

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

**Petition No. 02/TT/2011
Petition No.57/TT/2011**

**Coram:
Shri S. Jayaraman, Member
Shri V.S. Verma, Member
Shri M. Deena Dayalan, Member**

**Date of Hearing: 6.3.2012
Date of Order : 9.5.2013**

In the matter of:

Approval of date of commercial operation for determination of Transmission Tariff (a) for Koldam-Nalagarh 400 kV (Quad) Line along with bays at Nalagarh Sub-station (proposed date of commercial operation: 1.4.2010) under Transmission System associated with Koldam Hydro- electric Project for 2009-14 in Northern Region (Petition No. 2/TT/2011)

(b) for combined assets of Koldam- Nalagarh 400 KV (Quad) Line along with bays at Nalagarh Sub-station (proposed date of commercial operation: 1.4.2010) and bays at Ludhiana (anticipated date of commercial operation: 1.3.2011) under Transmission System associated with Koldam Hydro- electric Project for 2009-14 in Northern Region (Petition No. 57/TT/2011)

And

In the matter of:

Power Grid Corporation of India Ltd., Gurgaon

.....**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, 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. New Delhi Municipal Council, New Delhi

... Respondents

The following were present:

1. Shri S.S. Raju, PGCIL
2. Shri Rajeev Gupta, PGCIL
3. Shri M.M. Mondal, PGCIL
4. Shri Mukesh Khanna, PGCIL,
5. Shri Prashant Sharma, PGCIL
6. Shri R.B. Sharma, Advocate for BRPL
7. Shri Sanjay Srivastav, BRPL
8. Shri T.P.S. Bawa, PSPCL

ORDER

These petitions have been filed by Powergrid Corporation of India Limited (PGCIL) seeking approval of the dates of commercial operation under Regulation-3 (12) (c) of the CERC (Terms and Conditions of Tariff) Regulations, 2009 and Regulation-24 of the CERC (Conduct of Business) Regulations, 1999, and for determination of transmission tariff for Koldam-Nalagarh 400 kV (Quad) Line along with bays at Nalagarh Sub-station from proposed date of commercial operation (1.4.2010) to 31.3.2014, and for combined assets of Koldam- Nalagarh 400 KV (Quad) Line along with bays at Nalagarh Sub-station, and bays at Ludhiana from anticipated date of commercial operation (1.3.2011) to 31.3.2014 under Transmission System associated with Koldam Hydro-electric Project (hereinafter referred to as "transmission project") in Northern Region, for tariff block 2009-14 period, under Regulation 86 of 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 sanction to the transmission project was accorded by the Ministry of Power, Government of India vide letter No. 12/19/2003-PG dated 7.9.2005 at an estimated cost of ₹46491 lakh , including IDC of ₹3102 lakh (based on 2nd Quarter, 2005 price level), consisting of (i) PGCIL portion of work at a cost of ₹16296 lakh including an IDC of ₹1054 lakh and (ii) JV portion of work at a cost of ₹30195 lakh including an IDC of ₹2048 lakh, subject to the condition that the JV must bear the entire revenue risk and must sign BPTA with the beneficiary states before commencement of the construction activities. Subsequently, the Revised Cost Estimate for the project (PGCIL scope) was approved by the Board of Directors of the petitioner vide Memorandum C/CCP/RCE-Koldam dated 16.8.2011 at an estimated revised cost of ₹19933 lakh including Interest During Construction (IDC) of ₹1776 lakh at 3rd quarter, 2010 price level.

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

(i) Transmission System

Koldam- Nalagarh 400 kV D/C (Quad) --- 45 Kms.

(ii) Sub-stations

- a. 400/220 kV Nalagarh (Extension)
- b. 400/220 kV Ludhiana (Extension)

(iii) Scope under JV route of private participation:

Koldam- Ludhiana 400 kV D/C (triple Aluminum Conductor Steel re-enforced)
--- 153 Kms.

4. The petitioner has claimed transmission tariff for “Koldam–Nalagarh 400 kV D/C (Quad) Line along with bays at Nalagarh Sub-station (hereinafter referred as to “Asset-I”) in Petition No 2/TT/2011 from date of commercial operation (1.4.2010) and thereafter the same has been clubbed with “bays at Ludhiana” (hereinafter referred as to “Asset-II”) (anticipated date of commercial operation: 1.3.2011) in Petition No 57/TT/2011 for the purpose of determination of transmission tariff from notional date of commercial operation to 31.3.2014. The petitioner has also prayed in the respective petitions for approval of dates of commercial operation for Asset-I and Asset-II under Regulation 3 (12) (c) of the 2009 Tariff Regulations, in view of the fact that it was unable to charge the lines because of non-readiness of generation. The dates of commercial operation of Asset-I and Asset-II have been proposed respectively in Petition No. 2/TT/2011 and Petition No. 57/TT/2011 as 1.4.2010 and 1.4.2011. Since both the assets are part of same project, they are clubbed in this order. Thus, the tariff for Asset-I in Petition No. 2/TT/2011 has been determined from date of commercial operation (1.4.2010) up to the notional date of commercial operation of combined asset in Petition No. 57/TT/2011. The petitions involve determination of transmission tariff based on estimated capital expenditure incurred up to date of commercial operation and estimated additional capital expenditure projected to be incurred from date of commercial operation to 31.3.2014 for the above mentioned assets.

