

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 234/TT/2018

Coram :

Shri P.K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I.S. Jha, Member

Date of Order: 27.12.2019

In the matter of

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of,

- (i) Truing up Transmission tariff for 2009-14 tariff block &
- (ii) Transmission tariff for 2014-19 tariff block

For (1): LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station, (2): LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station, (3): 765 kV Bays for Bhiwani-Moga Line at Bhiwani Sub-station; 765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani sub-station; 765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani Sub-station; 2 Nos. 400 kV Bays for Hisar-Bahadurgarh at Bhiwani Sub-station, (4): LILO of Hisar-Bawana at Bhiwani along with 2 No. 400 kV Bays at Bhiwani Sub-station, (5): 765 kV bays for Jattikalan-Bhiwani Line at Bhiwani Sub-station, (6): 765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut & Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station, (7): 765/400 kV, 1000 MVA ICT-II along with associated bays at Bhiwani Sub-station, (8): 765 kV 240 MVAR Bus Reactor-II along with associated



bays at Bhiwani Sub-station and (9):400/220 kV Ballabgarh Substation (re-alignment works) under “765 kV System for Central Part of Northern Grid-Part III” in Northern Region.

And in the matter of

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

....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005
2. Ajmer Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
3. Jaipur Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
4. Jodhpur Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan, Kumar House Complex Building II
Shimla-171 004
6. Punjab State Power Corporation Ltd.
Thermal Shed TIA, Near 22 Phatak,
Patiala - 147 001
7. Haryana Power Purchase Centre
2nd Floor, Shakti Bhawan, Sector-6
Panchkula-134 109



8. Power Development Dept., J&K
Janipura Grid Station,
Jammu (Tawi)-180 007
9. Uttar Pradesh Power Corporation Ltd.
10th Floor, Shakti Bhawan Extn,
14, Ashok Marg, Lucknow - 226 001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road (Near ITO),
New Delhi-110 002
11. BSES Yamuna Power Ltd. (BYPL),
Shakti Kiran Building, Karkardooma,
Delhi-110092.
12. BSES Rajdhani Power Ltd. (BRPL) ,
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Ltd,
Power Trading & Load Dispatch Group
Cennetbuilding, Pitampura,
New Delhi
14. Chandigarh Administration
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Road, Dehradun.
16. North Central Railway
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

...Respondents

Parties present:

For Petitioner: Shri S.S.Raju, PGCIL
Shri Zafrul Hasan, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Vivek Kumar Singh, PGCIL



For Respondent: Shri R.B. Sharma, Advocate, BRPL & BYPL
Shri Mohit Mudgal, Advocate, BRPL & BYPL
Ms. Sanya Sud, Advocate, BRPL & BYPL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") for trueing up of capital expenditure under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual capital expenditure for the period from COD of respective asset to 31.3.2014 and for determination of tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for for the **Asset-1:** LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station, **Asset-2:** LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station, **Asset-3:** 765 kV Bays for Bhiwani-Moga Line at Bhiwani Sub-station; 765 kV 240 MVAR Bus Reactor-I alongwith associated bays at Bhiwani sub-station; 765/400 kV 1000 MVA ICT-I alongwith associated bays at Bhiwani Sub-station; 2 Nos. 400 kV Bays for Hisar-Bahadurgarh at Bhiwani Sub-station, **Asset-4:** LILO of Hisar-Bawana at Bhiwani along with 2 No. 400 kV Bays at Bhiwani Sub-station, **Asset-5:** 765 kV bays for Jattikalan-Bhiwani Line at Bhiwani Sub-station, **Asset-6:** 765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut & Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station, **Asset-7:** 765/400 kV, 1000 MVA ICT-II along with associated bays at Bhiwani Sub-station, **Asset-8:** 765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Sub-station and **Asset-9:** 400/220 kV Ballabgarh Substation (re-alignment works) under "**765 kV System for Central Part of Northern Grid-Part III**" in Northern Region (hereinafter referred as "transmission asset").



2. The Petitioner has made the following prayers:
- a) *Approve the Trued up Transmission Tariff for the tariff block 2009-14 for the assets covered under this petition. The adjustment billing shall be raised;*
 - b) *Admit the capital cost as on 31.3.2014 as claimed in the petition and approve the additional capitalization incurred during 2009-14 period and projected to be incurred during the tariff block 2014-19 as claimed in the petition;*
 - c) *Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition;*
 - d) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014;*
 - e) *Allow the approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01 .01 .2017 onwards.*
 - f) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents;*
 - g) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition;*
 - h) *Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014;*
 - i) *Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any*



Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries;

- j) *Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. Further, any taxes and duties including cess etc. imposed by any statutory/Govt/municipal authorities shall be allowed to be recovered from the beneficiaries;*
- k) *Allow to recover annual lease rent as claimed directly from the beneficiaries on annual basis as allowed in order dated 23.9.2015 in review petition no. 11/RP/2015;*

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

Background

3. The Investment Approval (hereinafter referred to as "IA") for implementation of "765 kV System for Central Part of Northern Grid-Part III" in Northern Region was accorded by Board of Directors of the Petitioner for ₹107512 lakh including an IDC of ₹7712 lakh based on 3rd Quarter, 2009 price level (communicated vide Memorandum dated 3.11.2009).

4. The administrative approval and expenditure sanction of Revised Cost Estimate (RCE) of the transmission project was accorded by the Board of Directors of Petitioner in its 329th meeting held on 26.5.2016 for ₹103805 lakh including an IDC of ₹6947 lakh based on December, 2015 price level (communicated vide Memorandum no. C/CP/RCE NCR-III dated 1.6.2016).

5. The scope of work covered under the project "765 kV System for Central Part of Northern Grid-Part III" are as follows:-

Transmission Lines:

- (i) Meerut Bhiwani 765 kV S/C line -175 km.
- (ii) LILO of Bareilly–Mandola 400 kV D/C Line at Meerut -103 km.



- (iii) LILO of both circuits of Bawana/ Bahadurgarh-Hissar 400 kV D/C line at Bhiwani-15 km

Sub-stations:

- (i) New 2 X 1000 MVA, 765/400 kV and 2 X 500 MVA, 400/220 kV Bhiwani 765/400/220 kV sub-station.
(ii) Extension of Meerut 765/400 kV sub-station.
(iii) Extension of Mandola 400/220 kV sub-station.
(iv) Extension of Ballabgarh 400/220 kV sub-station- Realignment works.

Reactive Compensation:

Line Reactors

- (i) Meerut–Bhiwani 765 kV S/C Line (240 MVAR switchable)

Bus Reactors

- (i) Bhiwani- 2X240 MVAR

6. Details of the assets covered in the project scope under various petitions is summarized below:

S.N.	Asset	COD (Actual)	Petition No.	True up Pet.No.
1	Asset-1: LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station	1.10.2012	99/TT/2012 (2009-14 period)	Current Petition
2	Asset-2: LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station	1.4.2013		
3	Asset-3: 765 kV Bays for Bhiwani-Moga Line at Bhiwani S/s;765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani S/s;765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani S/s; 2 Nos.400 kV Bays for Hisar-Bahadurgarh at Bhiwani S/s	1.6.2012		
4	Asset-4: LILO of Hisar-Bawana at Bhiwani along with 2 Nos.400 kV Bays at Bhiwani S/s	1.7.2012		
5	Asset-5: 765 kV bays for Jattikalan-Bhiwani Line at Bhiwani Sub-station	1.10.2012		
6	Asset-6: 765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut & Bhiwani and 765 kV,240 MVAR Line Reactor at Bhiwani S/s	1.2.2014		
7	Asset-7: 765/400 kV,1000 MVA ICT-II along with associated bays at Bhiwani S/s	1.10.2012		
8	Asset-8: 765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Sub-stn	1.7.2012		
9	400/220 kV Ballabgarh Substation (realignment works)	1.12.2012	58/TT/2013 (2009-14 period)	



7. The details of assets covered under the instant petition is as follows:-

Asset	Description	Asset-No. in Instant Petition	COD (Actual)
CERC order dated 24.3.2015 in Petition no. 99/TT/2012			
Asset-1	LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Substation	Asset-1	1.10.2012
Asset-2	LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Substation	Asset-2	1.4.2013
Asset-3	765 kV Bays for Bhiwani-Moga Line at Bhiwani Sub-station;765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani;765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani; 2 Nos.400 kV Bays for Hisar-Bahadurgarh at Bhiwani S/s	Asset-3	1.6.2012
Asset-4	LILO of Hisar-Bawana at Bhiwani along with 2 Nos.400 kV Bays at Bhiwani Substation	Asset-4	1.7.2012
Asset-5	765 kV bays for Jattikalan-Bhiwani Line at Bhiwani Substation	Asset-5	1.10.2012
Asset-6	765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut & Bhiwani and 765 kV,240 MVAR Line Reactor at Bhiwani	Asset-6	1.2.2014
Asset-7	765/400 kV,1000 MVA ICT-II along with associated bays at Bhiwani Substation	Asset-7	1.10.2012
Asset-8	765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Substation	Asset-8	1.7.2012
CERC order dated 15.2.2016 in Petition no. 58/TT/2013			
Asset	400/220 kV Ballabgarh Substation (realignment works)	Asset-9	1.12.2012

8. The brief facts of the case are as follows:-

- a) As the Petitioner had not furnished any explanation regarding the higher completion cost of the “foundation for structure” of the assets at Bhiwani Sub-station, the Commission vide Order dated 24.3.2015 in petition no. 99/TT/2012 restricted the cost of the “foundation for structure” in respect of assets involving Bhiwani Sub-station to FR cost viz. Asset-3, Asset-5, Asset-7 and Asset-8. The Commission in the said order granted liberty to the Petitioner to submit detailed justification of the foundation cost at the time of truing-up.

