

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.201/TT/2014

Coram:

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

**Date of Hearing: 14.03.2016
Date of Order: 23.05.2016**

In the matter of:

Determination of transmission tariff for 2014-19 tariff block for 765 kV S/C Satna - Gwalior ckt. 2 Transmission Line along with associated bays and respective line reactor at Satna & Gwalior Sub-Station under Vindhyachal IV & Rihand III (1000 MW)(Group-3) Generation Project 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 Ltd,
SAUDAMINI, Plot No. 2,
Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Ltd.
Shakti Bhawan, Rampur
Jabalpur – 482008
2. Maharashtra State Electricity Distribution Co. Ltd.
Prakashgad, 4th Floor
Andheri (East), Mumbai - 400 052
3. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Race Course Road
Vadodara - 390 007
4. Electricity Department Govt. Of Goa
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001



5. Electricity Department
Administration of Daman & 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
Chhatisgarh-492013
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. Uttar Pradesh Power Corporation Ltd. (UPPCL),
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.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.
20. BSES Rajdhani Power Ltd. (BRPL),
BSES Bhawan, Nehru Place,
New Delhi.
21. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura - ,
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

.....Respondent(s)

The following were present:

For Petitioner: Shri Piyush Awasthi, PGCIL
 Shri S.S. Raju, PGCIL
 Shri Aryaman Saxena, PGCIL
 Shri Jasbir Singh, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri Pankaj Sharma, PGCIL
 Shri M.M. Mondal, PGCIL
 Shri Mohd. Mohsin, PGCIL
 Shri A.M. Pavgi, PGCIL



Shri P.V. Nath, PGCIL
Smt. Archana Kumari, PGCIL
Shri Amit Yadav, PGCIL

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited ("the petitioner"), a transmission licensee, for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 in respect of 765 kV S/C Satna-Gwalior ckt.-2 Transmission Line along with associated bays and respective linereactor at Satna & Gwalior Sub-Station under Vindhyachal IV & Rihand III (1000 MW)(Group-3) Generation Project (hereinafter referred to as "the transmission asset").

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

3. The brief facts of the case are as follows:-

a) The petitioner has been entrusted with the implementation of Vindhyachal IV and Rihand Stage-III Transmission System in Western Region. The Investment Approval for the said system was accorded by Board of Directors of the petitioner company vide letter no. C/CP/Vin-IV & Rih-III dated 17.3.2010 at an estimated cost of ₹467299 lakh, including IDC of ₹29779 lakh (based on 3rd Quarter, 2009 price level).



b) The transmission system was scheduled to be commissioned within 32 months from the date of Investment Approval. Thus, the scheduled date of commissioning of the transmission system is 16.11.2012.

c) The detailed scope of works under the transmission system 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 2 X S/C line
(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

Sub-station

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

Part-II: Common System for both WR & NR

Transmission line

- (i) Vindhyachal-IV- Vindhyachal Pooling Station-Satna 765 kV 2 X S/C
(ii) Satna-Gwalior 765 kV 2 x S/C
(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, 2X 1500 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 765/400 kV Bassi Sub-station

d) The instant petition, covers the transmission asset of 765 kV S/C Satna-Gwalior ckt.-2 Transmission Line along with associated bays and respective line reactor at Satna & Gwalior Sub-Station under Vindhyaachal IV & Rihand III (1000 MW)(Group-3) Generation Project.

e) The petitioner had filed the petition on 22.7.2014 with an anticipated COD of 1.8.2014 in respect of the instant assets. Subsequently, the petitioner, vide affidavit dated 11.5.2016, has submitted the actual date of commercial operation for 765 kV S/C Satna-Gwalior ckt. 2 Transmission Line along with associated bays and respective line reactor at Satna end (referred as "Asset-I (A)") as 6.8.2014 and 765 kV, 3x80 MVAR Reactor at Gwalior end for 765 kV S/C Satna-Gwalior ckt.-2 Transmission Line (referred as "Asset-I (B)") as 30.9.2014. The petitioner has submitted the revised Auditor's Certificates dated 2.5.2016 and tariff forms in respect of the actual COD of the instant assets. Accordingly, the transmission charges are being determined for the transmission assets based on the actual COD of 6.8.2014 for Asset- I (A) and 30.9.2014 for Asset- I (B) and the associated submissions in respect of capital cost, subject to true up on actual basis.

f) The petitioner has claimed a capital cost of ₹45541.90 lakh and ₹3349.51 lakh as on COD of 6.8.2014 for Asset-I (A) and 30.9.2014 for Asset- I (B) respectively. The petitioner has claimed an estimated additional capital expenditure of ₹5402.29 lakh and ₹714.62 lakh respectively for Asset- I (A) and Asset-I (B) during 2014-19 tariff period.

4. The Annual Transmission Charges for the instant asset was allowed under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges vide order dated 26.9.2014.

5. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). In response to the instant petition, replies were filed by Respondent No.17, UPPCL, Respondent No.14, PSPCL and Respondent No.20, BRPL vide affidavit dated 27.8.2014, 5.9.2014 and 9.9.2014 respectively. However, the petitioner has not filed any rejoinder to the aforesaid replies of the respondents. No comments/objections have been received from the public in response to the notice published in newspaper. The hearing in this matter was held on 14.3.2016.

6. Having heard the representatives of the petitioner and respondents, and perused the material on record, we proceed to determine the tariff in accordance with the Tariff Regulations, 2014.



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

Asset-I (A):

(₹ in lakh)

Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	1568.93	2450.03	2556.92	2660.77	2674.99
Interest on Loan	1525.00	2267.07	2243.00	2173.53	1971.60
Return on Equity	1754.31	2753.92	2877.22	2995.64	3011.57
Interest on Working Capital	127.30	196.83	202.38	206.76	203.68
O & M Expenses	284.32	449.97	464.67	480.25	496.13
Total	5259.86	8117.82	8344.19	8516.95	8357.97

Asset-I (B):

(₹ in lakh)

Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	89.42	187.76	197.02	210.10	214.59
Interest on Loan	107.30	212.35	205.92	203.17	189.14
Return on Equity	99.64	210.22	220.58	235.23	240.25
Interest on Working Capital	6.82	14.05	14.35	14.93	14.82
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	303.18	624.38	637.87	663.43	658.8

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

Asset-I (A):

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	36.27	37.50	38.72	40.02	41.34
Maintenance Spares	65.29	67.50	69.70	72.04	74.42
Receivables	1342.02	1352.97	1390.70	1419.49	1393.00
Total working capital	1443.58	1457.97	1499.12	1531.55	1508.76
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest on working capital	127.30	196.83	202.38	206.76	203.68

Asset-I (B):

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	100.50	104.06	106.31	110.57	109.80
Total working capital	100.50	104.06	106.31	110.57	109.80
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest on working capital	6.82	14.05	14.35	14.93	14.82

Date of Commercial Operation (“COD”)

9. The petitioner has claimed the date of the commercial operation of Asset- I (A) and I (B) as 6.8.2014 and 30.9.2014 respectively. Regulation 4(3) of the 2014

Tariff Regulations provides as follows:-

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

xxx

(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.

xxx

xxx”

10. UPPCL has submitted that the tariff may not be allowed based on anticipated COD and may be allowed after receipt of confirmation of actual COD by the



RLDC. PSPCL has requested the petitioner to provide documents based on actual COD. BRPL has pointed out that the petitioner has made contradictory submissions in respect of anticipated COD being 1.8.2014 and at the same time asset being put to use w.e.f 1.4.2014.

11. We have considered the submissions made by the respondents. The petitioner, vide affidavit dated 11.5.2016, has submitted the RLDC certificates and CEA energisation certificate in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial operation for Asset-I (A) and I (B). Accordingly, the commercial operation date of Asset-I (A) and I (B) has been considered as 6.8.2014 and 30.9.2014 respectively. Accordingly, the tariff is worked out from corresponding COD to 31.3.2019.

Capital Cost

12. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from COD to 31.3.2019 as certified by the Auditor's Certificate dated 2.5.2016 for the transmission assets as submitted by the petitioner are as follows:-

(₹ in lakh)

Asset	Appor- tioned approved cost as per FR	Expendi- ture up to COD	Estimated Additional Capital Expenditure					Total completi on cost
			FY 2014- 15	FY 2015- 16	FY 2016-17	FY 2017- 18	Total	
Asset- I (A)	70076.79	45541.90	692.12	703.47	3467.99	538.71	5402.29	50944.19
Asset- I (B)	6204.74	3349.51	194.12	24.94	325.68	169.88	714.62	4064.13

13. Regulation 9 (1), 9(2) and 10(1) of the 2014 Tariff Regulations provides as follows:-

“9. Capital Cost: (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;
- 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.”

“10. Prudence Check of Capital Expenditure: The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time:

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

14. UPPCL has raised objection about non-submission of the Auditor’s Certificate as required under Regulation 7(4) of the Tariff Regulations 2014. The petitioner has submitted the Auditor’s Certificates and revised tariff forms. The admissible capital cost of the transmission asset as on COD is worked out in the



subsequent paragraphs taking into consideration the initial spares and IEDC and IDC amount.

Cost over-run

15. As per the Investment approval and the form-5 submitted by the petitioner, the apportioned approved cost of the transmission asset was ₹76281.55 lakh against which the estimated completion cost is ₹58243.60 lakh (as per petition), which is within the apportioned approved cost. BRPL has raised issue in respect of over-estimation of the capital cost during investment approval on 17.3.2010, as even at this distance of time there are huge savings observed at the completion stage. Further, BRPL, UPPCL and PSPCL have raised issue regarding non-submission of Form-5 in the petition, due to which cost over-run cannot be determined in various elements of the asset.

