

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 86/TT/2012

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri M. Deena Dayalan, Member
Shri A. K. Singhal, Member**

Date of Hearing : 11.03.2014

Date of Order : 04.09.2014

In the matter of:

Approval of transmission tariff for (i) Vindhyachal IV-Vindhyachal Pooling Station 400 kV D/C (Quad) (By passing Vindhyachal Pooling Station) Transmission Line and (ii) 400 kV D/C Sasan-Vindhyachal Pooling Transmission Line (Ant. DOCO: 1.3.2012) associated with Vindhyachal-IV & Rihand-III (1000 MW) Generation Project (under interim/contingency arrangement for power evacuation) in Western Region for tariff block 2009-14 under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

And in the matter of:

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

.....**Petitioner**

Vs

1. Madhya Pradesh Power Trading Company Ltd.,
Shakti Bhawan, Rampur
Jabalpur-482 008.
2. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, 4th floor
Andehri (East), Mumbai-400 052.
3. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390 007.
4. 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.
6. 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.
8. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road
Indore -452 008.
9. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302 005.
10. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
11. Jaipur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
12. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
13. 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.
15. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109.
16. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu.

17. UP Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001.
18. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110 002.
19. BSES Yamuna Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
20. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
21. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110 034.
22. Chandigarh Administration,
Sector-9, Chandigarh.
23. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.
24. North Central Railway,
Allahabad.
25. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002.

....Respondents

For petitioner : Shri S.S Raju, PGCIL
Ms. Sangeeta Edwards, PGCIL
Shri P. Saraswat, PGCIL
Shri M. M. Mondal, PGCIL
Shri S. K. Venkatesan, PGCIL

For respondent : Shri R. B. Sharma, Advocate, BRPL
Shri Padamjit Singh, PSPCL

ORDER

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of the transmission tariff for (i) Vindhyachal IV-Vindhyachal Pooling Station 400 kV D/C (Quad) (By passing Vindhyachal Pooling Station) Transmission Line and (ii) 400 kV D/C Sasan-Vindhyachal Pooling Transmission Line (anticipated DOCO: 1.3.2012) associated with Vindhyachal-IV & Rihand-III (1000 MW) Generation Project (under interim/contingency arrangement for power evacuation) (hereinafter referred to as "transmission assets") in Western Region for tariff block 2009-14 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 to the transmission project was accorded by Board of Directors of the petitioner vide letter No. C/CP/Vin-IV & Rih-III dated 17.10.2010 at an estimated cost of ₹467299 lakh, including IDC of ₹29779 lakh based on 3rd quarter, 2009 price level. The project was scheduled to be commissioned within 32 months from the date of investment approval i.e. 1.12.2012. The scope of work covered under the scheme is as follows:-

Part –I Generation specific transmission system

A- Rihand-III: For NR only.

Transmission Line

- (i) Rihand –III Vindhyachal Pooling station 765 kV 2xS/C (initially to be operated at 400 kV)

Sub-station



- (i) 765/400 kV Vindhyachal Pooling station (Extension)

B- Vindhyachal-IV : For WR only

Transmission Line

- (i) Vindhyachal-IV-Vindhyachal Pooling station 400 kV D/C (Quad) line

Substation

- (i) 765/400 kV Vindhyachal Pooling Station (Extension)

Part-II: Common System for both WR and NR

Transmission Line

- (i) Vindhyachal Pooling station –satna 765 kV 2xS/C line
- (ii) Satna-Gwalior 765 kV 2xS/C line
- (iii) Sasan-Vindhyachal Pooling station 765 kV S/C line
- (iv) Sasan-Vindhyachal Pooling station 400 kV D/C line

Sub-stations

- (i) Establishment of new 765/400 kV, 2x1500 MVA sub-station at Vindhyachal Pooling Station
- (ii) Extension of 765/400 kV Satna Sub-station
- (iii) Extension of 765/400 kV Gwalior Sub-station
- (iv) Extension of 765/400 kV Sasan Sub-station

Part-III: NR Strengthening in regional pool

Transmission Lines

- (i) Gwalior- Jaipur (RVPN) 765 kV S/C line
- (ii) Bassi- Jaipur (RVPN) 400 kV D/C (Quad) line

Sub-stations

- (i) Extension of 765/400 kV Gwalior Sub-station

- (ii) Extension of 765/400 kV Jaipur (RVPN) Sub-station
- (iii) Extension of 400/220 kV Bassi Sub-station

3. The instant petition covers determination of transmission tariff for the following two assets under interim/contingency arrangement for power evacuation:-

(i) Vindhyachal IV- Vindhyachal Pooling Station 400 kV D/C (Quad) (Bypassing Vindhyachal Pooling Station) Transmission Line (hereinafter referred to as "Asset-1").