- b) Earlier, the Commission in its order dated 15.2.2016 in petition no. 58/TT/2013 had restricted the completion cost to the apportioned approved cost in respect of Asset-9 covered under the instant petition. However, liberty was granted to the petitioner to approach the Commission after approval of RCE, if any, at the time of true-up.
- c) The Petitioner had filed review petition no. 11/RP/2015 seeking review of Order dated 28.3.2015 in Petition no. 99/TT/2012 on the following grounds:
- (i) Disallowance of time over-run of 2 months out of total time over-run of 20 months with respect to Asset-6
 - (ii) Disallowance of annuity to land owners payable by the petitioner for the next 31 years as per the Relief and Rehabilitation Policy of the government of Haryana; and
 - (iii) Disallowance of cost of “foundation for structure” for the transmission assets comprised in Assets-3, 5, 7 and 8 involving Bhiwani Sub-station.
- d) The Commission vide Order dated 23.9.2015 held that the supporting documents was available with the Petitioner at the time of filing of main petition i.e. 99/TT/2012 and same cannot be considered in the review. Hence, there was no error apparent on the face of record and review of disallowance of time over-run of 2 months out of total time over-run of 20 months in respect of Asset-6 was not allowed. As regard payment of annuity to land owner, the Commission decided to allow the review as the information submitted by the Petitioner could not be considered while passing the Order. With regard to disallowance of cost “foundation for structure”, the Commission observed that there is



huge variation between the original estimates and the actual expenditure and same needs detailed analysis. Thus, the Commission held its original decision that Petitioner is at liberty to submit detailed justification of the foundation cost at the time of true-up.

- e) As per the investment approval dated 3.11.2009, the instant assets were scheduled to be commissioned within 30 months i.e. by 1.6.2012. The details of the period of time over-run condoned by the Commission for the instant assets, covered in different petitions, are summarized below:-.

Asset	Respective Petition no.	Total Time Overrun	Condoned	Not Condoned
Asset 1	99/TT/2012	4 months	4 months	--
Asset 2		10 months	10 months	
Asset 3		No delay	--	--
Asset 4		1 month	1 month	
Asset 5		4 months	4 months	
Asset 6		20 months	18 months	2 months
Asset 7		4 months	4 months	--
Asset 8		1 month	1 month	--
Asset 9	58/TT/2013	6 months	--	6 months

- f) The capital cost allowed for the instant assets in aforesaid orders is summarized below:-

(₹ in lakh)

Asset	Respective Petition no.	Admitted Cost as on COD	Allowed Add Cap for FY		Total Cost as on 31.3.2014
			2012-13	2013-14	
Asset 1	99/TT/2012	6397.19	712.56	346.22	7455.97
Asset 2		7365.92	0.00	348.18	7714.10
Asset 3		10888.09	3964.52	1502.25	16354.86
Asset 4		2468.23	289.46	292.39	3050.08
Asset 5		1069.90	308.36	239.74	1618.00
Asset 6		28648.00	0.00	647.21	28295.21
Asset 7		5161.36	3009.90	658.96	8830.22
Asset 8		3218.05	1090.71	342.62	4651.38
Asset 9	58/TT/2013	84.38	0.00	6.02	90.40



9. The details of the Annual Transmission Charges approved by the Commission vide order dated 24.3.2015 in petition no. 99/TT/2012 for Asset-1 to Asset-8 and dated 15.2.2016 in petition no. 58/TT/2013 for Asset-9, vis-à-vis claimed by the Petitioner on account of Truing up of the additional capitalization and MAT adjustment as per 2009 Tariff Regulations are as under:-

(₹ in lakh)			
Asset	Particulars	2012-13	2013-14
Asset-1	Approved Annual Fixed Cost (AFC)	656.00	1386.89
	Revised AFC based on truing up	677.03	1423.13
Asset-2	Approved Annual Fixed Cost (AFC)	-	1454.76
	Revised AFC based on truing up	-	1572.23
Asset-3	Approved Annual Fixed Cost (AFC)	2191.09	3064.77
	Revised AFC based on truing up	2351.08	3311.13
Asset-4	Approved Annual Fixed Cost (AFC)	432.75	623.12
	Revised AFC based on truing up	438.00	633.90
Asset-5	Approved Annual Fixed Cost (AFC)	146.40	339.76
	Revised AFC based on truing up	165.72	380.46
Asset-6	Approved Annual Fixed Cost (AFC)	-	903.16
	Revised AFC based on truing up	-	1154.50
Asset-7	Approved Annual Fixed Cost (AFC)	646.37	1599.10
	Revised AFC based on truing up	695.55	1735.64
Asset-8	Approved Annual Fixed Cost (AFC)	546.14	837.88
	Revised AFC based on truing up	579.36	907.07
Asset-9	Approved Annual Fixed Cost (AFC)	5.22	15.97
	Revised AFC based on truing up	5.22	16.09

10. The details of the interest on working capital claimed by the Petitioner are as under:-



(₹ in lakh)			
Asset	Particulars	2012-13	2013-14
Asset-1	Approved Interest on Working Capital (IWC)	17.08	36.10
	Revised IWC based on truing up	17.93	36.14
Asset-2	Approved Interest on Working Capital (IWC)	-	37.65
	Revised IWC based on truing up	-	41.30
Asset-3	Approved Interest on Working Capital (IWC)	61.00	83.80
	Revised IWC based on truing up	64.60	89.35
Asset-4	Approved Interest on Working Capital (IWC)	12.80	18.34
	Revised IWC based on truing up	12.92	18.58
Asset-5	Approved Interest on Working Capital (IWC)	4.66	10.53
	Revised IWC based on truing up	5.10	11.45
Asset-6	Approved Interest on Working Capital (IWC)	-	21.88
	Revised IWC based on truing up	-	27.41
Asset-7	Approved Interest on Working Capital (IWC)	16.88	40.93
	Revised IWC based on truing up	17.99	44.00
Asset-8	Approved Interest on Working Capital (IWC)	14.34	21.74
	Revised IWC based on truing up	15.08	23.30
Asset-9	Approved Interest on Working Capital (IWC)	0.12	0.36
	Revised IWC based on truing up	0.12	0.36

11. The Petitioner has served the copy of the petition upon the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. 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. Reply to the petition has been filed by UPPCL (Respondent no 9) and BRPL (Respondent no 12) vide their affidavits dated 10.1.2019 & 13.3.2019, respectively and the Petitioner vide its affidavit dated 22.1.2019 filed its rejoinder to the reply of BRPL in the matter.



12. The Petition was heard on 24.5.2019 and the Commission reserved the order in the Petition.

13. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

14. This order has been issued after considering the main petition dated 10.5.2018, Petitioner's affidavits dated 16.1.2019, 22.1.2019, replies dated 10.1.2019, 13.3.2019 of the respondents, UPPCL and BRPL, respectively.

Truing-up of Annual Fixed Charges of 2009-14 tariff period

15. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

“(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors”.

16. The Petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

Capital Cost

17. Regulation 6 of the 2009 Tariff Regulations provides as under:-

“6. Truing up of Capital Expenditure and Tariff.

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff.

(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out truing up exercise in respect of the generating station a unit or block thereof or the transmission system or the transmission lines or sub-stations thereof by 31.10.2014;



(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014,

duly audited and certified by the auditors;

(4) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall refund to the beneficiaries or the transmission customers, as the case may be, the excess amount so recovered along with simple interest at the rates specified in the proviso to this regulation.

(5) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall recover from the beneficiaries or the transmission customers, as the case may be, the under-recovered amount along with simple interest at the rates specified in the proviso to this regulation.

(6) The amount under-recovered or over-recovered, along with simple interest at the rates specified in the proviso to this regulation, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly instalments starting within three months from Page 3 of 6 the date of the tariff order issued by the Commission after the truing up exercise.

