

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 223/TT/2016

Coram:

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

Date of Order : 14.09.2017

In the matter of:

Approval of Transmission Tariff under regulation-86 of CERC (Conduct of Business) Regulations' 1999 and CERC (Terms and conditions of Tariff) Regulations' 2014 from DOCO to 31.03.2019 for **Asset-1:** 765 kV, 3X80 MVAR Switchable line reactor for 765 kV S/C Gaya-Varanasi Transmission line as Bus reactor, along with associated bays at Gaya Sub-station and **Asset-2:** 3X110 MVAR, 765 kV Bus Reactor-I at 765/400 kV Varanasi GIS (Reactor shifting from Sasaram S/S) under "Transmission System for phase I Generation Projects in Jharkhand and West Bengal Part-A2".

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001
Haryana

....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
VidyutBhawan, VidyutMarg,
Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board



Vidyut Bhawan
Kumar House Complex Building II
Shimla-171004

6. Punjab State Electricity Board
The Mall, Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Luck now - 226 001
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 and Load Dispatch Group
Cennet Building, Adjacent to 66/11 kV Pitampura-3
Grid Building, Near PP Jewellers
Pitampura, New Delhi-110 034.
14. Chandigarh Administration
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.
UrjaBhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,



New Delhi-110002

18. Bihar State Power (Holding) Company Ltd.
(Formerly Bihar State Electricity Board)
Vidyut Bhawan, Bailey Road
Patna-800001
19. West Bengal State Electricity Distribution Company Ltd.
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091
20. Grid Corporation of Orissa Ltd.
Shahid Nagar,
Bhubhaneshwar-751007
21. Damodar Valley Corporation
DVC Tower, Maniktala Civic Centre, VIP Road
Calcutta-700054
22. Power Department, Govt. of Sikkim,
Gangtok-737101
23. Jharkhand State Electricity Board
In front of Main Secretariat
Doranda, Ranchi-834002
24. Essar Power Jharkhand Ltd
Essar House, 11 K.K.Marg
Mahalaxmi, Mumbai-400034
25. Adhunik Power and Natural Resources Ltd.
Crescent Towers (3rd Floor)
229 A J C Bose Road, Kolkata-700020
26. Corporate Power Ltd
8th and 9th Floor, Mahabir Tower,
Main Road Ranchi, Jharkhand-834001.....**Respondents**

For Petitioner : Shri S. S. Raju, PGCIL,
Shri Jasbir Singh, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri M.M. Mondal, PGCIL

For Respondents : Shri E. Shyamala, TANGEDCO
Shri R. Katihraavan, TANGEDCO



ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for 765kV, 3x80 MVAR Switchable line reactor for 765 kV S/C Gaya - Varanasi Transmission Line as Bus Reactor along with associated bays at Gaya Substation (referred as **Asset I**) and 3X110 MVAR, 765kV Bus Reactor –I at 765/400kV Varanasi GIS (Reactor shifting from Sasaram S/S) (referred as **Asset II**) under "Transmission System for Phase I Generation Projects in Jharkhand and West Bengal Part A2" 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").

2. The transmission system was discussed with the regional constituents in the Standing Committee Meetings of Eastern Region, Western Region and Northern Region held on 20.9.2010, 10.9.2009, and 29.12.2010 respectively as a part of the strengthening scheme for transfer of power to Eastern Region, Western Region and Northern Region. Further the scheme was also discussed in the Regional Power Committee (RPC) meetings of Eastern Region, Western Region and Northern Region held on 18-12-2010, 25-9-2009 and 04-1-2011 respectively. The investment approval of the project was accorded by Board of Directors of POWERGRID, the petitioner company, vide C/CP/Jharkhand and West Bengal Projects (Ph I) Part A2 dated 27th Dec 2011, for Rs. 2422.66 crores including an IDC of Rs. 140.70 Crores based on 3rd quarter 2011 price level. The Scope of work is as under:



Transmission Lines:

- Ranchi New (765/400kV S/s) - Dharamjaygarh/near Korba 765kV S/c
- Gaya - Varanasi 765 kV S/c
- LILO of Gaya - Balia 765 kV S/c line at Varanasi

Substations:

- Establishment of 2x1500MVA, **765/400 kV GIS substation at Varanasi**

Reactive Compensation (Scope covered in FR):

- 01 Nos. 765kV, 330MVAR Bus Reactor at 765/400kV GIS Varanasi S/s
- 02 Nos. 765kV, 240MVAR Line Reactor at 765/400kV GIS Varanasi S/s
- 01 Nos. 765kV, 330MVAR Line Reactor at 765/400kV Dharamjaygarh S/s
- 01 Nos. 765kV, 240MVAR Line Reactor (Switchable) at 765/400kV Ranchi S/s
- **2 Nos. 765kV, 240MVAR Line Reactor (Switchable) at 765/400kV Gaya S/s**

