CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 288/TT/2013

Coram:
Shri Gireesh B. Pradhan, Chairman
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member

Date of Hearing: 01.09.2014
Order issued on:25.08.2015

In the matter of:

Approval of date of commissioning of LILO of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur under transmission system associated with Rampur HEP under Regulation 3(12)(c) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and transmission tariff of the said asset in Northern Region for tariff block 2009-14 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 read with Regulations 24 and 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999.

And In the matter of:

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

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
   Vidyut Bhawan, Vidyut Marg,
   Jaipur- 302 005

2. Ajmer Vidyut Vitran Nigam Limited,
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur

3. Jaipur Vidyut Vitran Nigam Limited,
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur

4. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur

5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004

6. Punjab State Power Corporation limited,
Thermal Shed T-1A, Patiala

7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109

8. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001

10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002

11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place
New Delhi

12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place
New Delhi

13. Tata Power Distribution Limited,
33 kV Sub-station Building,
Hudson Lane, Kingsway Camp,
North Delhi-110 009

14. Chandigarh Administration,
Sector-9, Chandigarh

15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun

16. North Central Railway,
Allahabad

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002

18. Satluj Jal Vidyut Nigam Limited,
Himfed Building,
New Shimla-171 009 **….Respondents**

For petitioner: Shri Swapnil Verma, PGCIL
Shri P. Saraswat, PGCIL
Shri S.S. Raju, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Mohd. Mohsin, PGCIL
Shri Rakesh Prasad, PGCIL
Ms. Sangeeta Edwards, PGCIL

For respondents: Shri R.B. Sharma, Advocate, BRPL
Shri Padamjit Singh, PSPCL

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of date of commissioning and transmission charges for LILO of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur under transmission system associated with Rampur HEP in Northern Region for the tariff block 2009-2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. This order has been issued after considering the petitioner's affidavits dated 31.12.2013, 10.3.2014, 28.5.2014 and 29.1.2015.

3. The investment approval (IA) for the project was accorded by the Board of the Directors of the petitioner vide letter no. C/CP/Rampur HEP/14 dated 20.2.2009 at an estimated cost of ₹18419 lakh, including IDC of ₹1416 lakh (Based on 4th Quarter, 2008 price level). The project was to be commissioned within 33 months from the date of IA. Therefore, the scheduled date of commissioning of the transmission project was 19.11.2011 say 1.12.2011.

4. The scope of work covered under the project is as follows:-

Transmission lines:

(1) Patiala-Ludhiana 400 kV D/C line	: 78 km
(2) LILO of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur	: 4 km
(3) LILO of Patiala-Hissar 400 kV (Triple Snowbird) line at Kaithal	: 33 km

Sub-stations:

(1) Extension of Patiala 400/220 kV (PGCIL) Sub-station
(2) Extension of Ludhiana 400/220 kV (PGCIL) Sub-station
(3) Extension of Kaithal 400/220 kV (PGCIL) Sub-station

5. The petitioner in the original petition, initially claimed transmission charges for the instant asset from the anticipated date of commercial operation (COD) i.e. 1.12.2013. However, the petitioner vide affidavit dated 10.3.2014 submitted that only a part of the asset i.e. LILO of 1st Ckt. of 400 kV Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur has been put under commercial operation on 1.3.2014 which falls under tariff period 2009-14 and the other part of the asset i.e. LILO of 2nd

Ckt. of 400 kV Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur has not yet been commissioned and is expected to be commissioned in the 2014-19 tariff period. Accordingly, LILO of 1st Ckt. of 400 kV Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur (hereinafter referred to as "transmission asset") is only covered in the instant petition.

6. The petitioner was directed to submit revised tariff forms along with management/auditors' certificates for 1st Ckt. as per the actual COD, revised petition for 2nd Ckt. as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Minutes of the 29th Meeting of Standing Committee on Transmission System Planning of Northern Region held on 29.10.2010. The petitioner vide affidavit dated 1.5.2014 submitted the management certificate dated 11.3.2014 along with revised tariff forms for the expenditure of LILO of 1st Ckt. of 400 kV Nathpa Jhakri-Nalagarh (Triple Snowbird) line at Rampur based on the actual date of commercial operation i.e. 1.3.2014.

