

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 199/TT/2015**

**Coram:**

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

**Date of Hearing : 06.04.2016**

**Date of Order : 28.04.2016**

**In the matter of:**

Determination of transmission tariff for **Asset-A:** One ckt of 400 kV D/C Sikar-Ratangarh line with associated bays, **Asset-B:** Second ckt of 400 kV D/C Sikar-Ratangarh line with associated bays, and **Asset-C:** 125 MVAR bus reactor at Ratangarh S/S (RRV PNL) with associated bays under "System Strengthening in Northern Region for Sasan and Mundra UMPP" for 2014-19 Tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

**And in the matter of:**

Power Grid Corporation of India Ltd.  
'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon -122 001 (Haryana).

.....**Petitioner**

**Versus**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.  
Vidyut Bhawan, Vidyut Marg,  
Jaipur-302 005
2. Ajmer Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road  
Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road  
Heerapura, Jaipur



4. Jodhpur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road  
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II  
Shimla-171004
6. Punjab State Power Corporation Ltd.  
Thermal Shed T1A, Near 22 Phatak  
Patiala-147001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134 109
8. Power Development Department  
Govt. of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.  
Shakti Bhawan, 14, Ashok Marg  
Lucknow- 226001
10. Delhi Transco Ltd.  
Shakti Sadan, Kotla Road  
New Delhi- 110002
11. BSES Yamuna Power Ltd.  
BSES Bhawan, Nehru Place  
New Delhi
12. BSES Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place  
New Delhi
13. North Delhi Power Ltd.  
Power Trading & Load Dispatch Group  
Cennet Building  
Pitampura, New Delhi-110034



14. Chandigarh Administration  
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Ltd.  
Urja Bhawan, Kanwali Road  
Dehradun
16. North Central Railway  
Allahabad
17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg  
New Delhi-110002

.....**Respondents**

The following were present:-

For Petitioner: Smt Sangeeta Edwards, PGCIL  
Shri V.P Rastogi, PGCIL  
Shri S.S. Raju, PGCIL  
Shri Rakesh Prasad, PGCIL  
Shri S.K Venkatesan, PGCIL  
Shri M.M. Mondal, PGCIL  
Shri S.C Taneja, PGCIL  
Shri Pankaj Sharma, PGCIL

For Respondent: Shri S.K Agarawal, Rajasthan Discoms  
Shri S.P Das, Rajasthan Discoms  
Shri Gaurav Gupta, Advocate, PSPCL

### **ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for **Asset-A**: One ckt of 400 kV D/C Sikar-Ratangarh line with associated bays, **Asset-B**: Second ckt of 400 kV D/C Sikar-Ratangarh line with associated bays, and **Asset-C**: 125 MVAR bus reactor



at Ratangarh Sub-station (RRVPNL) with associated bays under “System Strengthening in Northern Region for Sasan and Mundra UMPP” (herein referred as transmission asset) for 2014-19 Tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD to 31.3.2019.

2. The respondents are distribution licensees or electricity departments or power procurement companies of States who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner’s company vide Memorandum no. C/CP/CS in NR for Sasan and Mundra Ultra Mega Power Projects dated 10.12.2009 at an estimated cost of ₹121683 lakh, which included IDC of ₹5770 lakh.

(b) The scope of the instant project is as per investment approval dated 10.12.2009 is as under:-

**Transmission Line:**

- a. Agra-Sikar 400 kV D/C (Quad) line – 320 km
- b. Sikar-Jaipur 400 kV D/C line – 157 km
- c. Sikar-Ratangarh (RVPN) 400 kV D/C line – 90 km
- d. LILO of both circuits of Nathpa Jhakri – Abdullapur 400 kV D/C (Triple Snowbird) line at Panchkula – 2x25 km
- e. LILO of both circuits of Sikar (RVPN) – Ratangarh (RVPN) 220 kV D/C line at Sikar (Powergrid) – 5.4 km



**Sub-station:**

- a. 2x315 MVA, 400/220 kV Sikar Sub-station (New)
- b. 2x315 MVA, 400/220 kV Panchkula Sub-station (New)
- c. 765/400 kV Agra Sub-station (Extension)
- d. 400/220 kV Ratangarh (RVPN) Sub-station (Extension)
- e. 400/220 kV Jaipur Sub-station (Extension)

**Reactive Compensation:**

Sr. No.	Transmission Lines	Line Reactors (MVAR)	
		From end	To end
(i)	Agra-Sikar 400 kV D/C (Quad) line	50	50 (Switchable)
(ii)	LILO of both circuits of Nathpa Jhakri-Abdullapur 400 kV D/C at Panchkula		
	➤ Naptha Jhakri – Panchkula 400 kV D/C line	-	50 (Switchable)
	➤ Panchkula – Abdullapur 400 kV D/C line	-	50 (existing reactor to be retained)
	Switchable Bus Reactors (MVAR)		
(i)	Sikar		80
(ii)	Ratangarh		125
(iii)	Panchkula		15

(c) The Commission approved provisional tariff under Regulation 7(7) of the 2014 Tariff Regulations vide order dated 21.10.2015.

4. The petitioner has claimed the revised transmission charges based on IDC and IEDC discharged vide affidavit dated 4.4.2016 as under:-

Asset-A	(₹ in lakh)				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	52.22	367.56	410.18	410.18	410.18
Interest on Loan	11.65	78.53	81.56	74.63	67.70
Return on Equity	58.28	412.34	460.33	460.33	460.33
Interest on Working Capital	4.36	29.73	32.22	32.40	32.59
O&M Expenses	28.08	180.54	186.51	192.71	199.10



Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Total</b>	<b>154.59</b>	<b>1068.70</b>	<b>1170.80</b>	<b>1170.25</b>	<b>1169.90</b>

(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	28.20	227.22	248.48	248.48	248.48
Interest on Loan	6.30	48.68	49.47	45.28	41.08
Return on Equity	31.49	255.21	279.28	279.28	279.28
Interest on Working Capital	2.84	22.20	23.59	23.84	24.09
O&M Expenses	23.92	180.54	186.51	192.71	199.10
<b>Total</b>	<b>92.75</b>	<b>733.85</b>	<b>787.33</b>	<b>789.59</b>	<b>792.03</b>

(₹ in lakh)

Asset-C	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	8.85	67.62	80.17	80.17	80.17
Interest on Loan	1.97	14.43	15.99	14.64	13.28
Return on Equity	9.86	75.71	89.76	89.76	89.76
Interest on Working Capital	1.01	7.07	7.84	7.92	8.01
O&M Expenses	9.69	62.30	64.37	66.51	68.71
<b>Total</b>	<b>31.38</b>	<b>227.13</b>	<b>258.13</b>	<b>259.00</b>	<b>259.93</b>

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

(₹ in lakh)

Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	26.21	27.08	27.98	28.91	29.87
O & M Expenses	14.56	15.05	15.54	16.06	16.59
Receivables	160.32	178.12	195.13	195.04	194.98
Total	201.09	220.25	238.65	240.01	241.44
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>27.15</b>	<b>29.73</b>	<b>32.22</b>	<b>32.40</b>	<b>32.59</b>
<b>Pro-rata interest</b>	<b>4.36</b>	<b>29.73</b>	<b>32.22</b>	<b>32.40</b>	<b>32.59</b>



