CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 208/TT/2016

Coram:

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

Date of Order: 22.11.2017

In the matter of:

Approval of transmission tariff for **Asset-1:** 400 kV, 125 MVAR Bus Reactor with associated bays at Bina, **Asset-2:**, 400 kV, 63 MVAR Switchable Line Reactors at 400/220 kV Rajgarh Sub-station with associated bays for 400 kV D/C Rajgarh-Sardar Sarovar Transmission Line Ckt. 1 and Ckt. 2, **Asset-3:** 400/220 kV, 500 MVA ICT at Damoh Sub-station with associated bays and 2 Nos. 220 kV Line bays, **Asset-4:** 765/400 kV, 1500 MVA, ICT-2 at Raipur Pooling Station with associated bays and 765/400 kV, 1500 MVA, ICT-4 at Raigarh (Tamnar) Pooling Station with associated bays and **Asset-5:** 400/220 kV, 500 MVA, 2 Nos. ICTs at Vadodara GIS with associated bays, under "Installation of Bus Reactor and ICT in Western Region" in Western Region from COD to 31.3.2019, under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

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

Vs

1. Madhya Pradesh Power Management Company Limited,
   Shakti Bhawan, Rampur,
   Jabalpur-482 008

2. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
   3/54, Press Complex, Agra-Bombay Road,
   Indore -452 008

3. Maharashtra State Electricity Distribution Company Limited,
   Hong Kong bank Building, 3rd Floor,
   M.G. Road, Fort, Mumbai-400 001

4. Gujarat Urja Vikas Nigam Limited,
   Sardar Patel Vidyut Bhawan,
   Race Course Road, Vadodara-390 007

5. Electricity Department,
   Government of Goa,
   Vidyut Bhawan, Panaji,
   Near Mandvi Hotel, Goa-403 001

6. Electricity Department,
   Administration of Daman and Diu,
   Daman-396 210

7. Electricity Department,
   Administration of Dadra Nagar Haveli U.T.,
   Silvassa-396 230

8. Chhattisgarh State Electricity Board,
   P.O. Sunder Nagar, Dangania, Raipur,
   Chhattisgarh-492 013 ……..**Respondents**

Parties present: Shri S.S. Raju, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Jasbir Singh, PGCIL
Shri M.M. Mondal, PGCIL

ORDER

The present petition has been filed by Power Grid Corporation of India Limited ("the petitioner') for approval of the transmission tariff in respect of **Asset-1:** 400 kV, 125 MVAR Bus Reactor with associated bays at Bina, **Asset-2:**, 400 kV, 63 MVAR Switchable Line Reactors at 400/220 kV Rajgarh Sub-station with associated bays for 400 kV D/C Rajgarh-Sardar Sarovar Transmission Line Ckt. 1 and Ckt. 2, **Asset-3:** 400/220 kV, 500 MVA ICT at Damoh Sub-station with associated bays and 2 Nos. 220 kV Line bays, **Asset-4:** 765/400 kV, 1500 MVA, ICT-2 at Raipur Pooling Station with associated bays and 765/400 kV, 1500 MVA, ICT-4 at Raigarh (Tamnar) Pooling Station with associated bays and **Asset-5:** 400/220 kV, 500 MVA, 2 Nos. ICTs at Vadodara GIS with associated bays (hereinafter referred to as "transmission assets"), under "Installation of Bus Reactor and ICT in Western Region" in Western Region from the date of commercial operation to 31.3.2019 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations”).

2. This order has been issued after considering petitioner’s affidavits dated 30.1.2017, 6.2.2017, 9.3.2017, 21.4.2017, 19.6.2017, 23.6.2017 and 18.7.2017.

3. The scope of the elements under the instant project have been discussed and agreed upon in 35th and 36th meetings of Standing Committee on Power System Planning in Western Region held on 3.1.2013 and 29.8.2013 respectively and 22nd and 24th WRPC meetings held on 25.2.2013 and 9.10.2013 respectively. The investment approval of the project was accorded by the Board of Directors of the petitioner, vide Memorandum No. C/CP/ICT&Rctr/WR-415 dated 19.5.2014 at an estimated cost of ₹30307 lakh including IDC of ₹1745 lakh based on February, 2014 price level. The transmission system was scheduled to be commissioned within 26 months from the date of IA i.e. 13.5.2014. Therefore, the scheduled date of commissioning of the transmission system was 12.7.2016. The petitioner vide affidavit dated 21.4.2017 has submitted the Revised Cost Estimate (RCE) of the project at ₹38970 lakh including IDC of ₹1472 lakh as discussed in the 339th meeting of Board of Directors of the petitioner held on 29.3.2017. The broad scope of project is as under:-

(i) Extension of 765/400/220 kV Raigarh Pooling Station (Tamnar)
- 1500 MVA 765/400 kV Transformer and associated bays : 1

(ii) Extension of Dehar 400/220 kV Bina Sub-station
- 125 MVAR Bus reactor : 1

(Existing 63 MVAR Bus reactor is to be replaced with 125 MVAR Bus reactor. The replaced 63 MVAR Bus reactor will be kept as a regional spare.)

(iii) Extension of 400/220 kV Damoh Sub-station (Extension)
- 500 MVA 400/220 kV Transformer and associated bays : 1
- 220 kV Line bays : 2

(iv) Extension of 765/400 kV Raipur Pooling Station
- 1500 MVA 765/400 kV Transformer and associated bays : 1

(v) Extension of 765/400 kV Vadodra GIS Sub-station
- 500 MVA 400/220 kV Transformer and associated bays : 2
- 220 kV GIS Line bays : 4

(vi) Extension of 400/220 kV Rajgarh Sub-station
- 63 MVAR switchable Line reactor for Rajgarh-Sardar Sarovar 400 kV D/C line

4. The petitioner had initially filed the instant petition claiming transmission tariff for five assets on the basis of actual/anticipated CODs and had submitted that the entire scope of the project is covered in the instant petition. However, the petitioner vide affidavits dated 30.1.2017 and 21.6.2017 has split Asset-2 into Asset-2A and Asset-2B and Asset-5 into Asset-5A and Asset-5B respectively. The details of elements covered under instant assets and date of actual/deemed commercial operation are as under:-

Scope as approved in Investment approval	Scheduled date of commissioning	Actual/ anticipated COD	Delay
Asset-1: 400 kV, 125 MVAR Bus Reactor with associated bays at Bina	12.7.2016	16.3.2016 (Actual)	No delay
Asset-2A: 400 kV, 63 MVAR Switchable Line Reactors at 400/200 kV Rajgarh S/S with associated bays for 400 kV D/C Rajgarh-Sardar Sarovar T/L Ckt.-1		20.10.2016 (Actual)	3 months and 8 days
Asset-2B: 400 kV, 63 MVAR Switchable Line Reactors at 400/200 kV Rajgarh S/S with associated bays for 400 kV D/C Rajgarh-Sardar Sarovar T/L Ckt.-2		23.10.2016 (Actual)	3 months and 11 days
Asset-3: 400/220 kV, 500 MVA ICT at Damoh S/S with associated bays and 2 Nos. 220 kV line bays		18.11.2016 (Actual)	4 months and 6 days
Asset-4: 765/400 kV, 1500 MVA, ICT-2 at Raipur PS with associated bays & 765/400 kV, 1500 MVA,ICT-4 at Raigarh (Tamnar) PS with associated bays		1.4.2017 (Actual)	8 months and 19 days
Asset-5A: 400/220 kV, 500 MVA ICTs at Vadodra GIS with associated bays		24.3.2017 (Deemed)	8 months and 12 days
Asset-5B: 4 nos. 220 kV downstream bays		20.5.2017 (Deemed)	10 months and 8 days

5. In support of COD of Assets-1, 2A, 2B, 3, 4, 5A and 5B, the petitioner has submitted self declaration COD certificate, RLDC charging certificate and CEA

certificate. However, in respect of Asset-5A and Asset-5B, the RLDC charging certificate is on no load basis.

