

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 55/TT/2017

Coram:

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

Date of Hearing: 3.8.2017

Date of Order: 30.11.2017

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for determination of transmission tariff from COD to 31.3.2019 for Asset-I: Combined Assets (a) One circuit of 400 kV D/C Dehradun – Bagpat line alongwith associated bays at both ends. Part of second circuit of 400 kV D/C Dehradun – Bagpat T/L as 400 kV S/C Roorkee – Dehradun line from Dehradun end and partly as 400 kV S/C Saharanpur – Bagpat line from Bagpat end using part of one circuit of 400 kV D/C Roorkee – Saharanpur line (under NRSS XXI) at inter-section point alongwith associated bays at Dehradun and Bagpat end, (b) 400/220 kV, 315 MVA ICT-I at Dehradun and associated bays with 1 no. 220 kV line bays, (c) 400/220 kV, 315 MVA ICT-II at Dehradun and associated bays with 1 no. 220 kV line bays and (d) 80 MVAR Bus reactor at Dehradun and associated bays; and Asset-II: 4 nos. 220 kV bays at Dehradun S/S under NRSS-XVIII Scheme in Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
“Saudamini”, Sector 29, Gurgaon-122001
Haryana

....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur



3. Jaipur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
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)
Lucknow - 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 & Load Dispatch Group
Pitampura, New Delhi.
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

For Petitioner : Shri S.K. Niranjana, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Rakesh Prasad, PGCIL
Shri B. Dash, PGCIL
Shri V.P. Rastogi, PGCIL

For Respondents : Sh. R. B. Sharma, Advocate, BRPL

ORDER

The present petition has been filed by Power Grid Corporation of India Limited. ("PGCIL") seeking approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the 2014 Tariff Regulations) for determination of transmission tariff from COD to 31.3.2019 for Asset-I: Combined Assets (a) One circuit of 400 kV D/C Dehradun – Bagpat line alongwith associated bays at both ends. Part of second circuit of 400 kV D/C Dehradun – Bagpat T/L as 400 kV S/C Roorkee – Dehradun line from Dehradun end and partly as 400 kV S/C Saharanpur – Bagpat line from Bagpat end using part of one circuit of 400 kV D/C Roorkee – Saharanpur line (under NRSS XXI) at inter-section point along with associated bays at Dehradun and Bagpat end, (b) 400/220 kV, 315 MVA ICT-I at Dehradun and associated bays with 1 no. 220 kV line bays, (c) 400/220 kV, 315 MVA ICT-II at Dehradun and associated bays with 1 no. 220 kV line bays



and (d) 80 MVAR Bus reactor at Dehradun and associated bays; and Asset-II: 4 nos. 220 kV bays at Dehradun (hereinafter referred as “transmission assets”) for 2014-19 tariff period in Northern Region under the 2014 Tariff Regulations.

2. The Scope of the work as per Investment Approval:

The scope of work covered under “Northern Region System Strengthening Scheme-XVIII” scheme is as follows:

A. Transmission Lines:

- 1.) Dehradun- Bagpat 400 kV D/C (Quard) line- 170 Kms

B. Substation Works:

- 1.) New 2*315 MVA, 400/220 kV Dehradun Substation.
- 2.) Extension of Bagpat 400/220 kV Gas Insulated Substation.

C. Reactive Compensation:

Sr. No.	Item Description	Approx. Line length	Line Reactor – From Bus	Line Reactor – To Bus
1	Dehradun- Bagpat 400 kV D/C (Quad) Line	170 Kms	50 MVAR on each ckt.	NIL
2	1x80 MVAR Bus reactor at Dehradun			

3. Assets covered in the instant petition is as follows :

Sr No.	Asset
1	<p>Asset-I: Combined Assets:</p> <p>a) One circuit of 400 kV D/C Dehradun-Bagpat line along with associated bays at both ends. Part of second circuit of 400 kV D/C Dehradun-Bagpat T/L as 400 kV S/C Roorkee- Dehradun line from Dehradun end and partly as 400 kV S/C Saharanpur- Bagpat line</p>



	<p>from Bagpat end using part of one circuit of 400 kV D/C Roorkee-Saharanpur line (under-NRSS XXI) at intersection point along with associated bays at Dehradun and Bagpat end.,</p> <p>b) 400/220 kV, 315 MVA ICT-1 at Dehradun and associated bays with 1 no. 220 kV Line bay,</p> <p>c) 400/220 kV, 315 MVA ICT-II at Dehradun and associated bays with 1 no. 220 kV Line bay, and</p> <p>d) 80 MVAR Bus Reactor at Dehra\dun and associated bays</p>
2	Asset-II: 04 nos. 220 kV bays at Dehradun S/S

4. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the petitioner vide letter dated 11.2.2009 at an estimated cost of ₹50966.00 lakh including an IDC of ₹3667.00 lakh based on 4th Quarter, 2008 price level.

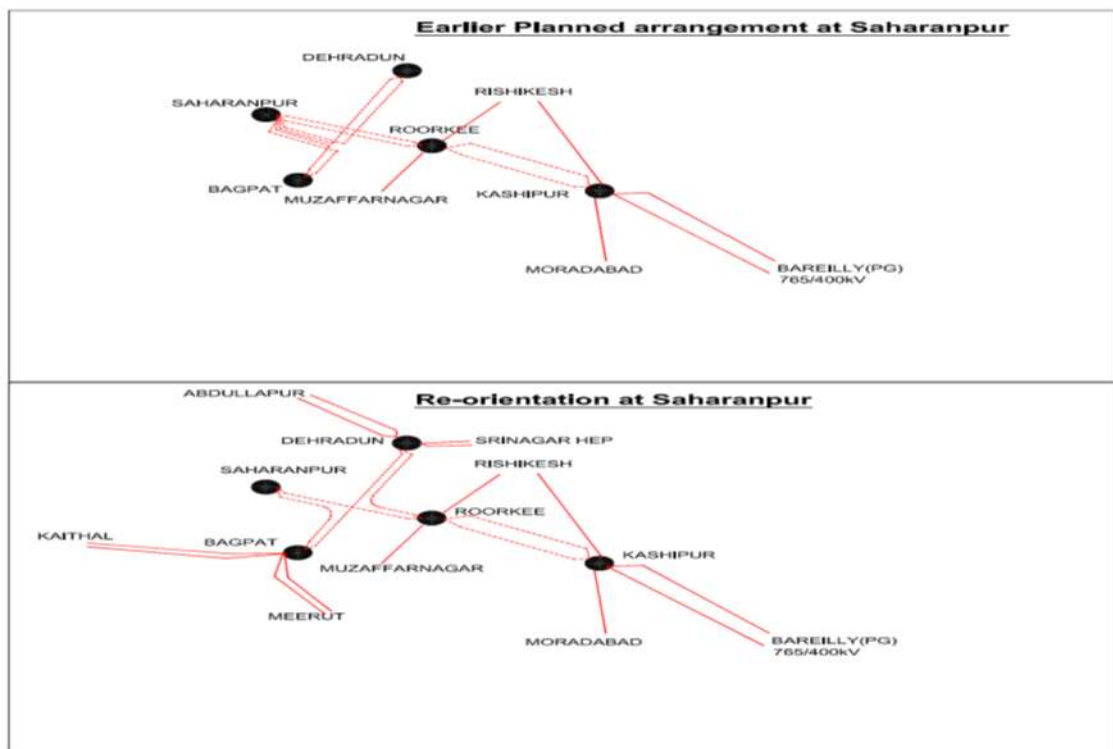
5. The scope of the scheme was discussed and agreed in 23rd Standing Committee meeting on Transmission System planning of Northern Region held on 16.2.2008, and further in 7th TCC and 8th NRPC meeting held on 25.4.2008.

6. During 36th Standing Committee Meeting on Power System Planning in Northern Region held on 13.7.2015 at NRPC, it was deliberated and decided that due to stiff resistance from farmers especially in Saharanpur, Muzzafarnagar, Bagpat, Shamli and Meerut, the construction of LILO of 400 kV D/C Dehradun-Bagpat transmission line at Saharanpur (under NRTSS) was not feasible. Various meetings were taken by Special Secretary, Ministry of Power, wherein petitioner requested for deployment of police force by the DM (Saharanpur) so that work can be initiated. Keeping in view severe RoW issue and public protest, DM (Saharanpur) opined that the petitioner may drop LILO of 400 kV Dehradun-Bagpat D/C Line at Saharanpur and assured to provide police force for



completion of other two lines (400 kV Dehradun- Bagpat D/C line under current project and 400 kV Roorkee-Saharanpur D/C line under NRSS XXI). As Saharanpur sub-station would have been in radial mode after deletion of LIL0 of 400 kV Dehradun-Bagpat D/C Line at Saharanpur. Hence, to provide stability, it was decided to route one circuit of Dehradun-Bagpat line through Roorkee and Saharanpur sub-stations using Roorkee Saharanpur D/C line.

7. As the 400 kV D/C Dehradun- Bagpat line is crossing 400 kV D/C Roorkee-Saharanpur line, an alternate arrangement was made at the crossing point to divert one circuit of Dehradun- Bagpat line from Dehradun end to Roorkee end and further from Bagpat end to Saharanpur. After this arrangement, one circuit of Dehradun-Bagpat will be direct and the second circuit will be routed through existing Roorkee and Saharanpur sub-stations.



8. In view of above arrangement, nomenclature of “400 kV Dehradun-Bagpat D/C line alongwith associated bays” shall be as “One circuit of 400 kV D/C



Dehradun-Bagpat line along with associated bays at both ends. Part of second circuit of 400 kV D/C Dehradun-Bagpat T/L as 400 kV S/C Roorkee- Dehradun line from Dehradun end and partly as 400 kV S/C Saharanpur- Bagpat line from Bagpat end using part of one circuit of 400 kV D/C Roorkee- Saharanpur line (under-NRSS XXI) at intersection point along with associated bays at Dehradun and Bagpat end". (Single line diagram is placed at annexure-III of this order)

9. Annual Fixed Cost was granted for the instant transmission asset vide order dated 12.6.2017, under first proviso to Regulation 7 (7) of the 2014 Tariff Regulation for inclusion of the POC charges.