3. The details of the scope of work covered in various petitions under this project are as follows:

S. No.	Name of Asset	COD	Remark
1	Asset I : 3x80 MVAR Switchable line Reactor for 765 kV S/C Gaya – Balia Transmission line at Gaya Substation,	08.01.2015	Covered under petition No. 450/TT/2014
2	Asset II : 3x80 MVAR Switchable line Reactor for 765 kV S/C Ranchi - Dharamjaygarh Transmission Line along with associated bays at Ranchi Substation as Bus Reactor	21.12.2015	
3	Asset III : 3x80 MVAR Switchable line Reactor for 765 kV S/C Gaya - Varanasi Transmission Line along with associated bays at Gaya Substation as Bus Reactor	02.01.2016	Was covered under 450/TT/2014. Fresh Tariff petition to be filed
4	Asset-I : 1500 MVA, 765/400 kV ICT-1 & associated bays at Varanasi GIS S/S	01.04.2016	Covered under petition No. 273/TT/2015
5	Asset-II : 1500 MVA, 765/400 kV ICT-2	Not commis-	



S. No.	Name of Asset	COD	Remark
	& associated bays at Varanasi GIS S/S	sioned	
6	Asset-III: 330 MVAR, 765 kV Bus Reactor-1 at Varanasi GIS S/S-	01.04.2016	
7	Asset-IV: 765 kV S/C Balia-Varanasi line and associated bays including 240 MVAR Line Reactor at both end-	01.04.2016	
8	Asset-V: 765kV S/C Gaya-Varanasi transmission line and associated bays including 240MVAR Line Reactor-	21.04.2016	
9	Asset-VI: 765 kV S/C Ranchi - Dharamjaygarh line along with associated bays at Dharamjaygarh-	26.12.2015	
The assets covered under this instant petition are as follows:-			
1	*Asset I: 3x80 MVAR Switchable line Reactor for 765 kV S/C Gaya - Varanasi Transmission Line as Bus Reactor along with associated bays at Gaya Substation	02.01.2016	Initially covered under 450/TT/2014. Now under Current petition
2	Asset II: 3X110 MVAR, 765kV Bus Reactor –I at 765/400kV Varanasi GIS (Reactor shifting from Sasaram S/S)	01.10.2016 (Anticipated)	Covered under Current petition

4. The Commission, vide its order dated 26.2.2016 in petition no. 450/TT/2014, directed the petitioner to file a fresh petition for therein mentioned Asset III (i.e. 3x80 MVAR Switchable line Reactor for 765 kV S/C Gaya - Varanasi Transmission Line as Bus Reactor along with associated bays at Gaya Substation) in view of non-commissioning of the same. The said reactor (i.e. Asset-I) has been commissioned w.e.f. 02.01.2016.

5. The petitioner vide affidavit dated 29.08.2017 has submitted RCE approval dated 30.03.2017 whereby reactive compensation as claimed in the petition has been covered which was not covered in original Investment Approval.



6. Petitioner has claimed Asset –II as shifting of 1x330 MVAR line reactor from Sasaram end of Gaya-Sasaram-Fatehpur 765 kV line as 1x330 MVAR bus Reactor at Varanasi. However RPC approval for such shifting is not enclosed with the petition. Further, petitioner has not provided the details of existing line reactor at Sasaram whether it is switchable or non-switchable. In case it is switchable reactor, petitioner needs to provide details of de-capitalization of associated bay equipment.

7. The reactor shifted from Sasaram would need to be capitalized afresh as bus reactor at Varanasi, Hence petitioner should provide proper approval along with capitalization details for this Asset and file fresh petition with all these details. Hence this asset is not being considered currently.

8. The capital cost claimed by the petitioner as per auditor's certificate dated 19.5.2016 is as below:

(₹ in lakh)				
Particulars	Capital cost	IEDC	IDC	Total
Expenditure up to 31.3.2015	1313.50	27.83	104.09	1445.42
Expenditure from 1.4.2015 to 1.1.2016	946.18	28.39	78.79	1053.36
Expenditure form 2.1.2016 to 31.3.2016	14.83	-	-	14.83
Estimated expenditure during 2016-17	1185.44	-	-	1185.44
Estimated expenditure during 2017-18	550.09	-	-	550.09
Total	4010.04	56.22	182.88	4249.14

9. The details of the transmission charges claimed by the petitioner are as under:-(**pro-rata**)



(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	32.20	163.50	209.97	224.50
Interest on Loan	37.46	181.85	219.78	217.44
Return on Equity	35.86	182.05	233.80	249.98
Interest on working capital	4.81	22.10	25.56	26.56
O & M Expenses	43.14	180.24	186.22	192.40
Total	153.47	729.74	875.33	910.88

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

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	26.17	27.04	27.93	28.86
O & M Expenses	14.54	15.02	15.52	16.03
Receivables	103.43	121.62	145.89	151.81
Total	144.14	163.68	189.34	196.70
Rate of Interest	13.50%			
Interest	4.81	22.10	25.56	26.56

Date of Commercial Operation

11. The petitioner has claimed date of Commercial Operation of Assets I as 2.1.2016 (Actual). In this regard the petitioner vide letter dated 16.04.2016 has submitted self declaration certificate for Asset-I. Similarly in support of the claim of the COD, the petitioner vide letter dated 31.3.2016 has submitted RLDC certificate for Asset-I. In response to ROP dated 6.12.2016, the petitioner vide affidavit dated 02.02.2017 and 26.05.2017 has submitted the RLDC certificate for Asset-I and Asset-II respectively. The petitioner has under Regulation 43 of CEA



(measures related to Safety & Electricity Supply) Regulations, 2010 submitted the CEA certificate for the assets covered in the petition.

