

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 96/TT/2011

Coram:

**Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V. S. Verma, Member**

Date of Hearing: 17.04.2012

Date of Order : 10.04.2013

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009, for transmission tariff for LILO of Nalagarh –Kaithal line at Patiala along with associated bays and 125 MVAR Bus Reactor at Patiala and 400/220 kV 500 MVA ICTs both at Patiala and Malerkotla S/S along with bays under Northern Region Strengthening Scheme –XIV (NRSS-XIV) in Northern Region from revised anticipated date of commercial operation i.e. 1.7.2011 to 31.3.2014.

And In the matter of:

Power Grid Corporation of India Limited, Gurgaon

.....**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Ltd, New Delhi.
11. BSES Yamuna Power Ltd., New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chandigarh Administration, Chandigarh
15. Uttarakhand Power Corporation Ltd., Dehradun
16. North Central Railway, Allahabad
17. NDMC, New Delhi

... **Respondents**



The following were present:

1. Shri. Rajeev Gupta, PGCIL
2. Shri S S Raju, PGCIL
3. Shri M M Mondal, PGCIL
4. Shri Tarun Johri, PGCIL
5. Shri Atul Nanda, PGCIL
6. Shri R B Sharma, Advocate, BRPL
7. Shri Padamjit Singh, PSPCL
8. Shri TPS Bawa, PSPCL

ORDER

This petition has been filed by Power Grid Corporation of India (PGCIL) for determination of transmission tariff for LILO of Nalagarh –Kaithal line at Patiala along with associated bays and 125 MVAR Bus Reactor at Patiala and 400/220 kV 500 MVA ICTs both at Patiala and Malerkotla sub-station along with bays (hereinafter referred to as "transmission assets") under Northern Region Strengthening Scheme –XIV (NRSS-XIV) in Northern Region from revised anticipated date of commercial operation i.e. 1.7.2011 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 Tariff Regulations").

2. The administrative approval and expenditure to the transmission project "Northern Region Strengthening Scheme –XIV (NRSS-XIV)" was accorded by the Board of Directors of POWERGRID vide C/CP/NRSS-XIV dated 16.2.2009 for `13219 lakh including an IDC of `893 lakh based on 4st Quarter, 2008 price level.

3. The scope of the work covered under the project includes construction of following transmission line and sub-station:-



Transmission Line

LILO of second circuit of Nalagarh-Kaithal 400 kV line (Triple Bundle) at Patiala -11 km.

Sub station

(a) Patiala 400/200 kV (POWERGRID) Substation (Extension)-1X500 MVA, 400/220kV transformer,

(b) Malerkotla 400/200 kV (POWERGRID) Substation (Extension)-1X500 MVA, 400/220kV transformer

Reactive Compensation

125 MVAR bus Reactor at Patiala

4. The petitioner has claimed transmission tariff for transmission assets with the anticipated date of commercial operation as 1.4.2011. The petitioner, vide affidavit dated 29.2.2012, has de-clubbed the assets covered in original petition and submitted the actual date of commercial operation along with revised capital expenditure, management certificate and revised tariff calculations.

5. The details of the assets covered in the instant petition and the date of commercial operation are given hereunder:-

Name of the Asset	DOCO
LILO of Nalagarh-Kaithal line at Patiala along with associated bays (referred to "Asset 1)	1.9.2011
400/220 kV 500 MVA ICTIII at Patiala Sub-station (referred to as :Asset 2")	1.9.2011
125 MVAR Bus Reactor at Patiala Sub-station along with associated bays at Patiala Sub-station (referred to as "Asset 3')	1.10.2011
400/220 kV 500 MVA ICT-III at Malerkotla Sub-station along with associated bays (referred to as "Asset 4")	1.10.2011

6. Details of the transmission charges claimed by the petitioner are as given under:-

(` in lakh)

Asset 1			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	78.43	151.06	156.10
Interest on Loan	91.45	166.16	158.42
Return on equity	81.14	156.11	161.28
Interest on Working Capital	8.51	15.79	16.21
O & M Expenses	72.97	132.24	139.80
Total	332.50	621.36	631.81

(` in lakh)

Asset 2			
	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	80.85	154.09	160.48
Interest on Loan	94.92	170.46	164.02
Return on equity	84.53	160.75	167.30
Interest on Working Capital	12.57	23.05	23.94
O & M Expenses	153.75	278.62	294.56
Total	426.62	786.97	810.30

(` in lakh)

Asset 3			
	2011-12 (pro rata)	2012-13	2013-14
Depreciation	24.40	51.87	53.09
Interest on Loan	28.99	58.23	54.96
Return on equity	24.53	52.12	53.33
Interest on Working Capital	2.96	6.21	6.36
O & M Expenses	29.29	61.92	65.46
Total	110.17	230.35	233.20

(` in lakh)

Asset 4			
	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	47.39	103.32	104.72
Interest on Loan	55.27	113.93	106.28
Return on equity	47.07	102.62	104.01
Interest on Working Capital	6.36	13.51	13.82
O & M Expenses	70.29	148.60	157.10
Total	226.38	481.98	485.93

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

(` in lakh)

Asset 1			
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	18.76	19.84	20.97
O & M expenses	10.42	11.02	11.65
Receivables	95.00	103.56	105.30
Total	124.18	134.42	137.92
Rate of Interest	11.75%	11.75%	11.75%
Interest	8.51	15.79	16.21

(` in lakh)

Asset 2			
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	39.54	41.79	44.18
O & M expenses	21.96	23.22	24.55
Receivables	121.89	131.16	135.05
Total	183.39	196.17	203.78
Rate of Interest	11.75%	11.75%	11.75%
Interest	12.57	23.05	23.94

(` in lakh)