5. Details of the Assets covered in the petition are as follows:-

S. No.	Description	Anticipated date of commercial operation	Actual date of commercial operation	Covered in Petition no
1	Koldam–Nalagarh 400kV D/C (Quad) Line along with bays at Nalagarh Sub Station (part of POWERGRID portion) (Asset-I)	--	1.4.2010	2/TT/2011
2	400 kV line bays at Ludhiana Sub-Station (Asset-II)	1.3.2011	1.4.2011	57/TT/2011
3	Combined Asset Koldam–Nalagarh 400kV D/C (Quad) Line along with bays at Nalagarh Sub Station (part of POWERGRID portion) and 400 kV line bays at Ludhiana Sub-Station (hereinafter referred to as “Combined Assets- I&II”)	--	1.4.2011 (Notional date of commercial operation)	

6. The details of revised/original apportioned approved cost, capital cost as on dates of commercial operation and estimated additional capitalization projected to be incurred for the assets covered in these petitions are summarized below:-

(₹ in lakh)

Particular	Revised apportioned approved cost	Original apportioned Approved Cost	Estimated capital expenditure incurred up to date of commercial operation *	Projected additional capital expenditure			Total estimated completion cost
				date of commercial operation to 31.3.2011	2011-12	2012-13	
Asset-I	19316.00	15098.16	17424.96	590.70	694.52	63.16	18773.34
Asset-II	617.00	1197.85	465.29+32.68+11.83+48.49 =558.29**	46.59	--	--	604.88
Combined Assets-I&II	19933.00	16296.01	17424.96+590.70+558.29= 18573.95	741.11	741.11	63.16	19378.22

* Inclusive of initial spares amounting to ₹423.64 lakh and ₹37.47 lakh pertaining to Transmission line & Sub-station respectively for Asset-I and ₹30.29 lakh pertaining to Sub-station for Asset-II.

** In case of Asset-II, the capital cost as on 1.4.2011 is determined based on capital expenditure up to 1.3.2011 and projected capital cost from 1.3.2011 to 31.3.2011. Any change in the proposed capital cost will be considered during truing -up.

7. Total estimated completion cost exceeds the original apportioned approved cost for Asset-I. Further, the petitioner vide affidavit dated 29.9.2011 in Petition No. 57/TT/2011, submitted Revised Cost Estimates and accordingly, total estimated completion cost of the assets falls within the revised apportioned approved cost.

8. Provisional tariff in respect of the above mentioned assets was approved by the Commission vide its order dated 30.6.2011. This was subject to adjustment as per Regulation 5 (4) of the 2009 Tariff Regulations.

9. Details of the transmission charges claimed by the petitioner are given hereunder:-

(₹ in lakh)

Asset-I	
	2010-11
Depreciation	937.07
Interest on Loan	1115.83
Return on equity	929.31
Interest on Working Capital	67.09
O & M Expenses	156.90
Total	3206.20

(₹ in lakh)

Combined Assets-I & II			
	2011-12	2012-13	2013-14
Depreciation	1002.83	1024.17	1025.84
Interest on Loan	1104.22	1035.06	940.94
Return on equity	993.51	1014.60	1016.25
Interest on Working Capital	75.50	75.74	74.75
O & M Expenses	283.03	299.41	316.29
Total	3459.09	3448.98	3374.07

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

(₹ in lakh)

Asset-I	
	2010-11
Maintenance Spares	23.54
O & M expenses	13.08
Receivables	534.37
Total	570.99
Interest	67.09
Rate of Interest	11.75%

(₹ in lakh)

Combined Assets-I & II			
	2011-12	2012-13	2013-14
Maintenance Spares	42.45	44.88	47.44
O & M expenses	23.59	24.93	26.36
Receivables	576.52	574.80	562.35
Total	642.56	644.61	636.15
Interest	75.50	75.74	74.75
Rate of Interest	11.75%	11.75%	11.75%

11. 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. The replies have been filed by Ajmer Vidyut Vitran Nigam Limited (AVVPNL) Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL) Respondent No. 3,

Jodhpur Vidyut Vitran Nigam Limited (Jd.VVNL) Respondent No. 4, Punjab State Power Corporation Limited (PSPCL) Respondent No. 6, Uttar Pradesh Power Corporation Ltd. (UPPCL) Respondent No. 9, BSES Rajdhani Power Ltd. (BRPL) Respondent No. 12, and National Thermal Power Corporation Ltd.(NTPC) Respondent No. 18. The petitioner has filed the rejoinder to the reply of AVVNL, JVVNL, Jd.VVNL UPPCL and BRPL. The objections and their clarification have been dealt with in relevant paragraphs of this order.

12. Having heard the representative of the parties and perused the material on record, we proceed to dispose of the petition.

Approval of date of commercial operation

13. As per the investment approval schedule, the Transmission System of Koldam Hydro Electric Project was scheduled for completion in 36 months from the date of investment approval (7.9.2005) to match the commissioning schedule of Koldam Generation Project. The petitioner has sought approval, in Petition No. 2/TT/2011, for date of commercial operation of Asset-I as 1.4.2010 and the tariff from approved date of commercial operation to 31.3.2014, and in Petition No. 57/TT/2011, for date of commercial operation of the bays at Ludhiana as 1.3.2011 (anticipated) and the tariff of the combined assets from approved date of commercial operation to 31.3.2014. We deal with the submission of the parties in the following paragraphs.

14. In Petition No. 2/TT/2011, the petitioner has submitted that it commenced the work of Transmission Line keeping in view the commissioning schedule of generation in 2008-09. During 10th NRPC meeting on 29.09.2008, it was informed by NTPC that first unit of Koldam was likely to be commissioned during July, 2010. Subsequently, in 26th meeting of Standing Committee on Power System Planning in Northern Region held on 13.10.2008, it was indicated that Koldam generation was getting further delayed and was expected to be commissioned by March, 2012. The petitioner submitted that it had commenced the work of Transmission Line keeping in view the parallel time lines of generation. With the subsequent shift/ delay in generation project, the petitioner had to slow down the work. However, it was not feasible to delay the project beyond a point as these time extensions would have a bearing on project cost. The petitioner was accordingly constrained to complete the construction activities, and Koldam- Nalagarh 400 kV D/C (Quad) Line along with bays at Nalagarh Sub-station have been completed on 31.03.2010.

15. In Petition No. 57/TT/2011, the petitioner has submitted that it had commenced the work of bays at Ludhiana keeping in view the parallel time lines of generation. With the subsequent shift/ delay in generation project, the petitioner had to slow down the work. However, it was not feasible to delay the project beyond a point as these time extensions would mean obvious implications for the petitioner which would have a bearing on project cost. The petitioner was accordingly constrained to complete the construction activities, and bays at Ludhiana were projected to be completed with anticipated date of commercial operation of 1.3.2011.

