# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 18/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 : 8.12.2016

#### In the matter of

Approval of transmission tariff for 400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh Border Transmission Line (operated at 132 kV) alongwith 2 nos. associated bays at Surjyamaninagar Sub-station (TSECL) under "Radial Interconnection between India (NER) and Bangladesh-India Portion" for tariff block 2014-19 in North-Eastern Region 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

Bangladesh Power Development Board (BPDB)

- Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board), Bijulee Bhawan, Paltan bazaar, Guwahati-781 001, Assam
- Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai', Shillong-793 001, Meghalaya



- 3. Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh
- Power and Electricity Department, Government of Mizoram, Aizawl, Mizoram
- Manipur State Electricity Distribution Company Limited, (Formerly Electricity Department, Government of Manipur), Keishampat, Imphal
- Department of Power, Government of Nagaland, Kohima, Nagaland
- 7. Tripura State Electricity Corporation Limited, Vidyut Bhawan, North Banamalipur, Agartala, Tripura (W)-799 001, Tripura

.....Respondents

For petitioner : Shri Rakesh Prasad, PGCIL

Shri Jasbir Singh, PGCIL

Shri Vivek Kumar Singh, PGCIL

Shri Anshul Garg, PGCIL Shri S.K. Venkatesan, PGCIL Shri M.M. Mondal, PGCIL Shri S.S. Raju. PGCIL

For respondents: Md. R. Karim Khan, BPDB

Md. S. Islam, BPDB

#### ORDER

In the instant petition, Power Grid Corporation of India Limited (PGCIL) has sought approval of transmission tariff for 400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh Border Transmission Line (operated at 132 kV) alongwith 2 nos. associated bays at Surjyamaninagar Sub-station (TSECL) (hereinafter referred to as "transmission asset") under "Radial Interconnection between India (NER) and Bangladesh-India Portion" in North-Eastern Region for tariff block 2014-19 under the Central Electricity



Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the "2014 Tariff Regulations").

- 2. Investment Approval (IA) of the project was accorded by Board of Directors of the petitioner vide Memorandum No. C/CP/Radial Interconnection (India-Bangladesh) dated 5.2.2015 at an estimated cost of ₹7623 lakh including IDC of ₹236 lakh (based on December, 2014 price level). The revised cost estimate was approved by Board of Directors of the petitioner vide Memorandum No. C/CP/RCE: Indo-Bangladesh dated 16.6.2016 at a cost of ₹10038 lakh including IDC of ₹224 lakh (based on December, 2015 price level). The instant assets were scheduled to be commissioned within 12 months from the date of IA with best efforts matching with the completion of the Bangladesh portion of work. However, the timeline of 12 months for implementation of the project was to be reckoned from the date of signing of BPTA with Bangladesh Power Development Board, i.e. 4.5.2015. Therefore, the project was scheduled to be commissioned by 3.5.2016.
- 3. The broad scope of work covered under the project is as follows:-

#### **Transmission Lines:**

a. Surjyamaninagar (Tripura)-Indo Bangladesh border 400 kV D/C line (operated at 132 kV level);

## **Sub-stations:**

- a. Two number of 132 kV line bay extensions at Surjyamaninagar Sub-station of Tripura State Electricity Corporation Limited (TSECL).
- 4. The petitioner initially claimed transmission tariff for the instant asset as a single



asset from the 1.1.2016. Subsequently, the petitioner vide affidavit dated 22.6.2016 submitted that the instant asset has been bifurcated into two assets and submitted the revised date of commercial operation of instant assets. The details of the instant assets and scheduled CODs and actual CODs are as under:-

Particulars	Schedule COD as per IA	Actual COD
Asset-I: 400 kV D/C Surjyamaninagar (Tripura)-Indo-		1.1.2016
Bangladesh Border T/L (operated at 132 kV)		1.1.2010
Asset-IA: 2 nos. of 132 kV line bays of 400 kV D/C	3.5.2016	
Surjyamaninagar-Indo-Bangladesh border at		14.4.2016
Surjyamaninagar (operated at 132 kV)		

- 5. This order has been issued after considering petitioner's affidavits dated 3.6.2016 and 22.6.2016.
- 6. The details of the transmission charges claimed by the petitioner are as below:-

			(₹ir	n lakh)
Particulars		Asse	t-l	
	2015-16	2016-17	2017-18	2018-19
	(pro-rata)			
Depreciation	81.94	374.29	405.94	405.94
Interest on Loan	91.96	403.08	405.62	370.75
Return on equity	91.74	419.05	454.50	454.50
Interest on Working Capital	6.29	28.26	29.88	29.11
O & M Expenses	3.14	12.99	13.42	13.86
Total	275.07	1237.67	1309.36	1274.16
Particulars		Asset-	I(A)	
	2015-16	2016-17	2017-18	2018-19
		(pro-rata)		
Depreciation	-	42.43	70.58	70.58
Interest on Loan	-	43.42	68.15	62.08
Return on equity	-	44.36	73.49	73.49
Interest on Working Capital	-	6.42	8.56	8.54
O & M Expenses	-	62.04	66.50	68.72
Total	-	198.67	287.28	283.41