12. The petitioner has claimed date of Commercial Operation of Assets I as 02.01.2016 under the proviso 5 of Tariff Regulations, 2014. The RLDC Certificate for subject Asset-I (765 KV, 3x80 MVAR Switchable line reactor for 765KV S/C Gaya- Varanasi Transmission line as Bus Reactor along with associated bays at Gaya substation) commissioned w.e.f. 02.01.2016 has been submitted by the petitioner. CEA charging clearance certificate dated 23.12.2015 & COD letter dated 31.03.2016 have been submitted by the petitioner.

COD of Asset I

13. We have considered the submissions of the petitioner. The 765/400 kV Varanasi GIS substation was commissioned on 1.04.2016 and the 765 kV S/C Gaya-Varanasi transmission line was commissioned on 21.04.2016. The Commission vide RoP for hearing dated 27.12.2016 has directed the petitioner to submit RPC/SCM approval for using line reactor as bus reactor along with justification. In response the petitioner vide affidavit dated 02.02.2017 has submitted that the commissioning of the line reactor as bus reactor has been approved in 106th OCC meeting held on 26.02.2015 at ERPC, Kolkata. The extract of the minutes of the 106th OCC meeting dated 26.02.2015 is as follows:

“Commissioning of one No 240 MVAR (3X80 MVAR) Line reactor meant for 765 kV Gaya-varnasi S/C transmission line as bus reactor at Gaya S/S

765 kV Gaya-Varanasi S/C line is being constructed by POWERGRID under JIPP project with 240 MVAR (3X80 MVAR) line reactor. However the commissioning of the said line will be delayed considerably due to ROW problems. In the mean time, the line reactor of the said line, have arrived at site and likely to be commissioned by March, 2015.



It is proposed that the said 240 MVAR line reactor may be installed & commissioned as bus reactor at Gaya sub-station to contain the voltage problems. After completion of the line (765 kV Gaya-Varanasi S/C line), the said Reactor will be commissioned along with the line as a Line Reactor.

OCC agreed for the above proposal

14. It is observed that the petitioner has obtained approval of Eastern Regional Power Committee (ERPC) OCC to utilize line reactor as Bus Reactor & the petitioner has submitted RLDC certificate in support of trial operation as per the requirement of 2014 Tariff Regulations. Therefore the COD of the asset has been considered as 02.01.2016.

Time over run:

15. As per the Investment Approval, the commissioning schedule of the project is 32 months from the date of Investment Approval. The date of Investment Approval is 27.12.2011 hence the assets are to be commissioned in the progressive manner up to 27.08.2014 against which the subject assets are put under commercial operation as follows.

S. No.	Name of Asset	Scheduled Completion	Actual/ Anticipated COD	Actual/ Allowed COD	Delay
1	Asset I: 3x80 MVAR Switchable line Reactor for 765 kV S/C Gaya - Varanasi Transmission Line as Bus Reactor along with associated bays at Gaya Substation	27.08.2014	2.1.2016 (Actual)	2.1.2016	16 months & 6 days (494 days)

16. There is delay of 16 months and 6 days in the commissioning of Asset –I. In reply, the petitioner has submitted that the 3x80 MVAR switchable line Reactor



(subject asset) was envisaged to be installed and commissioned along with the 765 kV S/C Gaya-Varanasi transmission line. The completion of this 765 kV S/C Gaya-Varanasi TL was delayed due to acute RoW problem and also due to the delay in completion of Varanasi substation owing to unforeseen issues regarding possession of land for Varanasi sub-station. The work of route alignment of 765 kV S/C Gaya – Varanasi line was completed before the award of main transmission line package. The work of detail survey was also started by the agency within a month of award of work and foundation work commenced in August 2012. In spite of best efforts, the commissioning of the line was delayed w.r.t. the schedule. In a nutshell, the petitioner has stated that this time overrun is mainly attributed to various ROW problems encountered during construction of the line, forest clearance in UP and getting possession of land for Varanasi substation.