(ii) 400 kV D/C Sasan – Vindhyachal Pooling Transmission Line associated with Vindhyachal IV & Rihand III (1000 MW) Generation Project (hereinafter referred to as "Asset-2").

The assets were put under commercial operation with effect from 1.1.2013.

4. The transmission charges claimed by the petitioner based on the actual date of commercial operation are as under:-

(` in lakh)

Particulars	Asset 1		Asset 2	
	2012-13	2013-14	2012-13	2013-14
Depreciation	120.06	494.46	15.17	63.22
Interest on Loan	144.68	567.41	18.51	73.49
Return on equity	119.25	491.12	15.07	62.79
Interest on Working Capital	9.29	37.64	1.18	4.82
O & M Expenses	8.13	34.37	0.97	4.10
Total	401.41	1625.00	50.90	208.42

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

(` in lakh)

Particulars	Asset 1		Asset 2	
	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	4.88	5.16	0.58	0.62
O & M Expenses	2.71	2.86	0.32	0.34
Receivables	267.61	270.83	33.93	34.74
Total	275.20	278.85	34.83	35.70
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	9.29	37.64	1.18	4.82

6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Punjab State Power Corporation Limited (PSPCL), Respondent No. 7, has filed its reply vide affidavit dated 28.3.2014, BSES Rajdhani Power Ltd (BRPL), Respondent No. 12, has filed its reply vide affidavit dated 10.3.2014. The petitioner has filed rejoinder to the reply of PSPCL vide affidavit dated 30.4.2014. Respondents have raised the issue of cost over-run, petition filing fee and additional capital expenditure. The objections raised by the respondent are addressed in the relevant paragraphs of this order.

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

8. PSPCL has submitted in its reply that during the hearing held on 27.3.2014, the petitioner stated that the 765 kV Sasan-Satna circuit no.1 got delayed due to forest clearance problems and this line was not operated at 400 kV. Instead this line was operated at 765 kV from the beginning to evacuate Sasan power i.e. this line was not used as a part of the contingency arrangement for evacuation of Vindhyachal-IV power as envisaged in the instant petition. PSPCL has submitted that it can be concluded that the contingency arrangement of connecting 3 lines in

series for evacuating Vindhyachal-IV power did not operate in loaded condition since the third line in the series arrangement (765 kV Sasan-Satna circuit-1) was delayed and was not available. Accordingly, there is no justification for charging transmission tariff of two nos. 400 kV lines connected in series when the third element in the series is delayed/not commissioned thereby making the entire series arrangement non-functional and non-operational. PSPCL has further submitted that the petitioner may be directed to give the dates when these two lines were actually loaded in series for contingency plan to evacuate Vindhyachal-IV power and the date when 765 kV Sasan-Satna circuit-1 was operated at 400 kV as a part of this series arrangement. In case it is established that this contingency arrangement of connecting three lines in series actually did not work, then there is no justification for claiming transmission tariff for lines that have remained unloaded. The transmission tariff under contingency scheme is not admissible and may not be allowed.

9. In response, the petitioner in its rejoinder has clarified that the contingency arrangement for power evacuation from Vindhyachal IV & Rihand III (1000 MW) Generation Project has been deliberated in various Standing Committee Meetings (SCMs) of Western Region Constituents (29th, 32nd, 33rd, 35th and 36th SCM). The contingency arrangement has undergone changes as per the progress of various transmission lines. In the 32nd SCM of Western Region the following interim arrangement was discussed and agreed due to non-availability of associated transmission system in the matching time frame of Vindhyachal-IV generation project (March 2012) to avoid evacuation constraints.

- i) Completion of Vindhyachal-IV - Sasan 400 kV D/C (by passing at Vindhyachal Pooling Station) and bunching of both ckts to make single ckt.

- ii) Completion of Sasan-Satna 765 kV S/C (to be operated at 400 kV Level) with termination of 765 kV yard as planned by interconnecting 400 kV and 765 kV yards as well as interconnected Vindhyachal IV-Sasan 400 kV bunched line.
- iii) Completion of Satna-Bina 765 kV S/C (to be operated at 400 kV level) with termination at 765 kV yard as planned by interconnecting 400 kV and 765 kV yards.
- iv) Installation of 765/400 kV transformers each at Bina and Gwalior Sub-station.
- v) Completion of 765 kV Bina-Gwalior S/C.