16. The petitioner has submitted form-5 vide affidavit dated 8.9.2014. There is no cost over-run in case of the instant asset. However, there is cost variation in several elements. As per the reasons submitted in form-5, the variations (reductions) are mainly due to change in design of towers from delta to horizontal configuration and consequential reduction in the number of towers, the reduced rates of awards as a result of competitive bidding, decrease in the requirement of foundations and erection quantities, reduced compensation vis-a-vis the estimated amount based on the assessment of Revenue Authorities, and change in layout diagrams in certain elements.



17. We have considered the submissions made by the petitioner regarding cost variation in case of the instant transmission assets. There is over-estimation of the cost of the assets. We are of the view that the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects to make the estimates more realistic.

Time Over-run

18. As per the Investment Approval, the transmission assets were scheduled to be commissioned within 32 months of the sanction i.e. on 1.12.2012. However, the actual COD is 6.8.2014 for Asset I (A) and 30.9.2014 for Asset I (B). Thus, there is time over-run of 613 days and 668 days for Asset I (A) and I (B) respectively in commissioning of the asset. The petitioner has submitted following reasons to justify the time overrun in commissioning of the transmission assets:

Delay in forest clearance:

19. The petitioner has submitted that the proposal for forest clearance in Satna-Charkheri part covering 78.839 ha of forest stretch in Madhya Pradesh was made in August, 2011. Compliances of Stage-I approval from all Divisional Forest Officers (DFOs) was submitted to the Chief Conservator of Forest (CCF) Gwalior on 12.9.2013 and forwarded on 24.9.2013 to Ministry of Environment & Forests (MoEF), New Delhi, which issued a letter on 11.10.2013 with two observations for compliance. The State Government of Madhya Pradesh forwarded clarification on 28.10.2013 to MoEF which issued Stage-II clearance on 1.11.2013. The entire process took almost 27 months.



20. As regards forest clearance in Charkheri-Gwalior part for both circuits involving 27.645 ha of forest stretch in Uttar Pradesh, the petitioner submitted the proposal for forest clearance in December, 2011. In-principal approval was received by the petitioner on 29.1.2013. Stage-I approval was issued by RMoEF, Lucknow on 17.1.2013. The compliance report was forwarded from DFOs to Nodal Officer, Lucknow on 5.4.2013. DFOs raised demand note for additional amount which was deposited by the petitioner on 25.6.2013. The compliance report of in-principal approval from DFO, Jhansi, was forwarded on 29.6.2013. Final approval of Stage-II was issued by RMoEF, Lucknow on 10.9.2013. It took around 22 months for the entire forest clearance process to complete.

21. The petitioner has submitted that the time over-run in the commissioning of the asset is due to the time taken in handling the RoW issue and getting the forest clearance from MP and UP forest divisions. These were reasons beyond its control, and hence the delay may be condoned.

22. BRPL has submitted that the petitioner is well conversant with problems like forest clearance, land acquisition and RoW. Keeping all these aspects in view, a completion period of 32 months was decided by the petitioner. The entire cost due to time over-run should be borne by the petitioner. BRPL has further submitted that the all the problems narrated by the petitioner have occurred due to slackness in project management and improper co-ordination with various authorities and thus has requested to disallow the IDC and IEDC corresponding to the time overrun. UPPCL has submitted that the petitioner has not been able to justify the time over-run and has thus requested to disallow the same.



23. We have considered the submissions of the petitioner and the respondents. The petitioner has submitted that the time over-run is due to time taken in forest clearance. However, it is not possible to assess the impact of the delay in getting the forest clearance on project implementation, as it is difficult to assess the time the petitioner considered for forest clearance while deciding schedule of 32 months at the time of planning.

24. It has been observed that the petitioner took 10 months for applying for forest clearance in the State of MP and 14 months in the State of UP from the date of Investment Approval, for which no justification/ reason has been submitted by the petitioner. The petitioner has not submitted how much time was envisaged for this activity in original schedule. The petitioner could have applied for first stage forest clearance immediately after I.A. based on preliminary survey and the project could have been commissioned in time even after delay in availability of forest clearance. So in the absence of reasons for delay in applying for forest clearance, delay of 14 months in respect of forest clearance is not being condoned.

ROW issues:

25. The petitioner has submitted that the bay extension for the transmission line Satna - Gwalior ckt.1 was constructed in the existing land. But for termination of Satna - Gwalior ckt.2 in Satna Sub-station, new land was acquired.

26. As per petitioner's submission, the application for the acquisition of total 12.485 Ha (10.269 Ha Pvt. Land and 2.216 Ha Govt. Land) was made on 24.2.2010 and further gazette notification issued in following order (i) Sec 4 - 23.7.2010 & 14.9.2010 (ii) Sec 6 - 27.8.2010 & 19.11.2010. The amount as per the demand note raised by revenue authorities was deposited on 15.11.2010.