Analysis and decision:

17. The petitioner vide affidavit dated 21.10.2016 has submitted that the above mentioned 765kV S/C Gaya-Varanasi TL was commissioned w.e.f. 21.04.2016. The delay in commissioning of this 765kV S/C Gaya-Varanasi TL (commissioned w.e.f. 21.04.2016 with corresponding delay of 20 months) was condoned by the Commission vide its order dated 03.06.2016 in Petition No. 273/TT/2015. The relevant extracts corresponding to reasons for time over run vide Order dated 30.05.2016 in petition no. 273/TT/2015 are as below:

Delay in commissioning of 765kV S/C Gaya-Varanasi Transmission Line

“27. The petitioner has submitted that the work of route alignment of 765 kV S/C Gaya - Varanasi line was completed before the award of main transmission line package. The work of detail survey was also started by the



agency within a month of award of work and foundation work was commenced in August 2012. In spite of best efforts, the commissioning of the line is delayed w.r.t the schedule. This time over run is mainly attributed to various ROW problems encountered during construction of the line, forest clearance in U.P. and possession of land for Varanasi substation. Further, there had been frequent stoppage of work due to obstructions created by land owners being affected by the construction work. The matter had been referred to local and district authorities for resolving the issues and in most of the cases the matter had been resolved with hindrances lasting for 10-15 days and up to August 2014, 710 nos. of foundations out of 730 nos. were completed. However there were some locations where ROW problems were quite severe. However in spite of best efforts and several correspondences and regular follow up at various levels, the obstruction has not been removed till date.”

"28. As regards delay due to forest clearance, the petitioner has submitted that the 765 kV Gaya- Varanasi line passes through the state of Bihar and Uttar Pradesh and Social Forests (at the road and canal crossing). Works in altogether 4 sections in UP and Bihar are affected due to delay in forest clearance. With Order in Petition No. 273/TT/2015 Page 19 regard forest clearance in UP, the proposals were submitted to concern DFOs on 30.7.2012 (Mirzapur and Banaras) and 11.10.2012 (Ramnagar). After completion of verification and examination of proposals the same was forwarded by DFOs to the Nodal Officer on 17.9.2013 (Banaras). Further queries raised by Nodal Officer have been complied. However requisite clearance is yet not issued by the concerned authority. Matter is being rigorously followed up with forest authorities. As regards forest clearance in Bihar, the proposal was submitted to the Nodal Officer Bihar on 30.7.2012. Stage I clearance received on 29.7.2013. As per the conditions of Stage I clearance, the petitioner had to deposit amount towards NPV, compensatory affore station and plantation of dwarf trees. The demand for NPV was received and paid by the petitioner on 21.9.2013. However the demand against other heads viz. CA and dwarf tree plantation could be received from respective forest divisions after a lot of persuasion. Considerable time was



lapsed in obtaining the demand letter for CA and dwarf plantation from all the forest divisions. In the meantime there was received till March 2015 (Demand Note received from Rohtas Division vide letter dated 23.3.15). After compliance of stage I clearance, final forest clearance was issued vide letter dated 26.8.2015."

.....

"35. With regard to the issue of land acquisition of Varanasi Sub-station in Chandauli, Roopchandrapur and Thathra village, it is observed that the first letter for acquisition of land for construction of substation has been forwarded to the DM Chandauli on 10.9.2010. The petitioner has submitted the documentary evidence in the forms of letter to Chief Minister (UP) and Ministry of Power, Gol dated 22.9.2010 along with paper cuttings. The matter was taken up with DM, Varanasi. The direct purchase through negotiation was opted due to delay in land acquiring. After various correspondences with administration and concerned authorities, the Gazette notification was published for section-4 and section-6 on 26.11.13 and 22.4.2014 respectively. The whole procedure took around more than two years for delay in commissioning of project from its scheduled date of commissioning. This is to the tune of around 600 days of completing the entire process."

.....

37. As regards delay in commissioning of 765kV S/C Gaya-Varanasi Transmission Line, it is observed that the work of route alignment of 765 kV S/C Gaya - Varanasi line was completed before the award of main transmission line package. The work of detail survey was also started by the agency within a month of award of work and foundation work was commenced in August 2012. Based on the documents available, it is observed that the time over run is attributed to various ROW problems encountered during construction of the line, forest clearance in UP and possession of land for Varanasi substation. Further, there have been severe obstructions from the local people.

38. As regards delay due to forest clearance, the petitioner has submitted that the 765 kV Gaya- Varanasi line passes through the state of Bihar and Uttar



Pradesh. The petitioner has submitted the required documents to substantiate the claim towards obtaining delay in forest clearances in these 2 regions. It is observed that it took more than a year to move the application from DFOs to the Nodal Officers, despite regular persuasion by the petitioner.

40. In view of the above discussion and having perused the available documents and as discussed in the aforesaid paras, we are of the view that the time over-run in the commissioning of the instant assets is beyond the control of the petitioner and not attributable to the petitioner. The time overrun of 584 days in Asset I, III, & IV, of 604 days in Asset V, of 487 days in Asset VI and an of 659 days in Asset II is thus being condoned.