7. The details submitted by the petitioner in support of its claim for Interest on

## Working Capital are as under:-

(₹ in lakh)

Particulars	Asset-I				
	2015-16 (pro-rata)	2016-17	2017-18	2018-19	
Maintenance Spares	1.88	1.95	2.01	2.08	
O & M expenses	1.05	1.08	1.12	1.16	
Receivables	183.38	206.28	218.23	212.36	
Total	186.31	209.31	221.36	215.59	
Rate of Interest	13.50%	13.50%	13.50%	13.50%	
Interest	6.29	28.26	29.88	29.11	

Particulars	Asset-I(A)				
	2015-16	2016-17	2017-18	2018-19	
		(pro-rata)			
Maintenance Spares	-	9.65	9.98	10.31	
O & M expenses	-	5.36	5.54	5.73	
Receivables	-	34.35	47.88	47.23	
Total	-	49.37	63.40	63.27	
Rate of Interest	-	13.50%	13.50%	13.50%	
Interest	-	6.42	8.56	8.54	

- 8. No comments have been received from the general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003. None of the respondents have filed a reply.
- 9. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

# **Approval of COD**

10. The petitioner has submitted that the transmission line (Indian portion) (17.2 km) was completed and test charged on 16.12.15 as per Certificate issued by NLDC, POSOCO with Ref No. POSOCO/NLDC/SO/8, dated 29.12.15. As per NLDC certificate, power flow for 24 hrs. on the line could not be established as the Bangladesh portion of the line was not ready. Thus, the petitioner was unable to connect the transmission

system (from injection end to drawl end). As such, the transmission system at both ends was ready and was put through a trial run, but due to unavailability of agreement between the generator and Bangladesh, the power did not flow. In view of the above, the petitioner has sought approval of date of commercial operation of the instant assets under proviso (ii) Regulation 4 (3) of the 2014 Tariff Regulations. Further, requirement of trial operation certificate could not be met as it is an international line and trial operation certificate is not issued.

- 11. The petition was heard on 22.3.2016. During the hearing the representative of the petitioner requested to approve COD of the instant asset under proviso (ii) Regulation 4(3) of the 2014 Tariff Regulations. The petitioner was directed to inform the date from when the power started flowing through this line. The petitioner was directed to submit whether the power flow on the line could be established for continuous 24 hrs, reasons for early commissioning of the above mentioned line and whether the Bangladesh portion of the 400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh border transmission line (operated at 132 kV) was ready in all respects at the time of filing the instant petition? If yes, then reason as to why "Power to relax" has been invoked.
- 12. The petitioner, in response, vide affidavit dated 3.6.2016 has submitted the following:-
  - (i) Tariff for 400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh Border Transmission Line (operated at 132 kV) along with 2 (two) Nos. associated bays at Surjyamaninagar Sub-station (TSECL) was claimed together. Subsequently, the

asset was commissioned in two parts, as follows:-

Particulars	Asset Name	Actual COD (As filed)	Actual COD
Asset-I	400 kV D/C Surjyamaninagar (Tripura)- Indo-Bangladesh Border Transmission Line (operated at 132kV)		1.1.2016
Asset-I (A)	2 (Two) nos. of 132kV line bays of 400kV D/C Surajmaninagar-Indo Bangladesh border at Surjyamaninagar (operated at 132kV)	1.1.2016	14.4.2016

The Asset-I, i.e. 400 kV D/C Surjyamaninagar (Tripura, India)-Comilla (Bangladesh) transmission line (operated at 132 kV) is an international asset involving India and Bangladesh. The said line was commissioned on 1.1.2016 as per the minutes of the 8th Joint Steering Committee (JSC) Meeting held on 10.10.2014, in New Delhi on the bays available at Tripura Sub-station of TSECL. The petitioner submitted CEA approval for energisation of the said asset up to Indo-Bangladesh border.

- (ii) The 400 kV D/C Surjyamaninagar (Tripura)-Indo Bangladesh border transmission line (Operated at 132 kV) was successfully test charged from Surjyamaninagar Sub-station (India) to India-Bangladesh border on 16.12.2015 and both the circuits from 132 kV Comilla Sub-station (Bangladesh) to India-Bangladesh border on 21.12.2015 and 28.12.2015 respectively. End to end protection inter trip and speech of PLCC was checked and found to be in order for both the circuit on connecting the jumpers of 132 kV Surjyamaninagar-Comilla at border (by Bangladesh as well as India).
- (iii) The RLDC certificate for completion of trial operation could not be



obtained as the other end is beyond Indian boundary and it requires actual power flow. However, the line was successfully charged from Surjyamaninagar (India) to Indo-Bangladesh Border and from Comilla (Bangladesh) to Indo-Bangladesh Border. The power flow could not commence on this line due to non-availability of Power Purchase Agreement (PPA) with Bangladesh.