(₹ in lakh)					
Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	26.21	27.08	27.98	28.91	29.87
O & M Expenses	14.56	15.05	15.54	16.06	16.59
Receivables	112.91	122.31	131.22	131.60	132.01
Total	153.68	164.44	174.74	176.57	178.47
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	20.75	22.20	23.59	23.84	24.09
<b>Pro-rata interest</b>	<b>2.84</b>	<b>22.20</b>	<b>23.59</b>	<b>23.84</b>	<b>24.09</b>

(₹ in lakh)					
Asset-C	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.04	9.35	9.66	9.98	10.31
O & M Expenses	5.02	5.19	5.36	5.54	5.73
Receivables	32.54	37.86	43.02	43.17	43.32
Total	46.60	52.40	58.04	58.69	59.36
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	6.29	7.07	7.84	7.92	8.01
<b>Pro-rata interest</b>	<b>1.01</b>	<b>7.07</b>	<b>7.84</b>	<b>7.92</b>	<b>8.01</b>

6. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 6.4.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

7. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Respondent No. 1 has filed its reply vide affidavit dated 1.12.2015. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur Vidyut Vitaran Nigam Ltd., and Jodhpur Vidyut Vitaran Nigam Ltd.,



Respondent Nos. 2, 3 and 4 respectively (collectively referred to as “Rajasthan Discoms”) have filed a combined reply vide affidavit dated 3.2.2016. In response, the petitioner has submitted the rejoinder to the reply filed by the respondents vide affidavit dated 11.4.2016. The concerns expressed by respondents are being addressed in the respective para of this order.

8. The petitioner has submitted the revised tariff forms vide affidavit dated 4.4.2016 for Asset-A, Asset-B and Asset-C along with the Auditor’s Certificate dated 20.5.2015.

**Commercial Operation Date (COD)**

9. The petitioner has submitted that Assets-A, B and C were commissioned on 3.2.2015, 11.2.2015 and 3.2.2015 and prayed for approval of their COD as claimed. The petitioner has also submitted RLDC certificate issued by NRLDC, POSOCO vide letter dated 1.4.2016 in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial run operation. The petitioner vide affidavit dated 4.4.2016 submitted that there is a dedicated bay on both ends for each circuit. Hence, each circuit functions like independent transmission line for fulfilling the criteria of ‘line’ as defined in the 2014 Tariff Regulations. The petitioner has further stated that since the assets are being utilised as per intended purpose, transmission tariff be allowed separately for the assets.





10. We have considered the submissions of the petitioner. In order dated 21.10.2015 in the instant petition, the Commission has observed as follows:-

“5. We have considered the submissions of the petitioner. The petitioner has declared two circuits of D/C line under commercial operation on two different dates and has claimed tariff with reference to the date of commercial operation of each circuit. According to the petitioner, the same is permissible under Regulation 6 (2) of the 2014 Tariff Regulations. In our view, the issue involved is not whether the tariff should be determined transmission line wise or sub-station wise in this case. The issue is whether two circuits of a D/C line can be declared under commercial operation separately. Regulation 4 (3) of 2014 Tariff regulations provides that the 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. Regulation 5 (2) defines trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power. Therefore, either the whole transmission system or an element thereof can be declared under commercial operation after successful trial operation. An “element” has been defined as an asset which has been distinctively defined under the scope of the project in its investment approval. On perusal of the investment approval it is noticed that 400 kV D/C Sikar-Ratangarh (RVPN) transmission line has been mentioned as a distinct element of the transmission system, namely, System Strengthening in Northern Region for Sasan and Mundra Ultra Mega Power Project. Since, the circuits of the said D/C line are not recognized as independent transmission lines in the investment approval, we are of the view that Sikar-Ratangarh (RVPN) 400 kV D/C line shall be considered as one element and after trial operation of the said transmission line as a whole, can be put under commercial operation. Even though the petitioner has separately declared the commercial operation of each circuit of the transmission line, the said commercial operation cannot be accepted for the purpose of determination of tariff. Therefore, we are of the view that the commercial operation of Sikar-Ratangarh (RVPN) 400 kV D/C line shall be with effect from the date of commercial operation of the second circuit of the transmission line i.e. 11.2.2015. IDC will be admissible for the said transmission line till the date of commercial operation of the transmission line. Accordingly, the petitioner is directed to file the revised tariff forms for the combined asset as per the 2014 Tariff Regulations. ”

11. In view of the above directions of the Commission, we are of the view that the commercial operation of Assets-A and B, i.e. one ckt of 400 kV D/C Sikar-Ratangarh line with associated bays and second ckt of 400 kV D/C Sikar-



Ratangarh line with associated bays shall be 11.2.2015. Accordingly, the COD of the assets covered in the instant petition is as given in the table below:-

Assets	Actual COD	Approved apportioned cost (₹ in lakh)
<b>Asset-A:</b> One ckt of 400 kV D/C Sikar-Ratangarh line with associated bays	11.2.2015	6913.39
<b>Asset-B:</b> Second ckt of 400 kV D/C Sikar-Ratangarh line with associated bays	11.2.2015	4540.26
<b>Asset-C:</b> 125 MVAR bus reactor at Ratangarh S/S (RRVNL) with associated bays	3.2.2015	918.88

### **Capital Cost**

12. The petitioner vide affidavit dated 4.4.2016 has submitted the revised tariff forms for the said assets. The petitioner has claimed capital cost of ₹6167.38 lakh, ₹3913.49 lakh and ₹1043.79 lakh as on COD of the assets based on Auditor's certificate dated 20.5.2015. The petitioner was directed vide affidavit dated 11.4.2016 to submit the reason for difference in capital cost of Asset-A and Asset-B, even though ckt-1 and ckt-2 are of the same D/C transmission line. In response, the petitioner vide affidavit dated 21.4.2016 submitted that, cost of Asset-A includes cost of all tower steel however in case of Asset-B, no cost against tower steel is considered.

13. The petitioner has claimed capital cost of ₹6163.58 lakh, ₹3910.07 lakh and ₹1043.15 lakh for Asset-A, Asset-B and Asset-C respectively after adjustment of IDC on cash basis for purpose of tariff computation.



14. Regulation 9 (1) and (2) and 10 (1) of the 2014 Tariff Regulations specify 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.”

### **Time over-run**

15. As per the investment approval dated 10.12.2009, the scheme was scheduled to be commissioned within 32 months from the date of investment



approval. Accordingly, the scheduled completion date was 10.8.2012. However, the actual commissioning of the subject assets for Asset-A was 11.2.2015, for Asset-B was 11.2.2015 and for Asset-C was 3.2.2015. The petitioner has submitted that there is a delay of 916 days (30 months 1 days) for Asset-A, delay of 916 days (30 months 1 day) for Asset-B and delay of 908 days (29 months 25 days) for Asset-C.