Asset 3			
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	8.79	9.29	9.82
O & M expenses	4.88	5.16	5.46
Receivables	36.72	38.39	38.87
Total	50.39	52.84	54.15
Rate of Interest	11.75%	11.75%	11.75%
Interest	2.96	6.21	6.36

(` in lakh)

Asset 4			
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	21.09	22.29	23.56
O & M expenses	11.72	12.38	13.09
Receivables	75.46	80.33	80.99
Total	108.27	115.00	117.64
Rate of Interest	11.75%	11.75%	11.75%
Interest	6.36	13.51	13.82

8. 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. Replies have been filed by Respondent No. 2 - Ajmer Vidyut Vitran Nigam Limited, Respondent No. 3 Jaipur Vidyut Vitran Nigam Limited Respondent No. 4- Jodhpur Vidyut Vitran Nigam limited, Respondent No.6- Punjab State Electricity Board (PSPCL), Respondent No.9- Uttar Pradesh Power Corporation Limited (UPPCL) and Respondent No. 12- BSES Rajdhani Power Limited (BRPL). Respondents have raised the issue of additional return on equity, cost over-run, service tax, licence fee, publication fee and actual date of commercial operation etc. The petitioner has filed the rejoinder to BRPL's reply. The objections raised by the respondents and the clarifications given by the petitioner have been dealt with in relevant paragraphs of this order.

9. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

Capital cost

10. As regards the capital cost, Regulation 7 (1) of the 2009 Tariff Regulations provides as under:-

“The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (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 fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.”

Time over-run

11. AVVNL, JVVNL, Jd.VVNL in their replies, vide affidavit dated 26.5.2011, 30.5.2011, 24.5.2011 respectively and PSPCL in its affidavit dated 1.8.2011 submitted that the petition has been filed seeking transmission charges from the anticipated date of commercial operation and therefore the petitioner may be asked to intimate the actual date of commercial operation.

12. As per investment approval, accorded on 16.2.2009, the assets were to be commissioned within 30 months from the date of approval i.e. by 16.8.2011. The petitioner has submitted that the assets covered under this petition have been progressively commissioned from 1.9.2011 to 1.10.2011. Thus, there is a delay of one month in commissioning Asset-3 and Asset-4. The petitioner has submitted that the delay of one month for commissioning of Asset 3 and Asset 4 occurred as the 220kV inter-connection at Malerkotla was to be taken in to PSTCL yard and coordination in this regard led to a delay of one month. In our view, the delay cannot be totally attributed to the petitioner and accordingly, time over-run of one month is condoned.

Cost variation



13. The respondents AVVNL, JVVNL, Jd. VVNL and PSPCL have submitted that the total completion cost is considerably less than the approved cost, despite the delay in completion. There is over estimation of capital cost.

14. BRPL has raised the issue of cost variation in certain items and has pointed out that the reasons mentioned for the variations are also very casual and hence the cost variation may not be allowed.

15. PSPCL pleaded that the cost of 500 MVA ICT at Malerkota be excluded from petition as its 220 kV bays are not yet commissioned. PSPCL has also pointed out that there is considerable variation between the estimated (₹ 107.09 lakh) and actual cost (₹ 49.72 lakh) in respect of outdoor lighting and the same needs to be explained.

16. During the hearing on 17.4.2012, the Commission directed the petitioner to furnish the reasons for higher cost estimate, especially the outdoor lightning. The petitioner, in its affidavit dated 19.6.2012 and rejoinder to the reply of PSPCL, has submitted that the estimates are prepared by the petitioner as per well defined procedures for cost estimate. The cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of evaluated eligible bidder. Regarding reasons for higher cost estimates, in case of outdoor lighting, it has been submitted that the original estimate for outdoor

lighting in LILO of 2nd Ckt. of Nalagarh –Kaithal 400 kV line at Patiala was `107.09 lakh whereas the actual expenditure till date of commercial operation is `32.73 lakh. Further, provision of ` 24.64 lakh is made to meet the requirements after commissioning.

17. There has been over-estimation of cost inspite of time over-run of a month. We are of the view that the cost estimates of the petitioner are not realistic not only in this petition but also in other similar petitions. The petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

Treatment of initial spares

18. The petitioner has claimed initial spares of `36.20 lakh, `129.83 lakh, `29.91 lakh and `142.10 lakh pertaining to sub-station for Asset-1, Asset-2, Asset-3 and Asset-4 respectively. The petitioner's claim of initial spares exceeds the ceiling limit specified in Regulation 8 of the 2009 Tariff Regulations. Therefore, initial spares are allowed in accordance with the provisions of the 2009 Tariff Regulations as per details given hereunder:-

(` in lakh)

Description	Project cost as on cut-off date	Initial spares Claimed	Ceiling limits as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out and allowed	Excess initial spares claimed and deducted
	(a)	(b)	(c)	$(d) = \frac{(a-b) \times c}{(100-c)\%}$	$(e) = (d) - (b)$
Asset 1	835.10	36.20	2.50%	20.48	(15.72)

Asset 2	3090.30	129.83	2.50%	75.91	(53.92)
Asset 3	1016.82	29.91	2.50%	25.31	(4.60)
Asset 4	1983.37	142.10	2.50%	47.21	(94.89)

19. The cost of sub-station is inclusive of land, building, civil works and PLCC. Initial spares as allowed above shall be reviewed at the time of truing up.