- (iv) Asset-I (A) i.e. 2 Nos. of 400 kV line Bays (charged at 132 kV) at Surjyamaninagar, are commissioned on 14.4.2016 after completion of trial run as per CEA certificate and RLDC certificate. After this, the line was also shifted from bays of TSECL to normal bays and accordingly tariff for the bays are claimed from 14.4.2016.
- (v) The schedule completion is within 12 months progressively from the date of investment approval. The date of signing of BPTA with Bangladesh Power Development Board is 4.5.2015. Hence, the commissioning schedule was 4.5.2016 against which the 400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh Border transmission line (operated at 132 kV) is declared under commercial operation w.e.f. 1.1.2016.
- (vi) It was agreed in 8<sup>th</sup> Joint Working Group (JWG) Meeting on Cooperation in Power Sector held on 9<sup>th</sup> & 10<sup>th</sup> October, 2014 that the target date for commissioning of the asset shall be December, 2015. Further, a meeting was held on 20.11.2015 between officials of Powergrid Company of Bangladesh (PGCB), TSECL-Tripura and Powergrid India (PGCI) at TSECL office, Agartala for

discussing prerequisites for commissioning of said assets. The meeting concluded with a resolution from all concerned to make all-out efforts for completion of the projects (charging by 16.12.2015).

13. We have considered the submissions of the petitioner. The petitioner did not file the date from when the actual power flow started. Therefore, the petitioner was again directed to file the date from when the actual power flow started. The petitioner has submitted the self declared COD certificates dated 8.1.2016 and 13.5.2016, in respect of the claim of COD in accordance with Regulation 4(3) of the 2014 Tariff Regulations indicating completion of successful trial operation vide affidavits dated 5.2.2016 and 3.6.2016. The petitioner was also directed to submit the details of "trial operation" of the instant asset i.e. if power flow on the line could be established for continuous 24 hours. The petitioner, in response, has submitted trial operation date of 400 kV Surjyamaninagar-Comilla Ckt.-1 and Ckt.-2 as 18.3.2016 and 400 kV Surjyamaninagar-Comilla Ckt.-1 bays and Ckt.-2 bays as 13.4.2016 and 11.4.2016 respectively. The petitioner has also submitted RLDC charging certificate dated 29.12.2015 with regard to 400 kV Surjyamaninagar-Comilla D/C line and claiming charging w.e.f from 16.12.2015 and approval of CEA energisation certificate. Further, the petitioner has submitted that the power flow on the line could not be established as the Bangladesh portion of the line was not ready, but has prayed to approve the COD as per revised claim. In this regard, Regulation 4(3) of the 2014 Tariff Regulations specifies 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:



#### Xxxxxxxx

- (3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end: Provided that:
- (i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:
- (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."
- 14. We have also perused e-mails dated 2.1.2016 and 3.1.2016 by the petitioner to the representative of BPDB, filed by the petitioner, from which, it is established that the Asset-I was ready for regular service but power flow could not commence on this line due to non-availability of Power Purchase Agreement (PPA) of Bangladesh. The JSC Meeting was held in October, 2014, and it was agreed that the target date for completion of the line was December, 2015. However, as per the investment approval dated 5.5.2016, the timeline for completion of the instant assets was 12 months from the date of signing of BPTA. The BPTA was signed on 4.5.2015 and accordingly the scheduled date of completion was 3.5.2016. It is observed that the successful trial operation of line, the Ckt.-1 bay and the Ckt.-2 bay were completed on 18.3.2016, 14.4.2016 and 11.4.2016 respectively. Thereafter, the line and the bays were put to use



and have been in full service. Taking into consideration the date from which the line and the bays are put to use, we approve COD of the line i.e. Asset-I from 18.3.2016 and COD of Asset-1(A) as 14.4.2016.

## **Capital Cost**

- 15. 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.
- 16. The petitioner has submitted the Revised Cost Estimate (RCE) vide affidavit dated 22.6.2016. The details of revised approved apportioned cost, actual expenditure



incurred as on the date of commercial operation and details of additional capital expenditure (hereinafter "add cap") incurred/projected to be incurred for the instant asset have been submitted by the petitioner vide affidavit dated 3.6.2016 (Auditors' Certificate dated 31.5.2016) and are summarized below:-

(₹ in lakh)

Particulars	Approved	Revised	Cost as	Add-cap		Estimated
	apportioned cost	approved apportioned cost	on COD*	2015-16	2016-17	completion cost
Asset-I						
(1.1.2016)**	6746.50	8311.50	6002.23	563.00	1123.10	7688.33
Asset-I(A)						
(14.4.2016)**	876.53	1726.29	320.70	-	922.46	1243.16

<sup>\*</sup>The capital cost has been verified from book of accounts of the project upto respective CODs of the assets as certified by the Auditors.

