

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 60/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 31.03.2019 for **Asset-I:** 2 No. Line bays at Amritsar 400/220 kV Sub-station (COD: 1.12.2016) and **Asset-II:** 4 No. 220 kV Line bays at Malerkotla GIS 400/220 kV Sub-station (COD: 1.12.2016) under "Northern Region System Strengthening Scheme- XXXI-B".

And in the matter of:

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

Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005
2. Ajmer Vidyut Vitran Nigam Ltd
400 kV Gss Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd
400 kV Gss Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Ltd
400 kV Gss Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building Ii
Shimla-171 004

6. Punjab State Electricity Board
The Mall, Patiala - 147 001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Deptt.
Govt. Of Jammu and Kashmir
Mini Secretariat, Jammu
Represented By Its Commissioner
9. Uttar Pradesh Power Corporation Ltd.
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
10. Delhi Transco Ltd
Shakti Sadan, Kotla Road,
New Delhi-110 002
11. BSES Yamuna Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Ltd,
Power Trading and Load Dispatch Group
Cennet Building,
Adjacent To 66/11 kV Pitampura-3
Grid Building, Near Pp Jewellers
Pitampura, New Delhi - 110034
14. Chandigarh Administration
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.
Urja Bhawan
Kanwali Road
Dehradun.
16. North Central Railway

Allahabad.

17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

18. NRSS XXXI (B) Transmission Limited
A-26/3, Mohan Cooperative Estate, Saidabad
New Delhi-110044.....Respondent

Parties present:

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

For Respondents: - Shri Matru Gupta Mishra, Advocate, RRVPNL
Shri Nimesh K. Jha, Advocate, RRVPNL
Shri R.B. Sharma, Advocate, BRPL
Shri Neeraj Verma, NTL

ORDER

The Petitioner, Power Grid Corporation of India Limited (PGCIL) has filed the present petition for approval of the transmission tariff in respect of the **Asset-I:** 2 No. Line bays at Amritsar 400/220 kV Sub-station (COD: 1.12.2016) and **Asset-II:** 4 No. 220 kV Line bays at Malerkotla GIS 400/220 kV Sub-station (COD: 1.12.2016) under "Northern Region System Strengthening Scheme- XXXI-B" in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

Approval of the Scheme

2. The petitioner was entrusted with the implementation of transmission system associated with provision of 400 kV bays for lines under NRSS-XXXI (Part-B) scheme. The same was discussed and agreed in the 31st Standing Committee meeting on transmission system planning of Northern Region held on 2.1.2013. The scheme was also approved during 34th Standing Committee meeting held on 25.8.2014 and 33rd NRPC meeting held on 11.11.2014.

3. The Investment Approval (IA) and expenditure sanction for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum no. C/CP/NRSS-31 (Part-B) in NR for NRSS-XXXI (Part-B) dated 2.6.2015 at an estimated cost of ₹11818 lakh including an IDC of ₹468 lakh (based on February, 2015 price level).

4. The scope of work covered under the project was broadly as under:-

Sub-station:

(i) Kurukshetra HVDC Sub-station (GIS)(Powergrid)(Extension)

400 kV - Line Bays: 2 nos.

(ii) Malerkotla(GIS) 400/220 kV (Powergrid) Sub-station (Extension)

400 kV - Line Bays: 4 nos.

(iii) Amritsar 400/200 kV (Powergrid) Sub-station(Extension)

400 kV - Line Bays: 2 nos.

Assets Covered under the instant petition

5. The details of the assets covered in the instant transmission petition are as follows:

Sr. No	Name of the Asset
1	2 No. Line bays at Amritsar 400/220 kV Sub-station (herein after referred as " Asset I ")
2	4 No.400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station* (herein after referred as " Asset II ")

*Petitioner vide affidavit dated 8.5.2017 has submitted that Asset-II has been inadvertently indicated as "4 nos. 220 kV line Bays at Malerkotla GIS 400/220 kV Sub-station" instead of "4 nos. 400 kV line bays at Malerkotla GIS 400/220 kV Sub-station; Same has been taken into consideration and rectified. The tariff of the balance assets is claimed by the petitioner separately.

6. Annual Fixed Charges was granted for the instant transmission asset vide order dated 12.6.2017 under the proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the POC charges.

7. The details of the transmission charges claimed by the petitioner for the instant asset are as under:-

Asset-I

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	5.59	26.19	33.50
Interest on Loan	5.81	26.20	31.57
Return on equity	6.09	28.74	36.85
Interest on Working Capital	2.63	8.73	9.41
O and M Expenses	42.91	133.02	137.42
Total	63.03	222.88	248.75

Asset-II

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	86.44	301.13	330.26
Interest on Loan	96.28	319.42	325.01
Return on equity	95.52	333.02	365.28
Interest on Working Capital	9.90	32.68	34.54
O and M Expenses	73.36	227.36	234.92
Total	361.50	1,213.61	1,290.01

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

Asset-I

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Maintenance Spares	19.31	19.95	20.61
O and M expenses	10.73	11.09	11.45
Receivables	31.52	37.15	41.46
Total	61.56	68.19	73.52
Interest (pro-rata)	2.63	8.73	9.41

Asset-II

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Maintenance Spares	33.01	34.10	35.24
O and M expenses	18.34	18.95	19.58
Receivables	180.75	202.27	215.00
Total	232.10	255.32	269.82
Interest (pro-rata)	9.90	32.50	34.54

9. The petitioner further submitted that it was decided to utilize 2 no. spare bays at Kurukshetra which are covered under “Transmission system strengthening in WR-NR Transmission corridor for IPPs in Chhattisgarh (Ckt-2) for termination of 400 kV D/C Kurukshetra-Malerkotla TBCB line at Kurukshetra. Thus, out of 8 bays covered under NRSS XXXI-B, 6 bays are covered in the present petition and remaining 2 bays i.e. “2 nos. GIS bays at Kurukshetra HCDC Sub-station” will be filed under Ckt-2 project separately.

10. BRPL, Respondent no-12 vide its affidavit dated 28.4.2017 has submitted that as the petitioner has mentioned that tariff for 2 Nos. spare bays at Kurukshetra will be filed under ckt-2 project, the petitioner may file the information related to 2 nos. spare bays and clarify whether the tariff for these bays is already claimed by the petitioner under Ckt-2 project or not. In response, the petitioner vide its rejoinder affidavit dated 8.5.2017 has submitted that the tariff for 2 nos. bays at Kurukshetra have not been claimed in the present petition and will be claimed under “Transmission system strengthening in WR-NR Transmission corridor for IPPs in Chhattisgarh (Ckt-2)”.