16. In the submission dated 28.7.2011, the petitioner has submitted that the auditor certificate for Koldam- Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh end was made with date of commercial operation as 1.4.2010, and for 400kV line bays at Ludhiana with anticipated date of commercial operation as 1.4.2011. However, anticipated notional date of commercial operation of the combined asset was revised and actually put under commercial operation w.e.f. 1.4.2011. The petitioner has enclosed a copy of letter dated 1.4.2011 addressed to Member Secretary, NRPC declaring Koldam- Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh end under commercial operation w.e.f. 1.4.2010 and the 400kV line bays at Ludhiana under commercial operation w.e.f. 1.4.2011.

17. The petitioner submits that the case qualifies for consideration of the Commission for approval of the date of commercial operation prior to the element coming into regular service as per the following provision of the 2009 Tariff Regulation :

“(12) ‘date of commercial operation ‘ or COD means
(c) in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmissions system is **in regular service** after successful charging and trial operation:

Provided that the date shall be first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from the date:

Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service.”

18. BRPL in its reply dated 2.3.2012 submitted that the petitioner is also the Central Transmission Utility (CTU) and in its capacity as CTU, the petitioner has a statutory

responsibility to undertake transmission of electricity through inter-state transmission system and also discharge all functions of planning and coordination relating to inter-state transmission system with the generating company under section 38 (2) of the Electricity Act, 2003. It has also submitted that the respondent beneficiaries cannot be made to pay for the lapses on the part of the petitioner in the discharge of the statutory responsibilities of coordination. Thus the request of the petitioner for approval of the date of commercial operation for the Asset-II as 1.3.2011 is not legitimate.

19. NTPC in its affidavit dated 20.4.2012 submitted that only Koldam- Nalagarh lines and bays at Nalagarh constitute ATS of Koldam. 400/220 kV extension at Ludhiana is not part of ATS of Koldam. Ludhiana sub-station is part of ATS for Parbati-II HEP and not Koldam as indicated by the petitioner. It has also submitted that construction of Ludhiana bays should have matched with Parbati-II and not with Koldam generation as these bays have no linkage with Koldam generation. It has further submitted that the said lines (400 kV Koldam-Nalagarh D/C T/L) are embedded lines in the system which shall provide support and electrical resilience in the system. Keeping in view the technical aspects, CTU has declared these assets commercial.

20. AVVNL, JVVNL and Jd.VVNL in affidavits dated 1.4.2011 has submitted that the Asset-II were to be commissioned to match the generation project. It is also mentioned that the Koldam-Ludhiana line, being executed through JV, has been delayed to match with generation. If it was noticed that generation project is being delayed as JV decided to delay the commissioning of the line, the petitioner could have also taken similar

steps. They have requested the Commission to consider approving the dates of commercial operation at a later date when the assets would be in regular use. To save the petitioner from financial loss, they have suggested, the generating company should be asked to bear the burden of IDC for the period upto date of commercial operation of the generating plant.

21. The PSPCL in its reply dated 10.5.2011 and 27.5.2011 submitted that as per the minutes of 26th meeting of CEA Standing Committee on Transmission System Planning held on 13.10.2008, there was a clear cut decision that with slippage of Koldam, the construction of Koldam- Ludhiana line should be delayed by further nine months beyond commissioning date of Koldam. It has also submitted that when Koldam-Ludhiana line was supposed to be commissioned nine months after Koldam, there is no justification for commissioning of Ludhiana bays on claimed date of commercial operation of 1.3.2011. The claim of the petitioner for date of commercial operation as 1.3.2011 is against the decision of CEA standing committee and the claim is not admissible. It has further submitted that the petitioner was participant in this meeting and was a party to the decision. The joint venture company executing Koldam-Ludhiana Line is a joint venture of PGCIL and Reliance. Petitioner, as one of the constituents of the JV was therefore acting on standing committee decision on delaying by nine months and hence, there is no basis for declaring early the date of commercial operation of Ludhiana bays. It has submitted that clubbing of this asset with Nalagarh-Koldam system is not justified and requested to disallow the request of the petitioner.

22. The petitioner has filed rejoinders dated 22.5.2012 and 30.5.2012 to the replies respectively of BRPL and PSPCL. It has also filed rejoinder dated 5.6.2012 to the replies of AVVNL, JVVNL and Jd.VVNL. In these rejoinders it has clarified that a composite transmission system was planned for Koldam HEP, Parbati-II HEP and Parbati-III HEP. The transmission scheme for these projects was agreed in 14th & 15th Standing Committee held on 30.12.2002 and 30.5.2003 respectively. The Koldam transmission system comprised 400 kV Koldam-Ludhiana D/C and 400 kV Koldam-Nalagarh D/C lines. The transmission system was again discussed during 16th Standing Committee held on 24.3.2004, wherein it was agreed for Koldam-Ludhiana line as a transmission system common to Koldam HEP and Parbati-II HEP (to be commissioned matching with whichever comes first).

23. The petitioner has also submitted a copy of Ministry of Power letter dated 7.9.2005 conveying the administrative approval for the transmission system of PGCIL associated with Koldam HEP which inter-alia included extension of 400/220 kV Ludhiana sub-station. In the letter, it was mentioned that this transmission system was to be matched with the commissioning schedule of Koldam generation project. Subsequently, award for two numbers of 400 kV bays at Ludhiana was placed on 25.10.2006. However, there were delays in the commissioning of the Hydro generation projects and sequence of commissioning of generation projects also changed. Considering these changes the transmission system was discussed in 26th Standing Committee meeting held on 13.10.2008 wherein it was agreed that date of commercial operation date of 400 kV D/C Koldam-Ludhiana line should be nine months after the

commissioning schedule of Koldam HEP but not later than commissioning schedule of Parbati-II. Subsequently CEA vide letter dated 23.2.2009 to PKTCL informed that Koldam-Ludhiana line should be commissioned to match with the time frame of Parbati-II HEP. It was also submitted that the completion of Ludhiana bays could have not been delayed further without having impact on the completion cost due to various contractual obligations as per terms and conditions of the contract. The petitioner reiterated that the bays at Ludhiana were ready for intended use, but the petitioner was unable to charge the same because of non-readiness, and hence the subject asset qualifies for approval under Regulation 3 (12) (c) of the 2009 Tariff Regulations. It has also emphasized that as per discussion during 10th NRPC meeting on 30.9.2008, first unit of Koldam was to be commissioned in July, 2010 and keeping the same in view, the activities which were being delayed had been taken up.