10. The capital cost claimed by the petitioner as per auditor's certificate dated 8.6.2017 is as below:

Asset-1(a)

(₹ in lakh)				
Particulars	Capital cost	IEDC	IDC	Total
Expenditure upto 31.3.2016	38165.70	1872.10	11747.65	52235.45
Expenditure from 1.4.2016 to 30.1.2017 (DOCO: 31.1.2017)	7573.84	30.72	3355.01	10959.57
Expenditure form 11.11.2016 to 31.3.2017	2298.23	-	-	2298.23
Estimated expenditure during 2017-18	5803.33	-	-	5803.33
Estimated expenditure during 2018-19	1450.57	-	-	1450.57
Total	55741.61	1902.82	15102.66	72747.15
Initial spares included in above				367.68

Asset- 1 (b, c, d)

(₹ in lakh)				
Particulars	Capital cost	IEDC	IDC	Total
Expenditure upto 31.3.2016	3407.45	210.66	1321.89	4940.00
Expenditure from 1.4.2016 to 2.2.2017 (DOCO: 3.2.2017)	1408.11	44.68	284.84	1737.63
Expenditure form 11.11.2016 to	440.66	-	-	440.66



31.3.2017				
Estimated expenditure during 2017-18	1004.31	-	-	1004.31
Estimated expenditure during 2018-19	251.08	-	-	251.08
Total	6511.61	255.34	1606.73	8373.68
Initial spares included in above				86.86

Asset-2

(₹ in lakh)

Particulars	Capital cost	IEDC	IDC	Total
Expenditure upto 31.3.2016	799.68	39.84	250.00	1089.52
Expenditure from 1.4.2016 to 3.2.2017 (DOCO: 3.2.2017)	35.40	32.17	56.81	124.38
Expenditure form 11.11.2016 to 31.3.2017	125.26	-	-	125.26
Estimated expenditure during 2017-18	10.25	-	-	10.25
Estimated expenditure during 2018-19	31.03	-	-	31.03
Total	1001.62	72.01	306.81	1380.44
Initial spares included in above				26.87

11. The details of the transmission charges claimed by the petitioner vide affidavit dated 3.7.2017, are as under:-

Asset-1(a)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	527.21	3366.82	3587.67
Interest on Loan	640.16	3894.25	3843.55
Return on Equity	626.75	3986.94	4237.05
Interest on working capital	42.06	263.18	272.94
O & M Expenses	56.36	343.89	355.31
Total	1892.54	11855.08	12296.52

Asset- 1 (b, c, d)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	57.00	393.05	422.50
Interest on Loan	63.78	424.85	427.68
Return on Equity	64.06	446.49	485.24
Interest on working capital	7.17	47.74	49.96
O & M Expenses	60.00	385.73	398.53
Total	252.01	1697.86	1783.91



Asset- 2

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	10.40	70.70	72.07
Interest on Loan	11.93	77.56	72.81
Return on Equity	11.59	78.78	80.30
Interest on working capital	2.23	14.69	14.97
O & M Expenses	28.43	186.20	192.40
Total	64.58	427.93	432.55

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

Asset-1(a)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	49.92	51.58	52.30
O & M Expenses	27.73	28.66	29.61
Receivables	1862.50	1975.85	2049.42
Total	1940.16	2056.09	2131.33
Rate of Interest	12.80%	12.80%	12.80%
Interest	42.06	263.18	272.94

Asset-1(b, c, d)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	56.00	57.86	59.78
O & M Expenses	31.11	32.14	33.21
Receivables	261.35	282.98	297.32
Total	348.46	372.98	390.31
Rate of Interest	12.80%	12.80%	12.80%
Interest	7.17	47.74	49.96

13. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 ("The Act"). BSES Rajdhani Power Limited (BRPL), Respondent No. 12 and UPPCL, Respondent No. 9 have filed reply vide affidavit dated 28.4.2017 and 18.4.2017 respectively. BRPL has raised issue of time over-



run, cost variation, effective tax rate, reimbursement of expenditure towards filing fee etc. The petitioner has filed rejoinder dated 8.5.2017 to the reply of BRPL and UPPCL. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

14. The respondent, UPPCL vide affidavit dated 18.4.2017 has submitted that the petitioner may be directed to submit the copy of the relevant OMs and explain whether GOI has delegated all the powers of Cabinet Committee for Economic Affairs regarding granting of approval to Govt. projects to the Board of Directors of Public Utilities for all the time to come. It has also requested that the RCE of the instant projects may be submitted.

15. The petitioner vide affidavit dated 8.5.2017, has submitted rejoinder to reply of UPPCL as under:-

“.....As per Clause 2 (i) of DPE’s Office Memorandum No. DPE/11(2)/97-Fin dated 22nd July, 1997 "Navratna Company has full power to incur expenditure on purchase of new items or for replacement, without any monetary ceiling". Relevant documents are submitted along with RCE of the project.”

16. We have considered the submissions of UPPCL as regards delegation of power and the clarification given by the petitioner. This issue has already been considered by the Commission in its order dated 30.8.2017 in petition No. 41/TT/2016. The relevant portion of the said order is as under:-

“UPPCL has submitted that the petitioner should explain whether Government of India has delegated all the powers of Cabinet Committee for Economic Affairs regarding granting of approval of government projects to the Board of Directors of Public Sector Utilities for all times to come. UPPTCL has stated that the petitioner should submit the concerned orders of the Government of India. The petitioner has clarified that as per Clause 2 (i) of DPE’s Office Memorandum No. DPE/11(2)/97-Fin dated 22.7.1997 Navratna Company has full power to incur expenditure on purchase of new items or for replacement, without any monetary ceiling. The petitioner has submitted a copy of OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-FIN dated 22.7.1997, a copy of which has also been provided to UPPCL. It is observed from the above said Office Memorandums, that the Navratna status of the petitioner and other PSUs is reviewed by the

Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises on yearly basis and if they do not fulfil the conditions laid down the Navratna status is withdrawn. However, this is not a relevant consideration as the approval of the Board of Directors should be accorded when the company is enjoying the Navratna status. In the present case, PGCIL as a Navratna company has approved the investment approval and therefore, the same has been considered for the purpose of tariff

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

Date of Commercial operation (COD) :

18. The petitioner has initially claimed anticipated date of commercial operation of the instant assets as 1.12.2016.

19. With regard to Asset-II, the petitioner has submitted that out of 6 Nos. 220 kV downstream network, 2 Nos. 220 kV downstream network (220 kV Dehradun-Jhajra-1 and Dehradun-Jhajra-II) have been commissioned on 4.2.2017 along with 2 Nos. 220 kV bays at Dehradun covered under Asset-1(b, c, d) in the instant petition. Asset-II, i.e. 4 Nos. 220 kV bays are not in use due to non-commissioning of 4 Nos. 220 kV downstream lines under the scope of PTCUL. The petitioner has prayed for approval of the COD under the second proviso to Regulation 4(3) of the 2014 Tariff Regulations.

20. The petitioner vide affidavit dated 8.5.2017 has submitted the actual COD of the assets and the same are as follows:

Assets	Scheduled COD as per IA	COD
<p><u>Asset-I:</u> Combined Assets: a) One circuit of 400 kV D/C Dehradun-Bagpat line along with associated bays at both ends. Part of second circuit of 400 kV D/C Dehradun-Bagpat T/L as 400 kV S/C Roorkee- Dehradun line from Dehradun end and partly as 400 kV S/C Saharanpur-Bagpat line from Bagpat end using part of one circuit of 400 kV D/C Roorkee-Saharanpur line (under-NRSS XXI) at intersection point along with associated bays at Dehradun and Bagpat end., (Line length: 166 Ckt Km)</p>	10.11.2011	31.1.2017
<p><u>Asset-1</u> b) 400/220 kV, 315 MVA ICT-1 at Dehradun and associated bays with 1 no. 220 kV line bay, c) 400/220 kV, 315 MVA ICT-II at Dehradun and associated bays with 1 no. 220 kV line bay, and d) 80 MVAR bus reactor at Dehradun and associated bays</p>	10.11.2011	3.2.2017
<p><u>Asset-II:</u> 04 Nos. 220 kV bays at Dehradun sub-station.</p>	10.11.2011	3.2.2017

21. The Commission vide provisional order dated 12.6.2017 directed the petitioner to submit the “status of downstream of 220 kV bays”. In response the petitioner vide affidavit dated 3.7.2017 has submitted that out of 6 Nos. 220 kV downstream network 02 Nos. 220 kV downstream network (220 kV Dehradun-Jhajra-1 & Dehradun-Jhajra-II) has been commissioned on 3.2.2017 along with 2 Nos. bays at Dehradun covered under asset-1 (b, c, d). The remaining 04 Nos. 220 kV downstream network w.r.t asset-II are yet to be commissioned. The

petitioner has submitted that the petitioner has communicated with PTCUL and no reply has been received from PTCUL.

22. We have considered the submission of the petitioner. In support of commercial operation of the assets covered in the instant petition, the petitioner has submitted self-declaration COD letter and RLDC charging certificate dated 27.2.2017 for Asset 1(a) and Asset1 (b ,c ,d) and RLDC charging certificate on no-load for asset-II . Accordingly the COD of the Asset 1(a) and Asset 1 (b, c, d) is considered as 31.01.2017 and 03.02.2017 respectively.

23. It is observed that Asset-II is not in regular service due to non-availability of associated downstream transmission system under the scope of PTCUL and therefore, the COD of Asset-II is not considered in the instant order. The petitioner is directed to file fresh petition matching with the associated downstream transmission system.

24. Taking into considerations the submissions made by the petitioner, the SRLDC certificates and CEA certificates submitted by the petitioner in support of trial operation, the following dates of commercial operation are approved as per the 2014 Tariff Regulations:-

Asset	COD
Asset-1(a)	31.01.2017
Asset-1(b, c, d)	3.2.2017
Asset-2	Not granted

25. Clause 6.3 (A) (4) (vi) of the Central Electricity Regulatory Commission (Indian Electricity Regulatory Commission) Regulation, 2010 is as follows:



“(vi) The transmission licensee shall submit a certificate from the CMD/CEO/MD of the Company that the transmission line, sub-station and communication system conform to the relevant Grid Standard and Grid Code, and are capable of operation to their full capacity.”

It is observed that petitioner has not enclosed CMD certificate as required under Regulation 6.3 (A)(4) of the Indian Electricity Grid Code. Hence, the petitioner is directed to furnish CMD certificate at the time of truing up.