20. The petitioner has claimed capital cost of `2350.32 lakh, `2505.25 lakh, `900.31 lakh and `1659.92 lakh, as on the actual date of commercial operation for, Asset-1, Asset-2, Asset-3 and Asset-4 respectively, vide Management Certificate dated 29.9.2011 for Asset-1 & Asset-2 and 22.11.2011 for Asset-3 and 23.11.2011 for Asset-4. The capital cost considered for the purpose for tariff calculation after deducting the excess initial spares claimed by the petitioner is as follows:-

(` in lakh)

Asset	Capital cost claimed as on date of commercial operation	Excess initial spares disallowed	Capital cost considered as on date of commercial operation excluding excess initial spares
	(a)	(b)	(c)= (a)-(b)
Asset 1 (DOCO: 1.9.2011)	2350.32	15.72	2334.60
Asset 2 (DOCO: 1.9.2011)	2505.25	53.92	2451.33
Asset 3 (DOCO: 1.10.2011)	900.31	4.60	895.71
Asset 4 (DOCO:1.10.2011)	1659.92	94.89	1565.03

Projected additional capital expenditure

21. With regard to additional capital expenditure, Regulation 9(1) of the 2009 Tariff Regulations provides as under:-

“Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the

date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (i) Works deferred for execution;
- (ii) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 8;
- (iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (iv) Change in Law:"

22. As per 2009 Tariff Regulations

"cut-off date as "cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

Therefore, the cut-off date for the above mentioned asset is 31.3.2013.

23. Petitioner has claimed the following additional capital expenditure:-

(` in lakh)			
Year	Element	Additional capital expenditure	Reason
Asset 1			
2011-12	Transmission Line	312.68	(Balance/ Retention Payments)
	Sub-Station	125.42	
	Sub-Total	438.10	
2012-13	Transmission Line	125.00	-do-
	Sub-Station	65.82	
	Sub-Total	190.82	
	Total	628.92	
Asset 2			
2011-12	Sub-Station	336.78	-do-
	PLCC	6.27	
	Sub-Total	343.05	
2012-13	Sub-Station	242.00	-do-
	Sub-Total	242.00	
	Total	585.05	
Asset 3			
2011-12	Sub-Station	70.38	-do-
2012-13	Sub-Station	46.13	
	Total	116.51	
Asset 4			
2011-12	Sub-Station	270.44	-do-
2012-13	Sub-Station	53.01	
	Total	323.45	

24. The additional capital expenditure claimed as above falls within the cut-off date. Hence, the same is allowed and considered for the purpose of tariff calculation.

Debt- equity ratio

25. Regulation 12 of the 2009 Tariff Regulations provides that,-

“12. **Debt-Equity Ratio.** (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 investment.

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, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(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.”

26. Details of debt-equity in respect of the transmission assets as on the date of commercial operation are as under:-

		(` in lakh)
	Apportioned Approved Cost	As on date of commercial operation
Asset 1		

	Amount	%	Amount	%
Debt	2100.75	70.00	1634.22	70.00
Equity	900.32	30.00	700.38	30.00
Total	3001.07	100.00	2334.60	100.00
Asset 2				
	Amount	%	Amount	%
Debt	3295.69	70.00	1715.93	70.00
Equity	1412.44	30.00	735.40	30.00
Total	4708.13	100.00	2451.33	100.00
Asset 3				
	Amount	%	Amount	%
Debt	776.68	70.00	626.99	70.00
Equity	332.86	30.00	268.71	30.00
Total	1109.54	100.0	895.71	100.00
Asset 4				
	Amount	%	Amount	%
Debt	3079.82	70.00	1095.53	70.00
Equity	1319.92	30.00	469.50	30.00
Total	4399.75	100.00	1565.03	100.00

27. Details of Debt-Equity Ratio of assets as on 31.3.2014 is as follows:-

(` in lakh)

Asset 1		
Capital cost as on 31.3.2014		
	Amount	%
Debt	2074.47	70.00
Equity	889.06	30.00
Total	2963.52	100.00
Asset 2		
Capital cost as on 31.3.2014		
	Amount	%
Debt	2125.47	70.00
Equity	910.91	30.00
Total	3036.38	100.00

Asset 3		
Capital cost as on 31.3.2014		
	Amount	%
Debt	708.55	70.00
Equity	303.66	30.00
Total	1012.22	100.00
Asset 4		
Capital cost as on 31.3.2014		
	Amount	%
Debt	1321.94	70.00
Equity	566.54	30.00
Total	1888.48	100.00

28. Details of projected capital expenditure claimed by the petitioner are as follows:-

(` in lakh)

Asset 1		
Particulars	Additional capital expenditure for 2011-12	
	Amount	%
	Normative	
Debt	306.67	70.00
Equity	131.43	30.00
Total	438.10	100.00
Particulars	Additional capital expenditure for 2012-13	
	Amount	%
	Normative	
Debt	133.57	70.00
Equity	57.25	30.00
Total	190.82	100.00

(` in lakh)

Asset 2		
Particulars	Additional capital expenditure for 2011-12	
	Amount	%
	Normative	
Debt	240.14	70.00
Equity	102.92	30.00
Total	343.05	100.00
Particulars	Additional capital expenditure for 2012-13	
	Amount	%
	Normative	
Debt	169.40	70.00
Equity	72.60	30.00
Total	242.00	100.00

(` in lakh)

Asset 3		
Particulars	Additional capital expenditure for 2011-12	
	Amount	%
	Normative	

Debt	49.27	70.00
Equity	21.11	30.00
Total	70.38	100.00
Particulars	Additional capital expenditure for 2012-13	
	Amount	%
	Normative	
Debt	32.29	70.00
Equity	13.84	30.00
Total	46.13	100.00

(` in lakh)

Asset 4		
Particulars	Additional capital expenditure for 2011-12	
	Amount	%
	Normative	
Debt	189.31	70.00
Equity	81.13	30.00
Total	270.44	100.00
Particulars	Additional capital expenditure for 2012-13	
	Amount	%
	Normative	
Debt	37.11	70.00
Equity	15.90	30.00
Total	53.01	100.00

Return on equity

29. Regulation 15 of the 2009 Tariff Regulations provides that,-

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge 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.

Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations"

30. The petitioner has claimed additional return on equity (return on equity) of 0.5 %, for the LILO and the ICT –III at Patiala, as per Appendix-II of the 2009 Tariff Regulations. The scope of the project as per investment approval dated 16.2.2009 for the scheme “Northern Region System Strengthening Scheme-XIV” and the actual dates of commercial operation as per submission dated 29.2.2012 are as under: -

Transmission Lines:

LILO of Second Circuit of Nalagarh- Kaithal 400 kV line (Tripple Bundle) at Patiala- 11 km.- actual date of commercial operation: 1.9.2011

Sub-Stations:



Patiala 400/220 kV (Powergrid) sub-station (extension)- 1X500 MVA 400/220 kV Transformer- actual date of commercial operation:1.9.2011

Malekotla 400/220 kV (Powergrid) sub-station (extension)- 1X500 MVA 400/220 kV Transformer: actual date of commercial operation:1.10.2011

Reactive Compensation:

125 MVAR bus reactor at Patiala: actual date of commercial operation: 1.10.2011

31. The petitioner has submitted that as per Appendix-II of the 2009 Tariff Regulations, in case of a scheme having combination of the above mentioned types of projects, the qualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole. In line with this provision, the time line for all the assets commissioned under the scope of work is considered on the basis of time line for 400 kV triple conductor D/C transmission line i.e. 30 months for plain area from the date of investment approval, which was 16.2.2009 implying that qualifying period was up to actual date of commercial operation i.e. 1.9.2011.

32. The petitioner has also submitted that additional return on equity is being claimed only for the two elements i.e. LILO of second circuit of Nalagarh- Kaithal 400 kV line (Triple Bundle) at Patiala and ICT-III at Patiala, which were completed within the qualifying time line of 1.9.2011. The petitioner has further

submitted that 4 Nos. of 220 kV bays at Malerkotla sub-station are yet to be commissioned.

33. Regarding the benefit of the assets commissioned, the petitioner has submitted that by commissioning of the subject LILO transmission line the intended benefit of reduction of uneven loading of Nalagarh-Kaithal and Nalagarh-Patiala transmission lines has been achieved. It has also been submitted that ICT augmentation at Patiala and Malerkotla has helped in improving the power supply reliability in these areas.

34. AVVNL, JVVNL, Jd.VVNL, PSPCL, UPPCL and BRPL have submitted that additional Return on equity is not admissible as 4 no. of bays at Malerkotla. In this connection, reference has been made to a Note under Appendix II of 2009 Tariff Regulations which provides that the qualifying schedule of activity having maximum time period shall be considered for the scheme as a whole in case of scheme having combination of assets.

35. Since, in case of the project, the scheduled date of commissioning is 1.9.2011, which is of 30 months from the date of investment approval i.e. 16.2.2009. However, only two assets have been commissioned as on 1.10.2011 and 4 Nos. of 220 kV bays are yet to be commissioned. The respondents have submitted that the petitioner is not eligible for 0.5% additional RoE as per Regulation 15 of 2009 Tariff Regulations.

36. PSPCL has submitted that since the 220 kV bays at Malerkotla are not complete, the ICT is of no use to PSPCL. PSPCL has questioned the declaration of commercial operation of ICT. PSPCL has also stated that 125 MVAR bus reactor at Patiala and ICT-III at Malerkotla were test charged at 1902 and 2330 hrs on 30.9.2011. Five hours is too short a time to carry out trial operation prior to commissioning and as such declaring the date of commercial operation as 1.10.2011 is not justified. Further, the claim of 0.5% additional return on equity may not be allowed as the assets were not commissioned earlier to the scheduled date of 16.8.2011.

37. The petitioner in its rejoinder to the PSPCL's reply has submitted that AC transmission elements are such that once successfully test charged the elements are immediately available for transmission of power @ 100% of its rated capacity. Power flow through any AC element is dependent on grid condition and demand and supply situation of the grid which is beyond the control of the petitioner. In the transmission system, generally transmission elements are static while in service and no rotating is involved. Unlike generating stations where one unit is connected with the grid at a certain load and with further additional input the load is increased to its rated capacity, whereas in case of AC transmission elements no additional input is required for transmission of power at rated capacity. All the relevant tests/ checks are carried out before charging and once successfully test charged, the transmission elements are available for regular service @ 100% of its rated capacity, and accordingly, the asset is declared for commercial operation from 1st day of next calendar month. As the 2009 Tariff Regulations does not

define 'trial run' in case of transmission element, successful test charging is considered as completion of trial run.

38. We have considered the submissions of both PSPCL and the petitioner. As submitted by the petitioner, the 2009 Tariff Regulations do not define the trial operation in case of transmission elements and the successful test charging is considered as trial operation. The explanation of the petitioner is found to be satisfactory and accordingly, successful test charging by the petitioner is considered as completion of trial operation. However, we direct the RPCs to discuss the issue of trial operation of transmission elements and submit the proposals to CEA who in turn shall submit a consolidated proposal regarding trial operation of transmission elements to the Commission. The staff of the Commission shall study the proposal made by CEA and make suitable changes to the existing Regulations to deal with all such cases in future.

39. As regards non-commissioning of 4 nos. line bays at Malerkotla sub-station, the petitioner has submitted that as per original scope of work, 4 nos. of 220 kV line bays were to be commissioned with 400/220 kV 500 MVA ICT at Patiala sub-station and 4 nos. of 220 kV line bays with 400/220 kV 500 MVA ICT at Malerkotla sub-station. However, 4 nos. 220 kV line bays with 400/220 kV 500 MVA ICT at Malerkotla sub-station have not been constructed as per the requirement of PSPTCL which is understood from the Memo No.0897/PDS-235/S-II dated 13.10.2010 written to the petitioner regarding construction of 4 nos. of 220 kV line bays with 400/220 kV 500 MVA ICT at Malerkotla sub-station. Relevant portion of the said Memo is extracted as under:-

"In this regard, it is intimated that as per decision of competent authority no new 220 kV line bays are required at 220 kV S/S Malerkotla. However, following works may be executed:-

- (a) Installation of additional 1 no. 500 MVA 400/220 kV Power T/F as per existing arrangement.