10. The petitioner has submitted that in the 33rd SCM of Western Region the interconnection of Vindhyachal-IV STPP 400 kV bus with this existing Vindhyachal-III STPP 400 kV along with 1x125 MVAR bus reactor at Bina end was also agreed as an interim arrangement till the commissioning of Vindhyachal-IV transmission system. Further, in view of the delay in implementation of the interim arrangement mentioned above due to delay in getting forest clearance and anticipated commissioning of first unit of Sasan UMPP generation project by January, 2013, the petitioner proposed a new interim arrangement to facilitate the evacuation of power from Vindhyachal-IV and Sasan UMPP generation projects. The interim, arrangement involves (i) charging of Sasan-Satna 765 2xS/C lines at 765 kV level (as per original scheme of Sasan UMPP) and (ii) completion of Vindhyachal IV-Sasan 400 kV D/C line (through interconnection of Vindhyachal IV-Vindhyachal pooling station 400 kV D/C (Quad) line with Vindhyachal pooling station-Sasan 400 kV D/C (Twin) line bypassing Vindhyachal pooling station). To facilitate implementation, in principle approval for the new interim arrangement was given to

the petitioner by CEA in November, 2012. Thus, in line with the above proposal the following assets were commissioned as per given details:-

- i) Vindhyachal-IV-Sasan 400 kV D/C line (through interconnection of Vindhyachal IV-Vindhyachal pooling station 400 kV D/C (Quad) line with Vindhyachal pooling station-Sasan 400 kV D/C (Twin) line bypassing Vindhyachal pooling station- date of commercial operation 1.1.2013.
- ii) Sasan-Satna ckt.-I charged at 765 kV level (as per original Sasan scheme) date of commercial operation-1.2.2013 along with first unit at Sasan UMPP Generating station.
- iii) 765 kV, 1500 MVA, ICT#1 at Sasan Switchyard- date of commercial operation 1.1.2013.

11. The petitioner has further submitted that the instant petition covers the interim arrangement, as at above, and its date of commercial operation is 1.1.2013. The Vindhyachal IV-Vindhyachal Pooling Station 400 kV D/C (Quad) (By passing Vindhyachal Pooling station) transmission line was bunched with 400 kV D/C Sasan-Vindhyachal Pooling Transmission Line and terminated at Sasan Bus. The actual of loading of the contingency arrangement is same as that of the actual date of commercial operation of the arrangement as mentioned above, i.e., 1.1.2013. The petitioner has further submitted that Sasan-Satna ckt-1 was charged at 765 kV level as per the original scheme under Sasan UMPP Transmission system in line with decision taken in 35th SCM of WR constituents. It is submitted that the contingency arrangement is still under operation and power generated from Vindhyachal-IV is

being evacuated through this contingency arrangement. The petitioner also submitted that the contingency arrangement is being operated as planned and agreed with constituents in the 35th SCM of Western Region constituents and the tariff is being claimed accordingly as per prevailing 2009 Tariff Regulations.

12. During the hearing on 11.3.2014, the representative of PSPCL submitted that the petitioner is responsible for the interim arrangement and, hence, the cost related to this arrangement should be borne by the petitioner and it should not be included in the capital cost. He further submitted that the petitioner has claimed the cost of switchgear and bypassing of the Vindhyachal Pooling Station would not require any switchgear and, hence, the cost of switchgear should not be included in the capital cost. The representative of petitioner reiterated that the interim arrangement of bypassing the Vindhyachal Pooling Station was discussed and agreed in the 33rd SCM meeting and the 17th WRPC meeting. He also submitted that only the cost of the line is claimed and the cost of the sub-station is not claimed in the instant petition and it would be claimed after the same is commissioned.

13. We have considered the submissions made by the petitioner and the respondents. It is observed that the contingency arrangement is being operated as planned and agreed by the constituents in the 35th SCM of Western Region. As this contingency arrangement has been put to use on the basis of the concurrence by the Western Region constituents, we are inclined to grant transmission tariff for the instant transmission assets as per the 2009 Tariff Regulations.