24. Regarding the prayer of the petitioner for approval of date of commercial operation, we are of the view that the subject assets were ready for regular use but were prevented from providing such service due to delay in generating units, for which the petitioner was not responsible. Therefore, date of commercial operation is being approved under Regulation 3 (12) (c) of the Tariff Regulations, 2009. In a similar case in Petition No. 81/2010, the date of commercial operation for the Kudankulam (NPC)-Tirunelveli (Power Grid) 400 kV (Quad) D/C Line I and II with associated bays and equipments under Kudankulam Transmission System in Southern Region were approved by the Commission vide order dated 24.9.2010. We also note that the petitioner has put the assets under commercial operation on 1.4.2011. Under proviso to Regulation 3 (12) (c) of the 2009 Tariff Regulations, date of commercial operation of the

asset "ready for regular service but prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors" may be approved by the Commission prior to the element coming into regular service. Under this provision, the petitioner has prayed for approval of date of commercial operation by the Commission in these petitions, but pending the order by the Commission the petitioner himself declared the assets under commercial operation, which is against the 2009 Tariff Regulations. Therefore, the declaration of date of commercial operation by the petitioner was not in accordance with the 2009 Tariff Regulations. We direct that the petitioner shall abide by the provisions of the Regulations in future.

Capital cost

25. Regulation 7(1) (a) of the 2009 Tariff Regulations provides that:-

“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.”

26. Petitioner has claimed capital cost of ₹17424.96 lakh as on the date of commercial operation for Asset-I and ₹ 558.29 lakh as on the date of commercial operation for Asset- II vide auditor's certificates dated 24.12.2010 and 19.1.2011 respectively.

27. Tariff for Asset-I (Single Asset) (date of commercial operation: 1.4.2010) has been computed for the year 2010-11. Thereafter, Asset-I has been clubbed with Asset-II as on 1.4.2011 for the purpose of determination of transmission tariff. Tariff for

Combined Assets-I&II (Notional date of commercial operation 1.4.2011) has been computed for the tariff period 2009-14 and which would be applicable for the period 1.4.2011 to 31.3.2014.

28. Details of Capital cost as on respective date of commercial operations considered for the purpose of determination of tariff calculation is given hereunder:-

Asset	(₹ in lakh)	
	As on date of commercial operation	Additional capital expenditure 2010-11
Asset-I (date of commercial operation: 1.4.2010)	16848.18	590.70
Asset-II (date of commercial operation: 1.4.2011)		542.73
Combined Asset-I & II (Notional date of commercial operation 1.4.2011)		17981.61

Time over-run

29. The investment approval of the Transmission System of Koldam Hydro Electric Project was scheduled for completion in time frame of 36 months from the date of investment approval (7.9.2005) to match the commissioning schedule of Koldam Generation Project. The date of commercial operation approved for Asset-I is 1.4.2010, and the date of commercial operation for Asset-II is 1.4.2011 implying delay of 18 months and 30 months respectively for Asset-I and Asset-II.

30. The petitioner vide affidavit dated 15.4.2011 in Petition No. 2/TT/2011 and affidavit dated 28.7.2011 in Petition No. 57/TT/2011 has submitted reason for delay. It has also submitted copy of the Indemnification Agreement (IA) signed with NTPC, wherein the zero date initially signed with the generating company was 1.7.2009. This

indemnification agreement was for 400kV Koldam-Nalagarh D/C line. No Indemnification Agreement has been submitted for bays at Ludhiana. As per the indemnification agreement that the petitioner signed with NTPC for the 400 kV Koldam-Nalagarh D/C line, NTPC has to bear IDC for 6 months from the scheduled date of commissioning.

31. In view of schedules given in investment approval by Government of India vide letter No. 12/19/2003-PG dated 7.9.2005 and the Indemnification Agreement with NTPC, the petitioner had rightly taken steps to complete the line in 2008-09. The supply and erection packages were awarded within the period from October, 2006 to December, 2006 with schedule completion of work within the period from June, 2007 to October, 2008. When the generating station was getting delayed, the petitioner slowed down the work of transmission line. The petitioner submitted that the delay in transmission system was not possible beyond a certain point and the asset was constructed, before the generation. We find the plea of the petitioner to be reasonable as delay in execution of awards may not be feasible beyond a certain point. The petitioner entered into Indemnification Agreement with NTPC according to which NTPC had to bear IDC for up to 6 months from the schedule date of commissioning . In the instant case the schedule for the purpose of Indemnification was 30.9.2008. Therefore, IDC and IEDC for 6 months from 1.10.2008 to 31.3.2009 is not being allowed as it was to be recovered by the petitioner from NTPC. We find however that the delay in the construction of the 400 kV bays at Ludhiana is reasonable and hence the delay is condoned.

32. The annual transmission charges have been worked out by disallowing IDC & IEDC of 6 months for Asset-I. The IDC and IEDC of 6 months have been disallowed proportionately, as per details given hereunder:-

(₹ in lakh)

Asset-I		
Detail of IDC as per Auditor's Certificate dated 24.12.2010		
	IDC	IEDC
Total IDC and IEDC Claimed up to 31.3.2010	1780.61	662.70
Detail of IDC & IEDC Disallowed for 6 months		
Total Disallowed IDC & IEDC (for 6 months) (Pro-Rata)	197.85	73.63

33. Disallowed IDC and IEDC have been proportionally deducted from each element of the Asset-I, as per details given below:-

(₹ in lakh)