6. The Commission directed the petitioner, vide order dated 19.12.2016, to submit the details of any decapitalised/replaced asset not put to use on COD of instant assets (i.e. date of capitalisation, gross block, accumulated depreciation till date of replacement for the assets decapitalized/replaced/asset not put to use) alongwith petition numbers in which tariff of the replaced assets were claimed. The petitioner, in response, vide affidavit dated 30.1.2017 has submitted that no asset has been decapitalised/proposed to be decapitalised. However, it is noted that Asset-I (125 MVAR Bus reactor at Bina) is a replacement of the existing 63 MVAR Bus reactor at Bina. The petitioner has submitted that the replaced 63 MVAR Bus Reactor shall be used as a regional spare. The tariff for the 63 MVAR Bus reactor at Bina was granted vide order dated 29.2.2016 in Petition No.225/TT/2015 (truing up of tariff of 2009-14 and determination of tariff of 2014-19 period).

7. We have considered the submissions of the petitioner. The petitioner has proposed to replace the 63 MVAR Bus reactor at Bina with the 125 MVAR Bus reactor and to use the replaced 63 MVAR Bus reactor as a regional spare. The 63 MVAR Bus reactor at Bina, which is sought to be replaced, was put into commercial operation on 1.5.2008 as part of the Sipat II Transmission System in WR under the “Installation of Bus Reactor & ICT in Western Region” project and hence it is transfer from one transmission project to another. In case of shifting of assets from one transmission project to another transmission project, we are of the view that the replaced asset should be decapitalised in the books of the account of the transmission system from

where it is transferred and should be capitalised in the books of accounts of the transmission system where it is shifted.

8. In a similar case, the Commission in order dated 28.9.2017 in Petition No. 195/TT/2016 held as under:-

> "6. The tariff of "40% FSC at Lucknow Sub-station" was allowed since 1.6.2007 and it has completed 10 years of its useful life. It is a case of inter-unit transfer. Since the proposed shifting of FSC from Lucknow to Sohawal is of permanent nature and as it involves two different schemes covered under different Investment Approvals, there will be a mismatch of recovery of the cost of the "40% FSC" over the 25 years. In order to address this issue, the Commission in the past has decided that in case of inter-unit transfer, the assets shall be de-capitalised in the books of accounts of the transmission system where the asset was originally commissioned and capitalised in the books of accounts of the transmission system where it is transferred. In the instant case, the 40% FSC has been transferred from Lucknow to Sohawal end. Therefore, the said assets need to be de-capitalised from the books of accounts of the assets at Lucknow and capitalised in the books of account of assets at Sohawal. The petitioner is directed to carry out the decapitalisation and corresponding capitalisation of the assets within a period of six months and claim the revised tariff of the "40% FSC" at Sohawal Sub-station at the time of truing-up. In so far as the expenditure involved in inter-unit transfer is concerned, this is in the nature of revenue expenditure and is allowed as a onetime pass through. Since the "40% FSC" was dismantled and shifted to Sohawal and thereafter, commissioned on 12.2.2016, the tariff of the assets shall be determined afresh with reference to the COD as 12.2.2016. Accordingly, the petitioner after carrying out necessary de-capitalisation of the assets at Lucknow and capitalisation at Sohawal Sub-station shall seek fresh determination of the tariff with effect from 12.2.2016. Therefore, the tariff for "40% FSC at Sohawal Sub-station" is not allowed in this order".

9. In another case in Petition No. 200/TT/2016 where the lower capacity Bus reactor is sought to be replaced with higher capacity Bus reactor, the Commission vide order dated 31.10.2017 held as under:-

> "Thus, the Commission is of the consistent view that the assets that have completed their service life should be removed from the capital cost of the existing transmission project and that in case of shifting of assets from transmissions system to another, the asset should be decapitalised in the transmission system from where it is shifted and capitalised in the transmission system where it is installed. Accordingly, the petitioner is required to submit the details of decapitalisation and capitalisation and the petition/transmission system under which tariff was allowed initially, in case of shifting. However, the petitioner has not submitted these details. We are of the view that allowing tariff for the four ICTs at Mandola Sub-station and two ICTs at Ballabhgarh without de-capitalisation of the existing ICTs would tantamount to servicing two assets. Therefore, we are not inclined to allow tariff for Assets-II to V, Asset-VII and VIII at this stage. The tariff for the said assets would be allowed only after de-capitalisation of replaced ICTs and associated cost of bays and adjustment of cumulative depreciation etc. Accordingly, tariff for Assets-I and VI is allowed in this order. Further, the AFC granted for Assets-II to

V, Asset-VII and Asset-VIII vide order dated 22.12.2016 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations is withdrawn. The petitioner is directed to file a separate petition claiming tariff for the ICTs at Mandola and Ballabhgarh Sub-stations alongwith the details of decapitalisation within three months of issue of this order. "

10. Further, it has been observed that the petitioner is procuring regional spare ICTs/ reactors and using for replacement of ICTs/reactors against any failure or any other requirement. The petitioner is directed to identify the cases where these regional spare ICTs/reactors have been used. The petitioner is also directed to submit the usage policy of regional spare ICTs/reactors and treatment of tariff after consultation at RPC level. The petitioner is further directed to submit list of regional spares already available versus requirement of such spares type wise at the time of truing-up. A view on treatment of 63 MVAR reactor shall be taken thereafter.

11. Allowing tariff for 125 MVAR Bus reactor at Bina without de-capitalisation of the existing 63 MVAR Bus reactor at Bina would tantamount to servicing two assets for the same purpose. Therefore, tariff for Asset-1 shall be allowed only after de-capitalisation of old asset i.e. 63 MVAR Bus reactor at Bina and associated cost of bays and adjustment of cumulative depreciation etc. The petitioner is directed to file a separate petition claiming tariff for 125 MVAR Bus reactor at Bina alongwith the details of decapitalisation within three months of issue of this order.

12. AFC granted for Asset-1 vide order dated 19.12.2016 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, subject to proviso (iii) and (iv) of the said Regulation is withdrawn.

13. The petitioner has filed the instant petition on 10.10.2016 even though the Asset-1 was commissioned on 16.3.2016. Thus, there has been a delay of six months and 24 days in filing the petition. The 2014 Tariff Regulations provide for

filing of application for determination of tariff before six months of projected date of commercial operation. However, the petition was filed on 10.10.2016. This delay in filing of petition has not been explained by the petitioner. Delay in filing petition would cost the beneficiaries by way of interest for the period of delay. As the petitioner has not filed any reason for such a delay in filing the petition in respect of Asset-1, we feel that the petitioner does not have any justifiable reason for the delay in filing the petition. We are of the view that the beneficiaries should not be burdened with interest for the period of delay in filing the petition and accordingly we direct the petitioner not to charge any interest for the period of delay in filing the petition, i.e. from the date of commercial operation to the date of filing of petition (16.3.2016 to 10.10.2016). As stated earlier in para 11, the petitioner is directed to file a fresh petition in respect of Asset-1. The filing fee paid by the petitioner towards Asset-1 shall be adjusted in future.