14. As regards the cost of the instant contingency arrangement, the petitioner has submitted that it was agreed in the 17th WRPC meeting that few additional types of equipment are required for implementing the contingency arrangement and transmission charges till commissioning of Vindhyachal-IV transmission system along with cost of additional equipment would be shared by the beneficiaries. The petitioner has further submitted that the cost of these additional equipment installed at Satna, Bina and Indore have been clubbed at one place in the certificate of 400 kV D/C (Quad) Vindhyachal-Vindhyachal (pool) line as all these equipment are commissioned to facilitate contingency arrangement for evacuation of power from Vindhyachal-IV generation projects. In response to a query, the petitioner vide affidavit dated 27.9.2012 has submitted that the cost of these additional equipment shall be used in future projects at zero cost.

15. We have considered the submissions made by the petitioner. As per the proviso to sub-clause (c) of clause (1) of Regulation 7 of the 2009 Tariff Regulations, assets forming part of the project but not in use shall be taken out of the capital cost. Accordingly, once the additional equipments are shifted to other projects, it would amount to de-capitalisation in the books of existing projects. After shifting, these equipments would be accounted for in the gross block of the respective projects after adjusting cumulative depreciation.

16. Accordingly, the petitioner is directed to decapitalise these additional equipments once these additional equipments are withdrawn from the instant project and also to inform the Commission about their utilization in other projects. The

petitioner shall also file a petition for decapitalisation of additional equipments withdrawn from the instant project.

Capital Cost

17. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

“(1) Capital cost for a project shall include:-

- (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
- (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
- (c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

18. The petitioner has submitted the capital cost as on the actual date of commercial operation and additional capital expenditure projected to be incurred for the instant transmission assets vide Management Certificate dated 11.9.2013

alongwith the affidavit dated 20.9.2013. The details submitted by the petitioner are as follows:-

(` in lakh)

Assets	Apportioned approved cost	Cost incurred as on actual DOCO	Projected additional capital expenditure				Total estimated completion cost
			2012-13	2013-14	2014-15	2015-16	
Asset-1	12439.72	8927.06	336.87	201.87	62.00	12.40	9540.2
Asset-1	1029.03	1143.21	12.20	83.84	11.32	2.26	1252.83
Total	13468.75	10070.27	349.07	285.71	73.32	14.66	10793.03

19. The expenditure up to 31.3.2013 has been verified on the basis of the information drawn from the audited statement of accounts of the petitioner. The projected expenditure is on the basis of statement of accounts furnished by the Management of the petitioner.

Cost Over-run

20. The BRPL has submitted that the apportioned cost of Asset-1 and Asset-2 is ₹12439.72 lakh and ₹1029.03 lakh respectively. The estimated completion cost of Asset-1 is lower than the apportioned cost and in case of Asset-2 the apportioned is higher than the completion cost thereby resulting in savings in case of Asset-1 and cost over-run in case of Asset-2. BRPL has also submitted that there is cost variation in case of certain elements as per Form-5B.

21. The Commission directed the petitioner to submit the reasons of cost variation of certain elements. In response, the petitioner, vide affidavit dated 15.2.2013, has submitted the following reasons for cost variation:-

- a. The length of Asset-1 decreased marginally and the length of Asset-2 increased marginally leading to cost saving and increase in cost in case of Asset-1 and Asset-2 respectively. :-

Asset	Line length as per FR (Based on Walk over Survey carried out in year-2010)	Line Length as per execution (Based on preliminary survey and final route alignment) in year-2012	Remarks
Asset-1	31 km	29.28 km	Line length is inclusive of inter connection agreement
Asset-2	5 km	5.24 km	Line length is inclusive of inter connection agreement

- b) Additional bay equipments which were required to facilitate interim arrangement for evacuation of power from VSTPP-IV generation projects were approved during 17th meeting of WRPC. Once the transmission scheme as per the approved scope of work comes up, these additional equipments shall be used subsequent projects at zero cost.
- c) As indicated in Form-5C, the conductor package-B2 (of Indore-Indore (quad) moose) is diverted from Sasan transmission line construction purpose. The conductor quantity is restricted in the awarded package of M/s. Gammon Ltd. under VSTPP-IV transmission system. The cost of conductor in VSTPP-IV transmission system is higher as compared to diverted conductor package of Sasan UMPP and thereby saving the total project cost.