Provided that the rate of interest, for clauses (4), (5) and (6) of this regulation, for Calculation of simple interest shall be considered as under:

- (i) SBI short-term Prime Lending Rate as on 1.4.2009 for the year 2009-10.
- (ii) SBI Base Rate as on 1.7.2010 plus 350 basis points for the year 2010-11.
- (iii) Monthly average SBI Base Rate from 1.7.2010 to 31.3.2011 plus 350 basis points for the year 2011-12.
- (iv) Monthly average SBI Base Rate during previous year plus 350 basis points for the year 2012-13 & 2013-14.”

18. The Petitioner has submitted apportioned approved cost as per RCE along with the petition. The Petitioner has submitted Auditor certificates dated 26.2.2018, 26.2.2018, 15.3.2018, 15.3.2018, 15.3.2018, 15.3.2018, 15.3.2018, 15.3.2018 and 26.2.2018 for Asset-1 to Asset-9, respectively. The details of apportioned approved cost (FR), revised apportioned approved cost (RCE) and actual additional capitalization claimed up to 31.3.2014 by the Petitioner for instant assets are as under:-



(₹ in lakh)

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Capital Cost as on COD	Add Cap for 2012-13	Add Cap for 2013-14	Total cost as on 31.3.2014
Asset-1	7521.06	8137.57	6412.26	697.94	614.59	7724.79
Asset-2	7762.70	8392.29	7380.76	0.00	605.40	7986.16
Asset-3	21853.12	18797.29	11652.06	3964.52	1660.27	17276.85
Asset-4	3000.76	3247.30	2468.81	289.46	187.40	2945.67
Asset-5	1897.04	2010.07	1251.73	308.36	207.69	1767.78
Asset-6	36260.02	39217.99	36256.59(*)	0.00	647.21	36903.80
Asset-7	11783.41	10148.36	5605.76	3009.90	913.35	9529.11
Asset-8	6234.04	5153.04	3402.42	1090.71	416.96	4910.09
Asset-9	151.72	215.33	85.69(*)	6.02	0.00	91.71

(*)Capital cost as on COD for Asset 6 and Asset 9 is after deducting IDC & IEDC of ₹358.66 lakh and ₹1.07 lakh, respectively.

19. The Petitioner has submitted that the cost of 240MVAR Line reactor at Bhiwani S/s was not included inadvertently in the management certificate submitted in Petition No-99/TT/2012 in case of Asset-6 i.e “765 kV S/C Meerut-Bhiwani Line alongwith associated bays at Meerut & Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station. Now, the Petitioner has included the cost of 240MVAR Line reactor at Bhiwani S/s in the auditor certificate dated 15.03.2018 in respect of Asset-6 and prayed to approve the cost of 240MVAR Line reactor at Bhiwani S/s and allow tariff as per the cost claimed in the instant petition.

Cost overrun

20. The Commission vide order dated 24.3.2015 in petition no. 99/TT/2012 held as under:

“20. We have considered the submissions of the petitioner and PSPCL. The petitioner has not filed its rejoinder to the reply filed by PSPCL. We are not happy with the petitioner for not filing its rejoinder to the PSPCL’s reply inspite of clear direction to this effect on 13.11.2014. In response to Commission’s queries, the petitioner has clarified that the LILO of one circuit had increased from 7.5 km as per FR to 15 km during actual execution. The petitioner has not furnished any explanation regarding the higher completion cost of the “foundation for structure” of the assets at Bhiwani Sub-station. Further, the reasons submitted by the petitioner for the steep increase in cost of certain items are not exhaustive and the information submitted by the petitioner do not give the details like change in volume of work, scope of work or cost and the extent of change from estimate to actual. Keeping in view, we are constrained to restrict the cost of the “foundation for structure” for assets



involving Bhiwani Sub-station to FR cost. The petitioner is at liberty to reply to the PSPCL queries dated 10.7.2012 and 13.2.2013 and submit detailed justification of the foundation cost at the time of truing-up.”

21. The Petitioner has now claimed the total cost of foundation in the instant petition. The Petitioner has submitted that the detailed justification of cost over-run alongwith reply to queries of PSPCL was filed in review petition 11/RP/2015 and the Commission vide Order dated 23.9.2015 in the said review petition directed the petitioner to approach the Commission at the time of truing up. The Petitioner has submitted the following details to substantiate its claim:-

- a) The detailed cost for structure for foundation for Assets 3, 5, 7 and 8 is as follows:-

		(₹ in lakh)			
Asset		Cost as per FR	Estimated completion cost	Variation	% Variation
Asset-3	765 kV, 240 MVAR Bus Reactor-I	76.00	267.68	191.68	240%
	1000 MVA ICT-I	109.19	535.37	426.18	374%
Asset-5	765 kV bays for Jattikalan-Bhiwani TL	79.53	267.68	188.15	237%
Asset-7	1000 MVA ICT-II	109.19	535.37	426.18	390%
Asset-8	765 kV, 240 MVAR Bus Reactor-II	76.00	267.68	191.68	252%

- b) The variation in the cost of civil works envisaged in FR of 765 kV Bhiwani S/S was prepared on the basis of LOA of 765 kV Seoni S/S, which was the 1st 765 kV Substation executed by the Petitioner. At that time, only composite cost was available in the LOA, therefore, the cost of foundation for structure in the FR was considered on lump sum basis.

- c) As per policy, the bid prices are invited for the complete scope of work on overall basis. The break-up of these prices are for the purpose of on-account payment only. The comparison of prices for a particular package is also done with its cost estimate on overall basis. The provision regarding

this policy has been included in the Petitioner's "Works & Procurement Policy and Procedure", which, inter-alia stipulates that the qualified bidder, whose bid is determined as the lowest evaluated, techno-commercially responsive and who is considered to have the capacity and capability to perform the contract based on the assessment, if carried out, will be recommended for award and the recommended price shall be compared with the approved cost estimate. The comparison shall be done only between total recommended price and the total cost estimate. Price of individual items will not be compared for the above purpose. Here it may also be noted that the procurement framework of Petitioner, which adopts best procurement practices, has been assessed by the World Bank.

d) Similar items may not always have the same rate in different contracts awarded during the same period or even within the same contract. The differences of rates may be because of various market forces and the pricing strategies followed by bidder(s) to decide the spread of their total prices over different items. Further, such pricing strategies may be different in case of different bidders and different packages. As such, comparing the prices of individual items would not serve much purpose once the purpose of ensuring the comparative positions of bidder on overall basis gets served during the Evaluation Stage.

e) More realistic approach for analyzing the prices would be to examine the prices for complete FR cost vis-à-vis the actual completed cost of the project instead of analyzing the same on price component-wise basis as the procurement by Petitioner is done on the overall basis. The overall actual cost of the project is within the overall estimated cost.



f) The cost of civil works of Bhiwani S/s envisaged in FR is about ₹16.5 crore which includes the cost of equipment civil works, Levelling / Site Surfacing, Boundary wall & fencing, Approach roads, internal roads & drainage, Water Supply, Power supply, Rain Water Harvesting, Transformer foundation & Rail track, Control Room Building incl. Administrative/office building/store room, Firefighting pump house& water tank etc. Against the afore mentioned scope covered in the FR, the price arrived for the civil works in the competitive bidding for the Bhiwani Substation is about ₹33.52 crore. The aforesaid cost variation of civil works vis-à-vis FR cost is mainly on account of the following:-

a. **Soil Condition:** At the time of preparation of FR, exact location of land for Bhiwani S/s was not identified. The benchmark for calculation of quantity and amount of civil works was preliminary data available for Seoni S/S. After the identification of land, soil testing for Bhiwani Substation was done. The analysis of “Report on Soil Investigation” of both the Substations revealed that, the land profile of Bhiwani S/S was Medium Dense whereas land profile of 765 kV Seoni S/S was Stiff to Hard. The net safe bearing capacity as indicated at Seoni S/S was 35 Ton/m². However, the net safe bearing capacity for different sizes of foundations at 1.5m depth at Bhiwani S/S was only 5.75 T/ m² to 7 T/ m². The difference in net bearing capacity (NBC in Seoni S/S is varying from 5 to 7 times as that of Bhiwani S/S) which made considerable impact in the size of foundations for structures during detailed engineering resulting in increase in quantity. Further, water table was encountered at 5m depth in Bhiwani S/S, the effect of which also had to be considered in the design of foundations. The



effect of water table was not present in Seoni S/S (FR Stage of Bhiwani S/S). Also, Bulk Density and Dry Density of soil in Seoni S/S are high, as compared to that of Bhiwani S/S. Hence, quantity of civil works have increased considerably in Bhiwani S/S after the Soil Investigation at LOA Stage. The above factors attribute to the large variation of quantity under the head of foundation of Structure cost.