18. We have considered the submissions of the petitioner with respect to the time overrun. The time over run is mainly attributed to various ROW problems encountered during construction of Gaya-Varanasi transmission line, forest clearance in U.P. and possession of land for Varanasi substation. The time overrun of about 20 Months (604 days) for 765 KV S/C Gaya-Varanasi transmission line and associated bays has been condoned by the Commission due to reasons beyond the control of the petitioner and not attributable to the petitioner vide Order dated 30.05.2016 in petition no. 273/TT/2015 (COD-21.04.2016). However, the instant asset has been actually commissioned on 02.01.2016. Therefore, the Time over run of 16 months and 6 days (494 days) for the instant asset in the instant petition is also condoned.

Capital Cost:

19. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”



(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

20. The petitioner has submitted the Capital Cost incurred up to COD and anticipated additional capital expenditure up to 31.03.2019 vide affidavit dated 21.10.2016 & auditor certificate dated 19.05.16. It has also submitted approval of tariff based on actual/estimated expenditure incurred up to COD and projected to be incurred during 2016-17, 2017-18 in respect of the subject asset as given below:



(₹ in Lakh)

Name of the element	FR Appportioned Approved Cost	Proj. exp. up to COD	Proj. exp. from COD to 31.03.2016	Proj. exp. From 2016 -17	Proj exp. From 2017 -18	Estimated completion Cost
Asset-I	4318.37	2498.78*	14.83	1185.44	550.09	4249.14

(*Capital cost is based on COD of 2.1.2016. Initial spares of ₹160.40 lakh included)

21. Bihar State Power (Holding) Co. Ltd. i.e. BSP(H)CL vide affidavit dated 21.12.2016 has submitted that despite time overrun, there is no cost overrun which is indicative of higher estimate and thus cost overrun cannot be determined. In response to ROP dated 06.12.2016, the petitioner has submitted the details of IDC, IEDC and justification for cost estimates.

22. We have considered the submissions of the petitioner with respect to the Capital Cost. Against the total appportioned approved cost of Rs. 4318.37 lakhs, the Estimated Completed Cost is Rs.4249.14 lakh. There being no cost overrun in comparison to FR appportioned approved cost and in view of petitioner's justifications, the same has been allowed.

Treatment of IDC

23. The petitioner has submitted the IDC discharged up to COD and 'IDC to be discharged' after COD i.e. during 2015-16 and 2016-17 vide affidavit dated 21.10.2016, which are as follows:-

(₹ in lakh)

Interest During Construction (IDC)			
Claimed as on COD as per the Auditor's Certificate 19.5.2016	Discharged up to COD	Balance Accrued IDC as on COD to be discharged during 2015-16	Balance Accrued IDC as on COD to be discharged during 2016-17
182.88	123.66	35.49	23.73



24. The IDC claimed by the petitioner has been verified based on the available information i.e. loan details in Form-9C and statement of calculation of IDC submitted vide affidavit 21.10.2016. The same is found to be in order. The undischarged IDC as on the COD (Rs. 59.22 lakh), has been disallowed from the capital cost as on COD and the same is being considered along with the allowable add cap during 2015-16 and 2016-17. The IDC allowed is as below:

(₹ in lakh)

IDC allowed as on COD	Balance Accrued IDC as on COD to be discharged between 2.1.16 and 31.3.16	Balance Accrued IDC as on COD to be discharged during 2016-17
123.66	35.49	23.73

25. The allowable capital cost as on COD is as follows:

(₹ in lakh)

Name of the element	FR Apportioned Approved Cost	Expenditure upto COD
Asset-I	4318.37	2498.78

Initial Spares

26. The Initial Spares claimed by the petitioner is as follows:

(₹ in lakh)

Name of the element	Plant & machinery cost *	Spares	
		TL	SS
Asset I	4010.04	-	160.40 (3.99 %)

*Plant & machinery cost excluding IDC, IEDC, Land Cost & Cost of Civil works

27. The actual discharge of initial spares submitted by the petitioner vide affidavit dated 2.2.2017 are as under:



(₹ in lakh)

Name of the element	Total Initial spares	Initial spares upto COD	Estd Exp. on Initial spares during 2016-17	Estd Exp. on Initial spares during 2017-18
	S/s	S/s	S/s	S/s
Asset I	160.40	36.09	22.53	101.78

Note: Expenditure on Initial spares from COD to 31.03.2016 is NIL.

28. BSP(H)CL vide affidavit dated 21.12.2016 has submitted that Asset-II has been shifted from Sasaram along with their spares and hence no spares would be necessary yet an amount of Rs. 5.73 lakh has been claimed which may not be permitted. While the asset II is not considered in this case, for asset-I the initial spares are within the ceiling limit as per Regulation 13(ii) of CERC (Terms & Conditions of Tariff) Regulations' 2014 and accordingly the same have been allowed. The submission of BSP(H)CL would be considered at the time of deciding the case of Asset-II.