22. We have considered the submissions made by both the petitioner and BRPL regarding the cost of assets. The cost variation in case of Asset-1 is due to marginal decrease in the line length. As regards Asset-2, as pointed out by BRPL, the total completion cost as on the date of commercial operation exceeds the apportioned approved cost. Therefore, the total estimated completion as on 31.3.2014 i.e. ₹1239.25 lakh has been restricted to the apportioned approved cost of ₹1029.03 lakh and no additional capital expenditure is allowed in case of Asset-2. This approach has been upheld by the Appellate Tribunal for Electricity in its judgement dated 28.11.2013 in Appeal No. 165 of 2012, wherein it has been observed as under:-

"..... The Appellant is a Nava Public Sector Company of the Central Government. Its Board is empowered to approve its projects including the cost estimates for such projects. The Central Commission also accepts the cost approved by the Board of the Appellant. Under such circumstances, the Appellant could have approached its own Board for approval of the Revised Cost Estimates as desired by the Central Commission."

Time Over-run

23. As per the investment approval dated 17.3.2010, the scheme was scheduled to be commissioned within 32 months from the date of investment approval. Accordingly, the schedule of completion works out to 1.12.2012. However, both the assets were commissioned on 1.1.2013. Hence, there is a marginal delay of 1 month in commissioning of both the assets.

24. The petitioner has submitted vide affidavit dated 7.3.2014 that the time over-run of one month is due to delay in getting forest clearance. The petitioner has submitted that about 9.375 hectares of forest is involved in the transmission line, as a result, foundation and tower erection in ten locations and about 3.8 km of stringing

stretches were held-up. The forest clearance proposal was initiated in July, 2011. The stage-I forest clearance was issued by Ministry of Environment and Forests, Bhopal in September, 2012 vide letter no. 6-MPC-030/2012-BHO/1510 and subsequently stage-II forest clearance was received on dated 23.11.2012. The petitioner has further submitted that the work in the balance ten foundation locations and stringing of about 3.8 km was taken up on war footing after receipt of Stage-II clearance and the line was commissioned on 31.12.2012 and put under commercial operation from 1.1.2013.

25. We have considered the submissions made by the petitioner regarding the reasons for time over-run. It is observed that the petitioner has completed the pending foundation work at 10 locations and stringing work of 3.8 km within 40 days from the date of receipt of Stage-II forest clearance. The petitioner could have possibly completed the work in time if the forest clearance was received early. However, it is observed that forest clearance proposal was initiated by the petitioner only in July, 2011, even though the Investment Approval was accorded in March, 2010. We are of the view that the petitioner should have initiated action for forest clearance immediately after the Investment Approval and accordingly we direct the petitioner to take action for forest clearance in all concerned cases in future immediately after the Investment Approval. However in this case, we condone the marginal time over-run of one month due to delay in obtaining forest clearance and this should not be quoted as precedent.

Initial Spares

26. The petitioner has not claimed any initial spares for both sub-station and transmission line.

Projected Additional Capital Expenditure

27. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law.”

28. Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines “cut-off” date as under:-

“cut-off date” means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

Therefore, cut-off date for the above mentioned assets is 31.3.2016.

29. The petitioner has claimed the following projected additional capital expenditure for the financial year 2012-13, 2013-14, 2014-15 and 2015-16 for the instant transmission assets.

(₹ in lakh)				
Particulars	2012-13	2013-14	2014-15	2015-16
Asset-1	336.87	201.87	62.00	12.40
Asset-2	12.20	83.84	11.32	2.26

30. The additional capital expenditure claimed by the petitioner falls within the cut-off date but beyond tariff control period 2009-2014. Therefore, additional capital expenditure upto 31.3.2014 has been considered for the purpose of tariff calculation.

However, in case of Asset-2, no additional capital expenditure is being allowed due to cost over-run of 11.09% as on date of commercial operation.

31. The capital cost as on 31.3.2014 considered for the purpose of tariff calculation is as follows:-

Particulars	(₹ in lakh)			
	Capital cost as on DOCO	Additional capital expenditure for 2012-13	Additional capital expenditure for 2013-14	Total estimated completion cost
Asset-1	8927.06	336.87	201.87	9465.80
Asset-2	1029.03	0.00	0.00	1029.03

Debt- Equity Ratio

32. Regulation 12 of the 2009 Tariff Regulations provides as under:-

“12. Debt-Equity Ratio (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

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

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

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, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

33. Debt-equity ratio as on the actual date of commercial operation considered for the purpose of tariff calculation is as follows:-

Asset 1

(` in lakh)

Capital cost as on date of commercial operation		
Particulars	Amount	%
Debt	6248.94	70.00
Equity	2678.12	30.00
Total	8927.06	100.00

Asset 2

(` in lakh)

Capital cost as on date of commercial operation		
Particulars	Amount	%
Debt	720.32	70.00
Equity	308.71	30.00
Total	1029.03	100.00

34. Debt equity ratio for additional capital expenditure considered for computing tariff is as follows:-

Asset 1

(` in lakh)

2012-13		
Particulars	Amount	%
Debt	235.81	70.00
Equity	101.06	30.00
Total	336.87	100.00
2013-14		
Particulars	Amount	%
Debt	141.31	70.00
Equity	60.56	30.00
Total	201.87	100.00

As discussed in para no.22 above, no additional capital expenditure has been allowed for Asset-2.