b. **Control Room Building:** In order to have clear and better view of switchyard from operational and maintenance point of view management decision was taken to make control room building as a double story building. Accordingly the Control Room Building of 765kV Bhiwani S/s. is made a two storied building as compared to single storied building at Seoni Substation.

g) Apart from the above submissions, the increase in cost of the civil works during the execution stage is on account of the following:-

a. There is a considerable increase in cost under the head of foundation of structure cost during the execution stage due to the uneven landforms of 765kV Bhiwani Substation which was made at 3 different levels i.e., switchyard for 765 kV, 400 kV & 220 kV at two levels and the control room building, firefighting system etc are at another level, for which slope protection was provided. This has further added the cost of leveling.

b. Increase in cost is also due to variation in rates. It is submitted that the price variation from the FR (i.e., 3rd quarter of 2009) up to Jun 2012 (i.e. the period of major supplies) is attributable to inflationary trends prevalent during the execution of project and also market forces



prevailing at the time of bidding process of various packages. The trend of increase in indices of various major raw materials is in the range of 12% to 30%.

h) Regarding price variation from FR to award, the contracts for various packages under this project were awarded to the lowest evaluated and responsive bidder, on the basis of Open Competitive Bidding. The award prices represent the lowest prices available at the time of bidding of various packages, thus capturing the price level at the bidding stage. The price variation from Award to final execution within contractual schedule is mainly on the basis of PV based on indices as per provision of respective contracts and are unavoidable as per terms of the contract. Therefore the same may be allowed. The details of awarded cost and Price variation (PV) during the execution of the project is as follows:-

(₹ in lakh)

Asset		Cost as per FR	Estimated completion cost	LOA cost	PV
Asset-3	765 kV, 240 MVAR Bus Reactor-I	76.00	267.68	240.91	26.77
	1000 MVA ICT-I	109.19	535.37	481.83	53.54
Asset-5	765 kV bays for Jattikalan-Bhiwani TL	79.53	267.68	240.91	26.77
Asset-7	1000 MVA ICT-II	109.19	535.37	481.83	53.54
Asset-8	765 kV, 240 MVAR Bus Reactor-II	76.00	267.68	240.91	26.77

22. We have considered the submissions made by the Petitioner. From the submissions of the Petitioner it is noted that the FR was prepared in 2008-2009 period wherein only Seoni sub-station was available for the purpose of benchmark for calculation of quantity and amount of civil works. The land profile of Bhiwani Sub-station was medium dense whereas land profile of 765 kV Seoni sub-station was hard. This difference in net bearing capacity in both places made considerable impact in the size of foundations for structure during detailed engineering resulting in



increase in quantity. The cost variation was mainly due to prevailing market condition, soil condition, uneven landforms which were beyond the control of the Petitioner.

23. The Petitioner has submitted revised cost estimate (RCE) for the project covering the instant assets. The total apportioned approved cost as per RCE in respect of assets covered under the instant petition as mentioned in the Table of Para. 18 above, the completion cost including additional capitalization is within the apportioned approved cost as per RCE. Therefore, there is no cost over-run in respect of the instant assets. Accordingly, the cost claimed by the Petitioner including cost of foundation structure in respect of Assets-3, Assets-5, Assets-7 and Assets-8 is allowed.

24. With regard to 240 MVAR line reactors at Bhiwani S/s which has been included now in Asset-6 in the instant petition, the Petitioner has submitted that this line reactor at Bhiwani S/S was not included inadvertently in the Management Certificate as submitted in petition no. 99/TT/2012. Perusal of Management Certificate furnished in Petition no. 99/TT/2012 for Asset-6 reveals that the cost of 240 MVAR Line Reactor was not included in capital cost. In view of the fact that 240 MVAR Line Reactor is in the scope of Investment Approval and COD has also been approved by the Commission, the capital cost claimed by the Petitioner for 240 MVAR Line Reactor is allowed.

Interest During Construction (IDC)

25. The Petitioner has claimed Interest During Construction (IDC) for the instant assets and has submitted the Auditor Certificate in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.



26. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis after considering the time over-run period which has not been condoned by the Commission. The loan details submitted in Form-13 for period 2009-14 and the IDC computation sheet were also considered for the purpose of IDC calculation on cash and accrued basis. The undischarged IDC as on COD has been considered as ACE during the year in which it has been discharged. The IDC as allowed

27. Accordingly, based on the information furnished by the Petitioner and earlier treatment of time over-run for respective assets, the IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter, for the purpose of tariff determination, is summarized as under:-

(₹ in lakh)

Asset	IDC claimed as per Auditor Certificate	IDC disallowed due to time over-run & computational difference	IDC admissible	IDC allowed as on COD	IDC un-discharged as on COD	IDC discharged in 2012-13	IDC discharged in 2013-14	IDC discharged in 2014-15
A	B	C	D=B-C	E	F=C-E	G	H	
Asset-1	739.16	0.00	739.16	559.85	179.31	179.31	0.00	
Asset-2	975.71	13.22	962.49	782.56	179.93	0.00	179.93	
Asset-3	593.50	0.00	593.50	381.47	212.03	212.03	0.00	
Asset-4	120.07	0.00	120.07	15.13	104.94	104.94	0.00	
Asset-5	92.00	0.00	92.00	80.94	11.06	11.06	0.00	
Asset-6	4182.40	301.66	3880.74	3368.89	511.85	0.00	387.33	124.52
Asset-7	493.58	2.96	490.62	373.24	117.38	96.32	21.06	
Asset-8	194.59	0.00	194.59	75.53	119.06	119.06	0.00	
Asset-9	4.10	1.97	2.13	0.18	1.95	-	1.95	

Incidental Expenditure During Construction (IEDC)

28. The Petitioner has claimed IEDC of the Assets covered in the petition and submitted Auditor certificate in support of the same. The allowable IEDC has been determined by considering the percentage of IEDC on Hard Cost as indicated in the Abstract Cost Estimate as per original investment approval, which is 5% for the



instant assets. The IEDC claimed is within this limit in case of all the individual assets. The details of claimed and allowed IEDC is mentioned below:-

(₹ in lakh)

Asset	IEDC claimed as per Auditor Certificate	IEDC allowed
Asset-1	65.79	65.79
Asset-2	80.90	80.90
Asset-3	192.16	192.16
Asset-4	33.83	33.83
Asset-5	20.48	20.48
Asset-6	699.69	642.69**
Asset-7	100.01	100.01
Asset-8	53.52	53.52
Asset-9	1.23	1.03

***IEDC of an amount of Rs.57 lakhs has been decuded on account of time over-run not condoned.*

Initial Spares

29. The Petitioner has claimed initial spares of the Assets covered in the petition and submitted Auditor certificate in support of the same. The details of initial spares claimed by the Petitioner are as follows:-

(₹ in lakh)

Asset	Element	Capital Cost Claimed	Initial spares claimed
Asset-1	Substation	1469.79	36.21
Asset-2	Substation	1469.79	36.21
Asset-3	Substation	18729.09	376.95
Asset-4	Substation	1648.50	24.16
	Transmission line	1555.13	12.24
Asset-5	Substation	1939.41	36.08
Asset-6	Substation	10232.56	233.28
	Transmission line	28922.06	222.13
Asset-7	Substation	10068.50	208.04
Asset-8	Substation	5110.94	118.67
Asset-9	Substation	195.33	25.06

30. The Respondent, BRPL has submitted that the initial spares claimed by Petitioner are beyond the ceiling limit as prescribed under Regulation 8 of the Tariff Regulations, 2009 in respect of Assets 1,2,4 and 6 and the Commission may allow



initial spares accordingly. In response, Petitioner vide affidavit dated 22.1.2019 filed its rejoinder and submitted that the initial spares claimed is under the ceiling limit and accordingly, the entire claimed may be allowed.