Treatment of IEDC

29. The petitioner claimed ₹56.22 lakh as IEDC. Usually, while granting transmission tariff, the IEDC limit mentioned in the 'Abstract Cost Estimate' is considered for allowing the IEDC. In the instant case, the "IEDC limit" has been mentioned in the 'Abstract Cost Estimate' as 5% of the hard cost. The IEDC claimed by the petitioner as on COD is lower than that mentioned in the 'Abstract Cost Estimate'. Accordingly, the IEDC claimed as above is allowed to be capitalized in the present case.



Additional Capitalization:

30. 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.”

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

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

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



33. The petitioner vide affidavit dated 21.10.2016 has submitted the additional capitalization projected to be incurred during 2016-17 & 2017-18 is given below:

(₹ in lakh)

Name of the element	Add Cap from COD to 31.03.2016	Add Cap to 2016 to 2017	Add Cap to 2017 to 2018	Total Add Cap Exp.
Asset-I	14.83	1185.44	550.09	1750.36

34. We have considered the submission of the petitioner and respondent. The additional Capitalization incurred/projected to be incurred for Asset – 1 is on account of Balance/Retention Payments and is within cut-off date and is covered under clause 14(1) (i) of Tariff Regulation'2014. Initial spares are included as per actual discharge of initial spares.

Capital cost for tariff

35. Based on the discussion in the foregoing para's, the capital cost is considered as under:

(₹ in lakh)

Capital Cost claimed as on COD	2498.78
Less: Un-discharged IDC as on COD	59.22
Capital Cost allowable as on COD	2439.56
Add: Add-Cap during COD to 31.3.16	14.83
Add: IDC to be discharged during COD to 31.3.16	35.49
Capital Cost as on 31.03.2016	2489.88
Add: Add-Cap During 2016-17	1185.44
Add: IDC to be discharged during 2016-17	23.73
Capital Cost as on 31.03.2017	3699.05
Add: Add-Cap During 2017-18	550.09
Capital Cost as on 31.03.2018	4249.14
Total completion cost	4249.14



Debt-Equity Ratio

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

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

Provided that:

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

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

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

37. The petitioner has claimed debt: equity ratio of 70:30 as on the date of commercial operation. Debt: Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt: Equity ratio in respect of the instant assetas on the date of commercial operation and as on 31.3.2019 are as under:-



(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1707.69	70.00	2974.40	70.00
Equity	731.87	30.00	1274.74	30.00
Total	2439.56	100.00	4249.14	100.00

Return on Equity

38. Clause (1) and (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:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation



(RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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.”

39. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961%, as provided under Regulation 25(2)(i) of the 2014 Tariff



Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period 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. 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. BRPL has submitted that effective tax rate should be allowed as per Regulation 25 of the 2014 Tariff Regulations and the petitioner should submit the details of working of effective tax rate.

40. We have considered the submissions made by the petitioner and BRPL. 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. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE allowed is as follows:-



(₹ in lakh)

Particulars	2015-16 (2.1.2016 to 31.3.2016)	2016-17	2017-18	2018-19
Opening Equity	731.87	746.96	1109.71	1274.74
Addition due to Additional Capitalisation	15.10	362.75	165.03	0.00
Closing Equity	746.96	1109.71	1274.74	1274.74
Average Equity	739.42	928.34	1192.23	1274.74
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	35.66	182.05	233.80	249.98

Interest on Loan (IoL)

41. Regulation 26 of the 2014 Tariff Regulations are provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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



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

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

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

42. In these calculations, interest on loan has been worked out as hereinafter:-

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

(ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period; and

(iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

43. Detailed calculation of the weighted average rate of interest has been given in **Annexure** to this order.

44. Based on above, details of Interest on Loan calculated are as follows:-

Particulars	(₹ in lakh)			
	2015-16 (2.1.2016 to 31.3.2016)	2016-17	2017-18	2018-19
Gross Normative Loan	1707.69	1742.92	2589.33	2974.40
Cumulative Repayment up to Previous Year	0.00	32.02	195.51	405.47
Net Loan-Opening	1707.69	1710.89	2393.82	2568.93
Addition due to Additional Capitalisation	35.22	846.42	385.06	0.00
Repayment during the year	32.02	163.49	209.96	224.48



Net Loan-Closing	1710.89	2393.82	2568.93	2344.45
Average Loan	1709.29	2052.36	2481.38	2456.69
Weighted Average Rate of Interest on Loan	8.86%	8.86%	8.86%	8.85%
Interest	37.25	181.86	219.80	217.46

Depreciation

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

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

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

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

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



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

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

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

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

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

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

46. Depreciation has been allowed in accordance with Regulation 27 of the 2014 Tariff Regulations. The instant assets were put under commercial operation during 2016-17. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.



