depreciable Value	1895.56	2237.44	2235.59	2332.84	2332.84
Remaining Depreciable Value	1895.56	1812.59	1693.55	1561.94	1424.78
Depreciation	82.96	119.24	131.41	137.16	137.16

Operation & Maintenance Expenses (O&M Expenses)

51. 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 under:-

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV bays (₹ lakh per bay)	60.30	62.30	64.37	66.51	68.71
220 kV bays (₹ lakh per bay)	42.21	43.61	45.06	46.55	48.10

52. The petitioner has claimed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out as given follows:-



Element
Asset-1-COD: 16.6.2014
1 No. 400 kV bus reactor bay at New Wanpoh
Asset-2-COD: 3.7.2014
1 No. 400 kV ICT-II bay at New Wanpoh
4 Nos. 220 kV bays at Wanpoh-II bay (1 no.) and Wanpoh line bays (3 nos.)

53. AVVNL has submitted that the petitioner has claimed higher O & M expenses and same should not be allowed. O & M expenses have been allowed as per norms. Accordingly, O&M Expenses allowed in respect of the Asset-1 and Asset-2 are as under:-

Particulars	(₹ in lakh)				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Asset-1					
1 no. 400 kV bay	47.74	62.30	64.37	66.51	68.71
Asset-2					
1 no. 400 kV bay	44.93	62.30	64.37	66.51	68.71
4 nos. 220 kV bays	125.82	174.44	180.24	186.20	192.40
Total-Asset-2	170.75	236.74	244.61	252.71	261.11

54. The petitioner in the original petition filed under the 2009 Tariff Regulations submitted that O & M Expenses for the period 2009-14 were arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08. 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 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff.

55. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this



regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

Interest on Working Capital

56. 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:

(d) 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;”

57. 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 determined is as overleaf:-

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.04	9.35	9.66	9.98	10.31
O & M expenses	5.02	5.19	5.36	5.54	5.73

(₹ in lakh)



Receivables	37.29	38.40	40.83	41.75	41.21
Total	51.35	52.94	55.85	57.27	57.25
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	5.49	7.15	7.54	7.73	7.73
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	34.37	35.51	36.69	37.91	39.17
O & M expenses	19.09	19.73	20.38	21.06	21.76
Receivables	102.70	106.91	113.19	115.74	115.08
Total	156.17	162.15	170.27	174.70	176.01
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	15.71	21.89	22.99	23.59	23.76

Transmission Charges

58. The transmission charges being allowed for the transmission assets are as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	37.21	49.53	54.61	57.14	57.14
Interest on Loan	45.23	56.23	57.62	55.43	50.04
Return on equity	41.46	55.19	60.84	63.67	63.67
Interest on Working Capital	5.49	7.15	7.54	7.73	7.73
O & M Expenses	47.74	62.30	64.37	66.51	68.71
Total	177.13	230.40	244.97	250.49	247.29
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	82.96	119.24	131.41	137.16	137.16
Interest on Loan	97.45	130.93	134.01	128.49	115.99
Return on equity	92.34	132.67	146.13	152.49	152.49
Interest on Working Capital	15.71	21.89	22.99	23.59	23.76
O & M Expenses	170.75	236.74	244.61	252.71	261.11
Total	459.21	641.47	679.15	694.44	690.51



Filing Fee and the Publication Expenses

59. 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

60. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

61. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The petitioner submitted that service tax on transmission has been put on negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the respondents. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.



Sharing of Transmission Charges

62. 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.