27. The award letter for the land was passed by District Collector, Satna on 19.6.2012. However, the following litigations were filed by land owners:

- a) W.P No. 10687/2012 was filed before the Hon'ble High Court of MP, Jabalpur on 27.7.2012 against the award dated 19.6.2012 passed by the District Collector, Satna, pertaining to the Land acquisition of Satna Sub-station (Bay Extension). According to the petitioner, this appeal was finally argued on 28.11.2013 and the case was disposed of with a direction to the Single Bench to consider the objections raised by the party. As per the order dated 28.11.2013, the case was remanded back to the Single Bench with whom the matter is now pending. In the meanwhile, the stay was vacated on 30.4.2014 and the case was posted for further hearing on 22.7.2014.
- b) W.P No. 19045/2012 was filed before the Hon'ble High Court of MP, Jabalpur on 24.10.2013 against the award dated 19.6.2012 passed by the District Collector, Satna pertaining to the Land acquisition of Satna Sub-station (Bay Extension). The court vide its order dated 15.1.2014 has passed status-quo order restraining the petitioner from taking possession of the land belonging to the petitioner. The stay was vacated by the Court vide its order dated 7.5.2014. The case was further listed for final hearing during the last week of July 2014. However, the physical possession of this land after evacuation by the land owner could be obtained in the last week of July 2014.



28. The documents submitted by the petitioner depict that the delay is of the nature of ROW issues and court cases. The chronology of ROW events has been submitted by the petitioner. It is observed that the petitioner has submitted application for the acquisition of land on 24.2.2010. However, letter of award for the land was issued by District Collector Satna on 19.6.2012 i.e. after 28 months. Further, litigations filed after such award have been resolved only in July 2014, leading to a delay of 613 days and 668 days for Asset I (A) and I (B) respectively in commissioning of the instant assets. In spite of the efforts made by the petitioner to ensure resolution of ROW issues and efforts towards seeking forest clearances, the overall commissioning of the transmission assets was delayed by 613 days and 668 days for Asset I (A) and I (B) respectively. Accordingly, the time overrun of 613 days and 668 days for Asset I (A) and I (B) respectively is being condoned.

IDC and IEDC

29. The petitioner vide Auditor's certificates dated 2.5.2016 has submitted the IDC and IEDC up to COD for the instant transmission assets as given hereunder:

(₹ in lakh)		
Asset	IEDC up to COD	IDC up to COD
Asset I (A)	39.76	4159.13
Asset I (B)	41.07	564.25

30. The petitioner has submitted that entire IEDC has been discharged up to COD. The IDC discharged on cash basis is as below:-

(₹ in lakh)		
Asset	IDC discharged upto COD	IDC discharged during 2014-15
Asset I (A)	3684.02	475.11



Asset	IDC discharged upto COD	IDC discharged during 2014-15
Asset I (B)	408.30	155.95

31. For determination of tariff for the 2014-19 tariff period for the instant transmission assets, we have considered the capital cost as on COD after adjusting the IDC and IEDC discharged on cash basis.

32. Based on the submissions of the petitioner, IDC is being capitalised to the tune of ₹3684.02 lakh and ₹408.30 lakh up to COD for Asset I (A) and Asset I (B) respectively and IDC discharged during 2014-15 has been added to the additional capital expenditure during 2014-15. Capital cost after adjustment of IDC is as follows:-

(₹ in lakh)

Asset	Capital cost as on COD	Additional capital expenditure after adjustment of IDC			
		FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Asset I (A)	45063.17	1167.23	703.47	3467.99	538.71
Asset I (B)	3193.56	350.07	24.94	325.68	169.88

Initial Spares

33. The petitioner has claimed initial spares of ₹230.51 lakh and ₹206.00 lakh pertaining to Sub-station for Asset I(A) and I(B) respectively. Further, ₹424.73 lakh has been claimed pertaining to transmission line for Asset I(A) up to the cut-off date of 31.3.2018.

34. We have computed the allowable initial spares based on the norms in accordance with clause 13 of the Tariff Regulations, as below:-

(₹ in lakh)

Particulars (As per Auditor's Certificate)	Asset-I (A) (Sub-station)	Asset-I (A) (Transmission Line)	Asset-I (B) (Sub-station)
Capital Cost up to cut-off date (excluding IDC, IEDC and land and cost of civil works)	3785.11	42479.32	3458.81
Initial spares claimed	230.51	424.73	206.00
Norms (%)	6.00	1.00	6.00
Initial spares as per norms	226.89	424.79	207.63
Excess initial spares	3.62	0.00	0.00

35. The initial spares claimed by the petitioner for Asset I (A) with regard to Sub-station are in excess by ₹3.62 lakh. Hence, the same is being adjusted in the capital cost of Asset I (A). Initial spares pertaining to Transmission line for Asset I (A) and Sub-station for Asset I (B) are within the normative limits in accordance with clause 13 of the Tariff Regulations. Thus, the same are allowed for computation of tariff.

Additional Capital Expenditure

36. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

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

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law.”

37. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines 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 a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation.”

38. The petitioner has claimed an estimated additional capital expenditure of ₹5402.29 lakh and ₹714.62 lakh for Asset I (A) and I (B) from COD to 31.3.2019 on account of balance and retention payments, covered under Regulation 14(1) of 2014 Tariff Regulations.