Asset-1			
Particulars	Capital cost as on date of commercial operation as per Auditor certificate	AppORTIONED Disallowed IDC	Capital Cost as on date of commercial operation after deducting disallowed IDC
Freehold Land	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00
Transmission Line	16858.76	262.66	16596.10
Sub-Station	435.68	6.79	428.89
PLCC	130.52	2.03	128.49
Total	17424.96	271.48	17153.48
Asset-II			
Particulars	Capital cost as on date of commercial operation as per Auditor certificate	AppORTIONED Disallowed IDC	Capital Cost as on date of commercial operation after deducting disallowed IDC
Freehold Land	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00

Transmission Line	0.00	0.00	0.00
Sub-Station	466.77	0.00	466.77
PLCC	91.52	0.00	91.52
Total	558.29	0.00	558.29

Cost over-run

34. For Asset-I, the estimated completion cost is ₹18773 lakh, against the original apportioned approved cost of ₹15098 lakh. The cost variation is mainly due to variation in tower steel, conductor, hardware fittings, erection etc. and IDC. The reason mentioned by the petitioner was use of leg extension in towers due to steep slopes and difference in awarded and estimated values. As per the Revised Cost Estimates, the apportioned approved cost is ₹ 19316 lakh and the completion cost is within the approved cost.

35. In case of Asset-II, the estimated completion cost for 400 kV bays at Ludhiana is about ₹700 lakh against the original apportioned approved cost of ₹1198 lakh. The petitioner has submitted vide affidavit dated 28.7.2011 that the actual quantity was less than that estimated in FR due to deletion of tie bays and other associated works in actual implementation. The petitioner has further submitted that quantities of equipments (CB-4, CT-12, Isolators-12) were considered in the estimate for 2 nos. main bays along with 2 nos. tie bays for spare dias whereas only 2 nos. main bays (CB-2, CT-9, Isolators-6) have actually been constructed. This resulted in considerable reduction in quantities and cost of supply as well as erection including civil works. The petitioner has also submitted detailed break-up of cost variation.

36. AVVNL, JVVNL , Jd. VVNL and BRPL have raised the issue of large cost variation. The petitioner has submitted detailed reason in its rejoinders, and has submitted that revised cost estimate of ₹19378 lakh is within the approved cost.

37. We are satisfied with the reasons given by the petitioner for cost variation and hold that the cost variation is reasonable.

Treatment of Initial Spares

38. The petitioner has claimed initial spares amounting to ₹423.64 lakh and ₹37.47 lakh pertaining to transmission line & Sub-station respectively for Asset-I and ₹30.29 lakh pertaining to Sub-station for Asset-II corresponding to capital cost as on cut-off date. Capital cost pertaining to transmission line and sub-station (including PLCC) has been restricted to ₹16596.10 lakh and ₹557.38 lakh (excluding disallowed IDC & IEDC,) for Asset-I including initial spares as per Regulation 8 of the 2009 Tariff Regulations, as per details given hereunder:-

(₹ in lakh)

Element	Capital cost upto cut off date	Initial spares claimed	Proportionate capital cost after deducting corresponding IDC/IEDC	Proportionate initial spares claimed	Ceiling limits as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares
<u>Asset-I</u>							
Sub-Station	754.72	37.47	745.90	37.03	2.50%	18.18	18.86
Transmission Line	18018.62	423.64	17755.96	417.46	0.75%	131.02	286.44
<u>Asset-II</u>							
Sub-Station	604.88	30.29	--	--	2.50%	14.73	15.56

39. The initial spares claimed for substation and transmission line by the petitioner exceeds the ceiling limit specified in Regulation 8 of the 2009 Tariff Regulations. Element-wise details of Asset-I and Asset-II after deducting excess initial spares claimed is as follows:-

(₹ in lakh)

Asset-I			
Particulars	Capital cost as on date of commercial operation after deducting disallowed IDC & IEDC	Excess initial spares claimed	Capital cost as on date of commercial operation after deducting excess initial Spares
Freehold Land	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00
Transmission Line	16596.10	(286.44)	16309.66
Sub-Station	428.89	(18.86)	410.04
PLCC	128.49	0.00	128.49
Total	17153.48	(305.30)	16848.18

(₹ in lakh)

Asset-II			
Particulars	Capital Cost as on date of commercial operation	Excess Initial Spares claimed	Capital cost as on date of commercial operation after deducting excess Initial Spares
Freehold Land	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00
Sub-Station	466.77	(15.56)	451.21
PLCC	91.52	0.00	91.52
Total	558.29	(15.56)	542.73

Additional capital expenditure

40. Regulation 9 (1) of the 2009 Tariff Regulations provides as under:-

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

41. Further, the 2009 Tariff Regulations defines cut-off date as follows:-

“Cut-off date means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in-case 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 transmission assets is 31.3.2014.

42. The petitioner has claimed additional capital expenditure of ₹ 590.70 lakh, ₹694.52 lakh and ₹ 63.16 lakh for 2010-11, 2011-12 and 2012-13 respectively for Asset-I and ₹46.59 lakh for Asset-II pertaining to 2011-12. Additional capital expenditure claimed falls within the cut-off date i.e. 31.3.2014.

Debt- equity ratio

43. Regulation 12 of the 2009 Tariff Regulations provides as under:-

"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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

44. The details of opening debt-equity of assets considered for the purpose of tariff calculation is as follows:-

(₹ in lakh)

Asset-I		
Capital cost as on 1.4.2010		
	Amount	%
Debt	11793.73	70.00
Equity	5054.45	30.00
Total	16848.18	100.00
Combined Asset I & II		
Capital cost as on 31.3.2014		
	Amount	%
Debt	12587.13	70.00
Equity	5394.48	30.00
Total	17981.62	100.00

45. Details of debt-equity ratio of assets as on 31.3.2014 is given hereunder:-

(₹ in lakh)

Capital cost as on 31.3.2014		
	Amount	%
Debt	13150.12	70.00
Equity	5635.77	30.00
Total	18785.89	100.00

46. Details of debt-equity ratio for projected additional capital expenditure considered is as follows:-

(₹ in lakh)

Asset-I		
2010-11		
	Amount	%
Additional Capital expenditure for 2010-11		
Debt	413.49	70.00
Equity	177.21	30.00
Total	590.70	100.00
Combined Asset I & II		
2011-12		
	Amount	%
Debt	518.78	70.00
Equity	222.33	30.00
Total	741.11	100.00
2012-13		
Normative		
	Amount	%
Debt	44.21	70.00
Equity	18.95	30.00
Total	63.16	100.00

Return on equity

47. 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 Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as 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."