Date of Commercial Operation (COD)

11. The petitioner has claimed the commercial operation date of 1.12.2016 for Asset I i.e. 2 No. Line bays at Amritsar 400/220 kV Sub-station and Asset II i.e. 4 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station. The petitioner vide affidavit dated 8.5.2017 has submitted the charging details of associated lines developed under the TBCB route as follows:

S.no	Name of the Asset	Charging date	RLDC dated	Letter
1	400 kV Amritsar-Malerkotla TBCB Line	Ckt-I charged on 30.3.2017 Ckt-II charged on 1.4.2017	17.4.2017	
2	400 kV Malerkotla-Kurukshetra TBCB Line	Ckt-I charged on 15.1.2017 Ckt-II charged on 16.1.2017	3.2.2017	

12. The petitioner in main petition has claimed the COD of the instant assets as 1.12.2016. In support of the claim, the petitioner vide affidavit dated 27.12.2016 has submitted the trial operation certificate issued by RLDC on no-load and submitted that power flow could not be carried out for Asset-I and II as 400 kV Amritsar-Malerkotla (TBCB Line being constructed by NRSS XXXI (B) Transmission Limited (NTL)) was not commissioned on that date. The petitioner has also submitted self-declaration COD certificate and the certificate issued by CEA under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010.

13. During hearing on 3.8.2017, the representative of the NRSS XXXI (B) Transmission Limited (NTL) submitted as under:-

- a. The NTL is an inter-State transmission service provider and not a beneficiary of the instant assets.
- b. The scheduled commercial operation date of the Kurukshetra-Malerkotla transmission line and Malerkotla-Amritsar transmission line was 11.9.2016 i.e. 28 months from the effective date as per the Transmission Service Agreement dated 2.1.2014. The Kurukshetra-Malerkotla transmission line achieved its COD on 18.1.2017 and Malerkotla-Amritsar transmission line achieved its COD on 3.4.2017.

14. NTL, vide affidavit dated 5.5.2017 has submitted the following:-

- a. It is not a beneficiary of the system being built by the petitioner. For the purpose of determination of tariff, only the beneficiaries, who are liable to share the transmission charges, have to be made as respondents. NTL is an ISTS developer and not a beneficiary of the instant assets and hence it should not have been made a respondent. In the determination of the tariff petition neither there is any scope, nor an independent analysis of the reasons behind the delay occasioned in implementation of the transmission project within the scope of work of NTL.

- b. As regards the status of its project, NTL was selected through a Tariff Based Competitive Bidding Process, pursuant to the RFP dated 9.12.2013, for implementing the transmission scheme, referred to as NRSS XXXI-(B), on build, own, operate and maintain basis. Pursuant to the said bidding process, TSA was executed on 2.1.2014 with the various stakeholders in the Northern Region. The NRSS XXXI (B) consists of 400 kV D/C Twin ACSR Moose Kurukshetra-Malerkotla transmission line and 400 kV D/C Twin ACSR Moose Malerkotla-Amritsar transmission Line. The schedule commercial operation date of the above projects elements is 11.9.2016 which was 28 months from the effective date as per the TSA dated 2.1.2014.
- c. On 26.2.2014, letter of intent for the project was issued to NTL and accordingly, as per Article 3.1.1 of the TSA, the SPV was transferred to NTL on 12.5.2014 by REC Transmission Projects Company Ltd., the bid process coordinator. Subsequently, transmission license was issued to NTL by the Commission vide order dated 25.8.2014.
- d. The COD of the transmission line has been delayed due to delay in receipt of gantry coordinates at PGCIL Kurukshetra and Malerkotla Sub-station, change in tower extension at location no.71/0 of 400 kV D/C Kurukshetra-Malerkotla line during the final stages of the implementation /construction of the transmission project, requirement of Multi circuit towers for transmission line termination at Malerkotla Sub-station end, severe right of way issues, Force Majeure events, delay in transfer of SPV, delay in grant of Forest Clearance, withholding of tree cutting in the State of Punjab due to National Green Tribunal (NGT) Order dated 19.5.2016 (Case No.: OA 161 and 162 of 2016), withholding of tree cutting in Punjab due to non-availability of signed Copy of Order from Hon'ble High Court of Punjab and Haryana.

15. The petitioner, vide its rejoinder dated 28.7.2017, has submitted that as regards Asset-I i.e. "2 no. line bays at Amritsar 400/220 kV Sub-station", POWERGRID has made various communication with NTL vide letters dated 30.9.2016, 19.10.2016, 27.10.2016 and

22.11.2016 for commissioning of the TBCB line. The petitioner obtained CEA energization certificate on 26.9.2016 before SCOD of 1.10.2016 and waited 2 more month to match with the commissioning of TBCB line (Amritsar-Malerkotla). But due to contractual obligation Asset-I was finally declared COD on 1.12.2016.

16. Further, with regard to Asset-II i.e.”4 no. 400 kV line bays at Malerkotla GIS 400/220 KV Sub-station”, it is submitted that the petitioner made various communication vide letters dated 30.9.2016,19.10.2016,10.11.2016 and 21.11.2016 with NTL for commissioning of TBCB line. NTL through its letter dated 1.10.2016 confirmed that 400 kV D/C Kurukshetra-Malerkotla T/L will be commissioned by 30.11.2016. The Petitioner obtained the CEA energization certificate on 4.11.2016 before the schedule provided by NTL in order to charge the bays matching with the TBCB line. Further, as NTL delayed the commissioning of the TBCB line and due to contractual obligation on part of the petitioner, Asset-II was finally declared COD on 1.12.2016.

17. The petitioner, in its rejoinder dated 28.7.2017 has also submitted that the instant assets were not utilized due to delay in the completion and commissioning of the associated transmission line by NRSS XXXI (B) Transmission Limited (NTL), which were beyond the control of the petitioner. The petitioner has submitted that instant assets were not put to regular service for reasons not attributable to the petitioner and qualifies for approval of COD under the second proviso to Regulation 4(3) of 2014 Tariff Regulations.

Analysis and Decision regarding COD:

18. The petitioner has claimed the COD of the Asset-I and II as 1.12.2016 under the second proviso of 4(3) (ii) of the Tariff Regulations. The associated transmission system under the scope of NTL and the scheduled commissioning of the associated transmission system was 11.9.2016; however the same has not been commissioned on 11.9.2016. The

instant assets were not utilized due to delay in the completion and commissioning of the associated transmission line by NRSS XXXI (B) Transmission Limited (NTL). The petitioner has prayed for approval of COD under the second proviso to Regulation 4(3) of 2014 Tariff Regulations. Regulation 4(3)(ii) of the 2014 Tariff Regulations. The said provision provides as under:-

“4. Date of Commercial Operation

The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

XXXXXXXXXX

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

19. The Commission, vide its order dated 12.6.2017 in the instant petition, has directed as under:

”We have considered the submissions of the petitioner. The petitioner has prayed for approval of COD of the instant bays at Amritsar and Malerkotla as 1.12.2016 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. We would like to hear Essel Group before approving the COD of the instant assets as 1.12.2016, as prayed by the petitioner. Further, as per Regulation 6.3A(4)(vi) of Indian Electricity Grid Code, 2010, the petitioner is required to submit a certificate from its CMD/CEO/MD that the instant bays conform to the relevant Grid Standard and Grid Code, and are capable of operation to their full capacity. The petitioner has not filed any such certificate from its CMD. Hence, we are not inclined to approve COD of the instant bays as 1.12.2016 as prayed by the petitioner under Regulation 4(3) of the 2014 Tariff Regulations. The same will be reviewed after hearing Essel Group and receipt of information as specified under Regulation 6.3A(4)(vi) of Indian Electricity Grid Code, 2010”.