35. Detail of debt-equity ratio of assets as on 31.3.2014 are given overleaf:-

Asset I

(₹ in lakh)

Capital cost as on 31.3.2014		
Particulars	Amount	%
Debt	6626.06	70.00
Equity	2839.74	30.00
Total	9465.80	100.00

Asset 2

(₹ in lakh)

Capital cost as on 31.3.2014		
Particulars	Amount	%
Debt	720.32	70.00
Equity	308.71	30.00
Total	1029.03	100.00

Return on Equity

36. Regulation 15 of the 2009 Tariff Regulations provides as under:-

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return

on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission;

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

37. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account on 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 shall be dealt under Regulation 15(3) as state above. Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations

38. Based on the above, the return on equity has been considered as given hereunder:-

(` in lakh)

Particular	Asset-1		Asset-2	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Opening Equity	2678.12	2779.18	308.71	308.71
Addition due to Additional Capitalisation	101.06	60.56	0.00	0.00
Closing Equity	2779.18	2839.74	308.71	308.71
Average Equity	2728.65	2809.46	308.71	308.71
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre-tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre-tax)	119.25	491.12	13.49	53.96

Interest on Loan

39. Regulation 16 of the 2009 Tariff Regulations provides as under:-

“16. **Interest on loan capital** (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(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 annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

40. The petitioner's entitlement to interest on loan has been calculated as provided under Regulation 16 of the 2009 Tariff Regulations on the following basis:-

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

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.

(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.

41. Detailed calculations in support of the weighted average rates of interest have been given in Annexure I to II to this order.

42. Based on the above, interest on loan has been calculated as given hereunder:-

Particulars	(` in lakh)			
	Asset 1		Asset 2	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Gross Normative Loan	6248.94	6484.75	720.32	720.32
Cumulative Repayment upto previous year	0.00	120.06	0.00	13.58
Net Loan-Opening	6248.94	6364.69	720.32	706.74
Addition due to additional capital expenditure	235.81	141.31	0.00	0.00
Repayment during the year	120.06	494.46	13.58	54.33
Net Loan-Closing	6364.69	6011.53	706.74	652.41
Average Loan	6306.82	6188.11	713.53	679.57
Weighted Average Rate of Interest on Loan	9.1760%	9.1694%	9.2886%	9.2871%
Interest	144.68	567.41	16.57	63.11

Depreciation

43. Regulation 17 of the 2009 Tariff Regulations provides as follows:-

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) 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 stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

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

(3) 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.

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

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

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) 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.”

44. Date of commercial operation of the asset is 1.2.2013, accordingly will complete 12 years beyond 2013-14. Accordingly, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of Tariff Regulation 2009-14, as per the details given overleaf:-

(` in lakh)

Particulars	Asset 1		Asset 2	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Opening Gross Block	8927.06	9263.93	1029.03	1029.03
Addition due to Projected Additional Capitalisation	336.87	201.87	0.00	0.00
Closing Gross Block	9263.93	9465.80	1029.03	1029.03
Average Gross Block	9095.50	9364.87	1029.03	1029.03
Rate of Depreciation	5.2800%	5.2800 %	5.2800%	5.2800 %
Depreciable Value	8185.95	8428.38	926.13	926.13
Remaining Depreciable Value	8185.95	8308.32	926.13	912.54
Depreciation	120.06	494.46	13.58	54.33
Cumulative Depreciation	120.06	614.53	13.58	67.92

Operation & Maintenance Expenses (O&M Expenses)

45. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for O & M Expenses the transmission system based on the type of sub-station and the transmission line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

Norms for AC and HVDC lines

Element	2009-10	2010-11	2011-12	2012-13	2013-14
D/C (Twin & Triple Conductor) (₹ in lakh / km)	0.627	0.663	0.701	0.741	0.783
D/C (Bundled with four or more Sub-conductors) (₹ in lakh / km)	0.940	0.994	1.051	1.111	1.174