40. From the details submitted by the petitioner, it is observed that only two elements of the project LILO of Second Circuit of Nalagarh- Kaithal 400 kV line (Tripple Bundle) at Patiala and ICT-III at Patiala have been completed within the stipulated time schedule. For qualifying for grant of additional return on equity under first proviso to Regulation 15(2) of 2009 Tariff Regulations, all the elements of the transmission systems are to be completed within the time schedule specified in Appendix II of the said Regulations. This view has been upheld by the Hon'ble Appellate Tribunal in its judgment dated 10.5.2012 in Appeal No. 155/2011. In this case, all the elements were required to be commissioned within 30 months from the date of investment approval i.e. by 16.8.2011. Asset 3 and Asset 4 of the transmission system have been commissioned on 1.10.2011, which is beyond the schedule date of commercial operation of 1.9.2011. Accordingly, the petitioner's prayer for additional return on equity has not been allowed.

41. The petitioner has computed return on equity on pre- tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity @ 17.481%.

42. The petitioner's request to allow grossing up the base rate of return on equity based on the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations as amended from time to time.

43. The following amount of equity has been considered for calculation of return of equity:-

(` in lakh)

Description	Equity on date of commercial operation	Notional equity due to ACE for the period 2011-12	Average equity considered for tariff calculations for the period 2011-12	Notional equity due to ACE for the period 2012-13	Average equity considered for tariff calculations for the period 2012-13	Notional equity due to ACE for the period 2013-14	Average equity considered for tariff calculations for the period 2013-14
Asset 1	700.38	131.43	766.10	57.25	860.43	0.00	889.06
Asset 2	735.40	102.92	786.86	72.60	874.61	0.00	910.91
Asset3	268.71	21.11	279.27	13.84	296.75	0.00	303.66
Asset4	469.50	81.13	510.08	15.90	558.59	0.00	566.54

44. Based on the above, the following return on equity has been allowed:-

(` in lakh)

Asset 1			
Particulars	2011-12 (pro -rata)	2012-13	2013-14
Opening Equity	700.38	831.81	889.06
Addition due to Additional Capitalisation	131.43	57.25	0.00
Closing Equity	831.81	889.06	889.06
Average Equity	766.10	860.43	889.06
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	78.12	150.41	155.42

(` in lakh)

Asset 2

Particulars	2011-12 (pro -rata)	2012-13	2013-14
Opening Equity	735.40	838.31	910.91
Addition due to Additional Capitalisation	102.92	72.60	0.00
Closing Equity	838.31	910.91	910.91
Average Equity	786.86	874.61	910.91
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre-Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre-Tax)	80.24	152.89	159.24

(` in lakh)

Asset 3			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Opening Equity	268.71	289.83	303.66
Addition due to Additional Capitalisation	21.11	13.84	0.00
Closing Equity	289.83	303.66	303.66
Average Equity	279.27	296.75	303.66
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre-Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre-Tax)	24.41	51.87	53.08

(` in lakh)

Asset 4			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Opening Equity	469.50	550.64	566.54
Addition due to additional capital expenditure	81.13	15.90	0.00
Closing Equity	550.64	566.54	566.54
Average Equity	510.07	558.59	566.54
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre-Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre-Tax)	44.58	97.65	99.04

Interest on loan

45. Regulation 16 of the 2009 Tariff Regulations provides that,-

“16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(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 annual depreciation allowed,.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

46. In these calculations, interest on loan has been worked out as detailed below:-

(a) 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;

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;

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

(d) 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.

47. Detailed calculation of the weighted average rate of interest has been given in Annexure I to IV to this order.

48. Details of the interest on loan worked on the above basis are given hereunder:-

(` in lakh)



Asset 1			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	1634.22	1940.89	2074.47
Cumulative Repayment upto Previous Year	0.00	77.95	228.18
Net Loan-Opening	1634.22	1862.94	1846.28
Addition due to additional capital expenditure	306.67	133.57	0.00
Repayment during the year	77.95	150.23	155.27
Net Loan-Closing	1862.94	1846.28	1691.01
Average Loan	1748.58	1854.61	1768.65
Weighted Average Rate of Interest on Loan	8.91%	8.91%	8.91%
Interest	90.89	165.26	157.60

(` in lakh)

Asset 2			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	1715.93	1956.07	2125.47
Cumulative Repayment upto Previous Year	0.00	79.19	230.43
Net Loan-Opening	1715.93	1876.87	1895.03
Addition due to additional capital expenditure	240.14	169.40	0.00
Repayment during the year	79.19	151.24	157.63
Net Loan-Closing	1876.87	1895.03	1737.40
Average Loan	1796.40	1885.95	1816.22
Weighted Average Rate of Interest on Loan	8.88%	8.88%	8.88%
Interest	93.01	167.39	161.20

(` in lakh)

Asset 3			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	626.99	676.26	708.55
Cumulative Repayment upto Previous Year	0.00	24.27	75.90
Net Loan-Opening	626.99	651.99	632.65
Addition due to additional capital expenditure	49.27	32.29	0.00
Repayment during the year	24.27	51.62	52.84
Net Loan-Closing	651.99	632.65	579.81
Average Loan	639.49	642.32	606.23
Weighted Average Rate of Interest on Loan	9.02%	9.02%	9.02%
Interest	28.85	57.96	54.71

(` in lakh)

Asset 4			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	1095.53	1284.84	1321.94
Cumulative Repayment upto Previous Year	0.00	44.89	143.20
Net Loan-Opening	1095.53	1239.95	1178.74
Addition due to additional capital expenditure	189.31	37.11	0.00
Repayment during the year	44.89	98.31	99.71
Net Loan-Closing	1239.95	1178.74	1079.03
Average Loan	1167.74	1209.35	1128.89
Weighted Average Rate of Interest on Loan	8.97%	8.97%	8.97%
Interest	52.35	108.42	101.22

Depreciation

49. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:

“17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) 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 stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) 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.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III 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 date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) 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.”