16. Rajasthan Discoms vide affidavit dated 3.2.2016 submitted that, careful perusal of letters written to District Authorities including police would reveal that the matter was taken up predominantly in 2013-14. Further, there is nothing to justify the time over-run except copies of few letters, no photographs or press clippings attached. There is nothing substantial to justify time over run between 10.8.2012 to 5.3.2014. In response, the petitioner vide affidavit dated 3.4.2016 has submitted the following reasons for delay for Asset-A, Asset-B and Asset-C:-

**Asset- A&B**

17. The petitioner has submitted that the time over-run in case of Assets A and B is due to ROW issues. The petitioner has submitted that during construction of 400 kV D/C Sikar-Ratangarh line, there was severe ROW problem since July 2011 created by villagers of Bhaddar and Bhookhro ka Bas, which is adjacent to sub-station premises. The check survey and tower spotting to carry out the foundation work at locations No. 1 to 9 could be carried out only after the police protection along with Tehesildar (having power of Magistrate) Dhond, Sikar. Further, there was ROW problem in Fatehpur (Location No. 83)



which has affected the stringing of section 72-83-84 and Laxmangarh (Location No. 48) village which has affected the stringing of section 47-48-49. Work was hampered in Location 1 to 9 and Loc. No. 83 and 84 for about more than 36 months. The ROW in villages of Bhaddar and Bhookhro ka Bas was resolved only in the month of December 2014 with joint efforts of district administration and the petitioner. The work of foundation, erection and stringing in the affected locations could be completed after the police protection against unlawful obstruction by the Villagers. 1<sup>st</sup> & 2<sup>nd</sup> ckt of line was commissioned on 3.2.2015 and 11.2.2015 respectively.

### **Asset-C**

18. The Bus Reactor was to be installed at Ratanagarh Sub-station of RRVPNL and Sikar- Ratangarh line was also to be terminated at Ratanagarh Sub-station of RRVPNL. Extension works in a sub-station is executed through the utility owning the sub-station on depository work basis and generally overhead charges @15% are paid to the Implementing Agency. Since the work was to be executed by RRVPNL on depository work basis in their Ratangarh sub-station, the petitioner requested RRVPNL to construct 400 kV bays for aforesaid Assets at their Ratangarh Sub-station in February 2010. In this regard, RRVPNL submitted total estimated cost of the deposit works which included overhead charges @40%. Keeping in view the higher overhead charges demanded by RRVPNL, the petitioner requested on several occasions to RRVPNL to reduce the overhead charges to minimize the overall cost of the project. The petitioner vide letter dated 24.5.2011, addressed the matter to the



Joint Secretary (Transmission) so that overhead charges may be reduced which will avoid the additional burden on the beneficiaries.

19. Finally, the issue was raised in 21<sup>st</sup> NRPC meetings dated 2.6.2011 and further in 22<sup>nd</sup> NRPC Meeting dated 29.7.2011. In the said meetings, it was mutually agreed by all the constituents that the overhead charges for deposit works shall be @ 15% for carrying out any work on deposit basis among various utilities. An agreement was signed between petitioner and RRVPNL for execution of work on deposit work basis in March 2012.

20. We have considered the submissions of the petitioner. There has been delay of 916 days (30 months 1 day) for Asset-A, delay of 916 days (30 months 1 day) for Asset-B and delay of 908 days (29 months 25 days) for Asset-C in the commissioning of the assets. The reasons for time over-run for Asset-A and B were due to delay in ROW issues. It is observed that the substantial time was lost since the petitioner was unable to carry out the check survey in the specified locations. For Asset-C the delay was mainly on account of no progress as higher overhead charges were claimed by RRVPNL. It is observed that the petitioner has submitted the relevant documents and chronology of time over run for Asset-A, Asset-B and Asset-C. For Asset A & B the petitioner has submitted as follows:-

S. No.	Letter dated	To	Affected Location	Remarks
1	11.7.2011	District Collector, Sikar	Location 1 to 9 of Sikar-Ratangarh & Location No. 1 -12 of Sikar- Jaipur Line village: Bhandadar &	Request for resolving ROW issue created by villagers of Bhandadar, Bhookarokabas, Mailashi



S. No.	Letter dated	To	Affected Location	Remarks
2	12.11.2011	Telsidar, Dhond, Sikar	Bhookharo ka Bas & Mailasi Sikar	etc.
3	9.6.2012	District Collector, Sikar		
4	3.11.2012	SHO, Police Thana, Sadar, Sikar	Construction activities pertaining to sub-station and associated transmission lines	Request to take necessary action against villagers of Bhadadar, Mailashi etc. Manhandled PGCIL officials and working personals working in sub-station and associated transmission lines
5	19.3.2013	Collector and District Magistrate, Sikar	All construction activities of transmission projects (400 kV Sikar-Jaipur & Sikar- Ratangarh line) associated with 400 kV Sub-station, Bhaddar, Sikar	Resolve ROW issue created by villagers of Bhadadar, Bhookarokabas, Mailashi etc.
6	9.3.2014	SDM, Sikar		Request for providing protection of employees and working personnel at Sikar
7	15.6.2014	Tehsildar, Dhod/Sikar	Location 1 to 9 of Sikar-Ratangarh & Location No. 1 -12 of Sikar- Jaipur Line village: Bhandadar & Bhookharo ka Bas & Mailasi Sikar	Resolve ROW issue created by villagers of Bhadadar, Mailashi etc.
8	21.10.2014	SHO, Police Thana, Sadar, Sikar	Location No 1 to 8, Village- Bhadadar and Bhookharo ka Bas, Sikar	Instruction to provide police force to accomplish the work and depute tehsildar as duty magistrate to maintain law and order during execution of work
9	18.11.2014	Ch Mgr, Powergrid, Sikar	Location 4 to 5 and location 5 to 6 Village: Bhadadar, Sikar	Court notice from Bhagirath Singh Dhaka w.r.t Location No.6 of Sikar-Ratangarh line in Bhadadar village, Sikar
10	24.11.2014	DM, SDM, Tehsildar, Ch. Mgr Powergrid, Sikar	Location No. 2 to 3 Village: Bhadadar, Sikar	Court notice from Rajendra kumar Jhakad, Smt Bajri Devi w.r.t Location No 3 of Sikar-Ratangarh line in