17. The COD for Asset-I is 18.3.2016. Therefore, add-cap for 2015-16 i.e. from 2.1.2016 to 31.3.2016 has been reduced to pro-rata value for the revised add-cap and accordingly add-cap from 19.3.2016 to 31.3.2016 has been considered. As regards, Asset-I(A), add-cap claimed has been considered for working out the tariff in this order. The capital cost has been considered as submitted by the petitioner. However, the petitioner is directed to file details of revised capital cost as per approved COD at the time of truing-up.

#### Cost over-run

18. The total estimated completion cost is within the revised approved apportioned cost and there is no cost over-run in the case of instant assets.



<sup>\*\*</sup> Claimed CODs

# Time over-run

19. The instant asset was scheduled to be commissioned within 12 months from the date of IA. As per the IA, the time line of 12 months is to be reckoned from the date of signing of BPTA with BPDB, which is 4.5.2015. Accordingly, the scheduled commissioning works out to 3.5.2016. Asset-I and Asset-I(A) were claimed to have been commissioned on 1.1.2016 and 14.4.2016 respectively by the petitioner. The approved date of commercial operation of Asset-I and Asset-I(A) is 18.3.2016 and 14.4.2016 respectively. Thus, there is no time over-run in commissioning of instant assets.

# **Treatment of IDC and IEDC**

20. As regards IDC and IEDC, 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.
- 21. The petitioner, vide affidavit dated 3.6.2016 has submitted the statement of IDC discharged upto COD and IDC discharged after COD in 2016-17. The details of petitioner's claim, information related to IDC submitted by the petitioner and IDC allowed is as under:-

						(₹ in lak	h)
Particulars	Claimed as	Discharged Allowed Balance accrued Balance accrue			Balance accrued		accrued
	on COD as	up to COD	on cash	IDC disc	harged	IDC disc	charged
	per the	(as	(as basis as during 2015-16 during 2016-		during 2015-16		2016-17
	Auditor's	claimed)	on COD	As	Worked	As	Worked
	certificates			claimed	out	claimed	out
Asset I	76.00	-	-	-	-	76.00	76.00
Asset I (A)	8.80	2.12	2.12	-	-	6.68	6.68



- 22. For the purpose of determining the IDC on cash basis, the loan details in Form-9C, as provided by the petitioner have been considered. Thus, on the basis of available information, IDC as on COD has been worked out on cash basis and is allowed for instant assets, which is subject to true-up. The petitioner has also submitted that accrued IDC of ₹76.00 lakh and ₹6.68 lakh for Asset-I and Asset-I(A) respectively, as on COD has been discharged in 2016-17. Therefore, the accrued IDC discharged in 2016-17 in respect of both assets has been considered over and above the claimed add-cap. Thus, IDC is allowed for the purpose of tariff calculation in this order subject to submission of audited capital expenditure duly certified by the Auditors, alongwith updated revised tariff forms and documentary proof of the rate of interest for SBI 10000 loan at the time of truing-up.
- 23. Further, there is a difference in the Gross Loan claimed as on COD (as per Form-9C) and the Gross Loan considered for the IDC calculation (vide affidavit dated 3.6.2016) in respect of both the assets. We have considered, for the IDC calculation purpose, Gross loan (as per Form-9C) as it indicates the actual loan deployed for the respective asset. Therefore, the petitioner is directed to reconcile the Gross Loan for calculation of weighted average Rate of Interest and for the calculation of allowable IDC, subject to review at the time of truing-up.
- 24. The petitioner vide affidavit dated 3.6.2016 has also submitted information related to IEDC in Form-12A for the instant assets, wherein year wise details of IEDC discharged are indicated. The petitioner has also submitted that the entire IEDC has

been paid as on claimed CODs of instant assets. The petitioner has claimed ₹294.60 lakh and ₹55.47 lakh upto claimed CODs for instant assets, which has been considered for the purpose of working out tariff in this order. Further, the maximum allowable IEDC limit being applied in most of the petitions is 10.75% of the Hard cost. Therefore, in the instant petition too, IEDC limit of 10.75% on Hard cost is the allowable limit and the claimed IEDC is allowed in this order in case of Asset-I, as the claimed IEDC is within the limit of 10.75% on Hard cost, but in case of Asset-I(A), IEDC claimed is higher than the limit of 10.75% of the Hard cost. Thus, the details of IEDC for computing tariff, subject to review at the time of truing-up, on submission of cost data by the petitioner, in this order are as under:-

		(₹ in lakh)		
Particulars	IEDC			
	Claimed	Allowed		
Asset I	294.60	294.60		
Asset I(A)	55.47	27.57		