Time Over-Run

26. As per the investment approval, the schedule completion was 33 months from the date of investment approval. The date of investment approval is 11.2.2009. Hence, the scheduled date of commercial operations is 10.11.2011 against which the subject assets were put under commercial operation as per the details given below:

Assets	Scheduled COD as per IA	COD	Delay in Months (Approx.)
Asset-1(a)	10.11.2011	31.1.2017	62 months & 21 days
Asset-1(b,c,d)	10.11.2011	3.2.2017	62 months and 24 days

27. The petitioner has submitted the following justifications in support of delay in respect of Asset-1 (Combined Assets a, b, c & d) and the same are as follows:

400 kV D/C (QUAD) DEHRADUN-BAGPAT TRANSMISSION LINE

- (a) The 400 kV Dehradun-Bagpat line was scheduled to be completed in November' 2016. The assets under Dehradun sub-station got delayed due to delay in COD of 400 kV Dehradun- Bagpat transmission line.
- (b) The transmission line passes through Dehradun district of Uttarakhand and Saharanpur, Shamli, Muzaffarnagar and Bagpat districts of Western UP.



The progress of work was smooth till October, 2010 but events took a turn when GAIL (Gas Authority of India Ltd.) who was constructing a gas pipe line through the districts of Bagpat, Muzaffar nagar, Shamli and Saharanpur made an agreement on 2.11.2010 with farmers to pay higher / market rates of compensation against use of land (Right of Use) and for trees of various species. These rates were very high in comparison to rates notified by the State government. The impact of this agreement spread on other projects of these districts and the farmers affected by the lines of the petitioner also approached Kisan Unions for want of similar compensation in the corridor of transmission lines for land / crops and trees. They also demanded compensation of land against 'Right of Use' which was not payable under "Indian Telegraph Act' 1885" and "Indian Electricity Act' 2003".

- (c) The petitioner could manage work despite resistance up to April' 2011 with slow progress but the resistance spread in all the districts of western UP and finally work completely stopped in May' 2011. The petitioner approached district administration at various levels, but matter could not be resolved. Then The petitioner apprised the situation to Ministry of Power and Chief Secretary of UP. On 16.10.2012, the Minister for Power & Corporate Affairs, Ministry of Power, GOI, wrote letter to Chief Minister, UP but the RoW issues remained unresolved. After a series of meetings and deliberations with administrative officials and Kisan Unions, the work was resumed in January' 2015 with frequent resistance and hindrances from the farmers which are still being faced in completion of the line.



(d) The RoW problems started from 18.10.2010 and the same are still being faced till completion of the line which constitutes almost 72 months of hindrance in completion of the project. However, with best efforts, The petitioner could reduce this delay of 72 months to 60 months.

28. BRPL and UPPCL have submitted that the time over-run is attributable to the petitioner hence it could not be allowed.

29. In response, the petitioner has submitted detailed justification of delay and with regard to delay at Dehradun Sub-Station i.e. Asset-1(b, c, d), it is submitted that Dehradun is a new Sub-Station and without the upcoming 400 kV Dehradun-Bagpat line, the Sub-Station cannot be put to the commercial operation. The petitioner has submitted that asset-1(b, c, d) got delayed due to delay in 400 kV Dehradun-Bagpat D/C line.

30. The petitioner, vide affidavit dated 3.7.2017 has submitted the following:

Assets	Period of activity				Reason(s) for Delay along with reference
	Planned		Achieved		
	From	To	From	To	
Asset1 (a)	11.2.2009	10.11.2011	11.2.2009	31.1.2017	Persistent RoW issue
Assset-1(b, c, d)	11.2.2009	10.11.2011	11.2.2009	03.2.2017	Due to delay in Commissioning of Asset-1(a).

31. The detailed chronology of the reasons of delay as submitted by the petitioner is given below:

Date	Reason of delay	Details	Reference
18.10.2010	The work was stopped by	The contractor reported	Copy of letters dt. 18.10.10,



	the farmers in presence of Union leaders	obstruction to POWERGRID through various letters	30.10.10, 12.11.10, 14.12.10, 15.12.10 & 26.12.10
2.11.2010	M/s GAIL made an agreement with farmers for payment of compensation at market/ higher rates for their Gas pipe line project.	The farmers affected by POWERGRID demanded same compensation for transmission lines	Copy of Agreement dt. 2.11.2010
21.12.2010	Work stopped by farmers in Dehradun-Bagpat line	The matter was reported to DM Saharanpur	Copy of letter dt.21.12.2010
3.1.2011	DM, Saharanpur issued instructions to SDMs for resolving issue		DM letter dt. 3.1.2011
11.1.2011	Farmers stopped stringing work in Saharanpur	Matter was reported to SDM	Letter dt. 11.1.2011
25.1.2011	Farmers stopped foundation work in Saharanpur	Matter was reported to SDM	Letter dt. 25.1..2011
3.2.2011	The Commissioner, Saharanpur wrote a letter to POWERGRID Saharanpur and Dehradun for meeting	POWERGRID had a meeting with commissioner to clear the issue of compensation	Letter of commissioner dated 3.2.2011
26.2.2011	Villagers obstructed the work in Saharanpur district	Matter was reported to SDM	Letter dt.26.2.2011
14.3.2011	After various agitations, the Commissioner and DM forwarded the demands of the forum in the month of March'2011, to the UP Govt. to seek the ways through amendment in the rules so that the demand of paying 'Right of Use' in transmission line can be fulfilled in addition to the compensation of trees and crops.	GM (Projects-I) & AGM (Roorkee) had a meeting with DM and asked for administrative help to start the works	-
24.3.2011	Very strong agitation all over district Saharanpur and at Loc 54/6, Madaki village, farmers snatched equipment used for final checking of Tower	A letter was written to DM, Saharanpur	Copy of letter dt. 24.3.2011



7.4.2011	Farmers and their Union organized a gherao at POWERGRID site office at Saharanpur	1. Meeting with DM Saharanpur & Letter given to them with all concern SDM's 2. Matter informed to DGM(PESM)	copy of letter dt. 7.4.2011, news paper report dt. 8.4.2011
11.4.2011	Commissioner and DM forwarded the demands of the forum to the UP Govt. to seek the ways so that 'Right of Use' can be paid in transmission line.	ED, NR-1 met the Commissioner Saharanpur on 12.4.2011	-
15.4.2011	Farmers did not allow Erection of tower in Bagpat District	Letter to SDM Baraut for restart of work.	Copy of letter dt. 15.4.2011 & 16.4.2011
20.4.2011	On Dt 19.4.11 POWERGRID employ went for distribution of cheques of farmers but they refused to accept and when POWERGRID employ take measurement of crop damage during stringing, union leader and local farmers collected and did manhandling of POWERGRID Officers.	Stringing Work stopped/FIR done against Farmer From 19.4.2011 work fully stopped.	Copy of letter dt. 20.4.2011
4.5.11 to 31.5.11	Very strong agitation all over district Saharanpur and other area	Various meeting with DM & SDM's & letter given to SDM's to resumed work but no support from Administration, Saharanpur given to POWERGRID.	Letter dt.9.5.11, 10.5.2011, 12.5.2011, 16.5.2011 & 21.5.2011, 26.5.2011
15.6.11 To 24.6.11	TL construction work suspended due to strong agitation	Work totally stopped/ On Dt 22.6.2011 a meeting was held between DM and all union leaders but Farmer & Union leader did not support to start Line work till their demand was not fulfilled	Meeting with DM on 15.6.11 and letter given to start resume work
24.6.2011	DM Saharanpur issued another letter to SDM's for helping POWERGRID in cases where compensation was already paid to the farmers.	Since the compensation is paid only after completion of works, this letter did not help in starting the balance works.	Letter of DM dt. 24.6.2011
30.6.11 To 12.7.11	farmers and union resisted the work strongly & TL work suspended due	Work totally stopped	



	to strong agitation		
13.7.11	TL work suspended due to strong agitation	Work totally stopped. On <u>13.7.2011</u> , GM (Proj) wrote a letter & Meeting with DM, Saharanpur for helping in start of works of POWERGRID	Copy of letter dt. 13.7.2011 & 23.7.2011, 1.8.2011
20.8.2011	Due to stoppage of work a letter was written to DM, Saharanpur		Copy of letter dt. 20.8.2011
19.9.2011	A meeting was held in local circuit house along with farmers and union representatives. The Union repeated its demand of compensation against land coming in the Right of Way corridor (46 M) of transmission line in the form of Right Of Use and monthly rent for the land occupied by the four legs of the tower.	The City magistrate asked union to reconsider their demands but union did not agree.	Copy of GM's letter dt. 22.9.2011
30.9.2011	ED, NR-1, held a meeting with the Secretary(Power)	The Secy. (Power) confirmed from DM that there is severe ROW problem in Saharanpur and the farmers are demanding the cost of land	
13.10.2011	Severe ROW problem in Saharanpur	CMD, POWERGRID wrote a letter to Chief Secretary	Letter of CMD dt. 13.10.2011
18.10.2011	Special Secretary (Energy), UP forwarded the letter of Commissioner Saharanpur and asked for comments of POWERGRID regarding the demands of farmers union	ED(NR-I) replied to Special Secretary (Energy), UP that as per provisions of existing Electricity Act-2003 and Indian Telegraph Act-1885, the compensation for land is not payable	Letter of ED, NR-1, dt. 25.10.2011
6.11.2011	Union started distributing pamphlets in the sugarcane belts of western UP to unite the farmers of other districts.	CMD POWERGRID had a meeting with Chief Secretary on 15.11.2011	
29.12.2011	An attempt was made to restart the work of stringing in A-3 PKG of line and the DM was requested to provide help	A letter was issued from DM Saharanpur to SDM(Behat) for restart of work of stringing in Behat tehsil	Letter dt 29.12.2011
29.12.2011 to 7.1.2012	TL work suspended due to strong agitation	1. Engineer (TLC) Dehradun Meeting with DM, Saharanpur	Copy of letter of SDM, Behatdt 31.12.2012