20. NTL has submitted the status of the project and detailed reasons for delay in commissioning of the transmission line. NTL has further submitted that the TSA under Article 4.4 provides for a situation where in the SCOD may be extended for a period which is covered under situations arising out of events beyond the control and contemplation (Force Majeure events) of the TSP.

21. It is observed that instant transmission assets have been charged and trial operation could be successfully carried out only on commissioning of the associated transmission line, which is stated to have been commissioned as follows:

S. no	Name of the Asset	Charging date	Date of Completion of trial run
1	400 kV Amritsar-Malerkotla TBCB Line	Ckt-I charged on 30.3.2017 Ckt-II charged on 1.4.2017	Ckt I completed on 31.3.2017 Ckt-II completed on 2.4.2017
2	400 kV Malerkotla-Kurukshetra TBCB Line	Ckt-I charged on 15.1.2017 Ckt-II charged on 16.1.2017	Ckt I completed on 16.1.2017 Ckt-II completed on 17.1.2017

22. It is observed that the petitioner has submitted the following documents in support of COD:

- RLDC charging certificate, CEA certificate and CMD certificate as required under Grid Code.
- For Asset-I, The petitioner vide affidavit dated 8.5.2017 has submitted RLDC Certificate dated 17.4.2017 for 400 kV Amritsar (PG)- Malerkotla(PG)-I along with associated bays and 400 kV Amritsar(PG)- Malerkotla(PG)-II along with associated bays.
- For Asset-II, The petitioner vide affidavit dated 8.5.2017 has submitted RLDC Certificate dated 3.2.2017 for 400 kV Kurukshetra (PG)-Malerkotla(PG)-I and II along with associated bays.
- With respect to Asset- II, it is observed that out of 4 no. of 400 kV line bays at Malerkotla, 2 nos. of 400 kV bays associated with Amritsar-Malerkotla line completed trial operation on 2.4.2017 and remaining 2 bays associated with Kurukshetra-Malerkotla line on 17.1.2017. Therefore, the Asset II is further segregated into Asset-II (a) and II (b) respectively.

23. The petitioner has submitted that the 2 nos. of 400 kV line bays at Amritsar end and 4 nos. of 400 kV line bays at Malerkotla end were ready but were not put into use because of the non-commissioning of the associated transmission line being constructed by NRSS XXXI (B) Transmission Limited (NTL). The NTL has contended that the TBCB line has been delayed due to receipt of gantry coordination at PGCIL Kurukshetra and Malerkotla Sub-stations, change in tower extension, requirement of multi circuit towers, demonetization and delay in grant of forest clearance. We have considered the submissions of the respondent. The issues raised by the respondent (NTL) regarding time delay in commissioning shall be dealt in separate petition filed by NTL in Petition No. 195/MP/2017.

24. The petitioner has claimed the COD of the Asset I and II as 1.12.2016 under Regulation 4(3)(ii) of the 2014 Tariff Regulations.

25. The Asset I and II are mainly bays of Amritsar and Malerkotla. These bays could not be put into regular service without the commissioning of associated transmission line. We are of the view that COD of the Asset I and Asset II shall be considered from date of COD of associated line. We have taken similar view in Petition No.209/TT/2017 at para 18 and relevant extract is as under:

“18. As per findings of the APTEL, which was upheld by the Hon'ble Supreme Court, an element of transmission system can be declared as having attained commercial operation only if it has been charged successfully, after successful trial operation and is in regular service. In the instant case, bays were ready, but the successful trial operation and charging could not be carried out without the commissioning of the associated Muzaffarpur (PG)-Darbhanga (TBCB) 400 kV D/C (Triple Snowbird) line. As the bays could not have been charged for trial operation without the transmission line, we are not inclined to approve the date of commercial operation of instant asset as 31.8.2016, as claimed by the petitioner. We are of the view that the instant transmission assets could be charged and trial operation could be successfully carried out only on commissioning of the associated transmission line, which is stated to have been commissioned on 21.4.2017. As such, the instant assets could be put into commercial operation only after 21.4.2017. Accordingly, the COD of the instant asset is approved as 21.4.2017. However, it is observed the instant bays of the petitioner at Muzaffarpur Sub-station were ready in all aspects by 31.8.2016 but were not put into use because of the non-commissioning of the associated transmission line by DMTCL. Accordingly, we are of the view that IDC and IEDC for the period from 31.8.2016 to 21.4.2017 shall be borne by DMTCL”.

26. As per RLDC Certificate dated 17.4.2017 for 400 kV Amritsar(PG)- Malerkotla(PG)-I along with associated bays and 400 kV Amritsar(PG)- Malerkotla(PG)-II along with associated bays trial run completed on 31.3.2017 and 2.4.2017 respectively for Ckt I and II. Accordingly, we have considered the COD of the Asset I i.e. both bays at Amritsar end as 3.4.2017. For the sake of ease in computation, we are considering COD on later date keeping in view of the fact that only one day difference does not have much significance.

27. As per RLDC Certificate dated 3.2.2017 for 400 kV Kurukshetra(PG)- Malerkotla(PG)-I along with associated bays and 400 kV Kurukshetra(PG)-Malerkotla(PG) – II along with associated bays completed trial operation on 16.1.2017 and 17.1.2017 respectively for Ckt-I and II. Accordingly, COD of Asset II has been considered on 18.1.2017. We are considering COD on later date for ease of computation considering that only one day difference shall not have much significance. Accordingly, the COD of Asset-II is segregated into two assets i.e. Asset-II (a) and Asset-II (b) as 3.4.2017 and 18.1.2017 matching COD with associated lines respectively.

28. The date of commercial operation (COD) considered for the instant assets are as follows:

Assets	COD Claimed	COD Allowed
Asset I: 2 No. Line bays at Amritsar 400/220 kV Sub-station	1.12.2016	3.4.2017
Asset II(a): 2 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station	1.12.2016	3.4.2017
Asset II(b): 2 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station	1.12.2016	18.1.2017

Time overrun

29. As per the investment approval, the schedule completion is within 16 months from the date of investment approval. The date of Investment Approval is 2.6.2015. Hence, the commissioning schedule comes to 1.10.2016 against which the subject assets were put

under commercial operation as per detailed below: The details of the date of actual commissioning and time over-run in case of the instant assets are as under:-

Assets	SCOD as per instant petition	COD Considered	Delay as per approved COD
Asset I: 2 No. Line bays at Amritsar 400/220 kV Sub-station	1.10.2016	3.4.2017	6 months 3 days
Asset II(a): 2 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station	1.10.2016	3.4.2017	6 months 3 days
Asset II(b): 2 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station	1.10.2016	18.1.2017	3 months 18 days

30. The petitioner has submitted that the 400 kV bays at Amritsar Sub-station and 400 kV GIS bays at Malerkotla Sub-station are being constructed by the petitioner for connection of 400 kV D/C Amritsar-Malerkotla TBCB line and 400 kV D/C Kurukshetra-Malerkotla TBCB line being implemented by NRSS XXXI (B) Transmission Limited (NTL). As per the CEA reports as on 31.10.2016, these lines are scheduled to be commissioned in December, 2016 and November, 2016 respectively. Further NRSS XXXI (B) Transmission limited vide letter dated 1.10.2016 also confirmed that 400 kV D/C Kurukshetra-Malerkotla T/L will be commissioned by 30.11.2016. The petitioner has made correspondence regarding status of line and readiness of our bays to NRSS-XXXI (B) Transmission limited vide letters dated 30.9.2016, 19.10.2016, 27.10.2016, 10.11.2016, 21.11.2016 and 22.11.2016. Further matching with the scheduled provided by NRSS-XXXI(B) Transmission limited (Essel Group), bays at POWERGRID end is anticipated to be commissioned by 1.12.2016.