14. The petitioner has claimed the COD of Asset-3 as 18.11.2016. The petitioner vide affidavit dated 18.7.2017 has submitted that the downstream network corresponding to Asset-3 is 1 km LILO of 2nd ckt of Damoh (MPPTCL)-Sagar at Damoh (PGCIL) and it is under the scope of MPPTCL. The petitioner has submitted RLDC charging certificate in support of COD of Asset-3 dated 22.11.2016. It is observed from the charging certificate that the 500 MVA ICT and associated ICT bays (400 kV ICT bay and 220 kV ICT bay are commissioned) and the associated 2 Nos. 220 kV line bays (220 kV Damoh (MPPTCL) bay and Sagar bay) under the scope of the petitioner have not been commissioned due to non-commissioning of downstream transmission system of MPPTCL. The petitioner has submitted the correspondence carried out with MPPTCL from 6.10.2015 to 30.6.2017. It is observed from the Single line diagram (at **Annexure-I**), submitted by the petitioner,

that the 500 MVA ICT is connected to the existing transmission system and power is flowing through existing transmission system. Therefore, the COD of 500 MVA ICT is considered as 18.11.2016. However, COD of the 2 nos. of 220 kV line bays shall be declared once associated downstream is commissioned. The cost break-up of the ICT at Damoh Sub-station and the line bays is not available. Therefore, it is not possible to work out the final tariff for ICT Damoh Sub-station based on the available capital cost. Accordingly, taking into consideration the commercial interest of the petitioner, 80% of the tariff claimed by the petitioner for Asset-3 is allowed on provisional basis as given below. The same will be reconsidered at the time of truing up on submission of the break-up of the cost of the 500 MVA ICT and the bays at Damoh Sub-station.

(₹ in lakh)

Asset	2016-17	2017-18	2018-19
Asset-3	107.97	538.45	586.26

15. The petitioner has submitted, vide affidavit dated 21.4.2017, that Asset-5, 400/220 kV, 500 MVA, 2 nos. ICTs at Vadodara GIS with associated bays was charged and declared under commercial operation w.e.f. 24.3.2017, whereas associated 220 kV line are yet to be commissioned. The petitioner has further submitted that the 400/220 kV, 500 MVA, 2 Nos. ICTs at Vadodra GIS with associated bays were made ready for its intended use but are not in use due to delay in commissioning of the 4 Nos. 220 kV downstream bays. Therefore, the petitioner has also submitted that it is not able to provide the transmission service for the reasons not attributable to it, its suppliers or contractors. As such, the petitioner has sought approval of the COD of the 400/220 kV, 500 MVA, 2 nos. ICTs at Vadodara GIS under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Accordingly, the petitioner has further split Asset-5 into Assets-5A - 400/220 kV, 500

MVA, 2 nos. ICTs at Vadodara GIS with associated bays and Asset-5B - 4 nos. 220 kV downstream bays. The petitioner has claimed the COD of 5B as 20.5.2017 and has submitted RLDC charging certificate dated 31.5.2017 vide affidavit dated 19.6.2017.

16. We have considered the submissions of the petitioner for approval of COD of the Asset-5A and Asset-5B as 24.3.2017 and 20.5.2017 respectively under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The petitioner has submitted that it has completed the work under its scope but GETCO has not completed the work under its control and as such sought approval of COD of Asset-5A and Asset-5B under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The petitioner has submitted that it had made its elements ready but was prevented from regular service for reasons not attributable to it. We are of the view that the COD of the assets should match with the upstream/downstream assets for their proper utilization and the petitioner should have taken appropriate measures to ensure the same through Implementation Agreement. In the instant case, the downstream assets under the scope of GETCO have not been put into commercial operation and the petitioner has not produced any document to show that the instant assets are put to any alternative use. Since assets have not been put to regular use, we are not inclined to approved the COD of Assets-5A and 5B under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as prayed by the petitioner. As such, the tariff of Assets-5A and 5B is not allowed in the instant order. The petitioner may approach the Commission for tariff for these assets after the COD of the downstream system.

17. The petitioner has submitted the COD certificate in support of COD of the assets. The petitioner is directed to submit the same at the time of truing up.

18. In view of the above, tariff for Asset-2(A), Asset-2(B) and Asset-4 only is allowed in the instant order. The details of the transmission charges claimed by the petitioner for the instant assets are as under:-

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Depreciation	13.99	42.86	50.68
Interest on Loan	14.53	42.48	47.01
Return on equity	15.58	47.76	56.46
Interest on Working Capital	2.47	6.38	6.95
O & M Expenses	28.90	66.51	68.71
Total	**75.47**	**205.99**	**229.81**
Particulars	**Asset-2B**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Depreciation	13.68	42.80	50.75
Interest on Loan	14.16	42.26	46.89
Return on equity	15.24	47.68	56.54
Interest on Working Capital	2.42	6.37	6.96
O & M Expenses	28.38	66.51	68.71
Total	**73.88**	**205.62**	**229.85**

(₹ in lakh)

Particulars	**Asset-4**	
	2017-18	**2018-19**
Depreciation	740.99	904.23
Interest on Loan	804.17	945.38
Return on equity	877.06	1093.90
Interest on Working Capital	69.50	81.42
O & M Expenses	319.24	329.82
Total	**2810.96**	**3354.75**

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

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Maintenance Spares	9.66	9.98	10.31
O & M expenses	5.36	5.54	5.73
Receivables	28.02	34.33	38.30
Total	**43.04**	**49.85**	**54.34**

Rate of interest	12.80%	12.80%	12.80%
Interest	**5.51**	**6.38**	**6.95**

Particulars	**Asset-2B**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Maintenance Spares	9.66	9.98	10.31
O & M expenses	5.36	5.54	5.73
Receivables	27.93	34.27	38.31
Total	**42.95**	**49.79**	**54.35**
Rate of interest	12.80%	12.80%	12.80%
Interest	**5.50**	**6.37**	**6.96**

(₹ in lakh)

Particulars	**Asset-4**	
	2017-18	**2018-19**
Maintenance Spares	47.89	49.47
O & M expenses	26.60	27.49
Receivables	468.49	559.12
Total	**542.98**	**636.08**
Rate of interest	12.80%	12.80%
Interest	**69.50**	**81.42**

20. 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. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed reply vide affidavit dated 30.1.2017. MPPMCL has raised the issue of additional capital expenditure, time over-run, etc. The petitioner has filed rejoinder to the replies filed by MPPMCL vide affidavit dated 3.2.2017. The objections raised by the respondent and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

21. Having heard the representatives of the parties and perused the material available on record we proceed to dispose of the petition.

Capital Cost:-

22. 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."