39. The additional capital expenditure claimed by the petitioner is on account of balance and retention payments and the total estimated completion cost is within the apportioned approved cost. The same is allowed under Regulation 14(1) of 2014 Tariff Regulations, subject to true up on actual basis. Thus the additional capital expenditure allowed for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Asset	Apportioned Approved Cost as per FR	Expenditure up to COD	Estimated Additional capital expenditure					Total completion cost
			FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	Total	
Asset I(A)	70076.79	45063.17	1,167.23	703.47	3,467.99	538.71	5877.40	50940.57
Asset I(B)	6204.74	3193.56	350.07	24.94	325.68	169.88	870.57	4064.13

Debt: Equity

40. Clause (1) of Regulation 19 of the 2014 Tariff Regulations provides as under:-

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan”

Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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.”



41. 41.The petitioner has considered the debt: equity ratio of 70:30, which is in line with the 2014 Tariff Regulations, hence the same is considered for calculation of tariff. Accordingly, the details of the debt: equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Asset I (A)						
Funding	Capital cost as on COD	(%)	Estimated additional capital expenditure in 2014-19	(%)	Capital cost as on 31.3.2019	(%)
Equity	13518.95	30.00	1763.22	30.00	15282.17	30.00
Debt	31544.22	70.00	4114.18	70.00	35658.40	70.00
Total	45063.17	100.00	5877.40	100.00	50940.57	100.00

(₹ in lakh)

Asset I (B)						
Funding	Capital cost as on COD	(%)	Estimated additional capital expenditure in 2014-19	(%)	Capital cost as on 31.3.2019	(%)
Equity	958.07	30.00	261.17	30.00	1219.24	30.00
Debt	2235.49	70.00	609.40	70.00	2844.89	70.00
Total	3193.56	100.00	870.57	100.00	4064.13	100.00

Return on Equity (“ROE”)

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

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system....”

“25. Tax on Return on Equity:

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

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the



estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess."

43. The petitioner has claimed ROE at the rate of 20.961% after grossing up the ROE of 15.5% with MAT rate as per the above said Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

44. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.

45. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, 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. The ROE allowed for the instant transmission asset is given below:-

(₹ in lakh)

Asset I (A)					
Return on Equity	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	13518.95	13869.12	14080.16	15120.56	15282.17
Additions	350.17	211.04	1040.40	161.61	0.00
Closing Equity	13869.12	14080.16	15120.56	15282.17	15282.17
Average Equity	13694.04	13974.64	14600.36	15201.36	15282.17
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.705
Return on Equity	2685.46	2753.77	2877.07	2995.50	3011.42

Asset I (B)					
Return on Equity	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	958.07	1063.09	1070.57	1168.28	1219.24
Additions	105.02	7.48	97.70	50.96	0.00
Closing Equity	1063.09	1070.57	1168.28	1219.24	1219.24
Average Equity	1010.58	1066.83	1119.42	1193.76	1219.24
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.705
Return on Equity	198.18	210.22	220.59	235.24	240.26

Interest on Loan (“IoL”)

46. Clause 5 and 6 of Regulation 26 of 2014 Tariff Regulations provides that:-

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

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



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

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

47. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. Further, the petitioner has prayed to allow it to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any from the respondents.

48. UPPCL has submitted that the prayer of the petitioner in this respect is not tenable since the 2014 Tariff Regulations provide for swapping of loans in the interest of consumers. UPPCL has further submitted that there appears no cause for the petitioner to pray for floating rate of interest which entails the avoidable element of risk of increase in the rate of interest to which the consumers may be exposed.

49. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner's prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at Annexure-I and the IOL has been worked out as follows:-

(₹ in lakh)

Asset I (A)					
Interest on Loan	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	31544.22	32361.28	32853.71	35281.30	35658.40
Cumulative Repayment upto Previous Year	0.00	1566.00	4015.84	6572.57	9233.14
Net Loan-Opening	31544.22	30795.28	28837.87	28708.73	26425.26
Additions	817.06	492.43	2427.59	377.10	0.00
Repayment during the year	1566.00	2449.84	2556.73	2660.58	2674.80
Net Loan-Closing	30795.28	28837.87	28708.73	26425.26	23750.46
Average Loan	31169.75	29816.57	28773.30	27567.00	25087.86
Weighted Average Rate of Interest on Loan (%)	7.4900	7.6039	7.7961	7.8853	7.8596
Interest on Loan	1522.30	2267.23	2243.19	2173.74	1971.80

Asset I (B)					
Interest on Loan	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2235.49	2480.54	2498.00	2725.98	2844.89
Cumulative Repayment upto Previous Year	0.00	89.17	276.94	473.96	684.06
Net Loan-Opening	2235.49	2391.37	2221.06	2252.02	2160.83
Additions	245.05	17.46	227.98	118.92	0.00
Repayment during the year	89.17	187.76	197.02	210.10	214.59
Net Loan-Closing	2391.37	2221.06	2252.02	2160.83	1946.25
Average Loan	2313.43	2306.21	2236.54	2206.43	2053.54
Weighted Average Rate of Interest on Loan (%)	9.2258	9.2086	9.2082	9.2092	9.2113
Interest on Loan	107.01	212.37	205.94	203.20	189.16



Depreciation

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

"27. Depreciation:

...(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis

...