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

49. Return on equity has been calculated as per Regulation 15 of the 2009 regulations with pre-tax return on equity of 17.481%.

50. In view of the above, the following amount of equity has been considered for calculation of return on equity:-

(₹ in lakh)

Asset I	
	2010-11
Opening Equity	5054.45
Addition due to Additional Capital Expenditure	177.21
Closing Equity	5231.66
Average Equity	5143.06
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	899.06

(₹ in lakh)

Combined Asset-I &II			
	2011-12	2012-13	2013-14
Opening Equity	5394.48	5616.82	5635.77
Addition due to Additional Capital Expenditure	222.33	18.95	0.00
Closing Equity	5616.82	5635.77	5635.77
Average Equity	5505.65	5626.29	5635.77
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	962.44	983.53	985.19

Interest on loan

51. Regulation 16 of the 2009 Tariff Regulations provides as under:-

“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.”

52. In these calculations, interest on loan has been worked out as follows:-

(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 (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

53. Accordingly, the interest on Loan has been calculated on the basis of prevailing rate available as on date of commercial operation/ notional date of commercial operation. Any change in rate of interest subsequent to date of commercial operation will be considered at the time of truing up.

54. Tariff is being allowed for the Asset-I only for 2010-11, and repayment of Normative Loan i.e. ₹906.59 lakh for Asset-I has been considered as cumulative repayment of Normative Loan for Combined Assets- I & II as on notional date of commercial operation i.e. 1.4.2011.

55. Detailed calculations of the weighted revised average rate of interest have been given in Annexure I and II to this order.

56. Details of the interest on loan worked on the above basis are as under:-

(₹ in lakh)

Asset I	
	2010-11
Gross Normative Loan	11793.73
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	11793.73
Addition due to Additional Capitalisation	413.49
Repayment during the year	906.59
Net Loan-Closing	11300.63
Average Loan	11547.18
Weighted Average Rate of Interest on Loan	9.3487%
Interest	1079.51

(₹ in lakh)

Combined Asset-I & II			
	2011-12	2012-13	2013-14
Gross Normative Loan	12587.13	13105.91	13150.12
Cumulative Repayment upto Previous Year	906.59	1878.13	2871.00
Net Loan-Opening	11680.54	11227.78	10279.12
Addition due to Additional capital expenditure	518.78	44.21	0.00
Repayment during the year	971.54	992.87	994.54
Net Loan-Closing	11227.78	10279.12	9284.58
Average Loan	11454.16	10753.45	9781.85
Weighted Average Rate of Interest on Loan	9.3418%	9.3347%	9.3298%
Interest	1070.03	1003.81	912.62

Depreciation

57. Regulation 17 (4) of the 2009 Tariff Regulations provides as under:-

"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 31th 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 asset".

58. Asset-I and Asset-II were put under commercial operation on 1.4.2010 and 1.4.2011 respectively, and accordingly assets will complete 12 years beyond 2013-14.

Thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations. Depreciation of Asset-I for 2010-11 has been considered as cumulative depreciation for the combined Assets-I & II.

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

Asset I		(₹ in lakh)
	2010-11 (pro-rata)	
Opening Gross Block	16848.18	
Addition during 2009-14 due to Additional Capital expenditure	590.70	
Closing Gross Block	17438.88	
Average Gross Block	17143.53	
Rate of Depreciation	5.2882%	
Depreciable Value (up to 90%)	15429.18	
Remaining Depreciable Value	15429.18	
Depreciation	906.59	
Cumulative Depreciation/ Advance against depreciation	906.59	

Combined Asset-I & II				(₹ in lakh)
	2011-12	2012-13	2013-14	
Opening Gross Block	17981.62	18722.73	18785.89	
Addition during 2009-14 due to Additional capital expenditure	741.11	63.16	0.00	
Closing Gross Block	18722.73	18785.89	18785.89	
Average Gross Block	18352.17	18754.31	18785.89	
Rate of Depreciation	5.2938%	5.2941%	5.2941%	
Depreciable Value	16516.95	16878.87	16907.30	
Remaining Depreciable Value	15610.36	15000.75	14036.30	
Depreciation	971.54	992.87	994.54	
Cumulative Depreciation/ Advance against depreciation	1878.13	2871.00	3865.54	

Operation & maintenance expenses

60. Clause (g) of Regulation 19 of the 2009 Tariff regulations prescribed the norms for operation and maintenance expenditure based on the type of sub-station and line. The norms for the assets covered in these petitions are as follows:-

(₹ in lakh)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C quad conductor T/Line (₹ lakh/ kms)	0.940	0.994	1.051	1.111	1.174
400 kV Bays (₹lakh/ bay)	52.40	55.40	58.57	61.92	65.46

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

(₹ in lakh)

Asset-I				
Element	2010-11	2011-12	2012-13	2013-14
46.381 kms 400 kV D/C quad conductor T/L	46.10	48.75	51.53	54.45
2 Nos., 400 kV Bays	110.80	117.14	123.84	130.92
Total O&M expenditure	156.90	165.89	175.37	185.37

(₹ in lakh)

Asset-II				
Element	2010-11	2011-12	2012-13	2013-14
2 Nos., 400 kV Bays	-	117.14	123.84	130.92
O&M expenditure	-	117.14	123.84	130.92
Total O&M expenditure (Assets-I & II)	156.90	283.03	299.21	316.29

62. The petitioner has submitted that O&M expenses 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 expenses for tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike from 1.1.2007 is more than 50%.

63. UPPCL in its reply dated 27.3.2012 in Petition No. 2/TT/2011 has submitted that issue of actual wage hike in O&M cannot be seen in isolation as the tariff is a complete package and the escalation takes care of hike in pay also. BRPL in its reply dated 2.3.2012 has submitted that the Commission has already covered the increase in employees cost on account of pay revision in the O&M expenses for the period 2009-14 by rationalizing the O&M expenses by 50% increase. Further increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner so that the beneficiaries are not unduly burdened over and above the provisions made in the 2009 Tariff Regulations.