4.1.2012	The work of stringing was restarted in Behat area but it was stopped by the villagers in Dehradun-Bagpat line (A-3 PKG)	Matter was reported to DM, Saharanpur, he advised for a meeting with farmers and nominated City Magistrate as his representative.(12.1.2012)	Letter to DM, Saharanpur dt. 12.1.2012
18.1.2012	Meeting was held in the office of City Magistrate with some affected farmers and union representatives. In the meeting the farmers repeated their demands of compensation at par with M/s GAIL and intimated that work shall not be allowed till their demands are met.	The City Magistrate asked union representatives to put up demands in writing and in accordance with the existing laws. The union agreed to put up their demands in writing in 15 days time.	-
10.2.2012	GM (Project-I) had a meeting with Commissioner and DM, Saharanpur.	The DM, Saharanpur expressed helplessness due to upcoming Assembly elections in the state and suggested to wait till completion of Assembly elections.	-
13.2.2012	GM(Project-I), requested through letter to Commissioner Saharanpur and Dm, Bagpat with copy to Secy(Power), UP.	-	Copy of letter dt 13.2.2012 & 14.2.2012
February and March'12.	The administration was engaged in the UP Assembly elections	The work remained suspended in absence of administrative support	-
4.4.2012	The Kisan Union at Bagpat district opposed the line construction work for more compensation.	Matter was reported to DM Bagpat for providing assistance	Copy of letter dt. 4.4.2012 & 17.4.2012
24.5.2012	A meeting was held with DM, Saharanpur for finalizing the compensation after justification based on the demands raised by the unions so that work can be started	The DM, Saharanpur refused to recognize the unions of farmers, and asked for provisions of Indian Electricity Act'2003 and Indian Telegraph Act'1885, in which District Magistrate is bound to define compensation. He also suggested POWERGRID to decide the compensation mutually as has been done by M/s	Letter dt.24.5.2012



		GAIL.	
26.5.2012	A letter was written by GM(Meerut) to DM, Saharanpur	-	Copy of letter dt. 26.5.2012
29.6.12	CMD POWERGRID wrote to Chief Secretary, U.P., apprising the matter and early action from concerned DMs	-	Letter of CMD dt. 29.6.2012
2.7.2012	CM, Saharanpur requested for providing assistance in work	-	Copy of letter dt. 2.7.2012
31.7.12	Additional Secretary, Ministry of Power, Govt of India issued letter to concerned DMs to resolve the issue	POWERGRID met with DM Saharanpur on 3.8.12 in the contest of letter from Additional Secretary and requested to resolve the issues	Copy of letter dt. 31.7.2012
3.8.12	General Manager POWERGRID Meerut requested concerns District DMs through letter for early resolution	Letter submitted to DM Bagpat, Muzaffarnagar, Saharanpur	Copy of letter dt. 3.8.2012
6.8.2012	DM, Saharanpur constituted a committee for resolution of RoW issues	-	DM letter dt. 6.8.2012
16.10.2012	POWERGRID approached Ministry of Power, GOI for seeking support	Hon. Minister of Power and Corporate affairs wrote a letter to Chief Minister for his intervention	Copy of letter dt. 16.10.2012 from MOP
18.10.2012	Pr. Secy, IIDC, UP wrote a letter to DM, Saharanpur/Muzaffarnagar and Bagpat for resolving the issue	-	Letter dt 18.10.2012
19.10.2012	GM, Meerut wrote letter to various DMs regarding RoW issues in western UP	-	Letter dt 19.10.2012
21.10.12	DM, Bagpat called for a meeting on 25.10.12 for ROW related issued	-	Copy of letter dt. 21.10.2012.
12.11.2012	A letter was written to DM Saharanpur, regarding issues	-	Copy of letter dt. 12.11.2012, 2.11.2012
21.11.12	Dir (Proj.), ED, NR-I and GM (Mrt) had a meeting with Ch. Secy, UP Govt. for solution of the issues.	Ch. Secy.(UP) appreciated the problem and assured to extend co-operation through district	-



		administration	
5.12.12	Another meeting was held with Ch. Secy. (UP) by ED, NR-I for the issue.	All the concerned DMs were instructed by Ch. Secy to co-operate for ROW solution at District level.	-
10.12.12	Ch. Manager (PESM) a/w site met with DM(Bagpat) and DM(Saharanpur) for start of work in lines.	Both DM,s assured to extend help through concerned SDMs	-
22.12.12	DM (Bagpat) and DM Saharanpur were intimated	SDM, Baraut issued instructions for Police assistance. DM, Saharanpur also issued letter	Copy of letter dt. 22.12.2012 from DM and SDM.
28.12.12	The foundation work was started on Loc. No. 12/1 in BagpatDistt. In DDN-BPT line But the work was stopped by the union members	SDM, Baraut asked to stop The work and called a meeting of union members on 2.1. 2013 for amicable solution	-
4.1.2013	ED, NR-I wrote a letter to Ch. Secretary, UP for extending further help to start the work	-	Copy of letter dt. 4.1.2013 from ED, NR-I.
16.1.2013	Union leaders stopped the work on Loc. 58B/0 .	The matter was reported to SDM, Deoband, He assured to take necessary action.	Copy of letter to SDM, Deoband and endorsement to Police station Nagaldt. 16.1.2013
30.1.2013	DM, Saharanpur was requested for providing assistance to start the work	DM, Saharanpur issued instructions to SDM, Sadar for providing assistance	Copy of letter dt. 30.1.2013 form DM Saharanpur
21.2.2013	Another meeting was organized with Union leaders and it was expressed to them that POWERGRID can not pay for anything except damages as per the Telegraph Act	The Union leaders stated to close the project if the diminution in land value can not be paid. The matter was reported to DM, Bagpat and a copy of MOM was given to him	Copy of MOM Dt. 21.2.2013
22.2.2013	The Union leaders again raised the issue during the Kisaan Divas meeting at the office of DM, Bagpat and asked to give written judgement on the plaint submitted by them against POWERGRID to pay the Diminution value of the	DM, Bagpat assured Union leaders to look into the matter.	-



	land before laying the transmission line.		
26.2.2013	DM, Bagpat called for a meeting with GM, Meerut	The meeting was attended by GM, Meerut and CH. Manager Saharanpur. The New DM was again appraised with the relevant provisions of law to resolve the ROW problem	-
2.3.2013	SDM, Baraut called a meeting with POWERGRID and Union leaders	In the meeting the Union leaders were adamant for payment of diminution value of land	Copy of MOM dt. 2.3.2013
23.4.2013	DM, Bagpat nominated ADM as nodal officer to resolve RoW issues	-	Letter of DM dt. 23.4.2013 and ADM dt. 26.4.2013
23.4.2013 to 3.9.2013	POWERGRID had a series of meetings with kisan unions in presence of Nodal officers.	The Unions were adamant on their demands and did not allow work	-
3.9.2013	DM, Saharanpur was requested to provide police help	-	Letter dt. 3.9.2013
3.9.13 to 15.10.2013	Riots were erupted in the districts of Bagpat/ Muzaffar Nagar and Shamli between Hindu and Muslim Communities. The tower erection Gang working at Bagpat(Muslim Gang) was to be reverted.	SDM, Baraut was contacted. He advised to keep away the muslim gangs from the area till normalization of law and order situation.	-
6.2.2014	Foundation Work was not allowed by farmers in Dehradun-Bagpat TL (RS Co.) at loc. Nos. 60/1, 62/3, 62/4, 62/6, 63/1 & 63/2 and tower erection at 58/B in Deoband Tehsil.	Matter was reported to SDM, Deoband, who assured to resolve the issue	Copy of letter to SDM dt. 6.2.2014
14.3.2014	Stringing work stopped in Behat area of Saharanpur	Matter was reported to DM, Saharanpur,	letter to DM Saharanpur dated 14/03/14.



29/04/14	Conductor of incompleting stringing work of Dehradun-Bagpat TL in village Satpura & Kurdikhera, Tehsil-Behat cut & theft led to snapping of conductor on ground compromising public safety.	Matter was reported to DM, Saharanpur, who assured to resolve the issue.	Copy of letter dt. 29.4.2014
02/06/14	Meeting Satpura, Mirjapur&Mohammadpur Tehsil-Behat for stringing of incomplete section of Dehradun-Bagpat TL (RS Co.). Villagers didn't allow.	List of villagers opposing work submitted to DM, Saharanpur, who assured to resolve the issue	Copy of letter dt. 2.6.2014
13/06/14	Work was stopped in Deoband Area of Saharanpur.	SDM, Deoband was requested to provide help	Copy of letter dt. 13.6.2014
10.7.2014	DM Saharanpur nominated ADM as nodal officer for resolving RoW issues	-	Letter dt. 10.7.2014 &15.7.2014
14.7.2014	A meeting was held in the presence of DM, Shamli between GM(Meerut), other officers of POWERGRID and various leaders of farmers including Sh. Yogeshdahiya and ArunRana. During the meeting the union leaders repeated their demands of lease rent and Right of Use Charges for the land below transmission lines.	DM, Shamli intimated them that land compensation is not payable as per the Indian Telegraph Act -1885 and Indian Electricity Act'203. However the payment of compensation against damages shall be revised based on market rates in consultation with DFO, Shamli and other concerned agencies.	-
21/07/14	Farmers stopped work in Bagpat district	DM, Bagpat was requested to provide help	Letter dt. 21.7.2014
24/07/2014	Letter of DM Muzaffarnagar regarding RoW issues.	-	Letter dated 24/07/14
29.8.2014	POWERGRID approached Ch. Secretary, UP for resolution of RoW issues in lines of western UP	Ch. Secretary, UP issued instructions to concerned District Magistrates for extending co-operation to POWERGRID	Copy of letter dt. 29.8.2014 from Ch. Secretary, UP



10/10/2014	Meeting of DM Saharanpur with representatives of farmers and POWERGRID for resolving ROW.	POWERGRID agreed in meeting for payment of compensation as decided by DM Saharanpur and he decided the new compensation rates.	DM letter dated 27/10/2014
17/11/14	DM, Saharanpur was requested to issue order to exercise powers under Telegraph Act to POWERGRID	Letter / meeting with DM & Commissioner Saharanpur	Letter dated 17/11/2014.
20/03/2015	Completion of stringing work in tehsil Behat stopped due to ROW problem.	Meeting with DM Saharnpur regarding start of work in tehsil Behat	Letter dated 20/03/2015
25/07/15	ROW problem in stringing work in district Saharanpur.	Letter to DM Saharnpur regarding resolution of ROW	Letter dated 25/07/2015
05/08/15	Stoppage of Stringing work in village Fatehpurkala tehsil Deoband due to ROW problem.	Meeting with DM Saharnpur regarding redeployment of PAC / police protection for completion of work in tehsil Deoband.	DM letter dated 05/08/2015.
7.10.2015	Stoppage of Stringing work in village Fatehpurkala, Baseda tehsil Deoband due to ROW problem.	Meeting with DM Saharnpur regarding redeployment of PAC / police protection for completion of work in tehsil Deoband.	Letter dt. 7.10.2015
15/12/15	Stringing work in villages Sohanchidha, pahadpur and candenakoli of tehsil Deoband stopped due to ROW problem.	Letter to SP(RA) Saharnpur regarding police protection for start of work in tehsil Deoband. He directed CO (Deoband) for necessary action.	Letter dated 15/12/2015
16/12/15	Stringing work in villages of tehsil sadar stopped due to ROW problem.	Letter to DM Saharnpur regarding police protection for start of work in tehsil Sadar. He directed CO (Deoband) for necessary action.	Letter dated 16/12/2015
14/04/16	Stringing work in villages Sohanchidha of tehsil Deoband stopped due to ROW problem.	Letter to SP(RA) Saharnpur regarding police protection for start of work in tehsil Deoband.	Letter dated 14/04/2016