7. The petitioner had prayed for approval of provisional tariff as per clause (4) of Regulation 5 of the 2009 Tariff Regulations. The provisional tariff was granted vide order dated 26.9.2014 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

8. The petitioner has claimed the transmission charges for the instant asset as overleaf:-

(₹ in lakh)

Particulars	2013-14
Depreciation	6.53
Interest on Loan	7.70
Return on Equity	6.46
Interest on Working Capital	0.47
O & M Expenses	0.17
Total	**21.33**

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

(₹ in lakh)

Particulars	2013-14
Maintenance Spares	0.31
O & M expenses	0.17
Receivables	42.66
Total	**43.14**
Rate of Interest	13.20%
Interest	**0.47**

10. 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. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, BSES Rajdhani Power Limited (BRPL), Respondent No. 12, Satluj Jal Vidyut Nigam Limited (SJVN), Respondent No. 18 and Punjab State Power Corporation Limited (PSPCL), Respondent No. 6 have filed replies to the petition. The petitioner has filed rejoinders to the replies of the BRPL, SJVNL and PSPCL. The respondents have mainly raised the issues like COD, cost over-run, time over-run, IDC and IEDC, rate of interest, service tax, license fee, etc. The objections of the respondents and

submissions of the petitioner have been dealt with in the relevant paragraphs of this order.

11. We have considered the submissions of the petitioner, respondents and perused the material on record and we proceed to dispose of the petition.

Capital Cost

12. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

"(1) Capital cost for a project shall include:-

(a) 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.

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

> Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff."

13. The petitioner has submitted the details of apportioned approved cost, actual expenditure as on COD and estimated additional capitalization. The details are as under:-

(₹ in lakh)

Apportioned approved cost	Expenditure upto COD i.e. 1.3.2014	Projected expenditure from 1.3.2014 to 31.3.2014	Total estimated completion cost upto 31.3.2014
864.29	1466.01	25.00	1491.01

Date of commercial operation and time over-run

14. As per the IA dated 20.2.2009 the instant asset was scheduled to be commissioned in 33 months, i.e. by 1.12.2011. However, the instant asset has been put into commercial operation on 1.3.2014. Thus, there is a delay of 27 months in commissioning of the instant asset.

15. The petitioner submitted that during 29th Meeting of Standing Committee on Transmission System Planning of Northern Region held on 29.12.2010, it was agreed by the beneficiaries that LILO of Nathpa Jhakri-Nalagarh 400 KV D/C Line at Rampur would be commissioned, matching with the commissioning of Rampur HEP. As Rampur HEP was delayed, LILO of Nathpa Jhakri-Nalagarh at Rampur HEP was also delayed to match the generation. The commissioning of Rampur HEP was shifted to 12th Plan during the 15th meeting of TCC and 16th meeting of NRPC held on

15th & 16th April, 2010. As per minutes dated 16.12.2010 for 17th meeting of TCC and 18th meeting of NRPC, commissioning schedule of Rampur HEP was revised from March 2012 to September 2013. Accordingly, the commissioning of the transmission line was also delayed.

16. The petitioner further submitted that the delay in commissioning of the asset was also due to delay in the Forest Clearance in Anni Division (area=12.5924 hectare) & Rampur Division (area=0.8589 hectare). For Anni division the clearance for Stage-I was obtained on 13.2.2013 and the clearance for stage-II was obtained on 3.4.2013. The FRA certificate was also not received for Rampur division. The total numbers of towers in the LILO line were 12 Nos., out of which 10 were in Anni division and 2 in Rampur division. Out of total 10 Nos. of towers in Anni division, 7 Nos. were in the forest area and 3 Nos. in non-forest area, whereas both 2 Nos. of towers in Rampur division is in forest area.