S. No.	Letter dated	To	Affected Location	Remarks
				Bhadadr village, Sikar

21. The chronology of events accounting for time over-run in case of Asset-C, include:-

Sl. No	Particulars	Date	Remarks
1	Petitioner Requested M/s RRVPNL to construct 400 kV bays at their Ratangarh S/s.	5.2.2010	----
2	RRVPNL submitted total estimated cost of the works vide letter no. RVPN/SE (765 kV design)/ R&D/D.26.	26.3.2010	This cost estimate includes overhead charges @ 40 %.
3	Petitioner observed the overhead charges are too high which further leads additional cost against this asset therefore lot of persuasion was done with RRVPNL to reduce the overhead charges and bring down to acceptable level.	April 2010 to November 2010	----
4	RRVPNL informed vide letter dated 23.11.2010 that the overhead charges claimed by them are as per their approval circular dated 22.02.2008 and applicable for all kind of deposit works.	23.11.2010	----
	In a meeting held in the office of JS&FA, Petitioner suggested that the issue may be raised at RPC Level or a letter could be organized to be sent at JS (Transmission) level to Secretary (Energy), Govt. of Rajasthan. The same was intimated by the company secretary vide IOM dated 07.04.2011.	7.4.2011	----
4	Letter written to JS (Transmission)	24.5.2011	
5	Accordingly petitioner put this matter in 19 <sup>th</sup> TCC & 21 <sup>st</sup> NRPC Meeting.	1.6.2011 & 2.6.2011	The matter has put up to NRPC for deliberation/ direction/ concurrence of NRPC.
6	During 22 <sup>nd</sup> NRPC Meeting it was mutually agreed by all the constituents that the overhead charges for deposit works shall be @ 15%.	29.7.2011	After deliberation TCC recommended 15 % overhead charges for carrying out deposit work by any utility.
7	Various issues related to Draft MOU was	August 2011	-----





Sl. No	Particulars	Date	Remarks
	shorted out between RRVPNL & petitioner.	to March 2012	
8	Signing of final MOU between Petitioner & RRVPNL	March 2012	An agreement was made between petitioner and RRVPNL on 1.3.2012 with completion schedule of June 2013.

22. We are of the view that the entire delay in the commissioning of Asset-A&B is due to severe ROW issues which was beyond the control of the petitioner. In case of Asset-C, the time over-run was due to higher overhead charges claimed by RRVPNL i.e. 40% of total estimated cost instead of 15% on depository works. But, it is observed that, during the signing of final MOU between petitioner and RRVPNL, in 1.3.2012, the completion schedule was revised and decided as in June, 2013. Accordingly, it is expected that the assets should have commissioned by June, 2013. However, the asset was commissioned on 3.2.2015, i.e. late by 19 months and 3 days, i.e. 583 days. After settling the issue of overhead charges, the petitioner and RRVPNL agreed to commission the asset in June, 2013. Thus, we do not find any reason to condone the delay beyond this scheduled date. The petitioner has not provided any justification for the time over-run for the events following the signing of the MOU and therefore we are not inclined to condone the time over-run from June, 2013 onwards for Asset-C.

23. The Hon'ble Appellate Tribunal for Electricity in its judgement dated 27.4.2011 in Appeal No.72/2010 has held that the additional cost due to time



over-run due to factors beyond the control of project developer shall be capitalised. Accordingly, IDC and IEDC for 30 months and 1 day in case of Asset-A and 30 months and 1 day in case of Asset-B are allowed to be capitalized. In case of Asset-C IDC and IEDC for 325 days is capitalized.

### **Cost over-run**

24. The petitioner has submitted that cost variation is due to variation in award cost received in competitive bidding compared to initial estimates (FR cost). For procurement, open competitive bidding route was followed by providing equal opportunity to all eligible firms. Lowest possible market prices for required product and services were obtained and contracts were awarded on basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than cost estimate depending upon prevailing market conditions. The reasons of cost variation as submitted by petitioner are as follows:-

(₹ in lakh)

Sl. No.	Asset Name	FR cost	Actual completed cost	Difference	Major Reason of cost over/under-run
1	Asset-A	6913.39	7786.96	+873.57	<ul style="list-style-type: none"> <li>• Cost increase due to FERV of ₹1231 lakh and ₹831 lakh for Asset-B and Asset-C respectively;</li> <li>• Cost increase due to consultancy charges on account of deposit work done by RRVPNL;</li> <li>• Cost Increase due to change in types of insulators;</li> <li>• Cost decrease due to decrease in line length (Line length reduced by 15 %);</li> <li>• Details of element wise</li> </ul>
2	Asset-B	4540.26	4724.47	+184.21	



Sl. No.	Asset Name	FR cost	Actual completed cost	Difference	Major Reason of cost over/under-run
					Variation in cost is given in Form 5 attached with the petition.
3	Asset-C	918.88	1518.38	+599.5	<ul style="list-style-type: none"> <li>• Cost increase due to FERV of ₹268 lakh;</li> <li>• Cost increase due to consultancy charges on account of deposit work done by RRVPNL;</li> <li>• Cost Increase due to higher awarded cost of Bus Reactor in comparison to FR cost.</li> </ul>

**Initial spares:**

25. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

- “(a) Coal-based/lignite-fired thermal generating stations - 4.0%  
(b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%  
(c) Hydro generating stations including pumped storage hydro generating station. - 4.0%  
  
(d) Transmission system  
(i) Transmission line - 1.00%  
(ii) Transmission Sub-station (Green Field) - 4.00%  
(iii) Transmission Sub-station (Brown Field) - 6.00%  
(iv) Series Compensation devices and HVDC Station - 4.00%  
(v) Gas Insulated Sub-station (GIS) - 5.00%  
(vi) Communication system - 3.5%”

26. The petitioner was directed to submit the year wise and element wise detail of spares discharged. The petitioner vide affidavit dated 4.4.2016 submitted as follows:-



(₹ in lakh)

Asset		Initial Spares	Upto COD	2015-16
Asset- A	Transmission Line	15.11	13.60	1.51
	Sub-station	0.00	0.00	0.00
Asset-B	Transmission Line	15.11	13.60	1.51
	Sub-station	0.00	0.00	0.00
Asset-C	Transmission Line	0.00	0.00	0.00
	Sub-station	18.87	18.87	0.00

27. We have considered submissions of the petitioner. The initial spares claimed by the petitioner are within the specified ceiling limits and hence it is allowed.

### IDC and IEDC

28. The petitioner has submitted the cash basis IDC for Asset-A, Asset-B and Asset-C vide affidavit dated 4.4.2016. The details submitted are as follows:-

(₹ in lakh)

Asset Name	IDC discharged in COD	IDC discharged in 2015-16	Total
Asset-A	204.75	3.80	<b>208.55</b>
Asset-B	133.65	3.42	<b>137.07</b>
Asset-C	43.25	0.64	<b>43.89</b>
<b>Total</b>	<b>381.65</b>	<b>7.86</b>	<b>389.51</b>

(₹ in lakh)

Asset Name	Capital cost as per Auditor's Certificate	IDC Adjustment	Total capital cost claimed as on COD
Asset-A	6167.38	3.80	6163.58
Asset-B	3913.48	3.42	3910.06
Asset-C	1043.79	0.64	1043.15
<b>Total</b>	<b>11124.65</b>	<b>7.86</b>	<b>11116.79</b>



29. As the time over-run of Asset-A and Asset-B has been condoned, the entire IDC and IEDC have been capitalised. In case of Asset-C, time over-run of 583 days is disallowed and hence IDC disallowed for the period as shown below:-