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

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets."

51. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

"(67) '**Useful life**' in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:

- (a) Coal/Lignite based thermal generating station 25 years
- (b) Gas/Liquid fuel based thermal generating station 25 years
- (c) AC and DC sub-station 25 years
- (d) Gas Insulated Substation (GIS) 25 years
- (d) Hydro generating station including pumped Storage hydro generating stations
35 years
- (e) Transmission line (including HVAC & HVDC) 35 years
- (f) Communication system 15 years"

52. The depreciation has been worked out considering the admitted capital cost as on COD and the additional capital expenditure admitted during 2014-19 period.

The weighted average useful life of the asset has been considered as 34 years in

accordance with the above regulation. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Asset I (A)					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	45063.17	46230.40	46933.87	50401.86	50940.57
Additional Capitalisation	1167.23	703.47	3467.99	538.71	0.00
Closing Gross Block	46230.40	46933.87	50401.86	50940.57	50940.57
Average Gross Block	45646.78	46582.13	48667.86	50671.21	50940.57
Rate of Depreciation (%)	5.26	5.26	5.25	5.25	5.25
Depreciable Value	40993.16	41834.97	43681.96	45454.81	45697.23
Balance useful life of the asset	34	33	32	31	30
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	40993.16	40268.98	39666.12	38882.24	36464.09
Depreciation during the year	1566.00	2449.84	2556.73	2660.58	2674.80
Cumulative depreciation	1566.00	4015.84	6572.57	9233.14	11907.94

(₹ in lakh)

Asset I (B)					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	3193.56	3543.63	3568.57	3894.25	4064.13
Additional Capitalisation	350.07	24.94	325.68	169.88	0.00
Closing Gross Block	3543.63	3568.57	3894.25	4064.13	4064.13
Average Gross Block	3368.60	3556.10	3731.41	3979.19	4064.13
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	3031.74	3200.49	3358.27	3581.27	3657.72
Balance useful life of the asset	34	33	32	31	30
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	3031.74	3111.32	3081.33	3107.32	2973.66
Depreciation during the year	89.17	187.76	197.02	210.10	214.59
Cumulative depreciation	89.17	276.94	473.96	684.06	898.64



Operation & Maintenance Expenses (“O&M Expenses”)

53. The instant petition covers 3 nos. 765 kV bays and single circuit (bundled cond.- 4 sub-conductor) line of length 300.33 KMs for Asset I (A). The petitioner has not claimed any bay as reactor at Gwalior end for Satna - Gwalior ckt. II (Non-Switchable) with regard to Asset I (B). Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the following norms for O&M Expenses:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norm (₹ lakh/bay)					
765 kV bay	84.42	87.22	90.12	93.11	96.2
Norm (₹ lakh/KM)					
S/C (Bundle Conductor-4 sub-c)	0.606	0.627	0.647	0.669	0.691

54. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

55. UPPCL and BRPL have raised objections regarding the claim of the petitioner in respect of impact due to wage revision. 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, any application filed by the

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

56. The petitioner has claimed O&M Expenses as specified in sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. The details of O&M Expenses allowed are given hereunder:-

(₹ in lakh)

Asset I (A)					
Asset	Year				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
765 kV bay (3 Nos.)	165.14	261.66	270.36	279.33	288.6
S/C (Bundle Conductor-4 sub-c)- 300.33 KMs	118.67	188.31	194.31	200.92	207.53
Total	283.81	449.97	464.67	480.25	496.13

Interest on Working Capital

57. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

“28. Interest on Working Capital

- (c).(i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

58. The petitioner has considered the rate of interest on working capital to be 13.50%. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).The



components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

Asset I (A)					
Interest on Working Capital	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M expenses	36.26	37.48	38.71	40.00	41.33
Maintenance Spares	65.29	67.50	69.70	72.04	74.42
Receivables	1341.98	1352.94	1390.67	1419.47	1392.97
Total	1443.52	1457.91	1499.08	1531.51	1508.72
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	194.88	196.82	202.38	206.75	203.68

(₹ in lakh)

Asset I (B)					
Interest on Working Capital	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	100.51	104.07	106.32	110.58	109.80
Total	100.51	104.07	106.32	110.58	109.80
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	13.57	14.05	14.35	14.93	14.82

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Asset I (A)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	45063.17	46230.40	46933.87	50401.86	50940.57
Additional Capitalisation	1167.23	703.47	3467.99	538.71	0.00
Closing Gross Block	46230.40	46933.87	50401.86	50940.57	50940.57
Average Gross Block	45646.78	46582.13	48667.86	50671.21	50940.57
Rate of Depreciation	5.26	5.26	5.25	5.25	5.25
Depreciable Value	40993.16	41834.97	43681.96	45454.81	45697.23