31. The petitioner also submitted that the delay is mainly due to matching the bays with the upcoming TBCB line.

32. NTL vide affidavit dated 9.5.2017 has submitted the following:

- (a) The transmission scheme NRSS XXXI(B) is for augmenting power supply to Amritsar through HVDC station at Kurukshetra (which will get power from pit head generating stations of Chhattisgarh.)

(b) Both the transmission lines under the scope of NTL have achieved commercial operation. On account of the following reasons falling within the meaning of Article 11 of the TSA the project has been delayed and the same is as follows:

- (i) Delay in receipt of gantry coordinated at PGCIL Kurukshetra and Malerkotla Sub-station
- (ii) Change in Tower Extension at Location No.71/0 of 400 kV D/C Kurukshetra-Malerkotla line during the final stages of the implementation/construction of the transmission project.
- (iii) Requirement of Multi circuit towers for transmission line termination at Malerkotla Sub-station end
- (iv) Severe Right of Way issues
- (v) Force Majeure Events like conflict between Sikh community on management of Gurudwara, conflict and communal tension in Malerkotla, Farmer agitation in Punjab, Desecration of Shri Guru Granth Sahib, Jat agitation for caste based reservation in Haryana, Desecration of Quran, Adverse climatic conditions in Punjab and Haryana,.
- (vi) Delay in transfer of SPV.
- (vii) Delay in grant of Forest Clearance
- (viii) Withholding of tree cutting in the state of Punjab due to NGT order dated 19.5.2016 in case no OA 161 and 162 of 2016 and demonetization.

33. UPPTCL, the respondent no.9 vide affidavit dated 20.6.2017 has submitted the following:

- (a) NTL should not have been impleaded as a respondent in the present petition as it is not a beneficiary of the system built by the petitioner. For the purposes of

determination of tariff, only the affected parties, viz. beneficiaries, who are liable for sharing of transmission charges have to be made parties as respondents.

(b) As per 2014 Tariff Regulations upon completion of its scope of work, the petitioner is entitled to file a tariff petition and as such, there is no requirement of NTL being made a party as it is also a separate ISTS developer.

(c) The present petition relates to determination of tariff of the petitioner, neither there is any scope, nor an independent analysis of the reasons behind the delay occasioned in implementation of the transmission project within the scope of work or NTL, is within the subject matter of the present petition.

(d) The status of commissioning of project elements is as follows:-

S.no	Project element	SCOD of TBCB line	Status	Delay
1	400 kV D/C Kuruksetra-Malerkotla tr.line	11.9.2016	CKt I energized on 15.1.2017 Ckt II energized on 16.1.2017	Ckt-I:4 Months 4 days Ckt-II:4 months 5 days
2	400 kV D/C Malrkotla-Amritsar tr.line	11.9.2016	CKt I energized on 30.3.2017 Ckt II energized on 1.4.2017	Ckt-I:6 Months 19 days Ckt-II:4 months 20 days

(e) As per article 6.4 of TSA, respondent M/S NRSS XXXI (B) appears to be apprehensive about the delay and consequent application of liquidated damages clause of TSA but the respondent has not put up any prayer relating to the issue of impleadment and condonement of delay which is as per provisions of TSA and hence appear to be not within the jurisdiction of the Commission.

34. The petitioner, vide rejoinder dated 4.7.2017 has submitted the reply to the UPPTCL and the same is as follows:

- (a) With regard to Asset-I i.e. "2 No. Line bays at Amritsar 400/220 kV Sub-station", it is submitted that the petitioner has made various communication vide letter dated 30.9.2016, 19.10.2016, 27.10.2016 and 22.11.2016 with NRSS-XXXI (B) transmission limited (NTL) for status of TBCB line. Subsequently, the petitioner obtained CEA energization certificate on 26.9.2016 before SCOD of 1.10.2016 and waited for two more months to match with the TBCB line (Amritsar-Malerkotla) but due to contractual obligation, Asset-I was finally declared COD on 1.12.2016.
- (b) With regard to Asset-II i.e. "4 No. 400 kV Line bays at Malerkotla GIS 400/220 kV Sub-station", it is submitted that various communication vide letter dated 30.9.2016, 19.10.2016, 10.11.2016 and 21.11.2016 was done with NTL for seeking status of TBCB line. NTL limited through its letter dtd. 1.10.2016 confirmed that 400 kV D/C Kurukshetra-malerkotla T/L will be commissioned by 30.11.2016. Accordingly the petitioner obtained the CEA energization certificate on 4.11.2016 before the schedule provided by NTL in order to charge the bays matching with the TBCB line. Further NTL delayed the commissioning of the TBCB line and due to contractual obligation Asset-II was finally declared COD on 1.12.2016.
- (c) It is pertinent to mention that as the delay was mainly due to matching with the TBCB line which is under the scope of NTL, the NTL was made one of the respondents.
- (d) With regard to provision of liquidated damage clause of TSA, it is to be dealt by LTTCs and TBCB party.

35. NTL vide affidavit dated 10.7.2017 has submitted the reply to UPPTCL and the same is as follows:-

"The issue of any delay on the part of the answering respondent is not the subject matter of the present petition. The answering respondent submits that even though the present petition against the answering respondent is legally not tenable on account of the fact that the answering Respondent itself is an interstate transmission service provider and not a beneficiary. It would be pertinent to highlight the fact that despite the delay occasioned on account of reasons beyond the control of NTL, the said entity (NTL) has been successful in commissioning all the elements of project in tandem with the upstream 800 kV HVDC Champa- Kurukshetra bi-pole."

36. The petitioner, vide affidavit dated 28.7.2017, has submitted the rejoinder to the reply /objection filed by NRSS-XXXI(B) and the same is as follows:

(a) With regard to Asset-I, the petitioner has communicated various letters dated 30.9.2016, 19.10.2016, 10.11.2016 and 21.11.2016 with NTL for status of TBCB line. The petitioner obtained CEA energisation certificate on 26.09.2016 before SCOD of 1.10.2016.

(b) With regard to Asset-II, the petitioner has communicated various letters dated 30.9.2016, 19.10.2016, 10.11.2016 and 21.11.2016 with NTL for status of TBCB line. NTL vide its letter dated 1.10.2016 confirmed that 400 kV D/C Kurukshetra-malerkotla T/L will be commissioned by 30.11.2016. Accordingly PGCIL has obtained the CEA energization certificate on 4.11.2016 before the schedule provided by NTL in order to charge the bays matching with the TBCB line. Further NTL delayed the commissioning of the TBCB line and due to contractual obligation Asset-II was finally declared COD on 1.12.2016.