Total time till COD taken in completion of project( days)	1881.00
Scheduled time to complete as per IA (days)	974.00
Delay from SCOD to COD(days)	907.00
Total delay disallowed by the Commission (days)	583.00
Total IDC upto SCOD (₹ in lakh)	22.99
Total IDC from SCOD to COD (₹ in lakh)	20.90
<b>IDC disallowed (₹ in lakh)</b>	<b>13.43</b>
IDC allowed by the Commission (₹ in lakh)	30.46

Total time till COD taken in completion of project (days)	1881.00
Scheduled time to complete as per IA (days)	974.00
Delay from SCOD to COD (days)	907.00
Total delay disallowed by the Commission (days)	583.00
IEDC discharged upto COD (₹ in lakh)	25.84
<b>IEDC disallowed (₹ in lakh)</b>	<b>8.01</b>
IEDC allowed (₹ in lakh)	17.83

30. The total estimated cost claimed by the petitioner as on COD is exceeding the approved apportioned cost of Asset-C. The petitioner vide affidavit dated 4.4.2016 submitted that RCE is under approval and shall be submitted shortly. The petitioner has however not submitted the RCE till date. Hence, in the absence of RCE, the estimated completed cost for the 2014-19 tariff period has been limited to the approved apportioned cost.

31. The capital cost considered for the computation of transmission is as follows:-



(₹ in lakh)

Asset Name	Approved apportioned cost of the asset	Capital cost claimed after adjustment of IDC	Capital cost computed (after adjustment of IDC and IEDC)	Capital cost considered for the tariff computation
Asset-A	6913.39	6163.58	6163.58	6163.58
Asset-B	4540.26	3910.06	3910.06	3910.06
Asset-C	918.88	1043.15	1022.35	918.88
<b>Total</b>	<b>12372.53</b>	<b>11116.79</b>	<b>11095.99</b>	<b>10992.52</b>

### **Additional Capital Expenditure**

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

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

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law:”

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

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

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



the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation”.

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

34. The cut-off date in the case of instant transmission asset is 31.3.2019.

31. The petitioner has proposed additional capitalization of ₹1623.39 lakh, ₹814.42 lakh and ₹475.23 lakh for the years 2015-16 for Asset-A, Asset-B and Asset-C respectively towards balance and retention payment under Regulation 14(1)(i) of 2014 Tariff Regulations.

32. The total estimated completion cost of ₹6913.39 lakh, ₹4540.26 lakh and ₹918.88 lakh for Asset-A, Asset-B and Asset-C respectively including the additional capitalization is as shown below. The completion cost of Asset-C exceeds the approved apportioned cost of the assets. Additional capitalization proposed by the petitioner is allowed as claimed by the petitioner under Regulation 14(1)(i) of the 2014 Tariff Regulations in case of Assets-A and B. However, in case of Asset-C, the estimated completion cost as on 31.3.2019 is restricted to the approved apportioned cost of the asset.



(₹ in lakh)

Asset Name	Approved Apportioned Cost	Capital Cost as on COD	Additional Capitalization Claimed by petitioner as per Auditor's Certificate	Additional Capitalization Approved	Total Capital cost as on 31.3.2019
			2015-16	2015-16	
Asset-A	6913.39	6163.58	1619.59	749.81	6913.39
Asset-B	4540.26	3910.06	810.99	630.20	4540.26
Asset-C	918.88	918.88	474.59	0.00	918.88
<b>Total</b>	<b>12372.53</b>	<b>10992.52</b>	<b>2905.17</b>	<b>1380.01</b>	<b>12372.53</b>

### **Debt:Equity Ratio**

33. Regulation 19 (1) of the 2014 Tariff Regulations specifies 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:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.”

34. The petitioner has considered debt:equity ratio as 70:30 as on COD as well as for additional capitalisation. We have considered debt:equity ratio of 70:30 as on COD and for additional capitalization during 2015-16. The details of the debt:equity as on the date of COD for the assets and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-





(₹ in lakh)

Particulars	As on COD		Additional capitalization during 2014-19		As on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
<b>Asset-A</b>						
Debt	4314.51	70.00	524.87	70.00	4839.37	70.00
Equity	1849.07	30.00	224.94	30.00	2074.02	30.00
<b>Total</b>	<b>6163.58</b>	<b>100.00</b>	<b>749.81</b>	<b>100.00</b>	<b>6913.39</b>	<b>100.00</b>
<b>Asset-B</b>						
Debt	2737.07	70.00	441.14	70.00	3178.21	70.00
Equity	1172.99	30.00	189.06	30.00	1362.05	30.00
<b>Total</b>	<b>3910.06</b>	<b>100.00</b>	<b>630.20</b>	<b>100.00</b>	<b>4540.26</b>	<b>100.00</b>
<b>Asset-C</b>						
Debt	643.22	70.00	0.00	70.00	643.22	70.00
Equity	275.66	30.00	0.00	30.00	275.66	30.00
<b>Total</b>	<b>918.88</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>918.88</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

35. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides as under:-

“(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.”

36. The petitioner was directed vide provisional order dated 21.10.2015 to submit documents in support of date of drawl and exchange rate proof at actual



COD of the assets, for foreign loans i.e. IBRD V and also to provide if there is any default in interest payment alongwith Form-9 (details of allocation of corporate loans to various transmission assets). In response vide affidavit dated 4.4.2016, the petitioner submitted that, IBRD V (World Bank Loan) is drawn periodically based on actual expenditure incurred for which claims are lodged with World Bank for funding. The WB loan is generally sanctioned to a basket of projects. Since such draws are applicable for the project as a whole, allocation of the same to different elements of the project are done on the stage wise commissioning of various elements. As draws are made on a particular date exchange rate of that date is used as conversion rate to INR. But, for tariff purposes, the COD exchange rate is used for determining the loan component as on COD. Since, foreign currency is allocated on pro-rata for each element details of date of drawl of each element are not possible. The petitioner has submitted the proof of exchange rate considered.

37. The petitioner vide affidavit dated 11.4.2016 was directed to submit the detailed computation for increase in cost on account of FERV. The petitioner vide affidavit dated 21.4.2016 submitted that, the IBRD V loan has been drawn from a period of March 2010 till COD of the assets in various tranches. The foreign currency loan (USD) is converted to INR on date of each drawl based on prevailing exchange rate. As per Accounting Standards (AS), of the ICAI, the FERV on foreign currency loans as on 31<sup>st</sup> March every year is adjusted against capital cost. In these particular assets, drawl exchange rate is 1USD= ₹62.22 for



Asset-A and Asset-C and ₹62.82 for Asset-B. FERV amount is added to the capital cost upto COD, however, applicable interest rate is only 1.69%.