15/06/16	Stringing work in villages- Rajapur, Mathana of tehsil Sadar stopped due to ROW problem.	Letter to DM Saharnpur regarding police protection for start of work in tehsil Deoband. He ordered to SDM Sadar for necessary action.	Letter dated 15/06/16
04/07/16	Stringing work in villages- Rajapur, Mathana, Bahedigujjaretc of tehsil Sadar stopped due to ROW problem.	Letter to DM Saharnpur regarding police protection for start of work in tehsil Deoband. He ordered to SDM Sadar for necessary action.	Letter dated 04/07/16.
22/08/16	Stringing work in villages- Rajapur, Mathana, Bahedigujjaretc of tehsil Sadar stopped due to ROW problem.	Letter to SP Saharnpur regarding obstruction in exercising rights provided by section-10 of Telegraph act-1885 / police protection for start of work in tehsil Deoband. He ordered to SSP, Saharanpur for necessary action.	Letter of DM dated 22/08/16
24/08/16	Stringing work in villages- Rajapur, Mathana, Bahedigujjaretc of tehsil Sadar stopped due to ROW problem.	Letter to DM Saharnpur regarding obstruction in exercising rights provided by section-10 of Telegraph act-1885 / police protection for start of work in tehsil Sadar.	Letter No. NRTS-1/DDN/903 dated 24/08/16 of POWERGRID.
07/10/16	Stringing work in village: gagalhedhi of tehsil: sadar due to ROW problem and providing police protection	Letter to DM- Saharanpur regarding creation of agitation against uneven demand of tree compensation along with creating ROW to kept the work on hold. DM instructed SDM sadar to provide police protection	Letter dated: 07/10/16

32. We have considered the submissions of the petitioner and the respondents. As per the investment approval, the scheduled COD of the instant assets was 10.11.2011 against which the subject assets were put to commercial use on 31.01.2017 and 3.02.2017. Hence, there is a delay about 62 Months 21 days and 62 Months 24 days in commissioning of the Asset-1(a) and Asset-1(b, c, d) respectively.



33. The petitioner in the petition has submitted details of other events in chronological order in respect of other RoW issues at various locations. The petitioner has claimed that RoW problems persisted almost till January, 2017. The petitioner has further submitted that in spite of such inordinate delays, which started since beginning i.e. 18.10.2010, the assets were commissioned in January, 2017 by resolving the RoW issues at various locations. The petitioner has also submitted that all the efforts were made by it to resolve the various RoW issues and complete the said transmission line at the earliest.

34. From the submissions of the petitioner, it is observed that the petitioner has faced continuous RoW Problem at various locations on the route of the instant transmission line and has faced severe agitation from the local villagers and continuous obstruction caused by the land owners and local villagers. The petitioner has submitted chronology of events from which it can be seen that it took almost 75 months to resolve RoW issue. We have gone through the submissions of the petitioner and are of the view that the time over-run of 62 months 21 days and 62 months 24 days is mainly attributable to RoW issues faced during construction of the transmission line. The chronology of events and supporting documents submitted by the petitioner clearly reveals that there were severe RoW issues faced by the petitioner. The issue was not resolved at the DM level and the petitioner has also approached MoP, GoI to resolve the matter. We are of the view that delay due to RoW issue was beyond the control of the petitioner and accordingly, the time over-run of 62 months 21 days has been condoned for Asset-1(a). With regard to Asset-1(b, c, d), it is observed that the 400 kV Dehradun sub-station could not be put to regular use without the commissioning of the transmission line and since we have condoned delay of



commissioning of transmission line Asset-1(a), delay in Asset-1(b, c, d) is also condoned. Accordingly, the time delay of 62 months 24 days in respect of Asset-1(b, c, d) is condoned.

Capital cost:

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

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

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

- (a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Increase in cost in contract packages as approved by the Commission;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- (e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- (f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39
- (g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- (h) adjustment of any revenue earned by the transmission licensee by using the Assets before COD.

36. The petitioner vide affidavit dated 3.7.2017 and Auditor Certificate dated 8.6.2017 has submitted the capital cost incurred as on COD and additional capital expenditure for 2017-18 and 2018-19, which are as follows:-

(₹ in lakh)							
Asset	Apportioned approved cost as per FR	Apportioned approved cost as per RCE	Cost incurred as on COD	Cost from COD to 31.3.2017	2017-18	2018-19	Estimated completion cost
Asset-1(a)	49752.15	73806.00	63195.02	2298.23	5803.33	1450.57	72747.15
Asset-1(b,c&d)		8807.00	6677.63	440.66	1004.31	251.08	8373.68



Reasons for cost variation:

37. As regards variation of FR cost vis-à-vis the actual cost, the petitioner has submitted that as per policy, the procurement is carried out under open competitive route by providing equal opportunity to all the eligible firms. The bid prices are invited for the complete scope of work on overall basis and the contracts are awarded to the qualified bidder, whose bid is determined as the lowest evaluated, techno-commercially responsive and, who is considered to have the capacity and capability to perform the contract based on the assessment, if carried out. Thus, the variation of awarded/actual cost is due to various market forces and the pricing strategies followed by bidder(s). The reasons for item-wise cost variation between approved cost (FR) and anticipated cost as on COD are explained in detail in Form-5. It is mainly due to compensation, land cost and higher awarded price.

38. BRPL has submitted that there is huge cost over-run in both the assets due to preliminary investigation, RoW, land and structure for switchyard. The reasons filed for the cost over-run are very casual like low/ high bid prices and actual cost. The RCE, supported by proper justification for cost over-run needs to be submitted by the petitioner.

39. UPPCL has submitted that the petitioner may be directed to furnish detailed reasons for the cost over-run in respect of Asset-I and Asset-II.

40. The petitioner vide affidavit dated 8.5.2017 has submitted the reply to BRPL and UPPCL and the same is as follows:



“As per policy in POWERGRID, the bid prices are invited for the complete scope of work of one or more elements as a package on overall basis. The comparison of prices for a particular package is also done with its cost estimate on overall basis. Price of individual items will not be compared for the above purpose. POWERGRID adopts best procurement practices. The reason for item wise cost variation between approved cost (FR) and anticipated completion cost are explained in Form-5.”

Analysis and decision:

41. We have considered the submissions of the petitioner and respondents. As compared with apportioned approved cost of ₹49752.15 lakh, the estimated completion cost is ₹72747.15 lakh. Hence there is 46.21% (₹22995 lakh) variation in capital cost claimed by the petitioner. With regard to huge cost variation, the petitioner has submitted that the capital cost has increased mainly due to compensation, land cost and higher awarded price. The perusal of Form-5 reveals the following:

(₹ in lakh)				
Sl. No	Item	Estimated Amount	Actual Amount	Variation
1	Preliminary Investigation, Right of way, forest clearance, PTCC, general civil work etc	1155.55	15512.78	14357.23
2	Land	600.00	3794.82	3194.82
3	Structure for switchyard	589.59	2127.85	1538.26
4	IDC	3600.00	14932.03	11332.03
Total		5945.14	36367.48	30422.34

42. The petitioner has submitted RCE. The approved apportioned cost as per RCE is ₹73806 lakh for Asset-1(a) and ₹8807 Lakhs for Asset-1(b, c, d). The estimated completion cost is within the apportioned approved cost as per RCE. Therefore, the variation in the capital cost is allowed in the instant petition. However, the petitioner is directed to submit the detailed explanation for the cost



variation along with the break-up of each item, rates paid etc. at the time of truing up.

Treatment of IDC

43. The petitioner, vide Auditor's certificates dated 8.6.2017 submitted vide affidavit dated 3.7.2017, has claimed the IDC of ₹15102.66 lakh and ₹1606.73 lakh as on CODs of Asset-I (a) and Asset-I (b, c, d), respectively. The petitioner has further submitted a statement showing calculation of the IDC, capturing further loan details such as date of drawl, rate of interest, interest payment dates etc.

44. IDC discharged upto COD and proposed to be discharged in the subsequent years as per the statement is as below:

(₹ in lakh)				
Assets	IDC (on accrual basis) Claimed in Auditor's Certificate	IDC discharged as on Tariff date	IDC to be discharged during 2016-17	IDC to be discharged during 2017-18
Asset-1(a)	15102.66	13476.16	377.61	1248.89
Asset-1(b, c, d)	1606.73	1424.41	120.36	61.96

45. From the submission of the petitioner, it is noticed that the loan amount drawn till COD as per the IDC calculation statement is different from that as per Form 12-b (draw down schedule of IDC), as below:

(₹ in lakh)			
Particulars	Loan amount as per IDC statement submitted by the petitioner (a)	Loan amount as per form 12 b (b)	Difference (a-b)
Asset-1(a)	44236.51	43097.96	1138.55
Asset-1(b, c, d)	4674.34	4546.72	127.62

46. It is further observed that the difference in the loan amount has arisen in case of Asset-I due to inclusion of Bond LVII (₹283.66 lakh) and SBI-Q4 (₹512.26 lakh) in IDC calculation which are not included in form 12-b and Bond LVI is shown as ₹1069 lakh in the calculation which is ₹726.37 lakh as per form 12-b. In case of Asset-1 (b, c, d), the loan amount against Bond-LVII is ₹1216.34 lakh as per calculation and ₹1088.72 lakh as per form 12-b. In this of ₹43097.96 lakh and ₹4546.72 lakh for Asset-I(a) and Asset-I (b, c, d) respectively which are as per form 12-b.

47. In case of both the assets, it is noticed that the reduction in loan amount has no impact on the IDC calculation till COD, as the interest payment dates of the loan amounts not considered for IDC calculation, fall beyond COD. However, since the IDC on accrual basis till COD in case of Asset-1(a) comes to ₹15161.24 lakh which is more than the claimed amount of ₹15102.66 lakh, the same is restricted to the claimed IDC. In case of Asset-1 (b, c, d), the IDC on accrual basis is calculated at ₹1605.65 lakh as against the claim of ₹1606.73 lakh. The difference between the claimed and allowed IDC (₹1.08 lakh) has been adjusted in the discharge of IDC claimed from 3.2.17 (COD) to 31.3.17. Accordingly, the IDC as on COD and the discharge of IDC in the subsequent years is allowed as below:

Particulars	IDC accrued till COD	IDC calculated upto the payment date/ IDC allowed on cash basis upto COD)	(₹ in lakh)	
			Discharge of IDC from COD to 31.3.17	Discharge of IDC in 2017-18
Asset-1(a)	15102.66	13476.16	377.61	1248.89
Asset-1(b, c, d)	1605.64	1424.42	119.28	61.96



The IDC allowed as above is subject to true up. The petitioner is directed to furnish at the time of trueing up, Auditor's Certificate with respect to IDC discharged till COD and reconciliation of the loan positions as per form 12-b and that as per IDC calculation statement.