23. The petitioner has submitted Auditors' Certificates for the details of the apportioned approved capital cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant transmission assets. The details submitted by the petitioner are as follows:-

Particulars	**Approved apportioned cost**		**Capital cost upto COD**	**Projected additional capital expenditure**				**Estimated completed cost as on 31.3.2019**
	As per IA	**As per RCE**		**2016-17**	**2017-18**	**2018-19**	**2019-20**	
Asset-1	780.52	809.78	422.60	164.34	88.61	0.00	0.00	675.55
Asset-2A	854.23	1097.23	500.66	193.74	242.18	46.44	0.00	983.02
Asset-2B	854.23	1097.23	500.77	193.74	242.18	48.92	0.00	985.61
Asset-3	2662.37	3483.63	1976.77	461.58	618.21	107.96	0.00	3164.52
Asset-4	15906.06	19917.11	12192.48	0.00	5613.06	1577.37	0.00	19382.91
Asset-5A	9249.44	9368.40	6628.62	0.00	1345.16	896.78	449.84	9320.40

Asset-5B		3196.96	2281.95	0.00	319.38	359.17	26.20	2986.70
Total	30306.85	38970.34	24503.85	1013.40	8468.78	3036.64	476.04	37498.71

(₹ in lakh)

Cost over-run/variation

24. MPPMCL has submitted that there is cost over-run in case of the instant assets referring to the cost given in the petition. The petitioner in its rejoinder has submitted that although there is time over-run ranging from 3 months to 8 months in the commissioning of instant assets, the infusion of funds has started only from 14.9.2015 i.e. after approximately 16 months from the date of Investment Approval. The petitioner has further submitted that thus the IDC of the delay period shall not be an additional burden on the beneficiaries and has submitted that the delay be condoned.

25. The petitioner has submitted the RCE and as per the RCE, the estimated completion cost of instant assets is within the apportioned approved cost. Thus, there is no cost over-run.

Time Over-run

26. The instant assets were scheduled to be commissioned by 12.7.2016 as per Investment Approval dated 13.5.2014. However, the instant assets were commissioned as discussed at para-4 earlier in this order. Thus, there is a time over-run in the commissioning of instant assets ranging from 3 months and 8 days to 8 months and 19 days.

27. The petitioner has not submitted any documentary evidence justifying the time over-run in case of Assets-2A and 2B. The petitioner in the original petition has only submitted minutes of 35th and 36th meetings of Standing Committee held on 3.1.2013 and 29.8.2013 alongwith 24th WRPC meeting held on 9.10.2013, wherein

provision of 2x63 MVAR (switchable) line reactors at Dhule and Rajgarh end each in 400 kV lines from SSP was agreed and ratified. Therefore, we are not inclined to condone the time over-run of 3 months and 8 days and 3 months and 11 days in COD of Assets-1 and 2 respectively.

28. Similarly, there is a delay of 8 months 19 days in commissioning of the Asset-4. The petitioner has not submitted any justification for the time over-run and documentary evidences in support. Therefore, we are not inclined to condone the delay of 8 months 19 days in case of Asset-4.

Treatment of IDC and IEDC

29. The IDC and IEDC during the period of time over-run are to be treated as provided under Regulation 11 of the 2014 Tariff Regulations. Regulation 11 of the 2014 Tariff Regulations provides as follows:-

> **"11…..Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)**
>
> (A) Interest during Construction (IDC):
>
> (1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.
>
> (2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:
>
> Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check:
>
> Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds."
>
> "**(B)……Incidental Expenditure during Construction (IEDC)**:

(1) Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses upto SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.

(2) In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company or the transmission licensee, as the case may be, and is due to uncontrollable factors as specified in regulation 12, IEDC may be allowed after due prudence check:

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company or the transmission licensee, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost.

(3) In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or the transmission licensee."

30. The petitioner has claimed ₹7.54 lakh, ₹10.16 lakh and ₹451.35 lakh for Asset-2A, Asset-2B and Asset-4 respectively as Interest during Construction (IDC). We have worked out allowable IDC based on information of loan details in Form-9C and date of drawl submitted in the IDC statement by the petitioner. Thus, we have considered the claimed IDC for tariff purpose as under:-

(₹ in lakh)

Particulars	Total IDC (As per Auditors' Certificate)	Entitled IDC as on COD as worked out	IDC disallowed as on COD due to computation difference and time overrun	Undischarged portion of Entitled IDC as on COD	IDC Allowed on cash basis as on COD
	a	**b**	**c=a-b**	**d**	**e=b-d**
Asset-2A	7.54	0.13	7.41	0.00	0.13
Asset-2B	10.16	4.09	6.07	4.09	0.00
Asset-4	451.35	134.08	317.27	6.54	127.54
Total	**469.05**	**138.30**	**330.75**	**10.63**	**127.67**

31. Further, the undischarged IDC as on COD has been considered as additional capital expenditure during the year in which it has been actually discharged as summarized below:-

(₹ in lakh)

Particulars	Undischarged portion of Entitled IDC as on COD	Discharge of IDC Allowed as Add-cap of 2016-17	Discharge of IDC Allowed as Add-cap of 2017-18
Asset-2A	-	-	-
Asset-2B	4.09	-	4.09
Asset-4	6.54	-	6.54
Total	**10.63**	**-**	**10.63**

32. Similarly, the petitioner has claimed ₹6.76 lakh, ₹6.73 lakh and -₹119.70 lakh for Asset-2A, Asset-2B and Asset-4 respectively as Incidental Expenditure incurred and paid during Construction (IEDC) as on COD, which is within the percentage of 10.75% on Hard Cost as indicated in the Abstract Cost Estimate. Therefore, IEDC of ₹6.76 lakh and ₹6.73 lakh for Asset-2A and Asset-2B respectively is considered for tariff purpose. However, no adjustment for negative IEDC of -₹119.70 lakh in respect of Asset-4 has been done.

Initial Spares

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

> **"13. Initial Spares**
> Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:
>
> (d) Transmission system
>
> (i) Transmission line-1.00%
>
> (ii) Transmission Sub-station (Green Field)-4.00%
>
> (iii) Transmission Sub-station (Brown Field)-6.00%
>
> (iv) Series Compensation devices and HVDC Station-4.00%

(v) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%

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 norm 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) 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:

(v) 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 & IEDC in its tariff application."

34. The initial spares claimed by the petitioner are lower than the limit of 6% specified for a Brown field AIS sub-station as per Regulation 13 of the 2014 Tariff Regulations. Therefore, the initial spares for instant assets allowed are lower of amount claimed or the limit specified. The details of admissible initial spares worked out are as under:-

(₹ in lakh)

Particulars	Plant and Machinery cost as on cut-off date	Initial spares claimed	Ceiling Limit	Initial spares worked out	Excess initial spares	Initial spares allowed
Asset-1	968.72	41.20	6.00%	59.20	-	41.20
Asset-2	968.72	41.20	6.00%	59.20	-	41.20
Asset-3	14761.59	699.34	6.00%	891.85	-	699.34

Capital Cost as on COD

35. Based on the above, the summary of capital cost allowed as on COD is as follows:-

(₹ in lakh)

Particulars	Capital cost as on COD claimed	Disallowed IDC due to time over run	Un-discharged IDC as on COD	IEDC disallowed as on COD	Excess initial spare	Capital Cost as on COD considered for tariff calculation
	1	**2**	**3**	**4**	**5**	**6=(1-2-3-4-5)**
Asset-1	500.66	7.41	-	0.75	-	**492.50**
Asset-2	500.77	6.07	4.09	0.77	-	**489.84**
Asset-3	12192.48	317.27	6.54	-	-	**11868.67**
Total	**13193.91**	**330.75**	**10.63**	**1.52**	**-**	**12851.01**

Additional capital expenditure

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

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

(i) Undischarged liabilities 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.”