#### **Initial Spares**

25. 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) 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."
- 26. The petitioner has claimed initial spares of ₹50.86 lakh pertaining to PLCC and Communication Equipment. in respect of Asset-I and in respect of Asset-I(A), ₹69.55 lakh and ₹31.50 lakh pertaining to PLCC and Communication Equipment and Substation respectively in the instant petition, which are higher than the ceiling limit of 3.50% and 4.00% for PLCC and Communication Equipment and Substation respectively, as specified in the 2014 Tariff Regulations. Thus, initial spares have been worked out as per the 2014 Tariff Regulations and are allowed as under:-

Particulars	Total claimed capital cost upto actual cut-off date (plant and machinery cost excluding IDC, IEDC, land cost and cost of civil works)	Initial spares claimed against capital cost as on cut- off date	Ceiling limit as per 2014 Tariff Regulations	Initial spares worked out/allowed	(₹ in lakh) Excess initial spares claimed
PLCC & Comm. (Asset-I)	263.16	50.86	3.50%	7.70	43.16
PLCC & Comm. (Asset-I(A))	453.06	69.55	3.50%	13.91	55.64
Sub-station (Asset-I(A))	725.83	31.50	4.00%	28.93	2.57



27. The petitioner, in response to the direction regarding submission of details of year wise discharging of the initial spares for the instant assets, has submitted that the entire claimed Initial Spares are being discharged during 2016-17. Hence, the excess amount of initial spares is being deducted from the capital costs as on COD of Asset-I, there being no capital cost corresponding to PLCC in 2016-17 and in case of Asset-I(A), from the capital cost of 2016-17. However, the capitalized initial spares, in the instant assets, would be reviewed with audited capital expenditure to be submitted by the petitioner, after prudence check at the time of truing-up.

### Capital cost allowed as on COD

28. The details of the capital cost considered as on the approved date of commercial operation for Asset-I i.e. 18.3.2016 and date of commercial operation for Asset-I(A) i.e. 14.4.2016, after allowing capitalization of IDC, IEDC and initial spares for the purpose of the determination of transmission tariff are as follows:-

(₹ in lakh)

Particulars	Capital cost	Add: pro-rata	Less: IDC	Add allowed		Less: excess	Capital
	claimed as on COD (as per Auditors' Certificate)	add-cap from claimed COD to approved COD	and IEDC claimed	IDC	IEDC	Initial spares as on COD	cost allowed as on COD
Asset-I*	6002.23	481.68**	370.60	-	294.60	43.16	6364.75
Asset-I(A)	320.70	-	64.27	2.12	27.57	0.00	286.12

<sup>\*</sup>Revised COD for Asset-I being as 18.3.2016.

### **Additional Capital Expenditure**

- 29. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as follows:-
  - "(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



<sup>\*\*</sup>Pro-rata add-cap from 2.1.2016 to 18.3.2016 is being added up in the capital cost as on claimed COD.

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.

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

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

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

- 31. The cut-off date in the case of instant transmission assets is 31.3.2019.
- 32. The balance accrued IDC as on COD but discharged during 2015-16 and 2016-17 has been added, over and above the claimed add-cap, in case of instant assets as discussed at para-22. Thus, the details of estimated completion capital cost as on 31.3.2019 are as follows:-



(₹ in lakh)

(,						
Particulars	Capital cost allowed	Add-cap allowed for		Estimated		
	as on COD/approved COD	2015-16**	2016-17	completion cost		
Asset-I						
(18.3.2016)	6364.75	81.32	1199.10	7645.17		
Asset-I(A)						
(14.4.2016)	286.12	_	870.93	1157.05		

<sup>\*\*</sup>Revised add-cap (from 19.3.2016 to 31.3.2016) for 2015-16

## **Debt- Equity Ratio**

- 33. 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 debtequity 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."



34. The petitioner has claimed debt: equity ratio of 70:30 as on the date of commercial operation of the instant assets. The details of debt: equity in respect of the assets covered in this petition as on approved COD and COD for Asset-I and Asset-I(A) respectively and as on 31.3.2019 are as under:-

			(*	₹ in lakh)		
Particulars		Asset-I				
	Cost as	on	Cost as	s on		
	approved	COD	31.3.20	019		
	Amount	%	Amount	%		
Debt	4455.32	70.00	5351.62	70.00		
Equity	1909.42	30.00	2293.55	30.00		
Total	6364.75	100.00	7645.17	100.00		
Particulars		Asse	t-I(A)			
	Cost as o	n COD	Cost as	s on		
			31.3.20	019		
	Amount	%	Amount	%		
Debt	200.29	70.00	809.94	70.00		
Equity	85.83	30.00	347.11	30.00		
Total	286.12	100.00	1157.05	100.00		

35. The capital cost on the dates of commercial operation and as on 31.3.2019 as arrived above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30 for the purpose of tariff calculation in this order. However, the variation in the debt-equity ratio, if any, would be reviewed after submission of the actual gross loan as on approved COD of 18.3.2016 and COD of 14.4.2016, in case of Asset-I and Asset-I(A) respectively, by the petitioner at the time of truing-up.