47. Details of the depreciation allowed are as under:-

Particulars	(₹ in lakh)			
	2015-16 (2.1.2016 to 31.3.2016)	2016-17	2017-18	2018-19
Opening Gross Block	2439.56	2489.88	3699.05	4249.14
Additional Capital expenditure	50.32	1209.17	550.09	0.00
Closing Gross Block	2489.88	3699.05	4249.14	4249.14
Average Gross Block	2464.72	3094.46	3974.09	4249.14
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%
Depreciable Value	2218.25	2785.02	3576.68	3824.23
Remaining Depreciable Value	2218.25	2753.00	3381.17	3418.76
Depreciation	32.02	163.49	209.96	224.48

Operation & Maintenance Expenses (O & M Expenses)

48. The O&M Expenses claimed by the petitioner for 2014-19 vide affidavit dated 21.10.2016 are as follows:

Element	(₹ in lakh)			
	2015-16 (2.1.2016 to 31.3.2016)	2016-17	2017-18	2018-19
Asset-I	43.14	180.24	186.22	192.40

The O&M expenses have been calculated as given below:

Element	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I (COD:02.01.2016)					
2 Nos. 765 kV bays	0	42.89	180.24	186.22	192.40
Total	0	42.89	180.24	186.22	192.40

The petitioner has claimed the O&M Expenses for the Assets covered in the instant petition as per norms specified in Tariff Regulations, 2014. The O&M expenses for Assets-I covered for the FY-2015-16 in the instant petition are not

in accordance with the norms specified in CERC Tariff Regulations, 2014-19 and same may be restricted as per norms specified in Tariff Regulations, 2014.

Interest on Working Capital (IWC)

49. Clause 1(c) and clause (3) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

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

50. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner’s entitlement to interest thereon are discussed hereunder:-



(i) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

(ii) O & M expenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Proviso 3 of Regulation 28 of tariff regulation' 2014, SBI Base rate 10.00% as on 1.4.2015 plus 350 Bps i.e. 13.50% has been considered for the asset, as the rate of interest on working capital.

51. The interest on working capital as determined is shown in the table given below:-

(₹in lakh)

Particulars	2015-16 (2.1.2016 to 31.3.2016)	2016-17 (1.4.2016 to 31.3.2017)	2017-18	2018-19
Maintenance Spares	26.16	27.04	27.93	28.86
O & M expenses	14.53	15.02	15.52	16.03
Receivables	103.43	121.62	145.89	151.81
Total	144.13	163.68	189.34	196.71
Interest	4.78	22.10	25.56	26.56



Transmission charges

52. The transmission charges being allowed for the instant assets are summarized hereunder:-

Particulars	(₹ in lakh)			
	2015-16 (2.1.2016 to 31.3.2016)	2016-17 (1.4.2016 to 31.3.2017)	2017-18	2018-19
Depreciation	32.02	163.49	209.96	224.48
Interest on Loan	37.25	181.86	219.80	217.46
Return on equity	35.66	182.05	233.80	249.98
Interest on Working Capital	4.78	22.10	25.56	26.56
O & M Expenses	42.89	180.24	186.22	192.4
Total	152.60	729.74	875.33	910.88

Sharing of Transmission Charges:

53. The Tariff for Transmission of Electricity (Annual Fixed Cost) as per shall be shared as per Regulation-43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges shall be recovered on monthly basis and the billing collection and disbursement of Transmission Charges shall be governed by provision of CERC (Sharing of interstate Transmission Charges and Losses) Regulations, 2010. The transmission tariff for the asset covered under this petition has been allowed to be charged from the Respondents on the basis set out above.

54. BRPL vide affidavit dated 05.12.2016 and BSP(H)CL vide affidavit dated 21.12.2016 have submitted that the petitioner has not filed the 'Transmission Service Agreement' between the transmission licensee and the designated inter-State customers as per provisions of Regulation 3(63) of the Tariff Regulations, 2014. The discussions at the NRPC meetings cited by the Petitioner can at best be taken note off but cannot be treated as the 'Transmission service Agreement'.



With regard to 'Transmission Service Agreement' the petitioner vide affidavit dated 19.01.2017 has submitted that as per clause 13(5) of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, the notified Model Transmission Service Agreement provides the provision for sharing of transmission charges. As per above Regulation, signing of TSA is not mandatory. In this case, it is submitted that BRPL has already signed TSA on 19th Aug, 2011 & signed copy of TSA with BRPL (relevant extract) has been submitted by the petitioner.

21. In the Standing Committee Meeting held on 20.9.2010, it was agreed that "the transmission charges for common transmission system would be borne by the generation developers of Jharkhand as well as WBSEDCL till the time the long term beneficiaries are finalized. In response to the ROP dated 6.12.2016 with regard to status of capacity tied-up/ contracted with the distribution licensees alongwith capacity, the petitioner vide affidavit dated 2.2.2017 has submitted as under:-