63. This order disposes of Petition No. 111/TT/2013.

(M.K. Iyer)
Member

(A.S. Bakshi)
Member

(A.K. Singhal)
Member

(Gireesh B. Pradhan)
Chairperson



Annexure-1

(₹ 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	214.82	214.82	214.82	214.82	214.82
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	19.53	39.06
	Net Loan-Opening	214.82	214.82	214.82	195.29	175.76
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	19.53	19.53	19.53
	Net Loan-Closing	214.82	214.82	195.29	175.76	156.23
	Average Loan	214.82	214.82	205.06	185.53	166.00
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	22.02	22.02	21.02	19.02	17.01
	Rep Schedule	22 Annual Instalment from 31.08.2016				
2	Bond-XL					
	Gross loan opening	155.00	155.00	155.00	155.00	155.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	12.92	25.83
	Net Loan-Opening	155.00	155.00	155.00	142.08	129.17
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	12.92	12.92	12.92
	Net Loan-Closing	155.00	155.00	142.08	129.17	116.25
	Average Loan	155.00	155.00	148.54	135.63	122.71
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	14.42	14.42	13.81	12.61	11.41
	Rep Schedule	12 Annual Instalment from 28.06.2016				
3	BOND XXXV					
	Gross loan opening	104.00	104.00	104.00	104.00	104.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.67	17.33	26.00
	Net Loan-Opening	104.00	104.00	95.33	86.67	78.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.67	8.67	8.67	8.67
	Net Loan-Closing	104.00	95.33	86.67	78.00	69.33
	Average Loan	104.00	99.67	91.00	82.33	73.67
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	10.03	9.61	8.77	7.94	7.10
	Rep Schedule	12 Annual Instalment from 31.05.2015				
4	BOND XLIII					
	Gross loan opening	73.00	73.00	73.00	73.00	73.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	6.08
	Net Loan-Opening	73.00	73.00	73.00	73.00	66.92
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.08	6.08
	Net Loan-Closing	73.00	73.00	73.00	66.92	60.83
	Average Loan	73.00	73.00	73.00	69.96	63.88
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	5.79	5.79	5.79	5.55	5.07



	Rep Schedule	12 Annual Instalment from 20.05.2017				
5	BOND XLIV					
	Gross loan opening	32.00	32.00	32.00	32.00	32.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	32.00	32.00	32.00	32.00	32.00
	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	10.67
	Net Loan-Closing	32.00	32.00	32.00	32.00	21.33
	Average Loan	32.00	32.00	32.00	32.00	26.67
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	2.78	2.78	2.78	2.78	2.32
	Rep Schedule	3 instalments 15.07.2018,15.07.2023 and 15.07.2028				
6	BOND XLV					
	Gross loan opening	23.58	23.58	23.58	23.58	23.58
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	1.97
	Net Loan-Opening	23.58	23.58	23.58	23.58	21.62
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	1.97	1.97
	Net Loan-Closing	23.58	23.58	23.58	21.62	19.65
	Average Loan	23.58	23.58	23.58	22.60	20.63
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	2.28	2.28	2.28	2.18	1.99
	Rep Schedule	12 Annual Instalment from 28.02.2018				
7	BOND XXXIII					
	Gross loan opening	48.00	48.00	48.00	48.00	48.00
	Cumulative Repayment upto DOCO/previous year	0.00	4.00	8.00	12.00	16.00
	Net Loan-Opening	48.00	44.00	40.00	36.00	32.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.00	4.00	4.00	4.00	4.00
	Net Loan-Closing	44.00	40.00	36.00	32.00	28.00
	Average Loan	46.00	42.00	38.00	34.00	30.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%	8.64%
	Interest	3.97	3.63	3.28	2.94	2.59
	Rep Schedule	12 Annual Instalment from 08.07.2014				
	Total Loan					
	Gross loan opening	650.40	650.40	650.40	650.40	650.40
	Cumulative Repayment upto DOCO/previous year	0.00	4.00	16.67	61.78	114.94
	Net Loan-Opening	602.40	646.40	633.73	588.62	535.46
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	12.67	45.11	53.16	63.83
	Net Loan-Closing	646.40	633.73	588.62	535.46	471.63
	Average Loan	648.40	640.07	611.18	562.04	503.55
	Rate of Interest	9.4513%	9.4551%	9.4468%	9.4329%	9.4324%
	Interest	61.28	60.52	57.74	53.02	47.50