46. The O&M Expenses for the assets covered in the petition, as per norms specified in 2009 Tariff Regulations are given overleaf:-

(₹ in lakh)		
Element	2012-13	2013-14
400 kV D/C Vindhyachal-IV – Vindhyachal Pooling Station- 29.28 km	8.13	34.37
400 kV D/C Sasan-Vindhyachal Pooling Station- 5.24 km	0.97	4.10
Total	9.10	38.47

47. The petitioner 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 the 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 2009-14. The petitioner has further submitted that it would approach the Commission for suitable revision in the norms for O & M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

48. The Commission has given effect to impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law.

Interest on Working Capital

49. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months' of fixed cost. The petitioner has claimed the receivables on the basis of 2 months' of annual transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses as part of the working capital from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M Expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate of 10.00% plus 350 bps as on 1.4.2012 (13.50%). The interest on working capital for the assets covered in the petition has been worked out accordingly.

50. Necessary computations in support of interest on working capital are given hereunder:-

(` in lakh)

Particulars	Asset 1		Asset 2	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	4.88	5.16	0.58	0.62
O & M Expenses	2.71	2.86	0.32	0.34
Receivables	267.60	270.84	30.45	29.95
Total	275.19	278.86	31.35	30.90
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	9.29	37.65	1.06	4.17

Transmission Charges

51. The transmission charges being allowed for the assets are given below:-

(` in lakh)

Particulars	Asset 1		Asset 2	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	120.06	494.46	13.58	54.33
Interest on Loan	144.68	567.41	16.57	63.11
Return on Equity	119.25	491.12	13.49	53.96
Interest on Working Capital	9.29	37.65	1.06	4.17
O & M Expenses	8.13	34.37	0.97	4.10
Total	401.41	1625.02	45.67	179.68

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 Regulation 42A (1) (a) of the 2009 Tariff Regulations.

Licence Fee

53. The petitioner 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 in accordance with Regulation 42 A (1) (b) of the 2009 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 it is subjected to such service tax in future. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

55. The billing, collection & disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of

inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

56. This order disposes of Petition No. 86/TT/2012.

sd/-
(A. K. Singhal)
Member

sd/-
(M. Deena Dayalan)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



Annexure 1

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
				(₹ in lakh)
	Details of Loan	2012-13	2013-14	2013-14
1	Bond XXXVII			
	Gross loan opening	1475.40	1475.40	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	1475.40	1475.40	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	1475.40	1475.40	
	Average Loan	1475.40	1475.40	
	Rate of Interest	9.25%	9.25%	
	Interest	136.47	136.47	
	Rep Schedule	12 annual installments from 26.12.2015		
2	Bond XXXII			
	Gross loan opening	125.00	125.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	125.00	125.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	10.42	
	Net Loan-Closing	125.00	114.58	
	Average Loan	125.00	119.79	
	Rate of Interest	8.84%	8.84%	
	Interest	11.05	10.59	
	Rep Schedule	12 annual installments from 29.03.2014		
3	Bond XXXIX			
	Gross loan opening	800.00	800.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	800.00	800.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	800.00	800.00	
	Average Loan	800.00	800.00	
	Rate of Interest	9.40%	9.40%	
	Interest	75.20	75.20	
	Rep Schedule	Bullet Payment on 29.03.2027		
4	Bond XXXVI			
	Gross loan opening	1000.00	1000.00	
	Cumulative Repayment upto	0.00	0.00	

	DOCO/previous year			
	Net Loan-Opening	1000.00	1000.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	1000.00	1000.00	
	Average Loan	1000.00	1000.00	
	Rate of Interest	9.35%	9.35%	
	Interest	93.50	93.50	
	Rep Schedule	15 annual installments from 29.08.2016		
5	Bond XXXIV			
	Gross loan opening	1955.00	1955.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	1955.00	1955.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	1955.00	1955.00	
	Average Loan	1955.00	1955.00	
	Rate of Interest	8.84%	8.84%	
	Interest	172.82	172.82	
	Rep Schedule	12 annual installments from 21.10.2014		
6	Bond XXXV			
	Gross loan opening	500.00	500.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	500.00	500.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	500.00	500.00	
	Average Loan	500.00	500.00	
	Rate of Interest	9.64%	9.64%	
	Interest	48.20	48.20	
	Rep Schedule	12 annual installments from 31.05.2015		
7	Bond XLII(Add cap for 2012-13 Drawl on 31.03.2013			
	Gross loan opening	0.00	235.81	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	0.00	235.81	
	Additions during the year	235.81	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	235.81	235.81	
	Average Loan	117.91	235.81	
	Rate of Interest	8.80%	8.80%	
	Interest	10.38	20.75	