Asset I (A)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Balance Useful life of the asset	34	33	32	31	30
Elapsed Life	0	1	2	3	4
Remaining Depreciable Value	40993.16	40268.98	39666.12	38882.24	36464.09
Depreciation	1566.00	2449.84	2556.73	2660.58	2674.80
Cumulative depreciation (incl. of AAD)	1566.00	4015.84	6572.57	9233.14	11907.94
Interest on Loan					
Gross Normative Loan	31544.22	32361.28	32853.71	35281.30	35658.40
Cumulative Repayment upto Previous Year	0.00	1566.00	4015.84	6572.57	9233.14
Net Loan-Opening	31544.22	30795.28	28837.87	28708.73	26425.26
Additions	817.06	492.43	2427.59	377.10	0.00
Repayment during the year	1566.00	2449.84	2556.73	2660.58	2674.80
Net Loan-Closing	30795.28	28837.87	28708.73	26425.26	23750.46
Average Loan	31169.75	29816.57	28773.30	27567.00	25087.86
Weighted Average Rate of Interest on Loan	7.4900	7.6039	7.7961	7.8853	7.8596
Interest	1522.30	2267.23	2243.19	2173.74	1971.80
Return on Equity					
Opening Equity	13518.95	13869.12	14080.16	15120.56	15282.17
Additions	350.17	211.04	1040.40	161.61	0.00
Closing Equity	13869.12	14080.16	15120.56	15282.17	15282.17
Average Equity	13694.04	13974.64	14600.36	15201.36	15282.17
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity	19.610	19.705	19.705	19.705	19.705
Return on Equity	2685.46	2753.77	2877.07	2995.50	3011.42
Interest on Working Capital					
O & M expenses	36.26	37.48	38.71	40.00	41.33
Maintenance Spares	65.29	67.50	69.70	72.04	74.42
Receivables	1341.98	1352.94	1390.67	1419.47	1392.97
Total	1443.52	1457.91	1499.08	1531.51	1508.72
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	194.88	196.82	202.38	206.75	203.68

Asset I (A)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission Charges					
Depreciation	1566.00	2449.84	2556.73	2660.58	2674.80
Interest on Loan	1522.30	2267.23	2243.19	2173.74	1971.80
Return on Equity	1751.07	2753.77	2877.07	2995.50	3011.42
Interest on Working Capital	127.07	196.82	202.38	206.75	203.68
O & M Expenses	283.81	449.97	464.67	480.25	496.13
Total	5250.25	8117.62	8344.04	8516.82	8357.82

Asset I (B)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	3193.56	3543.63	3568.57	3894.25	4064.13
Additional Capitalisation	350.07	24.94	325.68	169.88	0.00
Closing Gross Block	3543.63	3568.57	3894.25	4064.13	4064.13
Average Gross Block	3368.60	3556.10	3731.41	3979.19	4064.13
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	3031.74	3200.49	3358.27	3581.27	3657.72
Balance Useful life of the asset	34	33	32	31	30
Elapsed Life	0	1	2	3	4
Remaining Depreciable Value	3031.74	3111.32	3081.33	3107.32	2973.66
Depreciation	89.17	187.76	197.02	210.10	214.59
Cumulative depreciation (incl. of AAD)	89.17	276.94	473.96	684.06	898.64
Interest on Loan					
Gross Normative Loan	2235.49	2480.54	2498.00	2725.98	2844.89
Cumulative Repayment upto Previous Year	0.00	89.17	276.94	473.96	684.06
Net Loan-Opening	2235.49	2391.37	2221.06	2252.02	2160.83
Additions	245.05	17.46	227.98	118.92	0.00
Repayment during the year	89.17	187.76	197.02	210.10	214.59
Net Loan-Closing	2391.37	2221.06	2252.02	2160.83	1946.25
Average Loan	2313.43	2306.21	2236.54	2206.43	2053.54
Weighted Average Rate of Interest on Loan	9.2258	9.2086	9.2082	9.2092	9.2113
Interest	107.01	212.37	205.94	203.20	189.16



Asset I (B)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	958.07	1063.09	1070.57	1168.28	1219.24
Additions	105.02	7.48	97.70	50.96	0.00
Closing Equity	1063.09	1070.57	1168.28	1219.24	1219.24
Average Equity	1010.58	1066.83	1119.42	1193.76	1219.24
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity	19.610	19.705	19.705	19.705	19.705
Return on Equity	198.18	210.22	220.59	235.24	240.26
Interest on Working Capital					
O & M expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	100.51	104.07	106.32	110.58	109.80
Total	100.51	104.07	106.32	110.58	109.80
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	13.57	14.05	14.35	14.93	14.82
Annual Transmission Charges					
Depreciation	89.17	187.76	197.02	210.10	214.59
Interest on Loan	107.01	212.37	205.94	203.20	189.16
Return on Equity	99.36	210.22	220.59	235.24	240.26
Interest on Working Capital	6.80	14.05	14.35	14.93	14.82
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	302.35	624.40	637.90	663.46	658.83

Filing Fee and the Publication Expenses

60. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. UPPCL has requested that the petitioner may be directed to submit relevant certified documents regarding publishing of notices in newspapers, and the petition filing fee etc. BRPL has requested the Commission

to reject the claim of petitioner in respect of filing fees. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Service Tax

62. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. UPPCL has raised objection against the claim of the petitioner. .We are of the view that the petitioner's prayer is premature.