31. We have considered initial spares claimed by the Petitioner. The details of initial spares allowed are as under:-

(₹ in lakh)

Asset	Element	Capital Cost Claimed	Initial Spares Claimed	Initial Spares admissible	Excess Initial Spares Claimed
Asset-1	Substation	1469.79	36.21	36.21	0.00
Asset-2	Substation	1469.79	36.21	36.21	0.00
Asset-3	Substation	18729.09	376.95	376.95	0.00
Asset-4	Substation	1648.50	24.16	24.16	0.00
	Transmission line	1555.13	12.24	11.66	0.58
Asset-5	Substation	1939.41	36.08	36.08	0.00
Asset-6	Substation	10232.56	233.28	233.28	0.00
	Transmission line	28922.06	222.13	216.88	5.25
Asset-7	Substation	10068.50	208.04	208.04	0.00
Asset-8	Substation	5110.94	118.67	118.67	0.00
Asset-9	Substation	195.33	25.06	4.37	20.69

Capital cost as on COD

32. Accordingly, the capital cost allowed as on COD is summarized as under:-

(₹ in lakh)

Assets	Capital cost as on COD as per Auditor Certificate	Less: IDC disallowed due to time over-run & computational difference	Less: IDC un-discharged as on COD	Less: IEDC Disallowed as on COD	Less: Excess Initial Spares disallowed as on COD	Capital cost considered as on COD
	1	2	3	4	5	6=1-2-3-4-5
Asset-1	6412.26	0.00	179.31	--	--	6232.95
Asset-2	7380.76	13.22	179.93	--	--	7187.61
Asset-3	11652.06	0.00	212.03	--	--	11440.03
Asset-4	2468.81	0.00	104.94	--	0.58	2363.29
Asset-5	1251.73	0.00	11.06	--	-	1240.67
Asset-6	36615.25	301.66	511.85	57.00	5.25	35739.49
Asset-7	5605.86	2.96	117.38	--	--	5485.52
Asset-8	3402.42	0.00	119.06	--	--	3283.36
Asset-9	86.76	1.97	1.95	0.20	20.69	61.94
Total	74875.91	319.81	1437.51	57.20	26.52	73034.87



Additional Capital Expenditure (ACE)

33. The Petitioner has claimed the following ACE on actuals in respect of the instant assets and submitted the Auditor's Certificates in support of the same:-

(₹ in lakh)

Asset	Additional Capital Expenditure		Total ACE claimed by Petitioner as on 31.3.2014
	2012-13	2013-14	
Asset-1	697.94	614.59	1312.53
Asset-2	0.00	605.41	605.41
Asset-3	3964.52	1660.27	5624.79
Asset-4	289.46	187.40	476.86
Asset-5	308.36	207.69	516.05
Asset-6	0.00	647.21	647.21
Asset-7	3009.90	913.35	3923.25
Asset-8	1090.71	416.96	1507.67
Asset-9	6.02	0.00	6.02
Total	9366.91	5252.87	14619.78

34. We have considered the submission made by the Petitioner. The un-discharged IDC as on COD has been allowed as ACE during the year of discharge. Accordingly, the ACE allowed has been summarized as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
ACE to the extent of Balance & Retention Payments and work deferred for execution other than IDC	697.94	614.59	605.40	3964.52	1660.27
Add: IDC Discharged	179.31	0.00	179.93	212.03	0.00
Total Add Cap allowed	877.25	614.59	785.33	4176.55	1660.27

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
ACE to the extent of Balance & Retention Payments and work deferred for execution other than IDC	289.46	187.40	308.36	207.69	647.21
Add: IDC Discharged	104.94	0.00	11.06	0.00	387.33
Total Add Cap allowed	394.40	187.40	319.42	207.69	1034.54



Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
ACE to the extent of Balance & Retention Payments and work deferred for execution other than IDC	3009.90	913.35	1090.71	416.96	6.02	0.00
Add: IDC Discharged	96.32	21.06	119.06	0.00	0.00	1.95
Total Add Cap allowed	3106.22	934.41	1209.77	416.96	6.02	1.95

Capital cost for the tariff period 2009-14

35. Accordingly, the capital cost considered for the tariff period 2009-14 is as follows:-

(₹ in lakh)

Asset	Capital Cost Allowed as on COD	Additional Capitalisation for FY		Admitted Capital Cost as on 31.3.2014
		2012-13	2013-14	
Asset-1	6232.95	877.25	614.59	7724.79
Asset-2	7187.61	0.00	785.33	7972.94
Asset-3	11440.03	4176.55	1660.27	17276.85
Asset-4	2363.29	394.40	187.40	2945.09
Asset-5	1240.67	319.42	207.69	1767.78
Asset-6	35739.49	0.00	1034.54	36774.03
Asset-7	5485.52	3106.22	934.41	9526.15
Asset-8	3283.36	1209.77	416.96	4910.09
Asset-9	61.94	6.02	1.95	69.91
Total	73034.86	10089.63	5843.14	88967.63

Debt-Equity Ratio

36. Clauses 1 and 3 of Regulation 12 of the 2009 Tariff Regulations provide as under:-

“(1) For a project declared under commercial operation on or after 1.4.2009, 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 where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each invest.

.....

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of



tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

37. The Petitioner has claimed true up of Annual Fixed Charge based on Debt:Equity ratio as on COD of 70:30 in respect of all the instant assets except Asset-6 for which the Petitioner has indicated the the debt-equity ratio of 70.70:29.30 in the Form-6. With regard to Additional Capital expenditure, the Petitioner has claimed the Debt:Equity ratio of 70:30 in respect of all the assets covered under the instant petition. Accordingly, the details of debt and equity considered are as under:-

(₹ in lakh)

Asset-1				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	4363.07	70.00	5407.35	70.00
Equity	1869.88	30.00	2317.43	30.00
Total	6232.95	100.00	7724.78	100.00

Asset-2				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	5031.33	70.00	5581.06	70.00
Equity	2156.28	30.00	2391.88	30.00
Total	7187.61	100.00	7972.94	100.00

Asset-3				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	8008.02	70.00	12093.80	70.00
Equity	3432.01	30.00	5183.06	30.00
Total	11440.03	100.00	17276.85	100.00

Asset-4				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	1654.30	70.00	2061.56	70.00
Equity	708.99	30.00	883.53	30.00
Total	2363.29	100.00	2945.09	100.00

Asset-5				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	868.47	70.00	1237.44	70.00
Equity	372.20	30.00	530.34	30.00
Total	1240.67	100.00	1767.78	100.00



Asset-6				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	25268.66	70.70	25992.84	70.68
Equity	10470.83	29.30	10781.19	29.32
Total	35739.49	100.00	36774.03	100.00

Asset-7				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	3839.86	70.00	6668.31	70.00
Equity	1645.66	30.00	2857.84	30.00
Total	5485.52	100.00	9526.15	100.00

Asset-8				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	2298.35	70.00	3437.06	70.00
Equity	985.01	30.00	1473.03	30.00
Total	3283.36	100.00	4910.09	100.00

Asset-9				
Particular	Capital cost as on COD		Capital cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	43.36	70.00	48.94	70.00
Equity	18.58	30.00	20.97	30.00
Total	61.94	100.00	69.91	100.00

Return on Equity (ROE)

38. Return on equity is allowed for the instant asset in terms of Regulation 15 of the 2009 Tariff Regulations. The Petitioner has submitted the MAT rate applicable during various years. Return on equity has been worked out by considering year wise MAT rate submitted by the Petitioner. The variation in the tax rate during the 2009-14 tariff block applicable to the Petitioner as per the Finance Act of the relevant year for the purpose of grossing up of ROE has been furnished as under:-

Year	MAT Rate (in %)	Gross up ROE (Base rate/(1-t) (in %)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610



39. We have considered the submissions of the Petitioner. Accordingly, the ROE as trued up in accordance with the 2009 Tariff Regulations is shown in the table below:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
Opening Equity	1869.88	2133.05	2156.28	3432.01	4684.97
Addition due to Additional Capitalization	263.17	184.38	235.60	1252.97	498.08
Closing Equity	2133.05	2317.43	2391.88	4684.97	5183.06
Average Equity	2001.47	2225.24	2274.08	4058.49	4934.01
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective Financial year	20.008%	20.961%	20.960%	20.008%	20.960%
Rate of Return on Equity (Pre-tax)	19.377%	19.611%	19.610%	19.377%	19.610%
Return on Equity (Pre-tax)	193.91	436.39	445.95	655.34	967.56

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
Opening Equity	708.99	827.31	372.20	468.02	10470.83
Addition due to Additional Capitalization	118.32	56.22	95.82	62.31	310.36
Closing Equity	827.31	883.53	468.02	530.33	10781.19
Average Equity	768.15	855.42	420.11	499.17	10626.01
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective Financial year	20.008%	20.960%	20.008%	20.960%	20.960%
Rate of Return on Equity (Pre-tax)	19.377%	19.610%	19.377%	19.610%	19.610%
Return on Equity (Pre-tax)	111.63	167.75	40.70	97.89	347.29

Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Opening Equity	1645.66	2577.52	985.01	1347.94	18.58	20.39
Addition due to Additional Capitalization	931.86	280.32	362.93	125.09	1.81	0.59
Closing Equity	2577.52	2857.84	1347.94	1473.03	20.39	20.97
Average Equity	2111.59	2717.68	1166.47	1410.48	19.49	20.68
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective Financial year	20.008%	20.960%	20.008%	20.960%	20.008%	20.960%
Rate of Return on Equity (Pre-tax)	19.377%	19.610%	19.377%	19.610%	19.377%	19.610%
Return on Equity (Pre-tax)	204.58	532.94	169.52	276.60	1.26	4.06

Interest on Loan (IOL)

40. The Petitioner has claimed the IOL based on actual interest rates for each year during the 2009-14 period. We have considered the submissions of the Petitioner and accordingly calculated the IOL based on actual interest rate, in accordance with Regulation 16 of the 2009 Tariff Regulations.