Rep Schedule	Bullet Payment on 13.03.2023		
8 Bond XL			
Gross loan opening	393.54	393.54	
Cumulative Repayment upto DOCO/previous year	0.00	0.00	
Net Loan-Opening	393.54	393.54	
Additions during the year	0.00	0.00	
Repayment during the year	0.00	0.00	
Net Loan-Closing	393.54	393.54	
Average Loan	393.54	393.54	
Rate of Interest	9.30%	9.30%	
Interest	36.60	36.60	
Rep Schedule	12 annual installments from 28.06.2016		
Total Loan			
Gross loan opening	6248.94	6484.75	
Cumulative Repayment upto DOCO/previous year	0.00	0.00	
Net Loan-Opening	6248.94	6484.75	
Additions during the year	235.81	0.00	
Repayment during the year	0.00	10.42	
Net Loan-Closing	6484.75	6474.33	
Average Loan	6366.85	6479.54	
Rate of Interest	9.1760%	9.1694%	
Interest	584.22	594.14	

Annexure 2

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
				(₹ in lakh)
	Details of Loan	2012-13	2013-14	2013-14
1	Bond XXXVII			
	Gross loan opening	201.50	201.50	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	201.50	201.50	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	201.50	201.50	
	Average Loan	201.50	201.50	
	Rate of Interest	9.25%	9.25%	
	Interest	18.64	18.64	
	Rep Schedule	12 annual installments from 26.12.2015		
2	Bond XXXII			
	Gross loan opening	50.00	50.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	50.00	50.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	4.17	
	Net Loan-Closing	50.00	45.83	
	Average Loan	50.00	47.92	
	Rate of Interest	8.84%	8.84%	
	Interest	4.42	4.24	
	Rep Schedule	12 annual installments from 29.03.2014		
3	Bond XXXIX			
	Gross loan opening	100.00	100.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	100.00	100.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	100.00	100.00	
	Average Loan	100.00	100.00	
	Rate of Interest	9.40%	9.40%	
	Interest	9.40	9.40	
	Rep Schedule	Bullet Payment on 29.03.2027		
4	Bond XXXVI			
	Gross loan opening	100.00	100.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	



	Net Loan-Opening	100.00	100.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	100.00	100.00	
	Average Loan	100.00	100.00	
	Rate of Interest	9.35%	9.35%	
	Interest	9.35	9.35	
	Rep Schedule	15 annual installments from 29.08.2016		
5	Bond XXXIV			
	Gross loan opening	50.00	50.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	50.00	50.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	50.00	50.00	
	Average Loan	50.00	50.00	
	Rate of Interest	8.84%	8.84%	
	Interest	4.42	4.42	
	Rep Schedule	12 annual installments from 21.10.2014		
6	Bond XXXV			
	Gross loan opening	100.00	100.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	100.00	100.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	100.00	100.00	
	Average Loan	100.00	100.00	
	Rate of Interest	9.64%	9.64%	
	Interest	9.64	9.64	
	Rep Schedule	12 annual installments from 31.05.2015		
7	Bond XLII(Add cap for 2012-13 Drawl on 31.03.2013			
	Gross loan opening	0.00	8.54	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	0.00	8.54	
	Additions during the year	8.54	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	8.54	8.54	
	Average Loan	4.27	8.54	
	Rate of Interest	8.80%	8.80%	
	Interest	0.38	0.75	
	Rep Schedule	Bullet Payment on 13.03.2023		



8	Bond XL			
	Gross loan opening	198.75	198.75	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	198.75	198.75	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	198.75	198.75	
	Average Loan	198.75	198.75	
	Rate of Interest	9.30%	9.30%	
	Interest	18.48	18.48	
	Rep Schedule	12 annual installments from 28.06.2016		
	Total Loan			
	Gross loan opening	800.25	808.79	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	800.25	808.79	
	Additions during the year	8.54	0.00	
	Repayment during the year	0.00	4.17	
	Net Loan-Closing	808.79	804.62	
	Average Loan	804.52	806.71	
	Rate of Interest	9.2886%	9.2871%	
	Interest	74.73	74.92	