37. 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”.

38. Therefore, the cut-off date in the case of Asset-2A and Asset-2B is 31.3.2019 and for Asset-4 is 31.3.2020.

39. The petitioner has claimed add-cap in Form-7 under Regulation 14(1) (i)-Discharge of undischarged liabilities and 14(1) (ii)-Deferred works. The add-cap

claimed in Form-7 are summation of the capital cost claimed in Auditors' Certificate and discharge of IDC after COD. The un-discharged IDC as on COD as determined at para-31, for Asset-2B and Asset-4 has been reduced from the COD capital cost of respective assets and the same has been allowed as additional capital expenditure during the year in which the actual discharge of IDC has been carried out.

40. However, it is noted that the Auditors' certificate is silent about the gross block added after COD. Therefore, the addition in to gross block after COD which has been claimed as deferred work under Regulation 14(1)(ii) and has been provisionally allowed in the instant petition for tariff determination, is subject to truing-up. Accordingly, the petitioner is directed to submit revised auditor certificate by clearly mentioning the capitalised cost as on COD and after COD on accrual basis, flow of undischarged liabilities and to justify the details of additional capitalisation by increasing the gross block after COD at the time of truing-up petition.

41. Based on the above, the additional capital expenditure claimed and allowed for the period from COD to 31.03.2019 has been summarized as under:-

(₹ in lakh)

Particulars	**Asset-2A**							
	Claimed				**Allowed**			
	2016-17	**2017-18**	**2018-19**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
1. Regulation 14(1)(i) Discharge of liabilities other than IDC.	193.74	242.18	46.44	**482.36**	193.74	242.18	46.44	**482.36**
2. Regulation 14(1)(ii)- (i.e. Addition into Gross block after COD)	-	-	-	**-**	-	-	-	**-**
3. Total except discharge of IDC (1+2)	193.74	242.18	46.44	**482.36**	193.74	242.18	46.44	**482.36**
4. Regulation 14(1)(i) - Discharge of IDC liabilities.	-	7.39	-	**7.39**	-	-	-	**-**
5. Total add-cap claimed in Form 7 and allowed (3+4)	**193.74**	**249.57**	**46.44**	**489.75**	**193.74**	**242.18**	**46.44**	**482.36**

(₹ in lakh)

Particulars	**Asset-2B**

	Claimed				Allowed			
	2016-17	2017-18	2018-19	Total	2016-17	2017-18	2018-19	Total
1. Regulation 14(1)(i) Discharge of liabilities other than IDC.	193.74	242.18	48.92	**484.84**	193.74	242.18	48.92	**484.84**
2. Regulation 14(1)(ii)- (i.e. Addition into Gross block after COD)	-	-	-	**-**	-	-	-	**-**
3. Total except discharge of IDC (1+2)	193.74	242.18	48.92	**484.84**	193.74	242.18	48.92	**484.84**
4. Regulation 14(1)(i) - Discharge of IDC liabilities.	-	-	-	**-**	-	4.09	-	**4.09**
5. Total add-cap claimed in Form 7 and allowed (3+4)	**193.74**	**242.18**	**48.92**	**484.84**	**193.74**	**246.27**	**48.92**	**488.93**

(₹ in lakh)

Particulars	Asset-4					
	Claimed			Allowed		
	2017-18	2018-19	Total	2017-18	2018-19	Total
1. Regulation 14(1)(i) Discharge of liabilities other than IDC.	5613.06	1577.37	**7190.43**	5613.06	1577.37	**7190.43**
2. Regulation 14(1)(ii)- (i.e. Addition into Gross block after COD)	-	-	**-**	-	-	**-**
3. Total except discharge of IDC (1+2)	5613.06	1577.37	**7190.43**	5613.06	1577.37	**7190.43**
4. Regulation 14(1)(i) - Discharge of IDC liabilities.	181.23	-	**181.23**	6.54	-	**6.54**
5. Total add-cap claimed in Form 7 and allowed (3+4)	**5794.29**	**1577.37**	**7371.66**	**5619.60**	**1577.37**	**7196.97**

Capital Cost as on COD and 31.3.2019

42. Accordingly, capital costs considered for the purpose of tariff calculation and the total estimated completion cost of the instant assets as on 31.3.2019 is as below:-

(₹ in lakh)

Particulars	Capital Cost as on COD considered for tariff calculation	Additional capitalization			Total admitted cost as on 31.3.2019
		2016-17	2017-18	2018-19	
Asset-1	492.50	193.74	242.18	46.44	974.86
Asset-2	489.84	193.74	246.27	48.92	978.77
Asset-3	11868.67	-	5619.60	1577.37	19065.64
Total	**12851.01**	**387.48**	**6108.05**	**1672.73**	**21019.27**

Debt-Equity Ratio

43. 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."

44. 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:-

(₹ in lakh)

Particulars	Asset-2A				Asset-2B			
	Capital cost as on tariff COD		Capital cost as on 31.3.2019		Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%	Amount	%	Amount	%
Debt	344.76	70.00	682.41	70.00	342.89	70.00	685.14	70.00
Equity	147.74	30.00	292.45	30.00	146.95	30.00	293.63	30.00
Total	**492.50**	**100.00**	**974.86**	**100.00**	**489.84**	**100.00**	**978.77**	**100.00**

Particulars	Asset-4			
	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	8308.07	70.00	13345.95	70.00
Equity	3560.60	30.00	5719.69	30.00
Total	**11868.67**	**100.00**	**19065.64**	**100.00**

Return on Equity

45. 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."

46. The petitioner has submitted that RoE has been calculated at the rate of 19.610% after grossing up the RoE with MAT rate of 20.961% as per the above Regulations. The petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

47. 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 under:-

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Opening Equity	147.74	205.86	278.51
Addition due to Additional Capitalisation	58.12	72.65	13.93
Closing Equity	205.86	278.51	292.45
Average Equity	176.80	242.19	285.48
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)	19.611%	19.611%	19.611%
Return on Equity (Pre-tax)	**15.48**	**47.50**	**55.99**
Particulars	**Asset-2B**		
	2016-17	**2017-18**	**2018-19**

	(pro-rata)		
Opening Equity	146.95	205.07	278.95
Addition due to Additional Capitalisation	58.12	73.88	14.68
Closing Equity	205.07	278.95	293.63
Average Equity	176.01	242.01	286.29
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)	19.611%	19.611%	19.611%
Return on Equity (Pre-tax)	**15.13**	**47.46**	**56.14**

Particulars	Asset-4	
	2017-18	**2018-19**
Opening Equity	3560.60	5246.48
Addition due to Additional Capitalisation	1685.88	473.21
Closing Equity	5246.48	5719.69
Average Equity	4403.54	5483.09
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)	19.611%	19.611%
Return on Equity (Pre-tax)	**863.58**	**1075.29**

Interest on Loan

48. 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."

49. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to IoL has been calculated on the following basis:-

(i) Gross amount of loan, rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition. However, the repayment schedule of actual loan is not available for several loans and the same are indentified in the annexure of computation of weighted average rate of interest of actual loan portfolio;

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

(iii) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the asset and shall be equal to the annual depreciation allowed; and

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

50. The petitioner has submitted that it be allowed to bill and adjust impact in interest rate on account of floating rate of interest applicable, if any, from the respondents. We have calculated the interest on loans on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

51. Detailed calculation of the weighted average rate of interest has been given in **Annexure-II to Annexure-IV** to this order.