17. The petitioner further submitted that they had commenced the work of transmission lines keeping in view the parallel time lines of the generation. However, the petitioner had to slow down the work due to subsequent shift/delay in the generation project but it was not feasible to delay the project to the extent of matching with the generation as such time extensions would have meant obvious implications for the petitioner which would have had a bearing on the project cost. The petitioner accordingly had taken up the execution to ensure that the line could be declared under commercial operation w.e.f. 1.12.2013.

18. During the hearing on 3.12.2013, the representative of the petitioner submitted that the transmission line was likely to be ready by 1.12.2013, but the petitioner was not able to charge the same because of non-readiness of the Rampur HEP. The instant case falls under the second proviso to Regulation 3(12)(c) of 2009 Tariff Regulations as it is prevented from putting the instant asset into effective use because of reasons attributable to the generation and not attributable to it and prayed to approve the date of commercial operation of the instant asset as 1.12.2013.

19. UPPCL has submitted that IDC and IEDC for delayed period may not be allowed. BRPL in its reply and as well as during the hearing on 13.3.2014, submitted that commercial operation date of the transmission assets will have to be first determined in accordance with the judgment of the Hon'ble Appellate Tribunal for Electricity (Tribunal) in Appeal No. 123 of 2011 and only then the capital cost of the assets be determined. SJVNL vide its reply dated 11.03.2014 and as well as during hearing on 13.3.2014 submitted that the petitioner's claim for non-readiness of respective transmission line due to non-readiness of generation is not correct. In case of LILO of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple snowbird) line at Rampur, the erection, commissioning and stringing on all the 12 towers, which the petitioner had to commission, were not complete and that there was no delay on the part of SJVNL. The main reason for delay as submitted by the petitioner themselves was due to delay in getting forest clearance of Anni and Rampur divisions, non-availability of FRA certificate for Rampur division and ROW issues. PSPCL in its reply submitted that the petitioner has neither submitted any details nor provided any supporting document for approval of the date of commissioning. Further, the commissioning of

the instant asset is not linked to delay in commissioning of Rampur HEP but to non-readiness of the 400 kV Switchgear.

20. PSPCL during the hearing on 13.3.2014 submitted that the line got delayed either because of generating station or due to delay in forest clearance. Hence, the beneficiaries should not be burdened with IDC and IEDC.

21. In response to a query of the Commission during hearing on 13.3.2014 as to why IDC and IEDC should be passed on to the beneficiaries, the petitioner submitted that all the beneficiaries in NRPC meetings had agreed that LILO of 400 kV D/C Nathpa Jhakri-Nalagarh would be commissioned matching with the Rampur HEP. The petitioner also submitted a copy of letter dated 31.10.2013 from SJVNL for revised schedule of commissioning and also minutes of the meeting held in the Ministry of Power on 31.1.2014 in this regard.

22. The petitioner, in response to the issues raised by BRPL, SJVNL and PSPCL in their respective replies has submitted in its rejoinders dated 30.10.2013 and 1.5.2014 that commissioning date of 1st Unit of Rampur HEP was revised to February, 2014 and remaining units by April, 2014 as per SJVNL letter dated 31.10.2013. The matter was also discussed in the meeting held on 31.1.2014 in the Ministry of Power and the revised date of commissioning was taken as February, 2014. Accordingly, commissioning of the transmission line was also delayed and same was commissioned on 1.3.2014, after completing the work on tower related to Ckt.-1 of LILO. Further, the delay in commissioning of line was also due to delay in getting

forest clearance, RoW issue including other reasons such as tough hilly terrain, huge volumes of benching, accessibility of location from road and hard rocky terrain etc.