64. 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 employees cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law.

Interest on working capital

65. 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 Tariff Regulations, receivables have been worked out on the basis of 2 months transmission charges;

(ii) Maintenance spares: As per 18 (1) (c) (i) of the 2009 Tariff Regulations, Maintenance spares have been worked out on the based on 15% of Operation and Maintenance expenses;

(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. This has been considered in the working capital.

(iv) Rate of interest on working capital: The petitioner has claimed interest on working capital @ 11.75% based on State Bank India PLR as on 1.4.2010 for Asset-I, which is in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 and is allowed. Further, interest on working capital has been worked out considering interest rate @ 11.25% (Base rate as on 1.4.2011 i.e. 8.25% and 350 basis points) for combined Asset-I & II (Notional date of commercial operation 1.4.2011).

66. Necessary computations in support of interest on working capital are appended hereunder:-

Asset I		(₹ in lakh)		
	2010-11			
Maintenance Spares	23.54			
O & M expenses	13.08			
Receivables	517.87			
Total	554.48			
Interest	65.15			

Combined Assets-I & II				(₹ in lakh)		
	2011-12	2012-13	2013-14			
Maintenance Spares	42.45	44.88	47.44			
O & M expenses	23.59	24.93	26.36			
Receivables	560.10	558.88	546.93			
Total	626.14	628.70	620.73			
Interest	73.57	73.87	72.94			

Transmission charges

67. The transmission charges being allowed for the transmission lines are given hereunder:-

Asset-I		(₹ in lakh)		
	2010-11			
Depreciation	906.59			
Interest on Loan	1079.51			
Return on equity	899.06			
Interest on Working Capital	65.15			
O & M Expenses	156.90			
Total	3107.21			

Combined Assets-I & II				(₹ in lakh)		
	2011-12	2012-13	2013-14			
Depreciation	971.54	992.87	994.54			
Interest on Loan	1070.03	1003.81	912.62			
Return on equity	962.44	983.53	985.19			
Interest on Working Capital	73.57	73.87	72.94			
O & M Expenses	283.03	299.21	316.29			
Total	3360.61	3353.29	3281.58			

Filing fee and the publication expenses

68. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009 applicable for the tariff period 2009-14, 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 beneficiaries on *pro-rata* basis.

Licence fee

69. The petitioner has submitted that in O&M expenses norms for tariff block 2009-14, the cost associated with licence fees had not been captured and the licence fee may be allowed to be recovered separately from the respondents. UPPCL and BRPL have submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a licence holder and it is the onus of the petitioner. The petitioner 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. We have considered the submission of the petitioner. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax

70. 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. UPPCL and BRPL have submitted that request for recovery of service tax premature for the petitioner when the matter is pending before the Hon'ble Supreme Court. The petitioner clarified that Government of India vide their notifications 11/2010 dated 27.2.2010 and 45/2012, has exempted transmission service from service tax. Further, in case the said notifications regarding granting of exemption to transmission service are withdrawn at a later date, the beneficiaries shall have to share the service tax paid by the petitioner. We consider the petitioner's prayer pre-mature and accordingly it is rejected.

Sharing of transmission charges

71. The petitioner has submitted that the transmission charges would be recovered on monthly basis from 1.4.2010 in accordance with Regulation 23 of the 2009 Tariff Regulations. As per Regulation 8 (6) of Sharing of Inter-state Transmission Charges and Regulations, 2010, under Point of connection Charges regime before date of commercial operation of generating stations the transmission charges are to be borne by the generator. The relevant Regulation is as under:

"(6) For Long Term customers availing supplies from inter-state generating stations, the charges payable by such generators for such Long Term supply shall be billed directly to the respective Long Term customers based on their share of capacity in such generating stations. Such mechanism shall be effective only after "commercial operation" of the generator. Till then, it shall be the responsibility of generator to pay these charges."

As per this provision the transmission charges should be borne by NTPC from date of implementation of these regulations i.e. 1.7.2011 till the commissioning of generating station. However, since NTPC has identified long-term customers and billing is done directly to these customers, ultimately the customers have to pay the transmission

charges even though, it is paid by NTPC to PGCIL, then reimbursed to NTPC by long-term customers.

72. As per submission dated 20.4.2012 by NTPC in Petition No. 57/TT/2011, NTPC has signed long term PPAs with all Northern Region beneficiaries wherein beneficiaries have agreed that it is their obligation and responsibility to evacuate power beyond bus-bar of the station including payment of charges & signing of Agreement with the transmission licensee. Thus, it would be difficult for NTPC to get the transmission charges reimbursed without provision in CERC regulations and in the PPAs regarding reimbursement of transmission charges from beneficiaries. Therefore, in case of generators who have long - term PPAs with identified long-term customers, the transmission charges should be paid directly by the customer even though the generating units have not been declared under commercial operation.

73. The PoC Regulation is in vogue from 1.7.2011. Ideally, the tariff of the subject asset should be shared in accordance with these Regulations from 1.7.2011. However, since the generating station is not commissioned and the transmission assets are actually not being used, the sharing of transmission charges by the beneficiaries of other regions in accordance with actual usage based PoC Regulations is not justified. Therefore, till the commissioning of Koldam HEP generating units, the transmission charges should be borne by Northern Region beneficiaries only, in accordance with the agreements signed by Northern Region beneficiaries with the petitioner and NTPC, regarding the purchase of power from Koldam generating units and the payment of

transmission charges for the concerned Associated Transmission System (ATS), i.e. 400 kV Koldam-Nalagarh D/C transmission line along with bays at Nalagarh.

74. In view of above, it is directed that petitioner shall not include the subject asset under Yearly Transmission Charges (YTC) to be recovered in accordance with PoC regulations till the commissioning of Koldam generating units and the transmission charges shall be billed separately to Northern Region beneficiaries in accordance with agreements with them. In similar case of Kudankulam Transmission System, for which the date of commercial operation and tariff was approved by the Commission in Petition Nos. 81/2010 and 307/2010, respectively, the beneficiaries had to pay transmission charges without utilisation of the assets.