Foreign Exchange Rate Variation

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

Sharing of Transmission Charges

64. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations.

65. This order disposes of Petition No.201/TT/2014.

Sd/-
(Dr. M.K. Iyer)
Member

Sd/-
(A.S. Bakshi)
Member

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Asset I (A)				
Particulars	Interst Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXII-Loan 1-	8.84	300.00	0.00	300.00
BOND-XXXIV-Loan 2-	8.84	28.62	0.00	28.62
BOND XXXVI-Loan 3-	9.35	350.00	0.00	350.00
BOND XXXVII-Loan 4-	9.25	1100.00	0.00	1100.00
BOND XXXVIII-Loan 5-	9.25	280.00	0.00	280.00
BOND XXXIX-Loan 6-	9.40	3300.00	0.00	3300.00
SBI (21.03.2012)-Loan 7-	10.25	1900.00	0.00	1900.00
BOND XL-Loan 8-	9.30	3550.00	0.00	3550.00
BOND - XLI-Loan 11-	8.85	2017.73	0.00	2017.73
BOND - XLII-Loan 16-	8.80	3000.00	0.00	3000.00
IFC (IFC - A LOAN) (31419-00)-Loan 12-61.71	3.23	925.65	0.00	925.65
IFC (IFC - B LOAN) (31419-01)-Loan 9-61.71	2.38	2468.40	0.00	2468.40
IFC (ICFF LOAN) (31419-02)-Loan 10-61.71	3.23	1234.20	0.00	1234.20
FC - BOND (17.01.2013)-Loan 13-61.71	4.10	3702.60	0.00	3702.60
BOND - XLIII-Loan 14-	7.93	4000.00	0.00	4000.00
BOND - XLIV-ADDCAP FOR 2014-2015 Add-Cap 2-	8.70	0.00	332.58	332.58
BOND - XLIV-Loan 15-	8.70	3389.55	0.00	3389.55
Bond XLVIII-ADDCAP FOR 2014-2015 Add-Cap 1-	8.20	0.00	484.48	484.48
BOND LI-ADDCAP FOR 2015-2016 Add Cap 3-	8.40	0.00	492.43	492.43
Total		31546.75	1309.49	32856.24



(₹ in lakh)

Asset I (B)				
Particulars	Interst Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXVII-Loan 1-	9.25	1700.00	0.00	1700.00
BOND XXXIX-Loan 2-	9.40	365.00	0.00	365.00
BOND XL-ADDCAP FOR 2015-2016 Add Cap 3-	9.30	0.00	17.46	17.46
BOND - XLI-ADDCAP FOR 2014-2015 Add Cap 2-	8.85	0.00	109.17	109.17
BOND - XLI-Loan 3-	8.85	170.49	0.00	170.49
Bond XLVII-ADDCAP FOR 2014-2015 Add Cap 1-	8.93	0.00	135.88	135.88
Total		2235.49	262.51	2498.00



WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2014-19 TARIFF PERIOD

(₹ in lakh)

Asset I (A)					
Gross Opening Loan	31546.75	32363.81	32856.24	32856.24	32856.24
Cumulative Repayments of Loans upto Previous Year	25.00	52.39	1405.65	3418.94	4747.35
Net Loans Opening	31521.75	32311.42	31450.59	29437.30	28108.89
Add: Drawl(s) during the year	817.06	492.43	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	27.39	1353.26	2013.29	1328.41	2569.12
Net Closing Loan	32311.42	31450.59	29437.30	28108.89	25539.77
Average Net Loan	31916.59	31881.01	30443.95	28773.10	26824.33
Rate of Interest on Loan	7.4900	7.6039	7.7961	7.8853	7.8596
Interest on Loan	2390.56	2424.21	2373.44	2268.85	2108.28

(₹ in lakh)

Asset I (B)					
Gross Opening Loan	2235.49	2480.54	2498.00	2498.00	2498.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	141.67	308.11	474.55
Net Loans Opening	2235.49	2480.54	2356.33	2189.89	2023.45
Add: Drawl(s) during the year	245.05	17.46	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	141.67	166.44	166.44	177.76
Net Closing Loan	2480.54	2356.33	2189.89	2023.45	1845.69
Average Net Loan	2358.02	2418.44	2273.12	2106.68	1934.58
Rate of Interest on Loan	9.2258	9.2086	9.2082	9.2092	9.2113
Interest on Loan	217.55	222.70	209.31	194.01	178.20