41. The interest on loan has been worked out as detailed below:-

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

(ii) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.

42. The details of IOL calculated are as follows:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
Gross Normative Loan	4363.07	4977.15	5031.33	8008.02	10931.61
Cumulative Repayment up to previous Year	0.00	174.86	0.00	0.00	554.09
Net Loan-Opening	4363.07	4802.29	5031.33	8008.02	10377.52
Addition due to Additional Capitalization	614.08	430.21	549.73	2923.59	1162.19
Repayment during the year	174.86	389.32	398.01	554.09	816.25
Net Loan-Closing	4802.29	4843.18	5183.06	10377.52	10723.46
Average Loan	4582.68	4822.73	5107.19	9192.77	10550.49
Weighted Average Rate of Interest on Loan	8.94%	8.92%	9.15%	9.21%	9.16%
Interest on Loan	204.91	430.38	467.21	705.90	966.64

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
Gross Normative Loan	1654.30	1930.38	868.47	1092.07	25268.66
Cumulative Repayment up to previous Year	0.00	94.46	0.00	32.21	0.00
Net Loan-Opening	1654.30	1835.93	868.47	1059.86	25268.66
Addition due to Additional Capitalization	276.08	131.18	223.60	145.38	724.18
Repayment during the year	94.46	140.80	32.21	77.94	315.45
Net Loan-Closing	1835.93	1826.31	1059.86	1127.30	25677.39
Average Loan	1745.12	1831.12	964.17	1093.58	25473.02
Weighted Average Rate of Interest on Loan	9.31%	9.27%	9.21%	9.29%	9.30%
Interest on Loan	121.88	169.66	44.38	101.54	394.69



Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	3839.86	6014.22	2298.35	3145.19	43.36	47.57
Cumulative Repayment up to previous Year	0.00	175.84	0.00	146.35	0.00	1.14
Net Loan-Opening	3839.86	5838.38	2298.35	2998.84	43.36	46.43
Addition due to Additional Capitalization	2174.36	654.09	846.84	291.87	4.21	1.37
Repayment during the year	175.84	457.24	146.35	237.42	1.14	3.64
Net Loan-Closing	5838.38	6035.24	2998.84	3053.30	46.43	44.16
Average Loan	4839.12	5936.81	2648.60	3026.07	44.90	45.29
Weighted Average Rate of Interest on Loan	9.22%	9.17%	9.24%	9.19%	9.31%	9.31%
Interest on Loan	222.97	544.14	183.53	278.10	1.39	4.22

Depreciation

43. Depreciation is allowed for the instant assets in terms of Clause (4) of Regulation 17 of the 2009 Tariff Regulations. Assets as admitted by the Commission have been put under Commercial Operation during 2009-14, thus, the instant assets would be completing 12 years beyond 2009-14 period. Accordingly, depreciation has been calculated annually based on Straight Line Method as per Regulations. Details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
Opening Gross Block	6232.95	7110.20	7187.61	11440.03	15616.58
Additional Capital expenditure	877.25	614.59	785.33	4176.55	1660.27
Closing Gross Block	7110.20	7724.79	7972.94	15616.58	17276.85
Average Gross Block	6671.58	7417.50	7580.28	13528.31	16446.72
Rate of Depreciation	5.2421%	5.2486%	5.2505%	4.9149%	4.9630%
Depreciable Value	6004.42	6675.75	6822.25	11360.46	13960.17
Remaining Depreciable Value	6004.42	6500.88	6822.25	11360.46	13406.08
Depreciation	174.86	389.32	398.01	554.09	816.25

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
Opening Gross Block	2363.29	2757.69	1240.67	1560.09	35739.49
Additional Capital expenditure	394.40	187.40	319.42	207.69	1034.54
Closing Gross Block	2757.69	2945.09	1560.09	1767.78	36774.03
Average Gross Block	2560.49	2851.39	1400.38	1663.94	36256.76
Rate of Depreciation	4.9186%	4.9380%	4.6000%	4.6840%	5.2203%
Depreciable Value	2143.41	2398.49	1096.10	1329.79	32165.54
Remaining Depreciable Value	2143.41	2304.04	1096.10	1297.58	32165.54
Depreciation	94.46	140.80	32.21	77.94	315.45



Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	5485.52	8591.74	3283.36	4493.13	61.94	67.96
Additional Capital expenditure	3106.22	934.41	1209.77	416.96	6.02	1.95
Closing Gross Block	8591.74	9526.15	4493.13	4910.09	67.96	69.91
Average Gross Block	7038.63	9058.94	3888.25	4701.61	64.95	68.94
Rate of Depreciation	4.9964%	5.0473%	5.0185%	5.0497%	5.2800%	5.2800%
Depreciable Value	4936.97	4936.97	2955.02	2955.02	55.75	55.75
Remaining Depreciable Value	4936.97	4761.13	2955.02	2808.68	55.75	54.61
Depreciation	175.84	457.24	146.35	237.42	1.14	3.64

Operation and Maintenance Expenses (O&M Expenses)

44. The allowable O&M expenses for the instant assets have been worked out based on norms of O&M Expenses and the details are as follows:-

(₹ in lakh)

Asset	2012-13	2013-14
Asset-1	85.42	130.92
Asset-2	-	217.92
Asset-3	371.50	471.30
Asset-4	97.19	136.99
Asset-5	43.34	91.64
Asset-6	-	65.24
Asset-7	74.30	157.10
Asset-8	65.01	91.64
Asset-9	0.00	0.00

Interest on Working Capital (IWC)

45. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital as below:-

(i) **Maintenance spares:**

Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses specified in Regulation 19.

(ii) **O & M expenses:**



O&M expenses have been considered for one month of the allowed O&M expenses.

(iii) **Receivables:**

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

(iv) **Rate of interest on working capital:**

Rate of interest in working capital is considered on normative basis in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations.

46. Accordingly, the Interest on Working Capital (IWC) trued up is as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
Maintenance Spares	25.63	19.64	32.69	66.87	70.70
O&M expenses	14.24	10.91	18.16	37.15	39.28
Receivables	225.68	237.19	261.72	470.29	551.85
Total	265.54	267.74	312.57	574.31	661.82
Rate of Interest on Working Capital	13.50%	13.50%	13.20%	13.50%	13.50%
Interest on Working Capital	17.92	36.14	41.26	64.61	89.35

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
Maintenance Spares	19.44	20.55	13.00	13.75	9.79
O&M expenses	10.80	11.42	7.22	7.64	5.44
Receivables	97.35	105.63	55.24	63.41	1148.28
Total	127.59	137.59	75.47	84.79	1163.50
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.20%
Interest on Working Capital	12.92	18.58	5.09	11.45	25.60

Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	22.29	23.57	13.00	13.75	0.00	0.00
O&M expenses	12.38	13.09	7.22	7.64	0.00	0.00
Receivables	231.89	289.23	128.78	151.17	1.94	2.03
Total	266.57	325.89	149.00	172.56	1.94	2.03
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	17.99	44.00	15.09	23.30	0.09	0.27



Annual Transmission Charges for 2009-14 Tariff Period

47. Accordingly, the annual transmission charges being allowed for the instant assets are as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2	Asset-3	
	2012-13	2013-14	2013-14	2012-13	2013-14
Depreciation	174.86	389.32	398.01	554.09	816.25
Interest on Loan	204.91	430.38	467.21	705.90	966.64
Return on Equity	193.91	436.39	445.95	655.34	967.56
Interest on Working Capital	17.92	36.14	41.26	64.61	89.35
O&M Expenses	85.42	130.92	217.92	371.50	471.30
Total	677.04	1423.15	1570.34	2351.44	3311.10

Particulars	Asset-4		Asset-5		Asset-6
	2012-13	2013-14	2012-13	2013-14	2013-14
Depreciation	94.46	140.80	32.21	77.94	315.45
Interest on Loan	121.88	169.66	44.38	101.54	394.69
Return on Equity	111.63	167.75	40.70	97.89	347.29
Interest on Working Capital	12.92	18.58	5.09	11.45	25.60
O&M Expenses	97.19	136.99	43.34	91.64	65.24
Total	438.07	633.77	165.73	380.45	1148.28

Particulars	Asset-7		Asset-8		Asset-9	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Depreciation	175.84	457.24	146.35	237.42	1.14	3.64
Interest on Loan	222.97	544.14	183.53	278.10	1.39	4.22
Return on Equity	204.58	532.94	169.52	276.60	1.26	4.06
Interest on Working Capital	17.99	44.00	15.09	23.30	0.09	0.27
O&M Expenses	74.30	157.10	65.01	91.64	0.00	0.00
Total	695.68	1735.41	579.49	907.05	3.88	12.18

Determination of Annual Transmission Charges for 2014-19

48. The Petitioner has submitted the tariff forms combining the Assets-1 to 9, wherein the COD has been achieved prior to 1.4.2014, as a single asset. Accordingly, as per proviso (i) of Regulation 6(1) of 2014 Tariff Regulations, single tariff for the combined asset has been worked out for the 2014-19 tariff period.