52. Based on above, details of Interest on Loan calculated are as under:-

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Gross Normative Loan	344.76	480.38	649.90
Cumulative Repayment upto Previous Year	-	13.90	56.52
Net Loan-Opening	344.76	466.48	593.38
Addition due to Additional Capitalisation	135.62	169.53	32.51
Repayment during the year	13.90	42.63	50.25
Net Loan-Closing	466.48	593.38	575.64
Average Loan	405.62	529.93	584.51
Weighted Average Rate of Interest on Loan	7.9723%	7.9722%	7.9722%
Interest	**14.44**	**42.25**	**46.60**
Particulars	**Asset-2B**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Gross Normative Loan	342.89	478.51	650.90
Cumulative Repayment upto Previous Year	-	13.58	56.17
Net Loan-Opening	342.89	464.93	594.73
Addition due to Additional Capitalisation	135.62	172.39	34.24
Repayment during the year	13.58	42.59	50.39
Net Loan-Closing	464.93	594.73	578.58
Average Loan	403.91	529.83	586.65
Weighted Average Rate of Interest on Loan	7.9428%	7.9388%	7.9349%
Interest	**14.06**	**42.06**	**46.55**

(₹ in lakh)

Particulars	**Asset-4**	
	2017-18	**2018-19**
Gross Normative Loan	8308.07	12241.79
Cumulative Repayment upto Previous Year	0.00	729.29
Net Loan-Opening	8308.07	11512.51
Addition due to Additional Capitalisation	3933.72	1104.16
Repayment during the year	729.29	888.07
Net Loan-Closing	11512.51	11728.59
Average Loan	9910.29	11620.55
Weighted Average Rate of Interest on Loan	7.9894%	7.9962%
Interest	**791.77**	**929.20**

53. The IOL is allowed considering all the loans submitted in Form-9C. However, the petitioner is directed to submit the repayment schedule of all actual loans which are not available and are indentified in the annexure of computation of weighted

average rate of interest of actual loan portfolio to reconcile the total gross loan for the calculation of weighted average rate of interest, which would be reviewed at the time of truing-up.

Depreciation

54. 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."

55. The petitioner has claimed actual depreciation as a component of annual fixed charges. 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 and 2017-18. Accordingly, these 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.

56. The details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Opening Gross Block	492.50	686.24	928.42
Additional Capital expenditure	193.74	242.18	46.44
Closing Gross Block	686.24	928.42	974.86
Average Gross Block	589.37	807.33	951.64
Rate of Depreciation	5.2800%	5.2800%	5.2800%
Depreciable Value	530.43	726.59	856.47
Remaining Depreciable Value	530.43	712.70	799.95
Depreciation	**13.90**	**42.63**	**50.25**
Particulars	**Asset-2B**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Opening Gross Block	489.84	683.58	929.85
Additional Capital expenditure	193.74	246.27	48.92
Closing Gross Block	683.58	929.85	978.77
Average Gross Block	586.71	806.72	954.31
Rate of Depreciation	5.2800%	5.2800%	5.2800%
Depreciable Value	528.04	726.05	858.88
Remaining Depreciable Value	528.04	712.47	802.71
Depreciation	**13.58**	**42.59**	**50.39**

Particulars	Asset-4	
	2017-18	2018-19
Opening Gross Block	11868.67	17488.27
Additional Capital expenditure	5619.60	1577.37
Closing Gross Block	17488.27	19065.64
Average Gross Block	14678.47	18276.96
Rate of Depreciation	4.9684%	4.8590%
Depreciable Value	13210.63	16449.26
Remaining Depreciable Value	13210.63	15719.98
Depreciation	**729.29**	**888.07**

Operation & Maintenance Expenses (O & M Expenses)

57. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

(₹ in lakh)

Element	2016-17	2017-18	2018-19
765 kV bay (₹ lakh/bay)	90.12	93.11	96.20
400 kV bay (₹ lakh/bay)	64.37	66.51	68.71
400 kV GIS bay (₹ lakh/bay)	55.02	56.84	58.73
220 kV bay (₹ lakh/bay)	45.06	46.55	48.10

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

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Asset-2A	28.74	66.51	68.71
Asset-2B	28.21	66.51	68.71
Asset-4	-	319.24	329.82

59. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage

revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

60. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

Interest on Working Capital (IWC)

61. 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;"

62. 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 hereinafter:-

(i) Maintenance spares

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

(ii) O & M expenses

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

(iii) Receivables

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

(iv) Rate of interest on working capital

As per Proviso 3 of Regulation 28 of the 2014 Tariff Regulations, SBI Base rate 9.30% as on 1.4.2016/1.4.2017 plus 350 Bps i.e. 12.80% has been considered for the instant assets, as the rate of interest on working capital.

63. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The interest on working capital determined is as follows:-

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Maintenance Spares	9.65	9.98	10.31
O & M expenses	5.36	5.54	5.73
Receivables	28.00	34.21	38.08
Total	**43.01**	**49.73**	**54.11**
Interest rate	12.80%	12.80%	12.80%
Interest	**2.46**	**6.36**	**6.93**
Particulars	**Asset-2B**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Maintenance Spares	9.65	9.98	10.31
O & M expenses	5.36	5.54	5.73
Receivables	27.90	34.16	38.12
Total	**42.92**	**49.68**	**54.15**
Interest rate	12.80%	12.80%	12.80%
Interest	**2.41**	**6.36**	**6.93**

(₹ in lakh)

Particulars	**Asset-4**	
	2017-18	**2018-19**
Maintenance Spares	47.89	49.47
O & M expenses	26.60	27.49
Receivables	462.09	550.45
Total	**536.58**	**627.41**
Interest rate	12.80%	12.80%
Interest	**68.68**	**80.31**

Transmission charges

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

(₹ in lakh)

Particulars	**Asset-2A**		
	2016-17 (pro-rata)	**2017-18**	**2018-19**
Depreciation	13.90	42.63	50.25
Interest on Loan	14.44	42.25	46.60
Return on equity	15.48	47.50	55.99
Interest on Working Capital	2.46	6.36	6.93
O & M Expenses	28.74	66.51	68.71
Total	**75.02**	**205.24**	**228.47**
Particulars	**Asset-2B**		

	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	13.58	42.59	50.39
Interest on Loan	14.06	42.06	46.55
Return on equity	15.13	47.46	56.14
Interest on Working Capital	2.41	6.36	6.93
O & M Expenses	28.21	66.51	68.71
Total	**73.39**	**204.99**	**228.72**

(₹ in lakh)

Particulars	Asset-4	
	2017-18	2018-19
Depreciation	729.29	888.07
Interest on Loan	791.77	929.20
Return on equity	863.58	1075.29
Interest on Working Capital	68.68	80.31
O & M Expenses	319.24	329.82
Total	**2772.56**	**3302.69**

65. 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, or any other kind of impositions etc. The same, if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is entitled for late payment surcharge and FERV as per Regulations 45 and 50 respectively of the 2014 Tariff Regulations.