Annexure-2

(₹ 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	274.12	274.12	274.12	274.12	274.12
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	24.92	49.84
	Net Loan-Opening	274.12	274.12	274.12	249.20	224.28
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	24.92	24.92	24.92
	Net Loan-Closing	274.12	274.12	249.20	224.28	199.36
	Average Loan	274.12	274.12	261.66	236.74	211.82
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	28.10	28.10	26.82	24.27	21.71
	Rep Schedule	22 Annual Instalment from 31.08.2016				
2	Bond-XL					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	16.67	33.33
	Net Loan-Opening	200.00	200.00	200.00	183.33	166.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	16.67	16.67	16.67
	Net Loan-Closing	200.00	200.00	183.33	166.67	150.00
	Average Loan	200.00	200.00	191.67	175.00	158.33
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	18.60	18.60	17.83	16.28	14.73
	Rep Schedule	12 Annual Instalment from 28.06.2016				
3	BOND XXXV					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1.25	2.50	3.75
	Net Loan-Opening	15.00	15.00	13.75	12.50	11.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1.25	1.25	1.25	1.25
	Net Loan-Closing	15.00	13.75	12.50	11.25	10.00
	Average Loan	15.00	14.38	13.13	11.88	10.63
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	1.45	1.39	1.27	1.14	1.02
	Rep Schedule	12 Annual Instalment from 31.05.2015				
4	BOND XLIII					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	16.67
	Net Loan-Opening	200.00	200.00	200.00	200.00	183.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	16.67	16.67
	Net Loan-Closing	200.00	200.00	200.00	183.33	166.67
	Average Loan	200.00	200.00	200.00	191.67	175.00
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	15.86	15.86	15.86	15.20	13.88