50. Asset-1 and Asset-2 were put under commercial operation as on 1.9.2011 and Asset-3 and Asset-4 were put under commercial operation as on 1.10.2011. Accordingly, all the assets covered in the instant petition shall complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations.

51. Details of the depreciation worked out are as under:-

(` in lakh)

Asset 1			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block- As on date of commercial operation	2334.60	2772.70	2963.52
Addition during 2009-14 due to Projected additional capital expenditure	438.10	190.82	0.00
Closing Gross Block	2772.70	2963.52	2963.52
Average Gross Block	2553.65	2868.11	2963.52
Rate of Depreciation	5.23%	5.24%	5.24%
Depreciable Value	2277.70	2560.71	2646.58
Remaining Depreciable Value	2277.70	2482.76	2418.40
Depreciation	77.95	150.23	155.27

(` in lakh)

Asset 2			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block- As on date of commercial operation	2451.33	2794.38	3036.38

Addition during 2009-14 due to Projected Additional capital expenditure	343.05	242.00	0.00
Closing Gross Block	2794.38	3036.38	3036.38
Average Gross Block	2622.85	2915.38	3036.38
Rate of Depreciation	5.18%	5.19%	5.19%
Depreciable Value	2298.80	2562.07	2670.97
Remaining Depreciable Value	2298.80	2482.88	2440.54
Depreciation	79.19	151.24	157.63

(` in lakh)

Asset 3			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block- As on date of commercial operation	895.71	966.09	1012.22
Addition during 2009-14 due to Projected additional capital expenditure	70.38	46.13	0.00
Closing Gross Block	966.09	1012.22	1012.22
Average Gross Block	930.90	989.15	1012.22
Rate of Depreciation	5.22%	5.22%	5.22%
Depreciable Value	827.51	879.94	900.70
Remaining Depreciable Value	827.51	855.66	824.80
Depreciation	24.27	51.62	52.84

(` in lakh)

Asset 4			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block- As on date of commercial operation	1565.03	1835.47	1888.48
Addition during 2009-14 due to Projected additional capital expenditure	270.44	53.01	0.00
Closing Gross Block	1835.47	1888.48	1888.48
Average Gross Block	1700.25	1861.98	1888.48
Rate of Depreciation	5.28%	5.28%	5.28%
Depreciable Value	1530.23	1675.78	1699.63
Remaining Depreciable Value	1530.23	1630.89	1556.43
Depreciation	44.89	98.31	99.71

Operation & maintenance expenses

52. The petitioner has submitted that the O&M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.

53. The respondent Jd.VVNL, AVVNL, JVVNL and PSPCL submitted that the O&M should be allowed only as per existing norms. UPPCL has submitted that the request of petitioner regarding increased O&M expenses due to revision in employees pay scale should not be accepted for the reason that once the normative parameters have been defined, the question of considering actual does not arise, and in case actual are to be considered, the whole tariff need to be based on actuals. BRPL has submitted that the petitioner should take care of the wage revision by improving the productivity level.

54. The petitioner in its rejoinder to BRPL's reply has submitted that per Ckt Km and per Bay O&M expenses are claimed as per the 2009 Tariff Regulations. While framing the 2009 Tariff Regulations, the petitioner has furnished the actual O&M cost, Line and Bay details of its transmission system for the 5 year period

i.e., 2003-04, 2004-05, 2005-06, 2006-07 and 2007-08, without taking into account expected manpower cost implication on account of wage revision. The Commission has considered 50% of wage hike to stipulate the norms for 2009-10. The total impact of wage hike may be more as compared to the compensation provided in the O&M rates and the petitioner would approach the Commission for additional manpower cost on account of wage revision during the tariff block 2009-14.

55. As regards the petitioner's submissions, we would like to clarify that the Commission has given effect to the impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law. We would like to further clarify that the O&M expenses are allowed in the instant petition as per the existing norms.

56. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are given hereunder:-

Element	(` in lakh)		
	2011-12	2012-13	2013-14
400 kV D/C triple conductor, T/Line (₹ lakh/ kms)	0.701	0.741	0.783

400 kV Bays (₹ lakh/ bay.)	58.57	61.92	65.46
220 kV Bays (₹ lakh/ bay.)	41.00	43.34	45.82

57. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which are allowed:-

(` in lakh)

Asset 1 (Date of commercial operation: 1.9.2011)	2011-12 (pro-rata for 7 months)	2012-13	2013-14
11.34 Km, 400 kV D/C triple conductor, LILO of Nalagarh- Kaithal line at Patiala along with bays	4.64	8.40	8.88
400/200 kV Patiala sub-station			
2 Nos. 400 kV bays	68.33	123.84	130.92
Total O&M allowable	72.97	132.24	139.8

(` in lakh)

Asset 2 (Date of commercial operation: 1.9.2011)	2011-12 (pro-rata for 7 months)	2012-13	2013-14
400/220 kV Patiala sub-station			
1 Nos. 400 kV bays	34.17	61.92	65.46
5 Nos. 220 kV bays	119.58	216.70	229.10
Total O&M allowable	153.75	278.62	294.56

(` in lakh)