(c) The reason for delay in commissioning of the instant asset are as under:

(I) Delay in receipt of Gantry Coordinates at PGCIL Kurukshetra and Malerkotla Sub-station-

(i) **Kurukshetra End:** NTL vide letter dated 14.5.2014 requested for Gantry coordinate of Malerkotla line at Kurukshetra Sub-station. The petitioner vide dated 4.7.2014 communicated to NTL, wherein coordinate at Kurukshetra end was communicated to NTL and it was mentioned that there may be change in North coordinates by few meters during detailed Engineering. In response to above letter, NTL vide letter ref dated 27.8.2015 sought clarification regarding change in North Coordinate of Gantry at Kurukshetra. In the said letter NTL has acknowledged receipt of GA and SLD of the bays at Malerkotla, Kurukshetra and Amritsar Sub-station on 4.7.2014. Coordinates of Kurukshetra end were provided in the said letter. It was

communicated that the North Coordinate may vary by few meters which have negligible impact on the finalization of dead end tower. Further, additional confirmation was given by Kurukshetra site vide mail dated 12.3.2016.

(ii) Malerkotla End:- The petitioner vide dated 4.7.2014 provided GA and SLD of Malerkotla, Kurukshetra and Amritsar Sub-station. Further, NTL vide letter ref dated 27.8.2015 requested Gantry coordinate of Kurukshetra and Amritsar line at Malerkotla Sub-station. The coordinates were provided by Powergrid vide letter dated 10.10.2015.

(II) Change in tower extension at location no. 71/0 of 400 kV D/C Kurukshetra-Malerkotla Line during the final stages of implementation/construction of transmission projects.

It is prime responsibility of transmission line executing agency that line terminating at the Sub-station shall not block the future corridor of the existing Sub-station and route alignment near Sub-station must be shared with respective site in charge of Sub-station. But same was not taken into consideration by NTL resulting in blockage of future corridor at Malerkotla end. Therefore, the matter was taken up with NTL vide letter ref dated 11.5.2016 and subsequent meeting was held with CEA at New Delhi on 27.5.2016 for resolving the issue CEA advised NTL to raise the height of only one tower by 9 meters to avoid blockage of future corridor. Therefore there was no delay on this account as height of only one tower no 71/0 has to be raised by +9 meters which can be done within 10-15 days.

(III) Requirement of Multi Circuit towers for transmission line termination at Malerkotla Sub-station End

The petitioner vide dated 4.7.2014 have provided GA and SLD of Malerkotla Sub-station wherein it was clearly mentioned that line of 400 kV D/C Amritsar-Malerkotla line and Kurukshetra-Malerkotla line has to be terminated on double level Gantry. However, NTL contention that multi circuit tower is required to terminate the same is

not correct as same can be done by installing two nos. D/C towers as done at Kurukshetra end by NTL. There was no requirement from the petitioner's side to install M/C tower. NTL has installed M/C tower as per their convenience.

(d) The schedule commissioning as per Investment approval for asset under present petition was 1.10.2016 and Schedule commissioning of the TBCB line was 11.9.2016. However TBCB line was getting delayed and NTL through its letter dated 1.10.2016 confirmed that 400 kV D/C Kurukshetra-Malerkotla T/L will be put under commercial operation by 30.11.2016. As the commissioning of TBCB line was further getting delayed, due to contractual obligation asset under present petition was declared COD on 1.12.2016. It is evident that lines were not ready and bays were ready to be charged hence it is submitted that the date of commercial operation for the **Asset-I** and **Asset-II** shall be determined in accordance with the provisions of Regulation 4(3)(ii) of the tariff Regulations, 2014 .

Analysis and decision:

37. As per the Investment Approval dated 2.6.2015, the instant assets were scheduled to be commissioned within 16 months i.e. by 1.10. 2016 against which the instant assets were ready to be put under commercial operation on 1.12.2016. However, the instant asset was put to use only after COD of associated line. The petitioner has submitted that it has made various communications with NTL through letters dated 30.9.2016, 19.10.2016, 27.10.2016 and 22.11.2016 for commissioning of the TBCB line. The petitioner has stated that the time over run is on account of the delay of the associated lines by the Respondent, NTL. We have observed that petitioner has submitted CEA certificate dated 26.9.2016 for Asset-I which proves that it was ready before 1.10.2016 but in case of Asset –II, the petitioner obtained CEA Certificate dated 4.11.2016. Therefore, there is no documentary evidence in the petition to support that Asset-II was ready before 4.11.2016. Hence, we are not inclined to allow time overrun of 1.10.2016 to 4.11.2016 for Asset-II. Accordingly, the IDC and IEDC shall be billed as under:

Asset	Date	Liabile party
Asset-I	1.10.2016-date of COD of the asset	To be borne by NTL
Asset-II (a and b)	1.10.2016-4.11.2016	Not to be Capitalized
Asset-II (a and b)	5.11.2016-date of COD of the asset	To be borne by NTL

Capital cost

38. 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;

(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.

39. The petitioner vide affidavit dated 8.5.2017 and Auditor Certificate dated 7.2.2017 has submitted the details of capital cost as on COD and projected additional capital expenditure which are summarized below:

(₹ in Lakh)

Name of the Asset	Approved cost as per FR	Exp. Up to COD (1.12.2016)	Proposed Exp. For FY 2016-17	Proposed Exp. for FY 2017-18	Proposed Exp. For FY 2018-19	Estimated completion cost
Asset-I	699.19	234.61	160.65	191.65	80.02	666.33
Asset-II	9197.80	4496.27	834.68	702.45	351.23	6384.63
Total	9896.99	4979.33	2042.67			7022.00

40. The total estimated completion cost of Asset-I is ₹666.33 lakh and Asset-II is ₹6384.63 lakh that are within the approved apportioned cost of ₹699.19 lakh and ₹9197.80 lakh respectively. BRPL, vide affidavit dated 28.4.2017, has submitted that apportioned cost of ₹9896.99 lakh has resulted into savings of 30% which is indicative of the fact of over-estimation in the approval of the cost estimates for this scheme approved by Board of Director of the petitioner and hence the cost overrun cannot be determined. In response, the petitioner vide affidavit dated 8.5.2017 has submitted that variation is due to difference in estimated rate FR and actual rate received through competitive bidding.