Treatment of IEDC

48. The petitioner vide Auditor's Certificates dated 8.6.2017 has claimed Incidental Expenditure during Construction (IEDC) of ₹1902.82 lakh and ₹255.34 lakh as on COD of Asset-1a and Asset-1 (b, c, d), respectively. The IEDC claimed by the petitioner is less than the allowable limit of IEDC indicated as per RCE which is comes out to 5.66 %. Keeping in view the submission regarding IEDC, the same is being allowed while calculating Capital Cost as on COD.

Initial Spares

49. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system:

"13. Initial Spares

Initial spares shall be capitalized as a percentage of the Plant and Machinery cost up to cut-off date, subject to following ceiling norms:

(d) Transmission system

<i>(i) Transmission line</i>	<i>: 1.00%</i>
<i>(ii) Transmission Sub-station (Green Field)</i>	<i>: 4.00%</i>
<i>(iii) Transmission Sub-station (Brown Field)</i>	<i>: 6.00%</i>
<i>(iv) Series Compensation devices and HVDC Station</i>	<i>: 4.00%</i>
<i>(v) Gas Insulated Sub-station (GIS)</i>	<i>: 5.00%</i>
<i>(vi) Communication system</i>	<i>: 3.5%</i>

....."

50. We have considered the submissions of the petitioner and respondents. The petitioner vide affidavit dated 3.7.2017 and Auditor certificate dated 8.6.2017 has claimed the Initial spares and the same is as follows:



(₹ in lakh)

Asset I (a)	Total Cost (Plant & machinery cost excluding IDC, IEDC, land cost & cost of civil works for the purpose of Initial Spares)	Initial spares	Percentage
Asset I (a)			
Transmission line	32678.14	326.78	1.00
Sub station	3011.78	40.90	1.35
Asset I (b, c, d)			
Sub station	5830.61	86.86	1.49

51. The initial spares allowed for the instant assets are as under:

(₹ in lakh)

Sl. No.	Description	Total Cost (Plant & Machinery cost excluding IDC, IEDC, land cost & cost of civil works for the purpose of Initial Spares)	Initial Spares claimed (Included in B)	Permissible Limit (%)	Initial Spares Allowed
	(A)	(B)	(C)	(D)	(E)
Asset-1(a)					
1	Transmission line	32678.14	326.78	1%	326.78
2	Sub-station	3011.78	40.90	4%	40.90
Asset-1(b, c, d)					
	Sub station	5830.61	86.86	4%	86.86

Additional capital expenditure

52. 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.”

53. 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”.

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

55. The petitioner vide affidavit dated 3.7.2017 and Auditor Certificate dated 8.6.2017 has submitted additional capital expenditure proposed to be incurred during 2017-18 and, 2018-19 and the same are as follows:

(₹ in lakh)				
Asset	Cost from to COD 31.03.2017	2017-18	2018-19	Total estimated additional capital expenditure
Asset-I(a)	2298.23	5803.33	1450.57	9552.13
Asset-I (b, c & d)	440.66	1004.31	251.08	1696.05

The petitioner has claimed add-cap for balance/ retention payment under Regulation 14(1) (i) of the 2014 Tariff Regulations.

56. UPPCL vide affidavit dated 18.4.2017 has submitted that the add-cap can be justified by the petitioner after submission of item-wise liability flow statement for each financial year 2014-15 to 2017-18. In response, the petitioner vide affidavit dated 8.5.2017 has submitted that item-wise liability of the instant assets



are submitted in Form-5 and the Add-Cap has been claimed under clause 14(1)(i) of the Tariff Regulations, 2014.

57. We have considered the submissions of the petitioner and respondents. The additional capital expenditure claimed by the petitioner is towards balance and retention payment along with accrued IDC. Accordingly, the additional capital expenditure claimed by the petitioner is allowed under clause 14(1)(i) of the 2014 Tariff Regulations.

Capital cost allowed for tariff

58. Based on the above, the following capital cost as on COD and as on 31.3.2019 after taking into consideration the allowable IDC, IEDC and initial spare is considered for the computation of tariff for the assets covered in the instant petition:-

	(₹ in lakh)	
	Asset-1(a)	Asset-1(b,c,d)
Capital Cost claimed as on COD	63195.02	6677.63
Less: Undischarged IDC as on COD	1626.50	182.32
Capital Cost allowed as on COD	61568.52	6495.31
Add: Add-Cap During 2016-17	2298.23	440.66
Add: IDC discharged during 2016-17	377.61	119.28
Capital Cost as on 31.03.2017	64244.36	7055.25
Add: Add-Cap During 2017-18	5803.32	1004.31
Add: IDC discharged during 2017-18	1248.89	61.96
Capital Cost as on 31.03.2018	71296.57	8121.52
Add: Add-Cap During 2018-19	1450.58	251.08
Capital Cost as on 31.03.2019	72747.15	8372.60

Debt-Equity Ratio

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

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

Provided that:

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

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

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

60. The petitioner has not submitted Form-6. Therefore, the debt-equity ratio claimed by the petitioner in respect of the capital cost as on date of commercial operation (excluding the undischarged IDC) of the Asset-I(a) and Asset-1(b, c, d) could not be verified. However, from the calculation of return on equity and interest on normative loan of the instant assets, it is noticed that the petitioner has considered debt:equity ratio of 70:30 as under:

(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	43097.96	70.00	1948.59	70.00
Equity	18470.56	30.00	4546.72	30.00
Total	61568.52	100.00	6495.31	100.00



61. Based on these details as above, the debt-equity ratio of 70:30 has been considered as on COD as well as for the additional capital expenditure after COD. However, this shall be subject to true up, based on the Form-6, which is to be furnished by the petitioner at the time of truing up.

Return on Equity (RoE)

62. 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.”

63. 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 per the above Regulation. The petitioner has further submitted that 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.

64. 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:-

Asset- I(a)

Particulars	(₹ in lakh)		
	2016-17 (31.1.2017 to 31.3.2017)	2017-18	2018-19
Opening Equity	18470.56	19273.31	21388.97
Addition due to Add. Capitalisation	802.75	2115.66	435.17
Closing Equity	19273.31	21388.97	21824.15
Average Equity	18871.93	20331.14	21606.56
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	608.35	3986.94	4237.05

Asset- I (b, c, d)

Particulars	(₹ in lakh)		
	2016-17 (3.2.2017 to 31.3.2017)	2017-18	2018-19

Opening Equity	1948.59	2116.57	2436.46
Addition due to Add. Capitalisation	167.98	319.88	75.32
Closing Equity	2116.57	2436.46	2511.78
Average Equity	2032.58	2276.51	2474.12
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	62.25	446.42	485.17

Interest on Loan (IoL)

65. 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 upto the date of decapitalisation of such Asset.

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

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

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

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

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

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



- a) 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;
- b) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period; and
- c) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

67. Detailed calculation of the weighted average rate of interest has been given in Annexure I and II to this order.

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

Asset-I (a)

Particulars	(₹ in lakh)		
	2016-17 (31.3.2017to 31.3.2017)	2017-18	2018-19
Gross Normative Loan	43097.96	44971.05	49907.60
Cumulative Repayment upto Previous Year	0.00	511.74	3878.56
Net Loan-Opening	43097.96	44459.32	46029.04
Addition due to Additional Capitalisation	1873.09	4936.55	1015.41
Repayment during the year	511.74	3366.82	3587.67
Net Loan-Closing	44459.32	46029.04	43456.78
Average Loan	43778.64	45244.18	44742.91
Weighted Average Rate of Interest on Loan	8.64%	8.61%	8.59%
Interest	621.48	3895.59	3844.91

Asset-I (b, c, d)

Particulars	(₹ in lakh)		
	2016-17 (3.2.2017 to 31.3.2017)	2017-18	2018-19



Gross Normative Loan	4546.72	4938.68	5685.07
Cumulative Repayment upto Previous Year	0.00	55.39	448.38
Net Loan-Opening	4546.72	4883.29	5236.70
Addition due to Additional Capitalisation	391.96	746.40	175.75
Repayment during the year	55.39	392.99	422.44
Net Loan-Closing	4883.29	5236.70	4990.00
Average Loan	4715.00	5059.99	5113.35
Weighted Average Rate of Interest on Loan	8.42%	8.40%	8.37%
Interest	61.98	424.93	427.75

Depreciation

69. 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.”

70. The petitioner has claimed actual depreciation as a component of annual fixed charges. In our calculations, 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.