Asset 3: (Date of commercial operation: 1.10.2011)	2011-12 (pro-rata for 6 months)	2012-13	2013-14
400/220 kV Patiala S/S			
1 Nos. 400 kV bays	29.29	61.92	65.46
Total O&M allowable	29.29	61.92	65.46

Asset 4 (Date of commercial operation: 1.10.2011)	2011-12 (pro-rata for 6 months)	2012-13	2013-14
Malerkotla 400 S/S			
1 Nos. 400 kV bays	29.29	61.92	65.46
1 No. ICT – III 220 kV bay	20.50	43.34	45.82
500 MVA ICT – III			
1 No 220 kV bay	20.50	43.34	45.82
Total O&M allowable	70.29	148.60	157.1

(` in lakh)

Interest on working capital

58. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 regulations, receivables will be equivalent to two months' fixed cost. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares

Regulation 18(1)(c)(ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a component of

working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital

Rates of interest for IWC have been considered according to Regulation 15 of the 2009 Tariff Regulations, based on the SBI Base rate @ 8.25% as on 1.4.2011 plus 350 basis points i.e. @ 11.75%.

59. Necessary computations in support of interest on working capital are appended herein below:-

(` in lakh)

Asset 1			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	18.76	19.84	20.97
O & M expenses	10.42	11.02	11.65
Receivables	93.82	102.30	104.02
Total	123.01	133.15	136.64
Rate of Interest	11.75%	11.75%	11.75%
Interest	8.43	15.65	16.06

(` in lakh)

Asset 2			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	39.54	41.79	44.18
O & M expenses	21.96	23.22	24.55
Receivables	119.60	128.82	132.72
Total	181.10	193.83	201.45
Rate of Interest	11.75%	11.75%	11.75%
Interest	12.41	22.78	23.67

(` in lakh)

Asset 3			
Particulars	2011-12 (pro-rata)	2012-13	2013-14

Maintenance Spares	8.79	9.29	9.82
O & M expenses	4.88	5.16	5.46
Receivables	36.59	38.26	38.74
Total	50.26	52.71	54.01
Rate of Interest	11.75%	11.75%	11.75%
Interest	2.95	6.19	6.35

(` in lakh)

Asset 4			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	21.09	22.29	23.57
O & M expenses	11.72	12.38	13.09
Receivables	72.77	77.70	78.43
Total	105.57	112.37	115.09
Rate of Interest	11.75%	11.75%	11.75%
Interest	6.20	13.20	13.52

Transmission charges

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

(` in lakh)

Asset 1			
Particulars	2011-12 (pro rata)	2012-13	2013-14
Depreciation	77.95	150.23	155.27
Interest on Loan	90.89	165.26	157.60
Return on equity	78.12	150.41	155.42
Interest on Working Capital	8.43	15.65	16.06
O & M Expenses	72.97	132.24	139.80
Total	328.36	613.79	624.14

(` in lakh)

Asset 2			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	79.19	151.24	157.63
Interest on Loan	93.01	167.39	161.20

Return on equity	80.24	152.89	159.24
Interest on Working Capital	12.41	22.78	23.67
O & M Expenses	153.75	278.62	294.56
Total	418.60	772.92	796.30

(` in lakh)

Asset 3			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	24.27	51.62	52.84
Interest on Loan	28.85	57.96	54.71
Return on equity	24.41	51.87	53.08
Interest on Working Capital	2.95	6.19	6.35
O & M Expenses	29.29	61.92	65.46
Total	109.78	229.57	232.44

(` in lakh)

Asset 4			
Particulars	2011-12 (pro- rata)	2012-13	2013-14
Depreciation	44.89	98.31	99.71
Interest on Loan	52.35	108.42	101.22
Return on equity	44.58	97.65	99.04
Interest on Working Capital	6.20	13.20	13.52
O & M Expenses	70.29	148.60	157.10
Total	218.31	466.19	470.59

Filing fee and the publication expenses

61. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the filing fee shall be governed as per the Commission's orders. The petitioner has submitted in its rejoinder, dated 19.6.2012 that reimbursement of filing fee and publications shall be as per the Commissions orders. In accordance with the Commission's order

dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on pro-rata basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiary on pro-rata basis.

Licence fee

62. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents.

63. BRPL has submitted that the petitioner's request for reimbursement for licence fee should be rejected. The petitioner has clarified that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09 and hence it should be rejected. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A(1)(b) of the 2009 Tariff Regulations.

Service tax

64. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. BRPL has requested to reject the petitioner's prayer for reimbursement of service tax. The petitioner has reiterated that if exemption to transmission service is withdrawn at a later date, the

beneficiaries shall have to share the service tax paid by the petitioner. We consider the prayer of the petitioner pre-mature and accordingly this prayer is rejected.

Sharing of transmission charges

65. The billing collection and disbursement of the transmission charges 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.

66. This order disposes of Petition No. 96/TT/2011.

sd/-

(V S Verma)
Member

sd/-

(S. Jayaraman)
Member

sd/-

(Dr. Pramod Deo)
Chairperson

Annexure I

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXI			
	Gross loan opening	400.00	400.00	400.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	400.00	400.00	400.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	33.33
	Net Loan-Closing	400.00	400.00	366.67
	Average Loan	400.00	400.00	383.33
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	35.60	35.60	34.12
	Rep Schedule	12 annual installments from 25.2.2014		
2	Bond XXXIII			
	Gross loan opening	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	200.00	200.00	200.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	200.00	200.00	200.00
	Average Loan	200.00	200.00	200.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	17.28	17.28	17.28
	Rep Schedule	12 annual installments from 8.7.2014		
3	Bond XXXIV			
	Gross loan opening	880.00	880.00	880.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	880.00	880.00	880.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	880.00	880.00	880.00
	Average Loan	880.00	880.00	880.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	77.79	77.79	77.79
	Rep Schedule	12 annual installments from 21.10.2014		
4	Bond XXXV			