Analysis and decision:

41. We have considered the submissions of the petitioner and respondent. As the estimated completion cost is within FR cost, there is no cost overrun in commissioning of the instant assets. The COD of the Assets I, II (a) and II (b) has been considered as 3.4.2017, 3.4.2017 and 18.1.2017 respectively. Accordingly, the capital cost considered as on revised COD is as follows:

(₹ in lakh)

Sr. No	Name of the Assets	Apportioned approved cost	Cost as on Revised COD
1	Asset-I: 2 no. Line bays at Amritsar 400/220 kV Sub-station- COD:3.4.2017	699.19	394.66
2	Asset-II(a): 2 no. 220 kV line bays at Malerkotla GIS 400/220 kV Sub-station- COD:3.4.2017	9197.80	2665.475
3	Asset-II(b): 2 no. 220 kV line bays at Malerkotla GIS 400/220 kV Sub-station- COD:18.1.2017		2417.135

Treatment of IDC and IEDC

42. The petitioner has made a claim of ₹6.81 lakh and ₹179.41 lakh for Asset-I and Asset-II, respectively duly, as per certified by the Auditor. The petitioner vide affidavit dated 7.2.2017 has submitted that IDC for ₹2.96 lakh and ₹136.63 lakh has been discharged as on COD in respect of Asset-I and Asset-II respectively. Remaining parts have been discharged

during 2017-18. Since the Asset-II has been segregated into two assets i.e. Asset-II (a) and Asset-II (b), IDC relating to Asset-II has been divided into two equal parts for each asset i.e. Asset-II (a) and Asset-II (b) in case of non-availability of information. The same shall be calculated at the time of truing up.

43. Similarly, the petitioner has claimed ₹2.80 lakh and ₹53.06 lakh towards Incidental Expenditure during Construction (IEDC) as on COD for Central portion and BBMB portion respectively. The petitioner has not submitted any supporting document in relation to the IEDC claim. However, the claim is within the percentage of 10.75% on Hard Cost as indicated in the Abstract Cost Estimate submitted by the petitioner and thus allowed for the purpose of tariff.

Initial Spares

44. Regulation 13 of the 2014 Tariff Regulations provides as under:-

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

- | | |
|--|---------|
| (a) Coal-based/lignite-fired thermal generating stations | - 4.0% |
| (b) Gas Turbine/Combined Cycle thermal generating stations | - 4.0% |
| (c) Hydro generating stations including pumped storage hydro generating station. | - 4.0% |
| (d) Transmission system | |
| (i) Transmission line | - 1.00% |
| (ii) Transmission Sub-station (Green Field) | - 4.00% |
| (iii) Transmission Sub-station (Brown Field) | - 6.00% |
| (iv) Series Compensation devices and HVDC Station | - 4.00% |
| (v) Gas Insulated Sub-station (GIS) | - 5.00% |
| (vi) Communication system | - 3.50% |

Provided that:

- i. where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:
- ii. where the generating station has any transmission equipment forming part of the generation project, the ceiling norms for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations:
- iii. once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:
- iv. for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC and IEDC in its tariff application.

45. The admissible initial spares are as under:

(₹ in lakhs)

Asset	Plant and Machinery	Spares cost (Claimed)	Ceiling Limit	Admissible Initial Spares	Excess Initial Spares
Asset-I	656.72	42.80	6.00%	39.19	3.62
Asset-II (a)	3076.08	86.42	5.00%	157.35	0.00
Asset-II (b)	3076.08	86.42	5.00%	157.35	0.00

The initial spares claimed by the petitioner are more than the limits specified in Regulation 13 of the 2014 Tariff Regulations. Therefore, the initial spares of Asset-I are restricted to 5% being a Sub-station.

Capital Cost

46. Based on above, the capital cost allowed as on COD under Regulation 9 (2) of 2014 Tariff regulation is as under:

(₹ in Lakhs)

Assets	Capital Cost considered for the purpose of tariff before adjustment of IEDC/IDC and Initial Spares, if any, as on COD (A)	IDC Disallowed as on COD (B)	IEDC Disallowed as on COD (C)	Excess Initial Spares Disallowed as on COD (D)	Capital Cost considered for the purpose of tariff after scrutiny of IEDC/IDC and Initial Spares as on COD (E)=(A)-(B+C+D)
Asset-I	394.66	3.85	0.00	3.62	387.19
Asset-II (a)	2665.48	21.39	0.00	0.00	2644.09
Asset-II (b)	2417.14	21.39	0.00	0.00	2395.75

Additional Capital Expenditure

47. 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.”

48. 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”.

49. The "cut-off date" in the case of instant transmission assets is 31.3.2020.

50. The petitioner vide affidavit dated 8.5.2017 and Auditor Certificate dated 7.2.2017 has claimed the following additional capital expenditure incurred for FY 2016-17, FY 2017-18 and FY 2018-19 and same is as follows:-

(₹ in lakh)

Asset	Proposed Exp. during FY 2016-17	Proposed Exp. during FY 2017-18	Proposed Exp. during FY 2018-19	Total Additional Capitalization Cost
Asset-I	160.65	191.65	80.02	432.32
Asset-II	834.68	702.45	351.23	1888.36
Total	995.33	894.10	431.25	2320.68

51. As, The COD of the Assets I, II (a) and II (b) has been considered as 3.4.2017, 3.4.2017 and 18.1.2017 respectively. Accordingly, the additional capital expenditure incurred is as follows:

(₹ in lakh)

S.no	Name of the Asset	Additional Capital Expenditure		
		2016-17	2017-18	2018-19
1	Asset-I: 2 no. Line bays at Amritsar 400/220 kV Sub-station-COD:3.4.2017	-	195.50 (191.65+3.85*)	80.02

2	Asset-II(a): 2 no. 220 kV line bays at Malerkotla GIS 400/220 kV Sub-station- COD:3.4.2017	-	372.62 (351.23+21.39*)	175.615
3	Asset-II(b): 2 no. 220 kV line bays at Malerkotla GIS 400/220 kV Sub-station- COD:18.1.2017	248.33	372.62 (351.23+21.39*)	175.615

*Discharge of IDC

Analysis:

52. The petitioner has submitted that the Additional Capital Expenditure for the period from COD to 31.3.2019, as per Regulation 14(1) of the 2014 Tariff Regulations towards balance and retention payments. Therefore the Add-Cap claimed by the petitioner is allowed as per para 51 above.

53. Accordingly, Capital Costs considered for the purpose of tariff calculation is as below:

(₹ in Lakhs)

Assets	Capital Cost considered for the purpose of tariff before adjustment of IEDC/IDC and Initial Spares, if any, as on COD (A)	IDC Disallowed as on COD (B)	IEDC Disallowed as on COD (C)	Excess Initial Spares Disallowed as on COD (D)	Capital Cost considered for the purpose of tariff after scrutiny of IEDC/IDC and Initial Spares as on COD (E)=(A)-(B+C+D)
Asset-I	394.66	3.85	0.00	3.62	387.19
Asset-II (a)	2665.48	21.39	0.00	0.00	2644.09
Asset-II (b)	2417.14	21.39	0.00	0.00	2395.75

54. The total estimated completion cost of the instant assets as on 31.3.2019 is given below:-

(₹ in lakh)

	Capital Cost allowed as on COD	Additional Capitalisation from COD to 31-03-17	Additional Capitalisation for 2017-18	Additional Capitalisation for 2018-19	Total estimated completion cost up to 31.3.2019
Asset-I	387.19	-	195.50	80.02	662.72
Asset-II (a)	2644.09	-	372.62	175.62	3192.32
Asset-II (b)	2395.75	248.33	372.62	175.62	3192.32

Debt-Equity Ratio

55. 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.”