# Return on Equity (RoE)

36. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:-



- " 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-rate 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."

- 37. 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.
- 38. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.
- 39. 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. The MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the details of return on equity calculated are as given under:-

(₹ in lakh)

Particulars	Asset-I				
	2015-16	2016-17	2017-18	2018-19	
	(pro-rata)				
Opening Equity	1909.42	1933.82	2293.55	2293.55	
Addition due to Additional					
Capitalisation	24.40	359.73	0.00	0.00	
Closing Equity	1933.82	2293.55	2293.55	2293.55	
Average Equity	1921.62	2113.69	2293.55	2293.55	
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%	
Rate of Return on Equity (Pre Tax )	19.610%	19.610%	19.610%	19.610%	
Return on Equity (Pre Tax)	14.41	414.49	449.77	449.77	
Particulars		Ass	et-I(A)		
	2015-16	2016-17	2017-18	2018-19	
		(pro-rata)			
Opening Equity	-	85.83	347.11	347.11	
Addition due to Additional					
Capitalisation	_	261.28	0.00	0.00	
Closing Equity	-	347.11	347.11	347.11	
Average Equity	-	216.47	347.11	347.11	
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)	-	40.94	68.07	68.07	

#### **Interest on Loan**

40. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies 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 decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.
- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
- 5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."
- 41. In these calculations, interest on loan has been worked out as hereinafter:-
  - (a) Gross amount of loan and rate of interest and weighted average rate of interested on actual average loan have been considered as per the petition:
  - (b) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period;
  - (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan; and



- (d) Loans have been adjusted on pro-rata basis for gross opening loans and for add-cap.
- 42. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on anticipated COD and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/adjusted over the tariff block. The interest on loan has been calculated 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.
- 43. Detailed calculations of the weighted average rate of interest have been given at Annexure-1 and Annexure-2.
- 44. Details of Interest on Loan calculated are as under:-

(₹ in lakh)

Particulars	Asset-I				
	2015-16	2016-17	2017-18	2018-19	
	(pro-rata)				
Gross Normative Loan	4455.32	4512.25	5351.62	5351.62	
Cumulative Repayment upto Previous Year	-	13.03	387.54	793.70	
Net Loan-Opening	4455.32	4499.22	4964.08	4557.92	
Addition due to Additional Capitalisation	56.93	839.37	-	-	
Repayment during the year	13.03	374.51	406.16	406.16	
Net Loan-Closing	4499.22	4964.08	4557.92	4151.76	
Average Loan	4477.27	4731.65	4761.00	4354.84	
Weighted Average Rate of Interest on Loan	8.5828%	8.5888%	8.5888%	8.5888%	
Interest	14.70	406.39	408.91	374.03	
Particulars		Asset	t-I(A)		
	2015-16	2016-17	2017-18	2018-19	
		(pro-rata)			
Gross Normative Loan	-	200.29	809.94	809.94	
Cumulative Repayment upto Previous Year	-	0.00	39.20	104.58	
Net Loan-Opening	-	200.29	770.74	705.36	
Addition due to Additional Capitalisation	-	609.65	0.00	0.00	
Repayment during the year	-	39.20	65.38	65.38	





Net Loan-Closing	-	770.74	705.36	639.98
Average Loan	Ī	485.51	738.05	672.67
Weighted Average Rate of Interest on Loan	-	8.5997%	8.5997%	8.5997%
Interest	-	40.27	63.47	57.85

45. However, in the absence of documentary proof for the rate of interest of SBI 10000 loan and its repayment schedule, the weighted average rate of interest has been worked out for the instant assets considering the claimed rate of interest as per Form-9C submitted by the petitioner for the purpose of tariff in this order. Therefore, the petitioner is directed to submit details of actual gross loan as on approved COD of 18.3.2016 and COD of 14.4.2016 for Asset-I and Asset-I(A) respectively and also submit the repayment schedule, revised, if any alongwith rate of interest proofs, which will be subject to a review at the time of truing-up.

# **Depreciation**

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

#### "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."
- 47. The instant transmission assets were put under commercial operation during 2014-15. Accordingly, the instant assets will complete 12 years beyond 2018-19. Thus, depreciation has been calculated annually based on Straight Line Method at rates specified in Appendix-II of the 2014 Tariff Regulations.
- 48. The details of the depreciation allowed are as follows:-



(₹ in lakh)