	Gross loan opening	165.20	165.20	165.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	165.20	165.20	165.20
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	165.20	165.20	165.20
	Average Loan	165.20	165.20	165.20
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	15.93	15.93	15.93
	Rep Schedule	12 annual installments from 31.05.2015		
	Total Loan			
	Gross loan opening	1645.20	1645.20	1645.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1645.20	1645.20	1645.20
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	33.33
	Net Loan-Closing	1645.20	1645.20	1611.87
	Average Loan	1645.20	1645.20	1628.53
	Rate of Interest	8.91%	8.91%	8.91%
	Interest	146.60	146.60	145.11

Annexure II

(` in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXI			
	Gross loan opening	400.00	400.00	400.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	400.00	400.00	400.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	33.33
	Net Loan-Closing	400.00	400.00	366.67
	Average Loan	400.00	400.00	383.33
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	35.60	35.60	34.12
	Rep Schedule	12 annual installments from 25.02.2014		
2	Bond XXXIII			
	Gross loan opening	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	200.00	200.00	200.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	200.00	200.00	200.00
	Average Loan	200.00	200.00	200.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	17.28	17.28	17.28
	Rep Schedule	12 annual installments from 8.7.2014		
3	Bond XXXIV			
	Gross loan opening	1055.00	1055.00	1055.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1055.00	1055.00	1055.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1055.00	1055.00	1055.00
	Average Loan	1055.00	1055.00	1055.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	93.26	93.26	93.26
	Rep Schedule	12 annual installments from 21.10.2014		

4	Bond XXXV			
	Gross loan opening	98.60	98.60	98.60
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	98.60	98.60	98.60
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	98.60	98.60	98.60
	Average Loan	98.60	98.60	98.60
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	9.51	9.51	9.51
	Rep Schedule	12 annual installments from 31.5.2015		
	Total Loan			
	Gross loan opening	1753.60	1753.60	1753.60
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1753.60	1753.60	1753.60
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	33.33
	Net Loan-Closing	1753.60	1753.60	1720.27
	Average Loan	1753.60	1753.60	1736.93
	Rate of Interest	8.88%	8.88%	8.88%
	Interest	155.65	155.65	154.16

Annexure III

(' in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXI			
	Gross loan opening	162.00	162.00	162.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	162.00	162.00	162.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	13.50
	Net Loan-Closing	162.00	162.00	148.50
	Average Loan	162.00	162.00	155.25
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	14.42	14.42	13.82
	Rep Schedule	12 annual installments from 25.2.2014		
2	Bond XXXIII			
	Gross loan opening	80.00	80.00	80.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	80.00	80.00	80.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	80.00	80.00	80.00
	Average Loan	80.00	80.00	80.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	6.91	6.91	6.91
	Rep Schedule	12 annual installments from 8.7.2014		
3	Bond XXXIV			
	Gross loan opening	206.00	206.00	206.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	206.00	206.00	206.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	206.00	206.00	206.00
	Average Loan	206.00	206.00	206.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	18.21	18.21	18.21
	Rep Schedule	12 annual installments from 21.10.2014		
4	Bond XXXV			
	Gross loan opening	100.00	100.00	100.00

	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	9.64	9.64	9.64
	Rep Schedule	12 annual installments from 31.5.2015		
5	Bond XXXVI			
	Gross loan opening	82.20	82.20	82.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	82.20	82.20	82.20
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	82.20	82.20	82.20
	Average Loan	82.20	82.20	82.20
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	7.69	7.69	7.69
	Rep Schedule	12 annual installments from 29.8.2016		
	Total Loan			
	Gross loan opening	630.20	630.20	630.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	630.20	630.20	630.20
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	13.50
	Net Loan-Closing	630.20	630.20	616.70
	Average Loan	630.20	630.20	623.45
	Rate of Interest	9.02%	9.02%	9.02%
	Interest	56.87	56.87	56.27

Annexure IV

(' in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN				
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXI			
	Gross loan opening	320.00	320.00	320.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	320.00	320.00	320.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	26.67
	Net Loan-Closing	320.00	320.00	293.33
	Average Loan	320.00	320.00	306.67
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	28.48	28.48	27.29
	Rep Schedule	12 annual installments from 25.2.2014		
2	Bond XXXIII			
	Gross loan opening	180.00	180.00	180.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	180.00	180.00	180.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	180.00	180.00	180.00
	Average Loan	180.00	180.00	180.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	15.55	15.55	15.55
	Rep Schedule	12 annual installments from 8.7.2014		
3	Bond XXXIV			
	Gross loan opening	400.00	400.00	400.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	400.00	400.00	400.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	400.00	400.00	400.00
	Average Loan	400.00	400.00	400.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	35.36	35.36	35.36
	Rep Schedule	12 annual installments from 21.10.2014		
4	Bond XXXV			
	Gross loan opening	100.00	100.00	100.00

	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	9.64	9.64	9.64
	Rep Schedule	12 annual installments from 31.5.2015		
5	Bond XXXVI			
	Gross loan opening	161.95	161.95	161.95
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	161.95	161.95	161.95
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	161.95	161.95	161.95
	Average Loan	161.95	161.95	161.95
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	15.14	15.14	15.14
	Rep Schedule	12 annual installments from 29.08.2016		
	Total Loan			
	Gross loan opening	1161.95	1161.95	1161.95
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1161.95	1161.95	1161.95
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	26.67
	Net Loan-Closing	1161.95	1161.95	1135.28
	Average Loan	1161.95	1161.95	1148.62
	Rate of Interest	8.97%	8.97%	8.97%
	Interest	104.17	104.17	102.99