38. 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. 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 trying 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-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	4314.51	4314.51	4839.37	4839.37	4839.37
Cumulative Repayment upto previous year	0.00	43.62	388.25	752.56	1116.86
Net Loan-Opening	4314.51	4270.88	4451.13	4086.82	3722.51
Additions during the year	0.00	524.87	0.00	0.00	0.00
Repayment during the year	43.62	344.62	364.31	364.31	364.31
Net Loan-Closing	4270.88	4451.13	4086.82	3722.51	3358.20
Average Loan	4292.69	4361.01	4268.97	3904.66	3540.35
Rate of Interest (%)	1.6900	1.6900	1.6900	1.6900	1.6900
<b>Interest</b>	9.74	73.70	72.15	65.99	59.83

(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	2737.07	2737.07	3178.21	3178.21	3178.21
Cumulative Repayment upto	0.00	27.65	250.06	488.91	727.77



Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
previous year					
Net Loan-Opening	2737.07	2709.42	2928.15	2689.30	2450.44
Additions during the year	0.00	441.14	0.00	0.00	0.00
Repayment during the year	27.65	222.41	238.86	238.86	238.86
Net Loan-Closing	2709.42	2928.15	2689.30	2450.44	2211.58
Average Loan	2723.25	2818.79	2808.73	2569.87	2331.01
Rate of Interest (%)	1.6900	1.6900	1.6900	1.6900	1.6900
<b>Interest</b>	<b>6.18</b>	<b>47.64</b>	<b>47.47</b>	<b>43.43</b>	<b>39.39</b>

(₹ in lakh)

Asset-C	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	643.22	643.22	643.22	643.22	643.22
Cumulative Repayment upto previous year	0.00	27.65	76.17	124.68	173.20
Net Loan-Opening	643.22	615.57	567.05	518.53	470.02
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	27.65	48.52	48.52	48.52	48.52
Net Loan-Closing	615.57	567.05	518.53	470.02	421.50
Average Loan	629.39	591.31	542.79	494.28	445.76
Rate of Interest (%)	1.6900	1.6900	1.6900	1.6900	1.6900
<b>Interest</b>	<b>1.66</b>	<b>9.99</b>	<b>9.17</b>	<b>8.35</b>	<b>7.53</b>

### **Return on Equity("ROE")**

39. Clause (1)& (2) of Regulation 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 and run of the river hydro generating station, and at the base rate of 16.50% for the



storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

xxx”

**“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.”

40. The petitioner has submitted ROE at the rate of 20.243% after grossing up the ROE of 15.50% with MAT rate as per the above 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.

41. 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.



42. 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-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	1849.07	1849.07	2074.02	2074.02	2074.02
Additional Capitalization	0.00	224.94	0.00	0.00	0.00
Closing Equity	1849.07	2074.02	2074.02	2074.02	2074.02
Average Equity	1849.07	1961.55	2074.02	2074.02	2074.02
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>48.68</b>	<b>384.66</b>	<b>406.71</b>	<b>406.71</b>	<b>406.71</b>

(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	1172.99	1172.99	1362.05	1362.05	1362.05
Additional Capitalization	0.00	189.06	0.00	0.00	0.00
Closing Equity	1172.99	1362.05	1362.05	1362.05	1362.05
Average Equity	1172.99	1267.52	1362.05	1362.05	1362.05
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50



Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Tax rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>30.88</b>	<b>248.56</b>	<b>267.10</b>	<b>267.10</b>	<b>267.10</b>

(₹ in lakh)

Asset-C	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	275.66	275.66	275.66	275.66	275.66
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	275.66	275.66	275.66	275.66	275.66
Average Equity	275.66	275.66	275.66	275.66	275.66
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>8.44</b>	<b>54.06</b>	<b>54.06</b>	<b>54.06</b>	<b>54.06</b>

### Depreciation

43. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

**"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.”

44. 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”

45. The petitioner has claimed depreciation considering capital cost as on COD and additional capitalisation claimed by it for the 2014-19 tariff period.

46. We have considered the submissions of the petitioner and have computed depreciation considering capital expenditure of ₹6163.58 lakh, ₹3910.06 lakh and ₹918.88 lakh as on COD for Asset-A, Asset-B and Asset-C with additional capitalization of ₹749.81 lakh, ₹630.20 lakh and ₹0.00 lakh for Asset-A, Asset-B and Asset-C respectively. The weighted average useful life of the assets has been considered as 31, 29 and 25years for Asset-A, Asset-B and Asset-C in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-





(₹ in lakh)

Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross block	6163.58	6163.58	6913.39	6913.39	6913.39
Additional Capitalization	0.00	749.81	0.00	0.00	0.00
Closing Gross block	6163.58	6913.39	6913.39	6913.39	6913.39
Average Gross block	6163.58	6538.49	6913.39	6913.39	6913.39
Rate of Depreciation (%)	6154.51	6529.42	6904.32	6904.32	6904.32
Depreciable Value	5.272	5.271	5.270	5.270	5.270
Elapsed Life of the assets at beginning of the year	5539.06	5876.47	6213.89	6213.89	6213.89
Weighted Balance Useful life of the assets	0	1	2	3	4
Remaining Depreciable Value	31	30	29	28	27
<b>Depreciation</b>	<b>5539.06</b>	<b>5832.85</b>	<b>5825.64</b>	<b>5461.33</b>	<b>5097.02</b>

(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross block	3910.06	3910.06	4540.26	4540.26	4540.26
Additional Capitalization	0.00	630.20	0.00	0.00	0.00
Closing Gross block	3910.06	4540.26	4540.26	4540.26	4540.26
Average Gross block	3910.06	4225.16	4540.26	4540.26	4540.26
Rate of Depreciation (%)	5.267	5.264	5.261	5.261	5.261
Depreciable Value	3510.89	3794.48	4078.07	4078.07	4078.07
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	29	28	27	26	25
Remaining Depreciable Value	3510.89	3766.83	3828.02	3589.16	3350.30
<b>Depreciation</b>	<b>27.65</b>	<b>222.41</b>	<b>238.86</b>	<b>238.86</b>	<b>238.86</b>

(₹ in lakh)

Asset-C	2014- 15(pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross block	918.88	918.88	918.88	918.88	918.88
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	918.88	918.88	918.88	918.88	918.88
Average Gross block	918.88	918.88	918.88	918.88	918.88



Asset-C	2014-15(pro-rata)	2015-16	2016-17	2017-18	2018-19
Rate of Depreciation (%)	5.280	5.280	5.280	5.280	5.280
Depreciable Value	826.99	826.99	826.99	826.99	826.99
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	826.99	819.42	770.90	722.38	673.86
<b>Depreciation</b>	<b>7.58</b>	<b>48.52</b>	<b>48.52</b>	<b>48.52</b>	<b>48.52</b>

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

47. The petitioner has computed normative O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, the petitioner’s entitlement to O&M expenses have been worked out as given hereunder:-

Particulars	Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Norms as per Regulation	Double Circuit (Double Conductor) (in ₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
	400 kV Bays (in ₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Actual	Double Circuit (Double Conductor) (km)	76.52	76.52	76.52	76.52	76.52
	400 kV Bays (Nos.)	2	2	2	2	2
<b>Total O&amp;M Expenses (₹ in lakh)</b>		<b>23.45</b>	<b>180.54</b>	<b>186.51</b>	<b>192.71</b>	<b>199.10</b>