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

Asset-I

(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	271.03	70.00	463.90	70.00
Equity	116.16	30.00	198.81	30.00
Total	387.19	100.00	662.72	100.00

Asset-II (a)

(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1,850.86	70.00	2234.62	70.00
Equity	793.23	30.00	957.69	30.00
Total	2,644.09	100.00	3192.32	100.00

Asset-II (b)

(₹ in lakh)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1,677.03	70.00	2234.62	70.00
Equity	718.73	30.00	957.69	30.00
Total	2,395.75	100.00	3192.32	100.00

Return on Equity (RoE)

57. 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:

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

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess."

58. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961%, as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

59. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. 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

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Opening Equity	116.16	174.81
Addition due to Additional Capitalisation	58.65	24.01
Closing Equity	174.81	198.81
Average Equity	145.48	186.81
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	28.37	36.63

Asset-II (a)

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Opening Equity	793.23	905.01
Addition due to Additional Capitalisation	111.78	52.68
Closing Equity	905.01	957.69
Average Equity	849.12	931.35
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	165.60	182.64

Asset-II (b)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Opening Equity	718.73	793.23	905.01
Addition due to Additional Capitalisation	74.50	111.78	52.68
Closing Equity	793.23	905.01	957.69
Average Equity	755.98	849.12	931.35
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)	29.65	166.51	182.64

Interest on Loan (IoL)

60. 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 de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

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

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

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

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

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

61. The petitioners entitlement to IOL has been considered as per the provisions of Regulation 26 of Tariff Regulation as detailed below:-

- (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;
- (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period; and
- (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

62. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents. The interest on loan has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest subsequent to the tariff date of commercial operation will be considered at the time of truing- up.

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

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

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Gross Normative Loan	271.03	407.89
Cumulative Repayment up to Previous Year	0.00	25.86
Net Loan-Opening	271.03	382.03
Addition due to Additional Capitalisation	136.85	56.01
Repayment during the year	25.86	33.31
Net Loan-Closing	382.03	404.74
Average Loan	326.53	393.38
Weighted Average Rate of Interest on Loan	8.104%	8.097%
Interest	26.32	31.85

Asset-II (a)

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Gross Normative Loan	1850.86	2111.69
Cumulative Repayment up to Previous Year	0.00	149.74
Net Loan-Opening	1850.86	1961.95
Addition due to Additional Capitalisation	260.83	122.93
Repayment during the year	149.74	165.13
Net Loan-Closing	1961.95	1919.75
Average Loan	1906.41	1940.85
Weighted Average Rate of Interest on Loan	8.574%	8.567%
Interest	162.56	166.28

Asset-II (b)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Gross Normative Loan	1677.03	1850.86	2111.69
Cumulative Repayment up to Previous Year	0.00	26.82	177.39
Net Loan-Opening	1677.03	1824.04	1934.30
Addition due to Additional Capitalisation	173.83	260.83	122.93
Repayment during the year	26.82	150.56	165.13
Net Loan-Closing	1824.04	1934.30	1892.11
Average Loan	1750.53	1879.17	1913.20
Weighted Average Rate of Interest on Loan	8.580%	8.574%	8.567%
Interest	30.04	161.12	163.91

65. The IOL is allowed considering all the loans submitted in Form-9C. The petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

Depreciation

66. 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."

67. The petitioner has claimed actual depreciation as a component of annual fixed charges. In our calculation, depreciation has been allowed in accordance with Regulation 27

of the 2014 Tariff Regulations. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

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

Asset-I

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Opening Gross Block	387.19	582.70
Additional Capital expenditure	195.50	80.02
Closing Gross Block	582.70	662.72
Average Gross Block	484.94	622.71
Rate of Depreciation	5.3612%	5.3487%
Depreciable Value	436.45	560.44
Remaining Depreciable Value	436.45	534.58
Depreciation	25.86	33.31

Asset-II (a)

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Opening Gross Block	2644.09	3016.70
Additional Capital expenditure	372.62	175.62
Closing Gross Block	3016.70	3192.32
Average Gross Block	2830.39	3104.51
Rate of Depreciation	5.3195%	5.3190%
Depreciable Value	2547.35	2794.06
Remaining Depreciable Value	2547.35	2644.32
Depreciation	149.74	165.13

Asset-II (b)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross Block	2395.75	2644.09	3016.70
Additional Capital expenditure	248.33	372.62	175.62
Closing Gross Block	2644.09	3016.70	3192.32
Average Gross Block	2519.92	2830.39	3104.51
Rate of Depreciation	5.3225%	5.3195%	5.3190%
Depreciable Value	2267.93	2547.35	2794.06
Remaining Depreciable Value	2267.93	2520.53	2616.67
Depreciation	26.82	150.56	165.13

Operation and Maintenance Expenses (O and M Expenses)

69. The O and M Expenses claimed by the petitioner vide affidavit dated 8.5.2017 are as follows:

(₹ in Lakh)

Asset	Particulars	2016-17	2017-18	2018-19
Asset-I	OandM Expenses	42.91	133.02	137.42
Asset-II		73.36	227.36	234.92

70. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O and M Expenses for transmission system based on the type of bays, GIS bays Norms in respect of the elements covered in the instant petition are as under:

	2016-17	2017-18	2018-19
400 KV bays	64.37	66.51	68.71
400 kV GIS bays	55.02	56.84	58.73

Analysis/Decision

71. We have considered the submissions of the petitioner. The COD of the Assets covered in the instant petition has been shifted and Asset-II has been bifurcated into Asset-II (a) and (b). Accordingly, the O and M Expenses claimed by the petitioner have been calculated. 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.

72. The petitioner's entitlement of O and M Expenses has been worked out as given hereunder:-

Asset-I: (COD: 3.4.2017)

(₹ in Lakh)

Elements	2017-18 (Pro-rata)	2018-19
2 no. of 400 kV bays at Amritsar Sub-station	$363/365 * 66.51 * 2$ =132.29	$68.71 * 2$ =137.42
Total	132.29	137.42

Asset-II(a)(COD: 3.4.2017)

(₹ in Lakh)

Elements	2017-18 (Pro-rata)	2018-19
2 no. of 400 kV GIS bays at Malerkotla Sub-station(2 no. of bay b/w Amritsar-Malerkotla)	$363/365 \times 56.84 \times 2$ =113.05	58.73×2 =117.46
Total	113.05	117.46

Asset-II(b) (COD: 18.1.2017)

(₹ in Lakh)

Elements	2016-17 (Pro-rata)	2017-18	2018-19
2 no. of 400 kV GIS bays at Malerkotla Sub-station (2 no. of bay b/w Malerkotla-Kurukshetra)	$73/365 \times 55.02 \times 2$ =22.01	56.84×2 =113.68	58.73×2 =117.46
Total	22.01	113.68	117.46

Interest on Working Capital (IWC)

73. 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;”

74. 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 and M Expenses. The value of maintenance spares has accordingly been worked out.