	ı			(\ III Iakii)	
Particulars	Asset-I				
	2015-16	2016-17	2017-18	2018-19	
	(pro-rata)				
Opening Gross Block	6364.75	6446.07	7645.17	7645.17	
Additional Capital expenditure	81.32	1199.10	0.00	0.00	
Closing Gross Block	6446.07	7645.17	7645.17	7645.17	
Average Gross Block	6405.41	7045.62	7645.17	7645.17	
Rate of Depreciation	5.3190%	5.3154%	5.3127%	5.3127%	
Depreciable Value	5764.87	6341.06	6880.65	6880.65	
Remaining Depreciable Value	5764.87	6328.03	6493.12	6086.95	
Depreciation	13.03	374.51	406.16	406.16	
Particulars		Asset-	·I(A)		
	2015-16	2016-17	2017-18	2018-19	
		(pro-rata)			
Opening Gross Block	-	286.12	1157.05	1157.05	
Additional Capital expenditure	-	870.93	0.00	0.00	
Closing Gross Block	-	1157.05	1157.05	1157.05	
Average Gross Block	-	721.58	1157.05	1157.05	
Rate of Depreciation	-	5.6331%	5.6504%	5.6504%	
Depreciable Value	-	649.42	1041.34	1041.34	
Remaining Depreciable Value	-	649.42	1002.14	936.76	
Depreciation	-	39.20	65.38	65.38	

# Operation & Maintenance Expenses (O&M Expenses)

49. 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:-

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
D/C (Twin & Triple conductor) T/L (₹					
lakh/km)	0.707	0.731	0.755	0.780	0.806
132 kV and below bay (₹ lakh/bay)	30.15	31.15	32.18	33.25	34.36

50. 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 allowable O&M Expenses for the instant transmission asset are as follows:-



(₹ in lakh)

Particulars	Asset-I					
	2015-16 (pro-rata)	2016-17	2017-18	2018-19		
17.20 km 400 kV D/C						
qua T/L	0.48	12.99	13.42	13.86		
Particulars		Asset-I(A)				
	2015-16	2016-17	2017-18	2018-19		
		(pro-rata)				
2 nos. 132 kV bays	-	62.07	66.50	68.72		

- 51. 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.
- 52. The petitioner has also submitted that the claim for transmission tariff is inclusive of income tax but exclusive of incentive, late payment surcharge, foreign exchange variations, any statutory taxes, levies, duties, cess, filing fees, license fee or any other kind of impositions levied by any government, local bodies/authorities and/or regulatory authorities etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2014 Tariff Regulations, given effect to the impact of such charges/levies after extensive consultations with the stakeholders as one time compensation for O&M cost. We do not

see any reason why the admissible amount is inadequate to meet the requirement of the O&M cost. In this order, we have allowed O&M Expenses as per the existing norms. 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**

- 53. Clause 1 (c) and 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:

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- (e) 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;"
- 54. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. As per the Second Amendment dated



21.6.2011 to the 2011 Tariff Regulations, the rate of interest on working capital for Asset-I is considered @ 13.50% (SBI Base Rate of 10% as on 1.4.2015 plus 350 basis points) and for Asset-I(A) is considered @ 12.80% (SBI Base Rate of 9.30% as on 1.4.2016 plus 350 basis points). The interest on working capital has been accordingly allowed. The interest on working capital determined is as under:-

(₹ in lakh) **Particulars** Asset-I 2017-18 2015-16 2016-17 2018-19 (pro-rata) Maintenance Spares 1.88 1.95 2.01 2.08 O & M expenses 1.16 1.05 1.08 1.12 212.15 190.07 Receivables 206.10 218.02 193.00 209.13 221.15 215.38 Total Rate of Interest 13.50% 13.50% 13.50% 13.50% Interest 1.00 28.23 29.86 29.08 **Particulars** Asset-I(A) 2015-16 2017-18 2018-19 2016-17 (pro-rata) Maintenance Spares 9.65 9.98 10.31 O & M expenses 5.54 5.73 5.36 Receivables 32.55 45.20 44.63 Total 47.57 60.71 60.66 Rate of Interest 12.80% 12.80% 12.80% -Interest 5.87 7.77 7.77

# **Transmission Charges**

55. The transmission charges being allowed for the transmission asset are as under:-

(₹ in lakh)

Particulars	Asset-I				
	2015-16	2016-17	2017-18	2018-19	
	(pro-rata)				
Depreciation	13.03	374.51	406.16	406.16	
Interest on Loan	14.70	406.39	408.91	374.03	
Return on equity	14.41	414.49	449.77	449.77	
Interest on Working Capital	1.00	28.23	29.86	29.08	
O & M Expenses	0.48	12.99	13.42	13.86	
Total	43.62	1236.61	1308.12	1272.89	



Particulars	Asset-I(A)				
	2015-16	2016-17	2017-18	2018-19	
		(pro-rata)			
Depreciation	ı	39.20	65.38	65.38	
Interest on Loan	ı	40.27	63.47	57.85	
Return on equity	ı	40.94	68.07	68.07	
Interest on Working Capital	ı	5.87	7.77	7.77	
O & M Expenses		62.07	66.50	68.72	
Total	-	188.34	271.19	267.78	

## Filing Fee and Publication Expenses

56. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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**

57. 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.