49. The Petitioner has claimed the following transmission charges for combined asset for the 2014-19:-



(₹ in lakh)

Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4634.29	4720.40	4759.41	4806.63	4832.64
Interest on Loan	5226.92	4911.53	4527.70	4144.95	3735.33
Return on Equity	5317.49	5420.95	5467.59	5521.24	5550.78
Interest on Working Capital	435.12	435.08	431.15	427.71	422.69
O&M Expenses	1552.07	1603.77	1656.90	1712.00	1768.73
Total	17165.89	17091.73	16842.75	16612.53	16310.17

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	232.81	240.57	248.54	256.80	265.31
O&M expenses	129.34	133.65	138.08	142.67	147.39
Receivables	2860.99	2848.62	2807.12	2768.75	2718.36
Total	3223.14	3222.84	3193.74	3168.22	3131.06
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	435.12	435.08	431.15	427.71	422.69

Effective Date of Commercial Operation (E-COD)

51. The Petitioner has submitted that E-COD of the combined assets works out to 1.6.2013. However, based on the trued up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as 5.4.2013 as shown below:-

(₹ in lakh)

Computation of Effective COD						
Asset No.	Actual COD	Admitted Capital Cost as on 31.03.2014	Weight of the cost	No. of Days from Last COD	Weighted days	Effective COD (Latest COD - Total weighted days)
Asset-1	1.10.2012	7724.79	0.09	488	42.37	5.4.2013
Asset-2	1.4.2013	7972.94	0.09	306	27.42	
Asset-3	1.6.2012	17276.85	0.19	610	118.46	
Asset-4	1.7.2012	2945.09	0.03	580	19.20	
Asset-5	1.10.2012	1767.78	0.02	488	9.70	
Asset-6	1.2.2014	36774.03	0.41	-	-	
Asset-7	1.10.2012	9526.15	0.11	488	52.25	
Asset-8	1.7.2012	4910.09	0.06	580	32.01	
Asset-9	1.12.2012	69.91	0.00	427	0.34	
Total		88967.63	1.00		301.75	



52. The E-COD has been used to determine the lapsed life of the project as a whole, which works out as 1 (one) year as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

53. The life as defined in Regulation 27 of the 2014 Tariff Regulations has been considered for determination of Weighted Average Life.

54. The combined asset may have multiple elements (i.e. Land, Building, Transmission line, Sub-station and PLCC) and each element may have different span of life. Therefore, in 2014 Tariff Regulations, the concept of Weighted Average Life (WAL) has been introduced which has been used as the useful life of the project as whole.

55. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in 2014-19 Tariff Regulations. The element wise life as it was defined in Tariff Regulations prevailed at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, the Weighted Average Life (WAL) of the combined asset (commissioned during 2009-14 tariff period) has been worked out as 29 years as shown below:-

(₹ in lakh)			
Admitted Capital Cost as on 31-03-2014			
Particulars	Combined Cost (₹ in lakh) (a)	Life as per 2014 Regulation (Years) (b)	Weight (a) x (b)
Freehold Land	2258.47	-	-
Leasehold Land	0.00	25	-
Building & Other Civil Works	990.78	25	24769.60
Transmission Line	41910.53	35	1466868.65
Sub-Station Equipment	43338.85	25	1083471.18
PLCC	469.00	15	7035.00
Total	88967.63	29	2582144.43
WAL = Total Weight/ Capital cost of the project		29 Years	



56. It is assumed that, the Weighted Average Life as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2014 to be 29 years.

Capital Cost

57. Clause (1) and (3) 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.”

“(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

58. The capital cost is dealt in line with Regulation 9 of 2014 Tariff Regulations. The element wise capital cost (i.e. Land, Building, Transmission Line, Substation and PLCC) as admitted by the Commission as on 31.3.2014 for the instant assets has been considered as capital cost for combined asset as on 1.4.2014, as per following details:-

(₹ in lakh)

Particulars	Combined Cost as on 1.4.2014
Freehold Land	2258.47
Leasehold Land	0.00
Building & Other Civil Works	990.78
Transmission Line	41910.53
Sub-Station Equipment	43338.85
PLCC	469.00
TOTAL	88967.63

59. The trued up capital cost of ₹88967.63 lakh for combined asset is considered as admitted capital cost as on 1.4.2014 for working out tariff for 2014-19 tariff period.



Additional Capital Expenditure (ACE)

60. The Petitioner has claimed projected additional expenditure for 2014-19 period and submitted Auditor certificates in support of the same. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant Asset-1, Asset-3 to Asset-5, Asset-7, Asset-8 and Asset-9 is 31.3.2015 and for Asset-2 is 31.3.2016 and that of Asset-6 is 31.3.2017. In addition, the Petitioner has also claimed the discharge of IDC liability as ACE. The Petitioner vide form 7 has claimed both these costs as ACE under Regulation 14(1)(i) & 14(1)(ii) for liability within “cut-off” date and under Regulation 14(3)(v) for liabilities after “cut-off” date of 2014 Tariff Regulations, which has been summarized as under:-

(₹ in lakh)				
Asset	2014-15	2015-16	2016-17	2017-18
Asset-1	90.90	18.74	28.27	229.64
Asset-2	90.90	18.74	28.27	219.93
Asset-3	984.87	293.43	101.02	72.92
Asset-4	113.98	60.28	10.22	73.48
Asset-5	89.80	60.66	10.34	10.83
Asset-6	953.24**	229.80	527.18	306.46
Asset-7	343.89	112.60	70.35	12.54
Asset-8	120.06	60.82	10.40	9.57
Asset-9	0.00	0.00	33.96	68.59
TOTAL	2787.64	855.07	820.02	1003.96

**Includes an amount of 124.52 towards IDC discharged

61. The Respondent, BRPL, vide affidavit dated 10.1.2019 has submitted that the Petitioner has claimed additional capitalisation without providing proper details. In response, the Petitioner vide affidavit dated 22.1.2019 has submitted that, the ACE incurred after COD is claimed under provisions of Regulation 14 of 2014 Tariff Regulations.

62. Clause (1) & (3) 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) *Un-discharged liabilities recognized 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.”

xxxxxxxxx

“(3)The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

- (i) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
- (ii) *Change in law or compliance of any existing law*
- (iii) *Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national security/internal security*
- (iv) *Deferred works relating to ash pond or ash handling system in the original scope of work*
- (v) *Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*

xxxxxx

63. We have considered the submissions of the Petitioner and Respondents. The Petitioner has claimed additional capital expenditure towards Balance and Retention payments. The admissible un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The allowed Additional Capital expenditure are summarized below which is subject to true up:-



(₹ in lakh)

Particulars	Regulation	Combined Asset			
		2014-15	2015-16	2016-17	2017-18
ACE to the extent of Balance & Retention Payments & work deferred for execution before cut-off date	14(1)(i) & 14(1)(ii)	2663.12	248.54	527.18	0.00
Add: IDC Discharged before cut-off date	14(1)(i)	124.53	0.00	0.00	0.00
Add: Discharge of undischarged liability on hard cost after cut-off date	14(3)(v)	0.00	606.53	292.84	1003.96
Total Add Cap allowed for tariff		2787.64	855.07	820.02	1003.96

Capital cost for the tariff period 2014-19

64. Accordingly, the capital cost of the combined asset, considered for the tariff period 2014-19, subject to truing up, is as follows:-

(₹ in lakh)

Capital Cost allowed as on 1.4.2014	Additional Capitalisation allowed for FY					Total Estimated Completion Cost up to 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	
88967.63	2787.64	855.07	820.02	1003.96	-	94434.31

Debt-Equity Ratio

65. Clause 3 of Regulation 19 of the 2014 Tariff Regulations provides as under :-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

66. The debt-equity ratio for the tariff period ending 31.3.2014 was determined as 70:30 for all the assets separately on truing up of tariff for 2009-14 period except for Asset-6 for which debt-equity ratio of 70.68:29.32 was determined. Based on this, the debt-equity ratio of combined asset as on 1.4.2014 has been considered. The debt-equity ratio as 70:30 has been considered for projected additional capitalization during 2014-19. The details of the debt-equity as on 1.4.2014 including additional capitalization as on 31.3.2019 considered for the purpose of tariff for 2014-19 period is as follows:-



(₹ in lakh)

Combined Asset				
Particular	Capital cost as on 1.4.2014		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	62,528.36	70.28	66,355.04	70.27
Equity	26,439.27	29.72	28,079.27	29.73
Total	88,967.63	100.00	94,434.31	100.00

Return on Equity (ROE)

67. 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 effective tax rate of respective financial year applicable to the Petitioner Company.