Particulars	Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Norms as per Regulation	Double Circuit (Double Conductor) (in ₹lakh/km)	0.707	0.731	0.755	0.78	0.806
	400 kV Bays (in ₹ lakh/bay)	60.3	62.3	64.37	66.51	68.71
Actual	Double Circuit (Single Conductor) (in ₹lakh/km)	76.52	76.52	76.52	76.52	76.52
	220 kV Bays (in ₹lakh/bay)	2	2	2	2	2
<b>Total O&amp;M Expenses (₹ in lakh)</b>		<b>23.45</b>	<b>180.54</b>	<b>186.51</b>	<b>192.71</b>	<b>199.10</b>



Particulars	Asset- C	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Norms as per Regulation	400 kV Bays (in lakh/bay)	60.3	62.3	64.37	66.51	68.71
Actual	400 kV Bays (in lakh/bay)	1	1	1	1	1
<b>Total O&amp;M Expenses (in lakh)</b>		<b>9.42</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>

48. The petitioner 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.

49. 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. The summary of O&M Expenses allowed for 2014-19 period are as follows:-

(₹ in lakh)					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Asset-A	23.45	180.54	186.51	192.71	199.10
Asset-B	23.45	180.54	186.51	192.71	199.10



Asset-C	9.42	62.30	64.37	66.51	68.71
<b>Total</b>	<b>56.32</b>	<b>423.37</b>	<b>437.40</b>	<b>451.92</b>	<b>466.90</b>

### **Interest on Working Capital (“IWC”)**

50. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

#### **(i) Receivables**

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months 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 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

#### **(iii) O & M Expenses**

Regulation 28 (1) (c) (iii) of the 2014 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 the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

**(iv) Rate of interest on working capital**

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

51. The interest on working capital allowed is shown in the table below:-

(₹ in lakh)					
Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	3.52	27.08	27.98	28.91	29.86
O & M expenses	1.95	15.04	15.54	16.06	16.59
Receivables	21.52	168.66	176.57	176.60	176.68
<b>Total</b>	<b>27.00</b>	<b>210.79</b>	<b>220.09</b>	<b>221.57</b>	<b>223.13</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>3.64</b>	<b>28.46</b>	<b>29.71</b>	<b>29.91</b>	<b>30.12</b>



(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	3.52	27.08	27.98	28.91	29.86
O & M expenses	1.95	15.04	15.54	16.06	16.59
Receivables	15.16	120.18	127.16	127.56	128.00
Total	20.63	162.30	170.68	172.53	174.45
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>2.79</b>	<b>21.91</b>	<b>23.04</b>	<b>23.29</b>	<b>23.55</b>

(₹ in lakh)

Asset-C	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	1.41	9.35	9.66	9.98	10.31
O & M expenses	0.78	5.19	5.36	5.54	5.73
Receivables	4.67	30.15	30.37	30.61	30.86
Total	6.87	44.69	45.39	46.13	46.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>0.93</b>	<b>6.03</b>	<b>6.13</b>	<b>6.23</b>	<b>6.33</b>

### Annual Transmission Charges

52. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)

Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	6163.58	6163.58	6913.39	6913.39	6913.39
Additional Capitalisation	0.00	749.81	0.00	0.00	0.00
Closing Gross Block	6163.58	6913.39	6913.39	6913.39	6913.39
Average Gross Block	6163.58	6538.49	6913.39	6913.39	6913.39
<b>Depreciation</b>					



Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Rate of Depreciation	5.272	5.271	5.270	5.270	5.270
Depreciable Value	5539.06	5876.47	6213.89	6213.89	6213.89
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	31	30	29	28	27
Remaining Depreciable Value	5539.06	5832.85	5825.64	5461.33	5097.02
Depreciation	43.62	344.62	364.31	364.31	364.31
<b>Interest on Loan</b>					
Gross Normative Loan	4314.51	4314.51	4839.37	4839.37	4839.37
Cumulative Repayment upto Previous Year	0.00	43.62	388.25	752.56	1116.86
Net Loan-Opening	4314.51	4270.88	4451.13	4086.82	3722.51
Additions	0.00	524.87	0.00	0.00	0.00
Repayment during the year	43.62	344.62	364.31	364.31	364.31
Net Loan-Closing	4270.88	4451.13	4086.82	3722.51	3358.20
Average Loan	4292.69	4361.01	4268.97	3904.66	3540.35
Weighted Average Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900
Interest	9.74	73.70	72.15	65.99	59.83
<b>Return on Equity</b>					
Opening Equity	1849.07	1849.07	2074.02	2074.02	2074.02
Additions	0.00	224.94	0.00	0.00	0.00
Closing Equity	1849.07	2074.02	2074.02	2074.02	2074.02
Average Equity	1849.07	1961.55	2074.02	2074.02	2074.02
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	48.68	384.66	406.71	406.71	406.71



Asset-A	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Interest on Working Capital</b>					
Maintenance Spares	3.52	27.08	27.98	28.91	29.86
O & M expenses	1.95	15.04	15.54	16.06	16.59
Receivables	21.52	168.66	176.57	176.60	176.68
<b>Total</b>	<b>27.00</b>	<b>210.79</b>	<b>220.09</b>	<b>221.57</b>	<b>223.13</b>
Interest	3.64	28.46	29.71	29.91	30.12
<b>Annual Transmission Charges</b>					
Depreciation	43.62	344.62	364.31	364.31	364.31
Interest on Loan	9.74	73.70	72.15	65.99	59.83
Return on Equity	48.68	384.66	406.71	406.71	406.71
Interest on Working Capital	3.64	28.46	29.71	29.91	30.12
O & M Expenses	23.45	180.54	186.51	192.71	199.10
<b>Total</b>	<b>129.14</b>	<b>1011.98</b>	<b>1059.39</b>	<b>1059.63</b>	<b>1060.07</b>

(₹ in lakh)

Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	3910.06	3910.06	4540.26	4540.26	4540.26
Additional Capitalization	0.00	630.20	0.00	0.00	0.00
Closing Gross Block	3910.06	4540.26	4540.26	4540.26	4540.26
Average Gross Block	3910.06	4225.16	4540.26	4540.26	4540.26
<b>Depreciation</b>					
Rate of Depreciation	5.267	5.264	5.261	5.261	5.261
Depreciable Value	3510.89	3794.48	4078.07	4078.07	4078.07
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00	4.00
Weighted Balance Useful life of the assets	29.00	28.00	27.00	26.00	25.00
Remaining Depreciable Value	3510.89	3766.83	3828.02	3589.16	3350.30
Depreciation	27.65	222.41	238.86	238.86	238.86





Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Interest on Loan</b>					
Gross Normative Loan	2737.07	2737.07	3178.21	3178.21	3178.21
Cumulative Repayment upto Previous Year	0.00	27.65	250.06	488.91	727.77
Net Loan-Opening	2737.07	2709.42	2928.15	2689.30	2450.44
Additions	0.00	441.14	0.00	0.00	0.00
Repayment during the year	27.65	222.41	238.86	238.86	238.86
Net Loan-Closing	2709.42	2928.15	2689.30	2450.44	2211.58
Average Loan	2723.25	2818.79	2808.73	2569.87	2331.01
Weighted Average Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900
Interest	6.18	47.64	47.47	43.43	39.39
<b>Return on Equity</b>					
Opening Equity	1172.99	1172.99	1362.05	1362.05	1362.05
Additions	0.00	189.06	0.00	0.00	0.00
Closing Equity	1172.99	1362.05	1362.05	1362.05	1362.05
Average Equity	1172.99	1267.52	1362.05	1362.05	1362.05
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	30.88	248.56	267.10	267.10	267.10
<b>Interest on Working Capital</b>					
Maintenance Spares	3.52	27.08	27.98	28.91	29.86
O & M expenses	1.95	15.04	15.54	16.06	16.59
Receivables	15.16	120.18	127.16	127.56	128.00
Total	20.63	162.30	170.68	172.53	174.45
Interest	2.79	21.91	23.04	23.29	23.55
<b>Annual Transmission Charges</b>					



Asset-B	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	27.65	222.41	238.86	238.86	238.86
Interest on Loan	6.18	47.64	47.47	43.43	39.39
Return on Equity	30.88	248.56	267.10	267.10	267.10
Interest on Working Capital	2.79	21.91	23.04	23.29	23.55
O & M Expenses	23.45	180.54	186.51	192.71	199.10
<b>Total</b>	<b>90.94</b>	<b>721.05</b>	<b>762.98</b>	<b>765.38</b>	<b>768.00</b>

(₹ in lakh)

Asset- C	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	918.88	918.88	918.88	918.88	918.88
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	918.88	918.88	918.88	918.88	918.88
Average Gross Block	918.88	918.88	918.88	918.88	918.88
<b>Depreciation</b>					
Rate of Depreciation	5.280	5.280	5.280	5.280	5.280
Depreciable Value	826.99	826.99	826.99	826.99	826.99
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00	4.00
Weighted Balance Useful life of the assets	25.00	24.00	23.00	22.00	21.00
Remaining Depreciable Value	826.99	819.42	770.90	722.38	673.86
Depreciation	7.58	48.52	48.52	48.52	48.52
<b>Interest on Loan</b>					
Gross Normative Loan	643.22	643.22	643.22	643.22	643.22
Cumulative Repayment upto Previous Year	0.00	27.65	76.17	124.68	173.20
Net Loan-Opening	643.22	615.57	567.05	518.53	470.02
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	27.65	48.52	48.52	48.52	48.52
Net Loan-Closing	615.57	567.05	518.53	470.02	421.50
Average Loan	629.39	591.31	542.79	494.28	445.76



Asset- C	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Weighted Average Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900
Interest	1.66	9.99	9.17	8.35	7.53
<b>Return on Equity</b>					
Opening Equity	275.66	275.66	275.66	275.66	275.66
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	275.66	275.66	275.66	275.66	275.66
Average Equity	275.66	275.66	275.66	275.66	275.66
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	8.44	54.06	54.06	54.06	54.06
<b>Interest on Working Capital</b>					
Maintenance Spares	1.41	9.35	9.66	9.98	10.31
O & M expenses	0.78	5.19	5.36	5.54	5.73
Receivables	4.67	30.15	30.37	30.61	30.86
Total	6.87	44.69	45.39	46.13	46.89
Interest	0.93	6.03	6.13	6.23	6.33
<b>Annual Transmission Charges</b>					
Depreciation	7.58	48.52	48.52	48.52	48.52
Interest on Loan	1.66	9.99	9.17	8.35	7.53
Return on Equity	8.44	54.06	54.06	54.06	54.06
Interest on Working Capital	0.93	6.03	6.13	6.23	6.33
O & M Expenses	9.42	62.30	64.37	66.51	68.71
<b>Total</b>	<b>28.02</b>	<b>180.90</b>	<b>182.25</b>	<b>183.67</b>	<b>185.15</b>



### **Filing Fee and Publication Expenses**

53. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

### **Licence Fee and RLDC Fees and Charges**

54. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. Rajasthan Discoms vide affidavit dated 3.2.2016 submitted that, details are not provided for expenditure in publication of notices. In response the petitioner vide affidavit dated 3.4.2016, submitted that, expenditure towards petition filing fee is in accordance with Regulation 42 of the 2009 Tariff Regulations.

55. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2) (b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

### **Service Tax**

56. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is



withdrawn from negative list in future. We are of the view that the petitioner's prayer of service tax is premature.

**Sharing of Transmission Charges**

57. 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.

58. This order disposes of Petition No. 199/TT/2015.

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

Sd/-  
**(A.S. Bakshi)**  
Member



**ANNEXURE-I**

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

(₹ in lakh)

Asset-A	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
IBRD V-DOCO loan-62.22	1.69	4314.33	0.00	4314.33
<b>Total</b>		<b>4314.33</b>	<b>0.00</b>	<b>4314.33</b>

(₹ in lakh)

Asset-B	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
IBRD V- Doco loan-62.82	1.69	2737.07	0.00	2737.07
<b>Total</b>		<b>2737.07</b>	<b>0.00</b>	<b>2737.07</b>

(₹ in lakh)

Asset- C	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
IBRD V- DOCO loan-62.22	1.69	730.15	0.00	730.15
<b>Total</b>		<b>730.15</b>	<b>0.00</b>	<b>730.15</b>



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN  
FOR TARIFF PERIOD 2014-19**

(₹ in lakh)

<b>Asset-A</b>	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	4314.33	4314.33	4314.33	4314.33	4314.33
Cumulative Repayments of Loans upto Previous Year	78.09	78.09	235.56	394.76	555.69
Net Loans Opening	4236.24	4236.24	4078.77	3919.57	3758.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	157.47	159.20	160.93	161.79
Net Closing Loan	4236.24	4078.77	3919.57	3758.64	3596.85
Average Net Loan	4236.24	4157.51	3999.17	3839.11	3677.75
Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900
Interest on Loan	71.59	70.26	67.59	64.88	62.15

(₹ in lakh)

<b>Asset-B</b>	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	2737.07	2737.07	2737.07	2737.07	2737.07
Cumulative Repayments of Loans upto Previous Year	49.54	49.54	149.53	250.53	352.63
Net Loans Opening	2687.53	2687.53	2587.54	2486.54	2384.44
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	99.99	101.00	102.10	102.64
Net Closing Loan	2687.53	2587.54	2486.54	2384.44	2281.80
Average Net Loan	2687.53	2637.54	2537.04	2435.49	2333.12
Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900
Interest on Loan	45.42	44.57	42.88	41.16	39.43

(₹ in lakh)

<b>Asset- C</b>	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	730.15	730.15	730.15	730.15	730.15
Cumulative Repayments of Loans upto Previous Year	13.22	13.22	39.87	66.81	94.04
Net Loans Opening	716.93	716.93	690.28	663.34	636.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	26.65	26.94	27.23	27.38
Net Closing Loan	716.93	690.28	663.34	636.11	608.73
Average Net Loan	716.93	703.61	676.81	649.73	622.42
Rate of Interest on Loan (%)	1.6900	1.6900	1.6900	1.6900	1.6900