# **Service Tax**

58. The petitioner submitted that service tax on transmission has been put in negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the respondents. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission



charges separately from the respondents, if service tax on transmission is withdrawn from negative list at any time in future. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

## **Deferred Tax Liability**

59. The petitioner has sought recovery of deferred tax liability accrued before 1.4.2009 from the beneficiaries or long term consumers/DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. However, the instant assets were commissioned after 1.4.2009 and hence the petitioner's prayer is infructuous.

## **Goods and Services Tax (GST)**

60. The petitioner has prayed for reimbursement of any tax payable in future on implementation of GST. We are of the view that the petitioners' prayer is premature and hence it is not allowed.

## **Sharing of Transmission Charges**

- 61. The BPTA signed between BPDB and POWERGRID provides as under:-
  - "3.2 BPDB shall pay the transmission tariff and other charges on account of the said transmission system mentioned at para 2.1 to POWERGRID INDIA with effect from the date of commercial operation in accordance with the norms/order/notification issued by CERC from time to time. POWERGRID INDIA shall ensure intimation to BPDB about Tariff hearing process of CERC and facilitate BPDB's participation for the same. However, any other taxes and duties imposed by Government of Bangladesh shall be paid by BPDB."



- 62. Therefore, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Bulk Power Transmission Agreement signed between Bangladesh Power Development Board and petitioner. The transmission charges shall be paid by BPDB as per the provisions of clause 3.0 of the BPTA and the same shall not be considered under POC pool. The line may be considered at zero cost in POC network model
- 63. This order disposes of Petition No. 18/TT/2016.

sd/-sd/-sd/-(M.K. lyer)(A.S. Bakshi)(A.K. Singhal)(Gireesh B. Pradhan)MemberMemberMemberChairperson

# **Annexure-1**

(₹ in lakh)

	CALCULATION OF WEIGHTED A	VERAGE RATE C	F INTERE		in iakn) N
	Details of Loan	2015-16	2016-17	2017-18	2018-19
1	SBI 10000 (01.05.2014)				
	Gross loan opening	688.87	745.80	745.80	745.80
	Cumulative Repayment upto				
	DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	688.87	745.80	745.80	745.80
	Additions during the year	56.93	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	745.80	745.80	745.80	745.80
	Average Loan	717.34	745.80	745.80	745.80
	Rate of Interest	9.55%	9.55%	9.55%	9.55%
	Interest	68.51	71.22	71.22	71.22
	Rep Schedule	20 Half yearly e	qual instaln	nents from 1	5.06.2019
2	Bond LI				
	Gross loan opening	3796.66	3796.66	3796.66	3796.66
	Cumulative Repayment upto				
	DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	3796.66	3796.66	3796.66	3796.66
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	3796.66	3796.66	3796.66	3796.66
	Average Loan	3796.66	3796.66	3796.66	3796.66
	Rate of Interest	8.40%	8.40%	8.40%	8.40%
	Interest	318.92	318.92	318.92	318.92
	Rep Schedule	12 Equal Annı	ual instalme	nts from 14	.09.2019
	Total Loan				
	Gross loan opening	4485.53	4542.46	4542.46	4542.46
	Cumulative Repayment upto				
	DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	4485.53	4542.46	4542.46	4542.46
	Additions during the year	56.93	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	4542.46	4542.46	4542.46	4542.46
	Average Loan	4514.00	4542.46	4542.46	4542.46
	Rate of Interest	8.5828%	8.5888%	8.5888%	8.5888%
	Interest	387.43	390.14	390.14	390.14



# **Annexure-2**

(₹ in lakh)

	(र in lakh) CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
	Details of Loan	2016-17	2017-18	2018-19		
1	SBI 10000 (01.05.2014)					
	Gross loan opening	38.18	38.18	38.18		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00		
	Net Loan-Opening	38.18	38.18	38.18		
	Additions during the year	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00		
	Net Loan-Closing	38.18	38.18	38.18		
	Average Loan	38.18	38.18	38.18		
	Rate of Interest	9.55%	9.55%	9.55%		
	Interest	3.65	3.65	3.65		
	Rep Schedule	20 Half ye	arly equal ir	stalments		
	•	fro	m 15.06.20	19		
2	Bond LI					
	Gross loan opening	181.64	181.64	181.64		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00		
	Net Loan-Opening	181.64	181.64	181.64		
	Additions during the year	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00		
	Net Loan-Closing	181.64	181.64	181.64		
	Average Loan	181.64	181.64	181.64		
	Rate of Interest	8.40%	8.40%	8.40%		
	Interest	15.26	15.26	15.26		
	Rep Schedule		I Annual ins			
	Trep deficuale	fro	m 14.09.20	19		
	Total Loan					
	Gross loan opening	219.82	219.82	219.82		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00		
	Net Loan-Opening	219.82	219.82	219.82		
	Additions during the year	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00		
	Net Loan-Closing	219.82	219.82	219.82		
	Average Loan	219.82	219.82	219.82		
	Rate of Interest	8.5997%	8.5997%	8.5997%		
	Interest	18.90	18.90	18.90		