	Rep Schedule	12 Annual Instalment from 20.05.2017				
5	BOND XLIV					
	Gross loan opening	120.00	120.00	120.00	120.00	120.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	120.00	120.00	120.00	120.00	120.00
	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	40.00
	Net Loan-Closing	120.00	120.00	120.00	120.00	80.00
	Average Loan	120.00	120.00	120.00	120.00	100.00
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	10.44	10.44	10.44	10.44	8.70
	Rep Schedule	3 instalments 15.07.2018,15.07.2023 and 15.07.2028				
6	BOND XLV					
	Gross loan opening	75.00	75.00	75.00	75.00	75.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	6.25
	Net Loan-Opening	75.00	75.00	75.00	75.00	68.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.25	6.25
	Net Loan-Closing	75.00	75.00	75.00	68.75	62.50
	Average Loan	75.00	75.00	75.00	71.88	65.63
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	7.24	7.24	7.24	6.94	6.33
	Rep Schedule	12 Annual Instalment from 28.02.2018				
7	BOND XLIX ADD CAP FOR 2014-15					
	Gross loan opening	0.00	39.49	39.49	39.49	39.49
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	39.49	39.49	39.49	39.49
	Additions during the year	39.49	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	39.49	39.49	39.49	39.49	39.49
	Average Loan	19.75	39.49	39.49	39.49	39.49
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	1.61	3.22	3.22	3.22	3.22
	Rep Schedule	3 instalment 09.03.2020,09.03.2025 and 09.03.2030				
8	BOND XLI					
	Gross loan opening	110.00	110.00	110.00	110.00	110.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	9.17	18.33
	Net Loan-Opening	110.00	110.00	110.00	100.83	91.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	9.17	9.17	9.17
	Net Loan-Closing	110.00	110.00	100.83	91.67	82.50
	Average Loan	110.00	110.00	105.42	96.25	87.08
	Rate of Interest	8.85%	8.85%	8.85%	8.85%	8.85%
	Interest	9.74	9.74	9.33	8.52	7.71
	Rep Schedule	12 Annual Instalment from 19.10.2016				
9	BOND XLII					
	Gross loan opening	60.00	60.00	60.00	60.00	60.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	60.00	60.00	60.00	60.00	60.00
	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	60.00	60.00	60.00	60.00	60.00
	Average Loan	60.00	60.00	60.00	60.00	60.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	5.28	5.28	5.28	5.28	5.28
	Rep Schedule	13.3.2023 Bullet Payment				
10	BOND XXXIII					
	Gross loan opening	30.00	30.00	30.00	30.00	30.00
	Cumulative Repayment upto DOCO/previous year	0.00	2.50	5.00	7.50	10.00
	Net Loan-Opening	30.00	27.50	25.00	22.50	20.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.50	2.50	2.50	2.50	2.50
	Net Loan-Closing	27.50	25.00	22.50	20.00	17.50
	Average Loan	28.75	26.25	23.75	21.25	18.75
	Rate of Interest	8.64%	8.64%	8.64%	8.64%	8.64%
	Interest	2.48	2.27	2.05	1.84	1.62
	Rep Schedule	12 Annual Instalment from 08.07.2014				
11	BOND XXXIX					
	Gross loan opening	60.00	60.00	60.00	60.00	60.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	60.00	60.00	60.00	60.00	60.00
	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	60.00	60.00	60.00	60.00	60.00
	Average Loan	60.00	60.00	60.00	60.00	60.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	5.64	5.64	5.64	5.64	5.64
	Rep Schedule	29.3.2027 Bullet Payment				
12	BOND XXXVIII					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	50.00	50.00	50.00	50.00	50.00
	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	50.00	50.00	50.00	50.00	50.00
	Average Loan	50.00	50.00	50.00	50.00	50.00
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	4.63	4.63	4.63	4.63	4.63
	Rep Schedule	9.3.2027 Bullet Payment				
13	BOND XXXVII					
	Gross loan opening	40.00	40.00	40.00	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	3.33	6.67	10.00
	Net Loan-Opening	40.00	40.00	36.67	33.33	30.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	3.33	3.33	3.33	3.33
	Net Loan-Closing	40.00	36.67	33.33	30.00	26.67
	Average Loan	40.00	38.33	35.00	31.67	28.33
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	3.70	3.55	3.24	2.93	2.62
	Rep Schedule	12 Annual Instalment from 25.12.2015				
14	BOND XXXVI					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	3.33	6.67
	Net Loan-Opening	50.00	50.00	50.00	46.67	43.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	3.33	3.33	3.33
	Net Loan-Closing	50.00	50.00	46.67	43.33	40.00
	Average Loan	50.00	50.00	48.33	45.00	41.67
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	4.68	4.68	4.52	4.21	3.90
	Rep Schedule	15 Annual Instalment from 29.08.2016				
15	BOND XXXIV					
	Gross loan opening	90.00	90.00	90.00	90.00	90.00
	Cumulative Repayment upto DOCO/previous year	0.00	7.50	15.00	22.50	30.00
	Net Loan-Opening	90.00	82.50	75.00	67.50	60.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	7.50	7.50	7.50	7.50	7.50
	Net Loan-Closing	82.50	75.00	67.50	60.00	52.50
	Average Loan	86.25	78.75	71.25	63.75	56.25
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	7.62	6.96	6.30	5.64	4.97
	Rep Schedule	12 Annual Instalment from 21.10.2014				
16	BOND XXXI					
	Gross loan opening	150.00	150.00	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	12.50	25.00	37.50	50.00	62.50
	Net Loan-Opening	137.50	125.00	112.50	100.00	87.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	12.50	12.50	12.50	12.50	12.50
	Net Loan-Closing	125.00	112.50	100.00	87.50	75.00
	Average Loan	131.25	118.75	106.25	93.75	81.25
	Rate of Interest	8.90%	8.90%	8.90%	8.90%	8.90%
	Interest	11.68	10.57	9.46	8.34	7.23
	Rep Schedule	12 Annual Instalment from 25.02.2014				
	Total Loan					
	Gross loan opening	1524.12	1563.61	1563.61	1563.61	1563.61
	Cumulative Repayment upto DOCO/previous year	12.50	35.00	62.08	143.25	247.34
	Net Loan-Opening	1511.62	1528.61	1501.53	1420.36	1316.27
	Additions during the year	39.49	0.00	0.00	0.00	0.00
	Repayment during the year	22.50	27.08	81.17	104.09	144.09
	Net Loan-Closing	1528.61	1501.53	1420.36	1316.27	1172.18



	Average Loan	1520.12	1515.07	1460.94	1368.31	1244.23
	Rate of Interest	9.1266%	9.1176%	9.1108%	9.0984%	9.0966%
	Interest	138.73	138.14	133.10	124.49	113.18