Filing Fee and Publication Expenses

66. 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

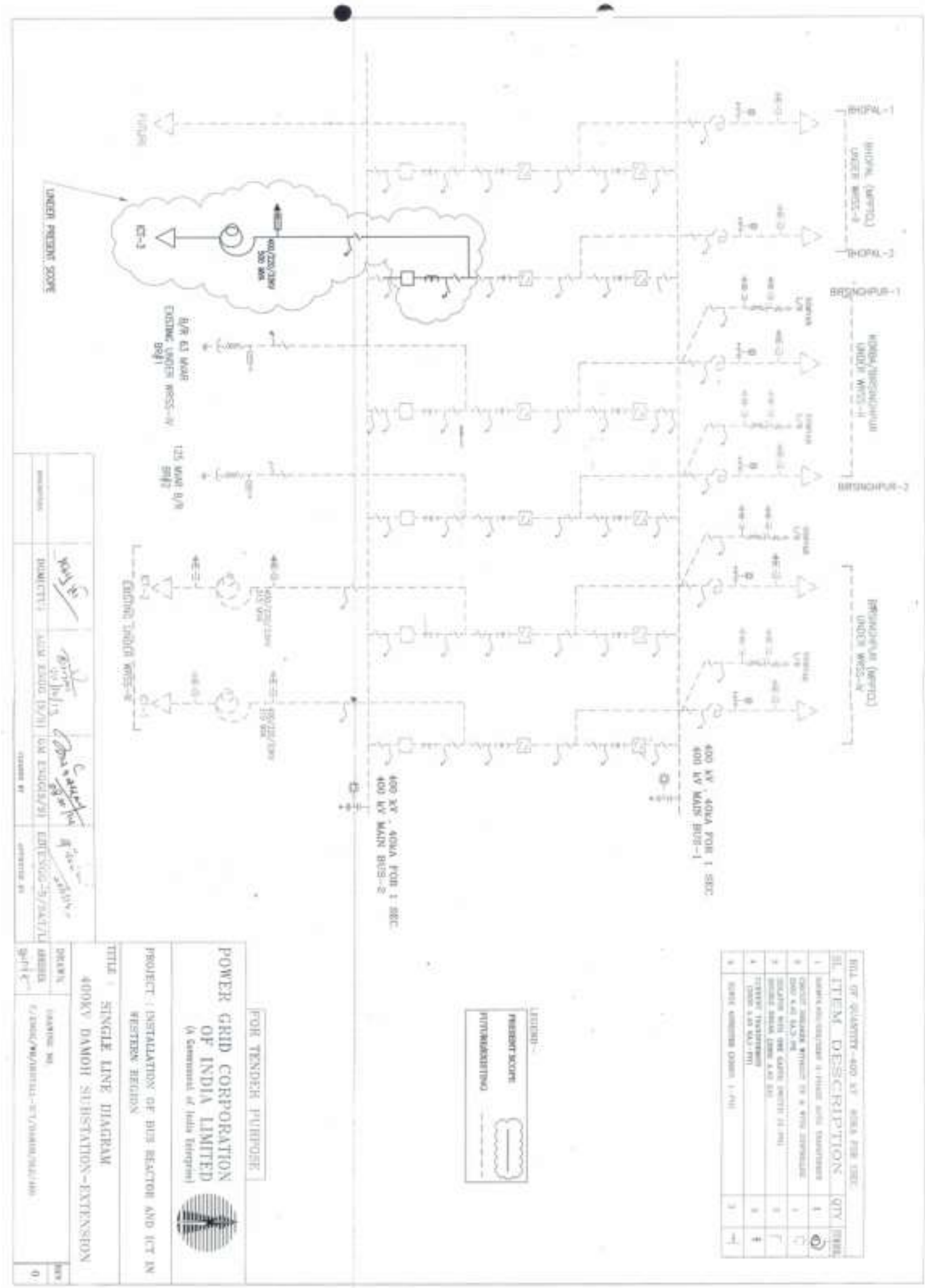
67. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) respectively of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

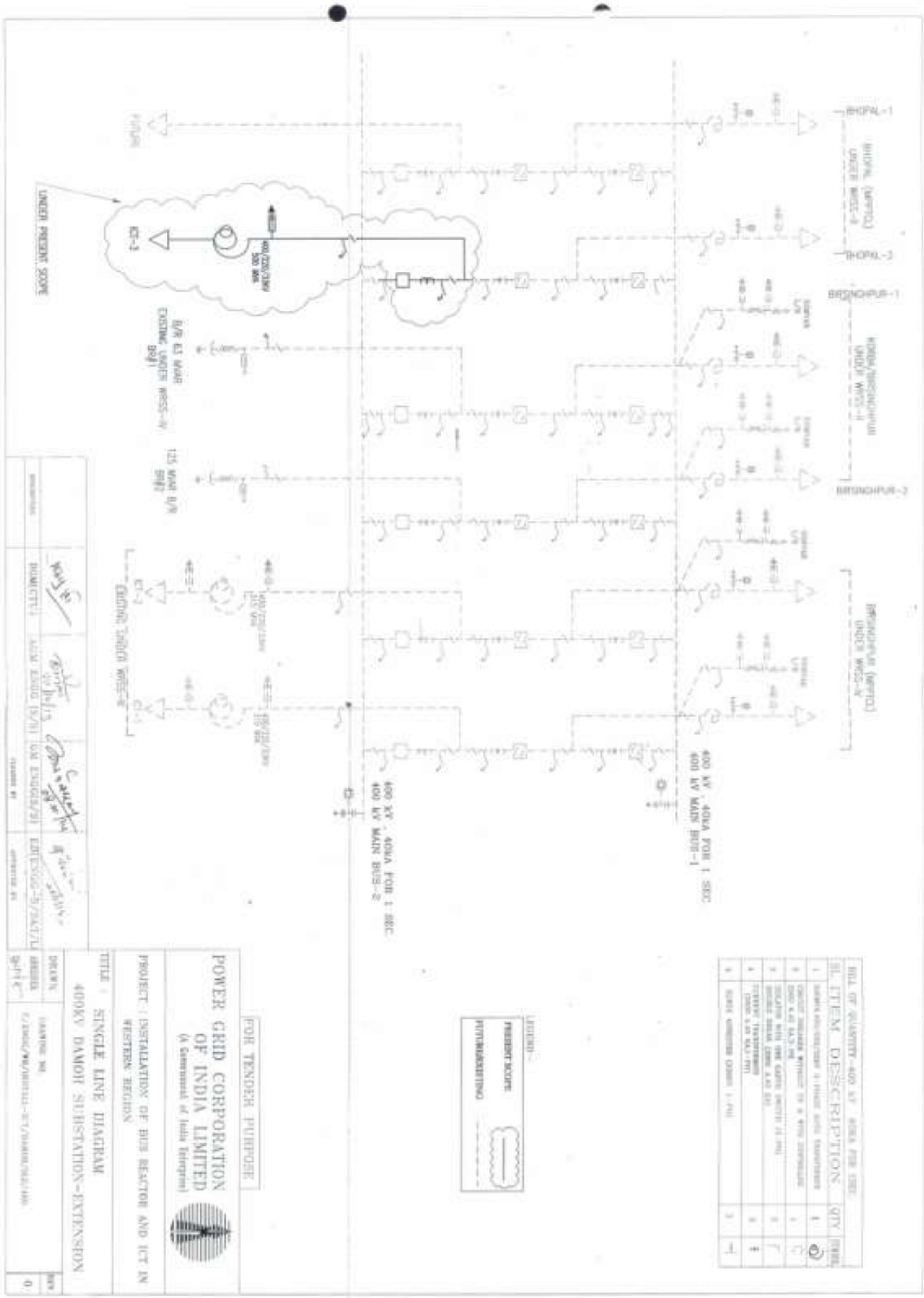
Sharing of Transmission Charges

68. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014 and shall be shared in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