Sr. No.	Generator	LTA Applied for (MW)	Status	Firm beneficiary	Remarks
1	Adhunik Power & Natural Resources Ltd.	450	Commissioned	Tamil Nadu: 100 MW; West Bengal: 100 MW	100 MW each LTA to Tamil Nadu (SR) & West Bengal Operational
2	Essar Power (Jharkhand) Ltd.	1100	Commissioned	Bihar:750 MW NPCL:240 MW Jharkhand 12%	LTA relinquished
3	Corporate Power Ltd. Phase I	480	-	-	Abandoned
4	Corporate Power Ltd. Phase-I	480	-	-	Abandoned
5.	WBSEDCL	11000	-	-	Not tied up



					yet
	Total	13510			

55. The petitioner has clarified that discussions held in the Standing Committee Meeting held on 20.09.2010 are of period prior to POC sharing mechanism. It is relevant to mention here that the subject assets are installed and commissioned/ anticipated to be commissioned at the existing sub-stations of POWERGRID i.e. 765/400kV Sasaram& Varanasi S/s. The transmission lines associated/ corresponding to the subject assets (765 kV S/C Gaya -Varanasi Transmission Line and LILO of this 765 kV S/C Gaya- Fatehpur Line at Varanasi S/S) have already been commissioned and are fully operational wheeling power through the grid.

56. Further, the tariff for these transmission lines (i.e. 765 kV S/C Gaya - Varanasi Transmission Line under JIPP-A2 and LILO of this 765 kV S/C Gaya- Fatehpur Line at Varanasi S/S under NRSS-VIII) has already been approved by the Commission (vide order dated 03.06.2016 in petition no. 273/TT/2015 and order dated 30.05.2016 in petition no. 277/TT/2015) and wherein the sharing of transmission charges is being done through POC mechanism as directed in the said orders.

57. The petitioner has claimed that 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. We have considered the submissions of the petitioner and respondent. 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.

59. This order disposes of Petition No. 223/TT/2016.

Sd/-
(M.K. Iyer)
Member

Sd/-
(A.S. Bakshi)
Member

Sd/-
(A.K. Singhal)
Member

Sd/-
(Gireesh B. Pradhan)
Chairperson



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(` in Lacs)					
	Details of Loan	2015-16	2016-17	2017-18	2018-19
1	BOND XLII				
	Gross loan opening	300.00	300.00	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	300.00	300.00	300.00	300.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	300.00	300.00	300.00	300.00
	Average Loan	300.00	300.00	300.00	300.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	26.40	26.40	26.40	26.40
2	BOND-XLV				
	Gross loan opening	175.00	175.00	175.00	175.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	14.58
	Net Loan-Opening	175.00	175.00	175.00	160.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	14.58	14.58
	Net Loan-Closing	175.00	175.00	160.42	145.84
	Average Loan	175.00	175.00	167.71	153.13
	Rate of Interest	9.65%	9.65%	9.65%	9.65%
	Interest	16.89	16.89	16.18	14.78
3	BOND-XLIV (CHILD 1)				
	Gross loan opening	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	50.00	50.00	50.00	50.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	16.67

	Net Loan-Closing	50.00	50.00	50.00	33.33
	Average Loan	50.00	50.00	50.00	41.67
	Rate of Interest	8.70%	8.70%	8.70%	8.70%
	Interest	4.35	4.35	4.35	3.62
4	BOND-XLVI				
	Gross loan opening	486.79	486.79	486.79	486.79
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	486.79	486.79	486.79	486.79
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	486.79	486.79	486.79	486.79
	Average Loan	486.79	486.79	486.79	486.79
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	45.27	45.27	45.27	45.27
5	SBI 10000 (1.5.2014)				
	Gross loan opening	0.00	10.38	10.38	10.38
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	10.38	10.38	10.38
	Additions during the year	10.38	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	10.38	10.38	10.38	10.38
	Average Loan	5.19	10.38	10.38	10.38
	Rate of Interest	9.55%	9.55%	9.55%	9.55%
	Interest	0.50	0.99	0.99	0.99
6	BOND-LI				
	Gross loan opening	695.90	695.90	695.90	695.90
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	695.90	695.90	695.90	695.90
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	695.90	695.90	695.90	695.90
	Average Loan	695.90	695.90	695.90	695.90
	Rate of Interest	8.40%	8.40%	8.40%	8.40%
	Interest	58.46	58.46	58.46	58.46



7	BOND-LI (ADD-CAP)				
	Gross loan opening	0.00	24.84	24.84	24.84
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	24.84	24.84	24.84
	Additions during the year	24.84	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	24.84	24.84	24.84	24.84
	Average Loan	12.42	24.84	24.84	24.84
	Rate of Interest	8.40%	8.40%	8.40%	8.40%
	Interest	1.04	2.09	2.09	2.09
	Total Loan				
	Gross loan opening	1707.69	1742.91	1742.91	1742.91
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	14.58
	Net Loan-Opening	1707.69	1742.91	1742.91	1728.33
	Additions during the year	35.22	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	14.58	31.25
	Net Loan-Closing	1742.91	1742.91	1728.33	1697.08
	Average Loan	1725.30	1742.91	1735.62	1712.71
	Rate of Interest	8.86%	8.86%	8.86%	8.85%
	Interest	152.90	154.44	153.74	151.61