68. We have considered the submissions made by the Petitioner and 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.

69. Accordingly, the ROE allowed is as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	26439.27	27275.56	27532.08	27778.08	28079.27
Addition due to Additional Capitalization	836.29	256.52	246.00	301.19	-
Closing Equity	27275.56	27532.08	27778.08	28079.27	28079.27
Average Equity	26857.41	27403.82	27655.08	27928.68	28079.27
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the Financial year 2013-14	20.960%	20.960%	20.960%	20.960%	20.960%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	5266.74	5373.89	5423.16	5476.81	5506.35



Interest on Loan (IOL)

70. The IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

- a) The Gross Normative loan has been considered as per the Loan amount determined based on the debt equity ratio applied on the allowed capital cost.
- b) The depreciation of every year has been considered as Normative repayment of loan of concerned year.
- c) The weighted average rate of interest on actual loan portfolio has been worked out by considering the Gross amount of loan, repayment & rate of interest as mentioned in the petition, which has been applied on the normative average loan during the year to arrive at the interest on loan.

71. The Petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. We have calculated IOL 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 triuing-up. The IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of triuing-up.

72. Accordingly, the IOL allowed for combined asset is as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	62528.36	64479.71	65078.26	65652.27	66355.04
Cumulative Repayment up to previous Year	4015.01	8647.01	13365.10	18122.20	22926.52
Net Loan-Opening	58513.36	55832.70	51713.16	47530.06	43428.52
Addition due to Additional Capitalization	1951.35	598.55	574.01	702.77	-
Repayment during the year	4632.01	4718.09	4757.10	4804.31	4830.32



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	62528.36	64479.71	65078.26	65652.27	66355.04
Net Loan-Closing	55832.70	51713.16	47530.06	43428.52	38598.20
Average Loan	57173.03	53772.93	49621.61	45479.29	41013.36
Weighted Average Rate of Interest on Loan	9.18%	9.17%	9.16%	9.15%	9.15%
Interest on Loan	5246.90	4929.95	4545.07	4162.54	3753.13

Depreciation

73. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant assets were put under commercial operation during 2012-13 & 2013-14. Accordingly, it will complete 12 years beyond the tariff period 2014-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations. Details of the depreciation allowed for combined asset are as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	88967.63	91755.27	92610.34	93430.35	94434.31
Additional Capital expenditure	2787.64	855.07	820.01	1003.96	-
Closing Gross Block	91755.27	92610.34	93430.35	94434.31	94434.31
Average Gross Block	90361.45	92182.81	93020.35	93932.33	94434.31
Rate of Depreciation	5.126%	5.118%	5.114%	5.115%	5.115%
Depreciable Value	79292.12	80930.77	81684.56	84539.10	82957.13
Remaining Depreciable Value	75277.11	72283.76	68319.46	66416.89	60030.61
Depreciation	4632.01	4718.09	4757.10	4804.31	4830.32

Operation & Maintenance Expenses (O&M Expenses)

74. The O&M Expenses claimed by the petitioner for combined asset are as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	1552.07	1603.77	1656.90	1712.00	1768.73

75. The Petitioner has submitted that O&M Expenses for the period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the



period 2008-13. The Petitioner has further submitted that the wage revision of the employees of the Petitioner Company is due during the period 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

76. The Respondent, BRPL vide affidavit dated 10.1.2019 has submitted that any increase in the employee cost due to wage revision must be taken care by increasing the productivity levels of the petitioner company and the beneficiaries should not be burdened over and above the provisions in the 2014 Tariff Regulations. In response, the Petitioner vide affidavit dated 8.1.2019 has submitted that wage revision of the employees of the petitioner company is due w.e.f. 1.1.2017 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014- 19. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner reserves the right to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards

77. We have considered the submissions made by the Petitioner and Respondents. 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, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

78. The details of O&M Expenses allowed as per Regulation 29(4) of the 2014 Tariff Regulation for combined asset is given hereunder:-



Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	1552.07	1603.77	1656.90	1712.00	1768.73

Interest on Working Capital (IWC)

79. As per the 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

a) Maintenance spares:

Maintenance spares @ 15% Operation and maintenance expenses specified in Regulation 28.

b) O & M expenses:

Operation and maintenance expenses have been considered for one month of the O&M expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.

d) Rate of interest on working capital:

As per Clause 28 (3) of the 2014 Tariff Regulations, SBI Base Rate (10.00%) as on 01.04.2014 Plus 350 Bps i.e. 13.50% have been considered as the rate of interest on working capital for the Assets.

80. Accordingly, the interest on working capital is summarized as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	232.81	240.57	248.54	256.80	265.31
O&M expenses	129.34	133.65	138.08	142.67	147.39
Receivables	2855.35	2843.34	2802.12	2763.78	2713.43
Total	3217.50	3217.56	3188.73	3163.25	3126.13
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on WC	434.36	434.37	430.48	427.04	422.03



Annual Transmission Charges

81. The details of Annual Transmission Charges allowed for the 2014-19 tariff period in respect of assets covered under the instant petition is summarized below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4632.01	4718.09	4757.10	4804.31	4830.32
Interest on Loan	5246.90	4929.95	4545.07	4162.54	3753.13
Return on Equity	5266.74	5373.89	5423.16	5476.81	5506.35
Interest on Working Capital	434.36	434.37	430.48	427.04	422.03
O&M Expenses	1552.07	1603.77	1656.90	1712.00	1768.73
Total	17132.08	17060.07	16812.71	16582.70	16280.56

Annual lease rent

82. The Petitioner has submitted that as per Haryana State R&R Policy amount mentioned in the below Table is payable in 2014-19 period to the land owners as annuity. The Petitioner submitted that the annual lease rent paid to the land owners is not part of the capital cost and to be directly recovered from the beneficiaries and submitted the calculations of annuity for Bhiwani Sub-Station duly certified by the Auditor.

(₹ in lakh)	
Year	Amount
2014-15 & 2015-16	17.16 (Actual)
2016-17	29.05 (Estimated)
2017-18	29.93 (Estimated)
2018-19	30.81 (Estimated)

83. The Petitioner has further submitted that the Commission has allowed to recover the lease rent on annual basis directly from the beneficiaries as per order dated 26.02.2016 in petition No. 32/TT/2013 and prayed to allow the same in the instant petition too.

84. We have considered the submissions of the Petitioner and noted that in the review petition no. 11/RP/2015 in petition no. 99/TT/2012 (covering the Asset-1 to Asset-8 of the instant petition), the Commission has already allowed the review on



these grounds. The relevant extracts of the Order dated 2.9.2015 is reproduced below:

"10. We have considered the submissions made by learned counsel for the petitioner, BRPL and documents available on record. The Commission in its order dated 16.7.2007 in Review Petition No. 73/2007 has allowed annuity payment for Dhaulinganga transmission system to be recovered from respondents. The relevant extract from the order is as follows:-

"12. We are satisfied that the petitioner is to pay lease rent to the State Government on annual basis @ Rs. 230.67 lakh. The amount of lease rent paid for the first year has already been capitalized. We direct that the amount payable during the next 29 years will be recovered by the petitioner from the respondent on monthly basis for the remaining lease period, that is, 29 years, while raising the bills for the transmission charges for the transmission line approved by the Commission. The amount recovered shall be regularized on production of evidence for payment of the lease rent by the petitioner to the State Government."

11. As per the above decision, the petitioner was allowed to recover the lease rent on annuity basis. Though the petitioner had made a similar claim in this petition with regard to the payment of annuity to the land owners over a period of 31 years in its affidavit dated 17.10.2014 which was also taken note of in RoP dated 13.11.2014, the said information could not be considered while passing the impugned order. This in our view is an error apparent on the face of record and accordingly, the review is allowed on this ground."

85. Accordingly, the Petitioner is entitled to recover the amount of annual lease rent from the respondent on monthly basis for the remaining lease period, that is, 27 years, while raising the bills for the transmission charges for the transmission line approved by the Commission. The amount recovered shall be regularized on production of evidence for payment of the lease rent by the Petitioner.

Filing fee and the publication expenses

86. 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.



License fee and RLDC Fees and Charges

87. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the 2014 Tariff Regulations.

Goods and Services Tax

88. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

Sharing of Transmission Charges

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

90. This order disposes of Petition No. 234/TT/2018.

Sd/-
(I. S. Jha)
Member

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(P. K. Pujari)
Chairperson