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

Asset-I(a)

(₹ in lakh)

Particulars	2016-17 (31.1.2017 to 31.3.2017)	2017-18	2018-19
Opening Gross Block	61568.52	64244.36	71296.57
Additional Capital expenditure	2675.84	7052.21	1450.58
Closing Gross Block	64244.36	71296.57	72747.15
Average Gross Block	62906.44	67770.47	72021.86
Rate of Depreciation	4.95%	4.97%	4.98%



Depreciable Value	53200.46	55057.35	60751.58
Remaining Depreciable Value	53200.46	54545.61	56873.02
Depreciation	511.74	3366.82	3587.67

Asset-I (b, c, d)

Particulars	(₹ in lakh)		
	2016-17 (3.2.2017 to 31.3.2017)	2017-18	2018-19
Opening Gross Block	6495.31	7055.25	8121.53
Additional Capital expenditure	559.94	1066.28	251.07
Closing Gross Block	7055.25	8121.53	8372.60
Average Gross Block	6775.28	7588.39	8247.06
Rate of Depreciation	5.23%	5.18%	5.12%
Depreciable Value	6097.75	6829.55	7422.36
Remaining Depreciable Value	6097.75	6774.16	6973.98
Depreciation	55.39	392.99	422.44

Operation & Maintenance Expenses (O & M Expenses)

72. The petitioner claimed following O&M Expenses in the instant petition:

Assets	(₹ in lakh)		
	2016-17	2017-18	2018-19
Asset-1(a)	56.36	343.89	355.31
Asset-1(b, c, d)	60.00	385.73	398.53
Total	617.17	1145.05	1238.84

73. As per Regulation 29(4) of Tariff Regulation 2014, the normative O&M for Asset covered in the instant petition are as under:-

Asset	(₹ in lakh)		
	2016-17	2017-18	2018-19
D/C (quad) T/L ₹ lakh/ KM	1.133	1.171	1.210
400 kV bays ₹ lakh/bay	64.370	66.510	68.710
400 kV GIS bays ₹ lakh/bay	55.020	56.840	58.30
220 kV bays ₹ lakh/bay	45.060	46.55	48.100

74. As per Regulation 29(4) of 2014 Tariff Regulation, the allowable O&M expenses for the asset covered in the instant petition are as under:-

(₹ in lakh)

Asset	2016-17	2017-18	2018-19
Asset I(a) COD-31.1.2017	15.46	97.19	100.43
83.00 KM D/C (quad) T/L			
2 Nos 400 kV bays	21.16	133.02	137.42
2 Nos 400 kV GIS bays	18.09	113.68	117.46
Total	54.71	343.89	353.31
Asset I(b, c, d) COD 3.2.2017			
3 Nos 400 kV bays for ICT I & II and bus reactor bay	30.15	199.53	206.13
4 Nos. 220 kV bays for ICT I & II and line bays at Dehradun S/S	28.15	186.20	192.40
Total	58.30	385.73	398.53

75. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the 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.

Interest on Working Capital (IWC)

76. 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;”

77. 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 Regulation 28 (3) of tariff regulation' 2014, SBI Base rate 9.30% as on 1.4.2016 plus 350 Bps i.e. 12.80% has been considered for the Asset, as the rate of interest on working capital.

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



Asset-I(a)

(₹ in lakh)

Particulars	2016-17 (31.1.2017 to 31.3.2017)	2017-18	2018-19
Maintenance Spares	49.92	51.58	53.00
O & M expenses	27.73	28.66	29.44
Receivables	1862.61	1976.07	2049.30
Total	1940.27	2056.32	2131.74
Interest	40.83	263.21	272.86

Asset-I (b, c, d)

(₹ in lakh)

Particulars	2016-17 (3.2.2017 to 31.3.2017)	2017-18	2018-19
Maintenance Spares	56.00	57.86	59.78
O & M expenses	31.11	32.14	33.21
Receivables	261.34	282.97	297.31
Total	348.45	372.97	390.30
Interest	6.97	47.74	49.96

Transmission charges

79. The transmission charges being allowed for the instant Assets are summarized hereunder:-

Asset-I(a)

(₹ in lakh)

Particulars	2016-17 (31.1.2017 to 31.3.2017)	2017-18	2018-19
Depreciation	511.74	3366.82	3587.67
Interest on Loan	621.48	3895.59	3844.91
Return on equity	608.35	3986.94	4237.05
Interest on Working Capital	40.83	263.21	272.86
O & M Expenses	54.71	343.89	353.31
Total	1837.10	11856.45	12295.80



Asset-I(b, c, d)

Particulars	(₹ in lakh)		
	2016-17 (3.2.2017 to 31.3.2017)	2017-18	2018-19
Depreciation	55.39	392.99	422.44
Interest on Loan	61.98	424.93	427.75
Return on equity	62.25	446.42	485.17
Interest on Working Capital	6.97	47.74	49.96
O & M Expenses	58.30	385.73	398.53
Total	244.87	1697.81	1783.86

80. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess and charges or any other kind of impositions etc. The same if imposed shall be borne and additionally paid by the respondents.

Transmission service agreement:

81. The respondent, BRPL vide affidavit dated 28.04.2017 has 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.

82. The Petitioner vide affidavit dated 8.5.2017 has submitted rejoinder to reply of BRPL as under:-

“As per Clause 13 (5) of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, the notified Model TSA shall be the default TSA and shall mandatorily apply to all Designated ISTS customers. BRPL has signed TSA on 19.08.2011.”



Filing Fee and Publication Expenses

83. 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. BRPL has submitted that filing fee and other expenses may not be allowed. 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.

Sharing of Transmission charges:

84. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of The 2014 Tariff regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended time to time.

85. This order disposes of Petition No. 55/TT/2017.

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

Asset-I(a)

(₹ in lakh)

BOND XXXIII			
Gross loan opening	7881.56	7881.56	7881.56
Cumulative Repayment upto DOCO/previous year	1954.64	1954.64	2606.19
Net Loan-Opening	5926.92	5926.92	5275.37
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	651.55	651.55
Net Loan-Closing	5926.92	5275.37	4623.82
Average Loan	5926.92	5601.15	4949.60
Rate of Interest	8.64%	8.64%	8.64%
Interest	512.09	483.94	427.65
BOND-XXXIV			
Gross loan opening	3500.00	3500.00	3500.00
Cumulative Repayment upto DOCO/previous year	875.00	875.00	1166.67
Net Loan-Opening	2625.00	2625.00	2333.33
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	291.67	291.67
Net Loan-Closing	2625.00	2333.33	2041.66
Average Loan	2625.00	2479.17	2187.50
Rate of Interest	8.84%	8.84%	8.84%
Interest	232.05	219.16	193.37
BOND-XXXV			
Gross loan opening	795.00	795.00	795.00
Cumulative Repayment upto DOCO/previous year	132.50	132.50	198.75
Net Loan-Opening	662.50	662.50	596.25
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	66.25	66.25
Net Loan-Closing	662.50	596.25	530.00
Average Loan	662.50	629.38	563.13
Rate of Interest	9.64%	9.64%	9.64%
Interest	63.87	60.67	54.29
BOND XXXV			
Gross loan opening	5145.00	5145.00	5145.00
Cumulative Repayment upto DOCO/previous year	343.00	343.00	686.00
Net Loan-Opening	4802.00	4802.00	4459.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	343.00	343.00



Net Loan-Closing	4802.00	4459.00	4116.00
Average Loan	4802.00	4630.50	4287.50
Rate of Interest	9.35%	9.35%	9.35%
Interest	448.99	432.95	400.88
BOND XL			
Gross loan opening	1600.00	1600.00	1600.00
Cumulative Repayment upto DOCO/previous year	133.33	133.33	266.66
Net Loan-Opening	1466.67	1466.67	1333.34
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	133.33	133.33
Net Loan-Closing	1466.67	1333.34	1200.01
Average Loan	1466.67	1400.01	1266.68
Rate of Interest	9.30%	9.30%	9.30%
Interest	136.40	130.20	117.80
BOND-XLI - CHILD1			
Gross loan opening	329.00	329.00	329.00
Cumulative Repayment upto DOCO/previous year	27.42	27.42	54.84
Net Loan-Opening	301.58	301.58	274.16
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	27.42	27.42
Net Loan-Closing	301.58	274.16	246.74
Average Loan	301.58	287.87	260.45
Rate of Interest	8.85%	8.85%	8.85%
Interest	26.69	25.48	23.05
BOND-XLII			
Gross loan opening	1000.00	1000.00	1000.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	1000.00	1000.00	1000.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1000.00	1000.00	1000.00
Average Loan	1000.00	1000.00	1000.00
Rate of Interest	8.80%	8.80%	8.80%
Interest	88.00	88.00	88.00
BOND-XLIII			
Gross loan opening	1870.00	1870.00	1870.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	155.83
Net Loan-Opening	1870.00	1870.00	1714.17
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	155.83	155.83
Net Loan-Closing	1870.00	1714.17	1558.34
Average Loan	1870.00	1792.09	1636.26
Rate of Interest	7.93%	7.93%	7.93%
Interest	148.29	142.11	129.76



BOND XLVI			
Gross loan opening	1004.35	1004.35	1004.35
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	1004.35	1004.35	1004.35
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1004.35	1004.35	1004.35
Average Loan	1004.35	1004.35	1004.35
Rate of Interest	9.30%	9.30%	9.30%
Interest	93.40	93.40	93.40
BOND XLVII			
Gross loan opening	245.00	245.00	245.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	245.00	245.00	245.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	20.42
Net Loan-Closing	245.00	245.00	224.58
Average Loan	245.00	245.00	234.79
Rate of Interest	8.93%	8.93%	8.93%
Interest	21.88	21.88	20.97
BOND XLVIII			
Gross loan opening	4000.00	4000.00	4000.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	4000.00	4000.00	4000.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	4000.00	4000.00	4000.00
Average Loan	4000.00	4000.00	4000.00
Rate of Interest	8.20%	8.20%	8.20%
Interest	328.00	328.00	328.00
SBI 1000 (1.5.14)			
Gross loan opening	3604.35	3604.35	3604.35
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	3604.35	3604.35	3604.35
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	3604.35	3604.35	3604.35
Average Loan	3604.35	3604.35	3604.35
Rate of Interest	8.90%	8.90%	8.90%
Interest	320.79	320.79	320.79
BOND XLIX			
Gross loan opening	332.00	332.00	332.00



Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	332.00	332.00	332.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	332.00	332.00	332.00
Average Loan	332.00	332.00	332.00
Rate of Interest	8.15%	8.15%	8.15%
Interest	27.06	27.06	27.06
BOND XXXI			
Gross loan opening	2903.37	2903.37	2903.37
Cumulative Repayment upto DOCO/previous year	725.84	967.79	1209.74
Net Loan-Opening	2177.53	1935.58	1693.63
Additions during the year	0.00	0.00	0.00
Repayment during the year	241.95	241.95	241.95
Net Loan-Closing	1935.58	1693.63	1451.68
Average Loan	2056.56	1814.61	1572.66
Rate of Interest	8.90%	8.90%	8.90%
Interest	183.03	161.50	139.97
Bond L			
Gross loan opening	500.00	500.00	500.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	500.00	500.00	500.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	500.00	500.00	500.00
Average Loan	500.00	500.00	500.00
Rate of Interest	8.40%	8.40%	8.40%
Interest	42.00	42.00	42.00
SBI Loan (Oct 13-Dec13) Child1			
Gross loan opening	500.00	500.00	500.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	500.00	500.00	500.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	500.00	500.00	500.00
Average Loan	500.00	500.00	500.00
Rate of Interest	8.90%	8.90%	8.90%
Interest	44.50	44.50	44.50
Bond LI			
Gross loan opening	3085.98	3085.98	3085.98
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	3085.98	3085.98	3085.98



Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	3085.98	3085.98	3085.98
Average Loan	3085.98	3085.98	3085.98
Rate of Interest	8.40%	8.40%	8.40%
Interest	259.22	259.22	259.22
Bond LII			
Gross loan opening	155.73	155.73	155.73
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	155.73	155.73	155.73
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	155.73	155.73	155.73
Average Loan	155.73	155.73	155.73
Rate of Interest	8.32%	8.32%	8.32%
Interest	12.96	12.96	12.96
Bond LIII			
Gross loan opening	1433.25	1433.25	1433.25
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	1433.25	1433.25	1433.25
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1433.25	1433.25	1433.25
Average Loan	1433.25	1433.25	1433.25
Rate of Interest	8.13%	8.13%	8.13%
Interest	116.52	116.52	116.52
Bond LV			
Gross loan opening	370.00	370.00	370.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	370.00	370.00	370.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	370.00	370.00	370.00
Average Loan	370.00	370.00	370.00
Rate of Interest	7.55%	7.55%	7.55%
Interest	27.94	27.94	27.94
Bond LVII			
Gross loan opening	0.00	0.00	283.66
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	283.66
Additions during the year	0.00	283.66	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	0.00	283.66	283.66
Average Loan	0.00	141.83	283.66
Rate of Interest	0.00%	7.20%	7.20%



Interest	0.00	10.21	20.42
BOND LIV			
Gross loan opening	2180.00	2180.00	2180.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	2180.00	2180.00	2180.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	2180.00	2180.00	2180.00
Average Loan	2180.00	2180.00	2180.00
Rate of Interest	7.97%	7.97%	7.97%
Interest	173.75	173.75	173.75
Bond LVI			
Gross loan opening	726.36	726.36	726.36
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	726.36	726.36	726.36
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	726.36	726.36	726.36
Average Loan	726.36	726.36	726.36
Rate of Interest	7.36%	7.36%	7.36%
Interest	53.46	53.46	53.46
BOND LVI			
Gross loan opening	0.00	264.33	264.33
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	264.33	264.33
Additions during the year	264.33	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	264.33	264.33	264.33
Average Loan	132.17	264.33	264.33
Rate of Interest	7.36%	7.36%	7.36%
Interest	9.73	19.45	19.45
Bond LVI			
Gross loan opening	0.00	0.00	78.30
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	78.30
Additions during the year	0.00	78.30	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	0.00	78.30	78.30
Average Loan	0.00	39.15	78.30
Rate of Interest	0.00%	7.36%	7.36%
Interest	0.00	2.88	5.76



Bond LVIII			
Gross loan opening	0.00	1275.00	1275.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	1275.00	1275.00
Additions during the year	1275.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1275.00	1275.00	1275.00
Average Loan	637.50	1275.00	1275.00
Rate of Interest	7.89%	7.89%	7.89%
Interest	50.30	100.60	100.60
SBI (2016-17) Q4			
Gross loan opening	0.00	333.76	333.76
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	333.76	333.76
Additions during the year	333.76	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	333.76	333.76	333.76
Average Loan	166.88	333.76	333.76
Rate of Interest	8.90%	8.90%	8.90%
Interest	14.85	29.70	29.70
SBI (2016-17) Q4			
Gross loan opening	0.00	0.00	512.26
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	512.26
Additions during the year	0.00	512.26	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	0.00	512.26	512.26
Average Loan	0.00	256.13	512.26
Rate of Interest	0.00%	8.90%	8.90%
Interest	0.00	22.80	45.59
Total Loan			
Gross loan opening	43160.95	45034.04	45908.26
Cumulative Repayment upto DOCO/previous year	4191.73	4433.68	6344.68
Net Loan-Opening	38969.22	40600.36	39563.58
Additions during the year	1873.09	874.22	0.00
Repayment during the year	241.95	1911.00	1931.42
Net Loan-Closing	40600.36	11698.63	11698.63
Average Loan	39784.79	40081.97	38597.87
Rate of Interest	8.64%	8.61%	8.59%
Interest	3435.75	3451.13	3316.85



Annexure-II

Asset-I(b, c, d)

(₹ in lakh)

Details of Loan	2016-17	2017-18	2018-19
BOND XXXIII			
Gross loan opening	17.44	17.44	17.44
Cumulative Repayment upto DOCO/previous year	4.36	4.36	5.81
Net Loan-Opening	13.08	13.08	11.63
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	1.45	1.45
Net Loan-Closing	13.08	11.63	10.18
Average Loan	13.08	12.36	10.91
Rate of Interest	8.64%	8.64%	8.64%
Interest	1.13	1.07	0.94
BOND-XXXIV			
Gross loan opening	510.00	510.00	510.00
Cumulative Repayment upto DOCO/previous year	127.50	127.50	170.00
Net Loan-Opening	382.50	382.50	340.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	42.50	42.50
Net Loan-Closing	382.50	340.00	297.50
Average Loan	382.50	361.25	318.75
Rate of Interest	8.84%	8.84%	8.84%
Interest	33.81	31.93	28.18
BOND-XXXV			
Gross loan opening	82.00	82.00	82.00
Cumulative Repayment upto DOCO/previous year	13.67	13.67	20.50
Net Loan-Opening	68.33	68.33	61.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	6.83	6.83
Net Loan-Closing	68.33	61.50	54.67
Average Loan	68.33	64.92	58.09
Rate of Interest	9.64%	9.64%	9.64%
Interest	6.59	6.26	5.60
BOND XXXVI			
Gross loan opening	107.00	107.00	107.00
Cumulative Repayment upto DOCO/previous year	7.13	7.13	14.26
Net Loan-Opening	99.87	99.87	92.74
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	7.13	7.13
Net Loan-Closing	99.87	92.74	85.61



Average Loan	99.87	96.31	89.18
Rate of Interest	9.35%	9.35%	9.35%
Interest	9.34	9.00	8.34
BOND XL			
Gross loan opening	222.00	222.00	222.00
Cumulative Repayment upto DOCO/previous year	18.50	18.50	37.00
Net Loan-Opening	203.50	203.50	185.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	18.50	18.50
Net Loan-Closing	203.50	185.00	166.50
Average Loan	203.50	194.25	175.75
Rate of Interest	9.30%	9.30%	9.30%
Interest	18.93	18.07	16.34
BOND-XLII			
Gross loan opening	31.00	31.00	31.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	31.00	31.00	31.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	31.00	31.00	31.00
Average Loan	31.00	31.00	31.00
Rate of Interest	8.80%	8.80%	8.80%
Interest	2.73	2.73	2.73
BOND-XLIII			
Gross loan opening	139.00	139.00	139.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	11.58
Net Loan-Opening	139.00	139.00	127.42
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	11.58	11.58
Net Loan-Closing	139.00	127.42	115.84
Average Loan	139.00	133.21	121.63
Rate of Interest	7.93%	7.93%	7.93%
Interest	11.02	10.56	9.65
SBI 10000 (1.5.14)			
Gross loan opening	250.64	250.64	250.64
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	250.64	250.64	250.64
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	250.64	250.64	250.64
Average Loan	250.64	250.64	250.64
Rate of Interest	8.90%	8.90%	8.90%
Interest	22.31	22.31	22.31



BOND XXXI			
Gross loan opening	1401.43	1401.43	1401.43
Cumulative Repayment upto DOCO/previous year	350.36	467.15	583.94
Net Loan-Opening	1051.07	934.28	817.49
Additions during the year	0.00	0.00	0.00
Repayment during the year	116.79	116.79	116.79
Net Loan-Closing	934.28	817.49	700.70
Average Loan	992.68	875.89	759.10
Rate of Interest	8.90%	8.90%	8.90%
Interest	88.35	77.95	67.56
BOND L			
Gross loan opening	56.30	56.30	56.30
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	56.30	56.30	56.30
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	20.42
Net Loan-Closing	56.30	56.30	35.88
Average Loan	56.30	56.30	46.09
Rate of Interest	8.40%	8.40%	8.40%
Interest	4.73	4.73	3.87
SBI LOAN (Oct10 TO Dec13) CHILD1			
Gross loan opening	499.00	499.00	499.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	499.00	499.00	499.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	499.00	499.00	499.00
Average Loan	499.00	499.00	499.00
Rate of Interest	8.90%	8.90%	8.90%
Interest	44.41	44.41	44.41
BOND LI			
Gross loan opening	127.92	127.92	127.92
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	127.92	127.92	127.92
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	127.92	127.92	127.92
Average Loan	127.92	127.92	127.92
Rate of Interest	8.40%	8.40%	8.40%
Interest	10.75	10.75	10.75
BOND LII			
Gross loan opening	14.27	14.27	14.27



Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	14.27	14.27	14.27
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	14.27	14.27	14.27
Average Loan	14.27	14.27	14.27
Rate of Interest	8.32%	8.32%	8.32%
Interest	1.19	1.19	1.19
BOND LVII			
Gross loan opening	1088.72	1088.72	1088.72
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	1088.72	1088.72	1088.72
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1088.72	1088.72	1088.72
Average Loan	1088.72	1088.72	1088.72
Rate of Interest	7.20%	7.20%	7.20%
Interest	78.39	78.39	78.39
Rep Schedule			
BOND LVII			
Gross loan opening	0.00	84.25	84.25
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	84.25	84.25
Additions during the year	84.25	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	84.25	84.25	84.25
Average Loan	42.13	84.25	84.25
Rate of Interest	7.20%	7.20%	7.20%
Interest	3.03	6.07	6.07
Rep Schedule			
BOND LVII			
Gross loan opening	0.00	0.00	43.37
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	43.37
Additions during the year	0.00	43.37	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	0.00	43.37	43.37
Average Loan	0.00	21.69	43.37
Rate of Interest	8.90%	7.20%	7.20%
Interest	0.00	1.56	3.12
Rep Schedule			
SBI (2016-17) Q4			
Gross loan opening	0.00	308.46	308.46



Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	308.46	308.46
Additions during the year	308.46	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	308.46	308.46	308.46
Average Loan	154.23	308.46	308.46
Rate of Interest	8.90%	8.90%	8.90%
Interest	13.73	27.45	27.45
Rep Schedule			
Total Loan			
Gross loan opening	4546.72	4939.43	4982.80
Cumulative Repayment upto DOCO/previous year	521.52	638.31	843.09
Net Loan-Opening	4025.20	4301.12	4139.71
Additions during the year	392.71	43.37	0.00
Repayment during the year	116.79	204.78	225.20
Net Loan-Closing	4301.12	436.08	436.08
Average Loan	4163.16	4220.42	4027.11
Rate of Interest	8.42%	8.40%	8.37%
Interest	350.42	354.42	336.89