75. This order disposes of Petition Nos. 2/TT/2011 and 57/TT/2011

(M. Deena Dayalan)
Member

(V.S. Verma)
Member

(S. Jayaraman)
Member

Annexure-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2010-11
1	Bond XXIV	
	Gross loan opening	400.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	400.00
	Additions during the year	0.00
	Repayment during the year	33.33
	Net Loan-Closing	366.67
	Average Loan	383.33
	Rate of Interest	9.95%
	Interest	38.14
	Rep Schedule	12 annual installments from 26.3.2011
2	Bond XXIX	
	Gross loan opening	641.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	641.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	641.00
	Average Loan	641.00
	Rate of Interest	9.20%
	Interest	58.97
	Rep Schedule	12 annual installments from 12.3.2013
3	Bond XXVIII	
	Gross loan opening	4100.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	4100.00
	Additions during the year	0.00

	Repayment during the year	0.00
	Net Loan-Closing	4100.00
	Average Loan	4100.00
	Rate of Interest	9.33%
	Interest	382.53
	Rep Schedule	12 annual installments from 15.12.2012
4	Bond XXXI	
	Gross loan opening	869.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	869.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	869.00
	Average Loan	869.00
	Rate of Interest	8.90%
	Interest	77.34
	Rep Schedule	12 annual installments from 25.2.2014
5	Bond XXX	
	Gross loan opening	626.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	626.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	626.00
	Average Loan	626.00
	Rate of Interest	8.80%
	Interest	55.09
	Rep Schedule	12 annual installments from 29.9.2013
6	Bond XXVII	
	Gross loan opening	5561.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00

	Net Loan-Opening	5561.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5561.00
	Average Loan	5561.00
	Rate of Interest	9.47%
	Interest	526.63
	Rep Schedule	12 annual installments from 31.3.2012
	Total Loan	
	Gross loan opening	12197.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00
	Net Loan-Opening	12197.00
	Additions during the year	0.00
	Repayment during the year	33.33
	Net Loan-Closing	12163.67
	Average Loan	12180.33
	Rate of Interest	9.3487%
	Interest	1138.70

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakhs)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXIV			
	Gross loan opening	544.00	544.00	544.00
	Cumulative Repayment upto date of commercial operation/previous year	45.33	90.67	136.00
	Net Loan-Opening	498.67	453.33	408.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	45.33	45.33	45.33
	Net Loan-Closing	453.33	408.00	362.67
	Average Loan	476.00	430.67	385.33
	Rate of Interest	9.950%	9.950%	9.950%
	Interest	47.36	42.85	38.34
	Rep Schedule	12 Annual instalments from 26.3.2011		
2	Bond XXXIII			
	Gross loan opening	139.00	139.00	139.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	0.00
	Net Loan-Opening	139.00	139.00	139.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	139.00	139.00	139.00
	Average Loan	139.00	139.00	139.00
	Rate of Interest	8.640%	8.640%	8.640%
	Interest	12.01	12.01	12.01
	Rep Schedule	12 Annual instalments from 08.07.2014		
3	Bond XXIX			
	Gross loan opening	641.00	641.00	641.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	53.42
	Net Loan-Opening	641.00	641.00	587.58
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	53.42	53.42
	Net Loan-Closing	641.00	587.58	534.17
	Average Loan	641.00	614.29	560.88
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	58.97	56.51	51.60
	Rep Schedule	12 Annual instalments from 12.3.2013		
4	Bond XXVIII			
	Gross loan opening	4100.00	4100.00	4100.00

	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	341.67
	Net Loan-Opening	4100.00	4100.00	3758.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	341.67	341.67
	Net Loan-Closing	4100.00	3758.33	3416.67
	Average Loan	4100.00	3929.17	3587.50
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	382.53	366.59	334.71
	Rep Schedule	12 annual Instalments from 15.12.2012		
5	Bond XXXIV			
	Gross loan opening	34.85	34.85	34.85
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	0.00
	Net Loan-Opening	34.85	34.85	34.85
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	34.85	34.85	34.85
	Average Loan	34.85	34.85	34.85
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	3.08	3.08	3.08
	Rep Schedule	12 Annual instalments from 21.10.2014		
6	Bond XXXI			
	Gross loan opening	869.00	869.00	869.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	0.00
	Net Loan-Opening	869.00	869.00	869.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	72.42
	Net Loan-Closing	869.00	869.00	796.58
	Average Loan	869.00	869.00	832.79
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	77.34	77.34	74.12
	Rep Schedule	12 Annual instalments from 25.2.2014		
7	Bond XXX			
	Gross loan opening	626.00	626.00	626.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	0.00
	Net Loan-Opening	626.00	626.00	626.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	52.17

	Net Loan-Closing	626.00	626.00	573.83
	Average Loan	626.00	626.00	599.92
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	55.09	55.09	52.79
	Rep Schedule	12 Annual instalments from 29.9.2013		
8	Bond XXVII			
	Gross loan opening	5600.00	5600.00	5600.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	466.67	933.33
	Net Loan-Opening	5600.00	5133.33	4666.67
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	466.67	466.67	466.67
	Net Loan-Closing	5133.33	4666.67	4200.00
	Average Loan	5366.67	4900.00	4433.33
	Rate of Interest	9.47%	9.47%	9.47%
	Interest	508.22	464.03	419.84
	Rep Schedule	12 Annual instalments from 31.3.2012		
	Total Loan			
	Gross loan opening	12553.85	12553.85	12553.85
	Cumulative Repayment upto date of commercial operation/previous year	45.33	557.33	1464.42
	Net Loan-Opening	12508.52	11996.52	11089.43
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	512.00	907.08	1031.67
	Net Loan-Closing	11996.52	11089.43	10057.77
	Average Loan	12252.52	11542.98	10573.60
	Rate of Interest	9.3418%	9.3347%	9.3298%
	Interest	1144.61	1077.51	986.49