69. This order disposes of Petition No. 208/TT/2016.

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


BHOPAL-1
BHOPAL-2
BIRSINGHPUR-1
BIRSINGHPUR-2
UNDER PRESENT SCOPE
ICT-3
400/220/33KV 500 MVA
FUTURE
400 kV, 40KA FOR 1 SEC
400 kV MAIN BUS-1
400 kV, 40KA FOR 1 SEC
400 kV MAIN BUS-2
LEGEND
PRESENT SCOPE
FUTURE/EXISTING
ITEM DESCRIPTION
QTY
FOR TENDER PURPOSE
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)
PROJECT: INSTALLATION OF BUS REACTOR AND ICT IN WESTERN REGION
TITLE: SINGLE LINE DIAGRAM
400KV DAMOH SUBSTATION-EXTENSION


BHOPAL-1
BHOPAL-2
BIRSINGHPUR-1
BIRSINGHPUR-2
UNDER PRESENT SCOPE
400 kV, 40KA FOR 1 SEC
400 kV MAIN BUS-1
400 kV MAIN BUS-2
LEGEND
PRESENT SCOPE
FUTURE/EXISTING
BILL OF QUANTITY-400 kV 40KA FOR 1SEC
SL ITEM DESCRIPTION QTY
FOR TENDER PURPOSE
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)
PROJECT: INSTALLATION OF BUS REACTOR AND ICT IN WESTERN REGION
TITLE: SINGLE LINE DIAGRAM
400KV DAMOH SUBSTATION-EXTENSION

Annexure-II

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
	Details of Loan	**2016-17**	**2017-18**	**2018-19**
1	**Bond LI**			
	Gross loan opening	**1.82**	**1.82**	**1.82**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**0.00**
	Net Loan-Opening	1.82	1.82	1.82
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1.82	1.82	1.82
	Average Loan	1.82	1.82	1.82
	Rate of Interest	8.40%	8.40%	8.40%
	Interest	0.15	0.15	0.15
	Rep Schedule	12 annual instalments from 14.09.2019		
2	**Bond LIV**			
	Gross loan opening	**343.48**	**343.48**	**348.65**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**0.00**
	Net Loan-Opening	343.48	343.48	348.65
	Additions during the year	0.00	5.17	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	343.48	348.65	348.65
	Average Loan	343.48	346.07	348.65
	Rate of Interest	7.97%	7.97%	7.97%
	Interest	27.38	27.58	27.79
	Rep Schedule	Not available		
	Total Loan			
	Gross loan opening	345.30	345.30	350.47
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	345.30	345.30	350.47
	Additions during the year	0.00	5.17	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	345.30	350.47	350.47
	Average Loan	345.30	347.89	350.47
	Rate of Interest	**7.9723%**	**7.9722%**	**7.9722%**
	Interest	**27.53**	**27.73**	**27.94**

Annexure-III

(₹ in lakh)

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	**2016-17**	**2017-18**	**2018-19**
1	**Bond LIII**			
	Gross loan opening	**232.60**	**232.60**	**232.60**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**0.00**
	Net Loan-Opening	232.60	232.60	232.60
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	232.60	232.60	232.60
	Average Loan	232.60	232.60	232.60
	Rate of Interest	8.13%	8.13%	8.13%
	Interest	18.91	18.91	18.91
	Rep Schedule	Not available		
2	**Bond LV**			
	Gross loan opening	**110.83**	**110.83**	**117.94**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**	**0.00**
	Net Loan-Opening	110.83	110.83	117.94
	Additions during the year	0.00	7.11	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	110.83	117.94	117.94
	Average Loan	110.83	114.39	117.94
	Rate of Interest	7.55%	7.55%	7.55%
	Interest	8.37	8.64	8.90
	Rep Schedule	Not available		
	Total Loan			
	Gross loan opening	343.43	343.43	350.54
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	343.43	343.43	350.54
	Additions during the year	0.00	7.11	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	343.43	350.54	350.54
	Average Loan	343.43	346.99	350.54
	Rate of Interest	**7.9428%**	**7.9388%**	**7.9349%**
	Interest	**27.28**	**27.55**	**27.81**

Annexure-IV

(₹ in lakh)

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	**2017-18**	**2018-19**
1	**Bond LIII**		
	Gross loan opening	**371.40**	**371.40**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	371.40	371.40
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	371.40	371.40
	Average Loan	371.40	371.40
	Rate of Interest	8.13%	8.13%
	Interest	30.19	30.19
	Rep Schedule	Not available	
2	**Bond LI**		
	Gross loan opening	**413.58**	**413.58**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	413.58	413.58
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	413.58	413.58
	Average Loan	413.58	413.58
	Rate of Interest	8.40%	8.40%
	Interest	34.74	34.74
	Rep Schedule	12 annual instalments from 14.09.2019	
3	**SBI 10000 (01.05.2014)**		
	Gross loan opening	**2086.60**	**2086.60**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	2086.60	2086.60
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2086.60	2086.60
	Average Loan	2086.60	2086.60
	Rate of Interest	8.90%	8.90%
	Interest	185.71	185.71
	Rep Schedule	Not available	
4	**Bond LVII**		
	Gross loan opening	**2342.74**	**2342.74**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	2342.74	2342.74
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2342.74	2342.74
	Average Loan	2342.74	2342.74
	Rate of Interest	7.20%	7.20%
	Interest	168.68	168.68
	Rep Schedule	Not available	
5	**Bond LIV**		
	Gross loan opening	**619.35**	**619.35**

	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	619.35	619.35
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	619.35	619.35
	Average Loan	619.35	619.35
	Rate of Interest	7.97%	7.97%
	Interest	49.36	49.36
	Rep Schedule	Not available	
6	**Bond LVIII**		
	Gross loan opening	**1056.07**	**1056.07**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	1056.07	1056.07
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1056.07	1056.07
	Average Loan	1056.07	1056.07
	Rate of Interest	7.89%	7.89%
	Interest	83.32	83.32
	Rep Schedule	Not available	
7	**Proposed loan Bond LV**		
	Gross loan opening	**1182.06**	**1182.06**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	1182.06	1182.06
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1182.06	1182.06
	Average Loan	1182.06	1182.06
	Rate of Interest	7.55%	7.55%
	Interest	89.25	89.25
	Rep Schedule	Not available	
8	**SBI 2016-17(Q4)**		
	Gross loan opening	**336.08**	**462.94**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	336.08	462.94
	Additions during the year	126.86	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	462.94	462.94
	Average Loan	399.51	462.94
	Rate of Interest	8.90%	8.90%
	Interest	35.56	41.20
	Rep Schedule	Not available	
	Total Loan		
	Gross loan opening	8407.88	8534.74
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	8407.88	8534.74
	Additions during the year	126.86	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	8534.74	8534.74
	Average Loan	8471.31	8534.74

	Rate of Interest	**7.9894%**	**7.9962%**
	Interest	**676.81**	**682.45**