(ii) O and M Expenses

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

(iii) Receivables

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

(iv) Rate of interest on working capital

As per Proviso 3 of Regulation 28 of tariff regulation' 2014, SBI Base rate 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.

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

Asset-I

(₹ in lakh)

Particulars	2017-18	2018-19
Maintenance Spares	19.95	20.61
O and M expenses	11.09	11.45
Receivables	37.12	41.44
Total	68.16	73.50
Interest (pro-rata)	8.68	9.41

Asset-II (a)

(₹ in lakh)

Particulars	2017-18	2018-19
Maintenance Spares	17.05	17.62
O and M expenses	9.47	9.79
Receivables	101.77	108.14
Total	128.30	135.55
Interest (pro-rata)	16.33	17.35

Asset-II (b)

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Maintenance Spares	16.51	17.05	17.62
O and M expenses	9.17	9.47	9.79
Receivables	92.97	101.37	107.74
Total	118.64	127.90	135.15
Interest (pro-rata)	3.04	16.37	17.30

Transmission charges

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

Asset-I

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Depreciation	25.86	33.31
Interest on Loan	26.32	31.85
Return on equity	28.37	36.63
Interest on Working Capital	8.68	9.41
O and M Expenses	132.29	137.42
Total	221.51	248.62

Asset-II (a)

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Depreciation	149.74	165.13
Interest on Loan	162.56	166.28
Return on equity	165.60	182.64
Interest on Working Capital	16.33	17.35
O and M Expenses	113.06	117.46
Total	607.28	648.85

Asset-II (b)

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	26.82	150.56	165.13
Interest on Loan	30.04	161.12	163.91
Return on equity	29.65	166.51	182.64
Interest on Working Capital	3.04	16.37	17.30
O and M Expenses	22.01	113.68	117.46
Total	111.56	608.24	646.43

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

78. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) respectively of Regulation 52 of the 2014 Tariff Regulations.

Sharing of Transmission Charges:

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

80. BRPL vide its affidavit dated 28.4.2017 has submitted that the petitioner in the instant petition 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. Further, the discussions at the NRPC meetings cited by the petitioner can at best be taken note off but cannot be treated as the “Transmission service Agreement”.

81. In response, the petitioner vide its rejoinder affidavit dated 8.5.2017 has submitted as per Regulation 13(5) of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, the notified Model Transmission Service Agreement provides the provision for sharing of transmission charges. As per above Regulation, signing of TSA is not mandatory. The petitioner has further submitted that BRPL has already signed TSA on 19.8.2011 and signed copy of TSA with BRPL is enclosed with the petition.

82. We have considered the submissions of the petitioner and respondent. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

83. This order disposes of Petition No. 60/TT/2017.

Sd/-	Sd/-	Sd/-	Sd/-
(M.K. Iyer) Member	(A.S. Bakshi) Member	(A.K. Singhal) Member	(Gireesh B. Pradhan) Chairperson

Asset-I

Annexure-1

(₹ in lakh)

	Details of Loan	2016-17	2017-18	2018-19
1	SBI 10000			
	Gross loan opening	34.46	34.46	34.46
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	34.46	34.46	34.46
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	34.46	34.46	34.46
	Average Loan	34.46	34.46	34.46
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	3.22	3.22	3.22
	Rep Schedule	20 Half yearly equal installment w.e.f. 15-06-2019		
2	Bond LIII			
	Gross loan opening	78.65	78.65	78.65
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	78.65	78.65	78.65
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	78.65	78.65	78.65
	Average Loan	78.65	78.65	78.65
	Rate of Interest	8.13%	8.13%	8.13%
	Interest	6.39	6.39	6.39
	Rep Schedule	12 Yearly equal installment w.e.f. 25-04-2020		
3	Bond LVII			
	Gross loan opening	48.42	48.42	48.42
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	48.42	48.42	48.42
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	48.42	48.42	48.42
	Average Loan	48.42	48.42	48.42
	Rate of Interest	7.20%	7.20%	7.20%
	Interest	3.49	3.49	3.49
	Rep Schedule	Bullet Payment as on 21-12-2021		
4	Bond LVII			
	Gross loan opening	0.00	0.00	2.70

	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	2.70
	Additions during the year	0.00	2.70	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	2.70	2.70
	Average Loan	0.00	1.35	2.70
	Rate of Interest	7.20%	7.20%	7.20%
	Interest	0.00	0.10	0.19
	Rep Schedule	Bullet Payment as on 21-12-2021		
	Total Loan	161.53	161.53	164.23
	Gross loan opening	0.00	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	161.53	161.53	164.23
	Net Loan-Opening	0.00	2.70	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	161.53	164.23	164.23
	Net Loan-Closing	161.53	162.88	164.23
	Average Loan	8.1115%	8.1039%	8.0965%
	Rate of Interest	13.10	13.20	13.30
	Interest	161.53	161.53	164.23

Asset-II

Annexure-2

(₹ in lakh)

	Details of Loan	2016-17	2017-18	2018-19
1	SBI 10000			
	Gross loan opening	1596.54	1596.54	1596.54
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1596.54	1596.54	1596.54
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1596.54	1596.54	1596.54
	Average Loan	1596.54	1596.54	1596.54
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	149.28	149.28	149.28
	Rep Schedule	20 Half yearly equal installment w.e.f. 15-06-2019		
2	Bond LIII			
	Gross loan opening	662.35	662.35	662.35
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	662.35	662.35	662.35
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	662.35	662.35	662.35
	Average Loan	662.35	662.35	662.35
	Rate of Interest	8.13%	8.13%	8.13%
	Interest	53.85	53.85	53.85
	Rep Schedule	12 Yearly equal installment w.e.f. 25-04-2020		
3	Bond LVII			
	Gross loan opening	527.55	527.55	527.55
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	527.55	527.55	527.55
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	527.55	527.55	527.55
	Average Loan	527.55	527.55	527.55
	Rate of Interest	7.20%	7.20%	7.20%
	Interest	37.98	37.98	37.98
	Rep Schedule	Bullet Payment as on 21-12-2021		
4	Bond LVII			
	Gross loan opening	0.00	0.00	2.70

	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	2.70
	Additions during the year	0.00	2.70	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	2.70	2.70
	Average Loan	0.00	1.35	2.70
	Rate of Interest	7.20%	7.20%	7.20%
	Interest	0.00	0.10	0.19
	Rep Schedule	Bullet Payment as on 21-12-2021		
5	Bond LIV			
	Gross loan opening	331.00	331.00	331.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	331.00	331.00	331.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	331.00	331.00	331.00
	Average Loan	331.00	331.00	331.00
	Rate of Interest	7.97%	7.97%	7.97%
	Interest	26.38	26.38	26.38
	Rep Schedule	3 Equal installment as on 15-07-2021, 15-07-2026 and 15-07-2031		
	Total Loan			
	Gross loan opening	3117.44	3117.44	3147.39
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	3117.44	3117.44	3147.39
	Additions during the year	0.00	29.95	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	3117.44	3147.39	3147.39
	Average Loan	3117.44	3132.42	3147.39
	Rate of Interest	8.5804%	8.5738%	8.5673%
	Interest	267.49	268.57	269.65