23. While allowing provisional tariff of the instant asset vide order dated 26.9.2014, the petitioner was directed to file an affidavit stating clearly that the conditions of Regulation 3 (12) (c) of 2009 Tariff Regulation have been complied with in the instant case in terms of the judgment of the Tribunal in Appeal No. 123/2011. The relevant portion of the said order is extracted hereunder:-

> "7……. that in affidavit dated 3.3.2014, SJVNL has indicated the commissioning schedule of Unit I of RHEP as 23.3.2014. Further, SJVNL in its affidavit dated 11.3.2014 submitted that in the first week of March 2014, wet spinning on two units of RHEP has been made successfully and 2 units were likely to be synchronised with the Grid in the month of March, 2014. However by the submissions of the petitioner and SJVNL, it cannot be clearly concluded that the switch yard of RHEP was ready to declare the date of commercial operation of LILO of NJHEP-Nalagarh ckt–I on 1.3.2014 in line with findings of Hon'ble APTEL in Appeal No. 127/2011. The petitioner is directed to file an affidavit that the conditions of Regulation 3 (12) (c) of 2009 Tariff Regulation have been complied with in this case in terms of the judgment of the Hon'ble APTEL in Appeal No. 123/2011, which will be taken into consideration at the time of final tariff. However, for inclusion of asset in POC, we provisionally approve the date of commercial operation of the transmission asset as 1.3.2014 and allow the provisional tariff, which will be effective from that date. It is however clarified that the generating company shall bear the transmission charges till the COD of the Unit I of RHEP in accordance with Regulation 8(6) of the Sharing Regulations.

24. In response to observations of the Commission in aforementioned order, the petitioner, vide affidavit dated 29.1.2015 has submitted that the transmission asset was successfully charged on 28.2.2014 and declared under commercial operation on 1.3.2014. All the relevant tests/checks are carried out before charging and once successfully test charged the transmission elements are available for regular service. The LILO was under regular operation since its charging on 28.2.2014, however, the line started carrying power from Rampur HEP w.e.f. 19.3.2014. The petitioner submitted that the metering arrangement and the complete wiring for special energy

meters in Rampur HEP end was completed on 2.12.2013. The petitioner further submitted that all the three conditions prescribed in the Tribunal's judgement is achieved and prayed to approve the date of commercial operation under Regulation 3(12)(c) of the 2009 Tariff Regulations.

25. SJVNL vide affidavit dated 27.1.2015, submitted that 1st unit of Rampur HEP was synchronized on 19.3.2014 and declared under commercial operation on 13.5.2014.

26. We have considered the submissions of the petitioner and the respondents. The petitioner has submitted the details of hourly power flow from 26.2.2014 to 30.4.2014, COD certificate and the approval for energisation of the transmission asset under Regulation 43 of CEA (Measures Relating to Safety and Electric Supply) Regulations, 2010. We are of the considered view that the petitioner, after being test charged, was ready with the instant asset for utilisaton on 1.3.2014, but was prevented from providing service as SJVNL was not ready with the Rampur HEP generation. As such, we approve the COD of the instant transmission asset as 1.3.2014. Accordingly, the transmission charges for the instant transmission asset shall be borne by SJVNL from 1.3.2014 to 12.5.2014, i.e. the commissioning of the first unit of Rampur HEP as provided Under Regulation 8(6) of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses).

27. As regards time over-run, there is a delay of 27 months in commissioning of the instant asset. The petitioner has submitted documents indicating the detailed chronology of events with regard to scheduled commissioning of Rampur HEP and

its revisions, forest clearance in Anni Division and court case for RoW issues. We have considered the replies of the respondents and the submissions of the petitioner and after a careful and detailed analysis have come to the conclusion that the LILO of 1st ckt of Nathpa Jhakri-Nalagarh T/L at Rampur has been delayed due to shifting of commissioning of Rampur HEP from March, 2012 to September, 2013 and finally to February, 2014. The delay in commissioning was also due to forest clearance which took 22 months (from 15.6.2011 to 3.4.2013) and the court case which took 7 months (from date of forest clearance 3.4.2013 to 22.10.2013). However, the delay in forest clearance as well as time taken by the court was beyond the control of the petitioner. The main delay was in commissioning of Rampur HEP which was rescheduled for commissioning to February, 2014 from the original schedule of March, 2012 and the 1st Unit of Rampur HEP was synchronized on 19.3.2014. Accordingly, the LILO of transmission line was delayed due to late commissioning of generation. The LILO of Ckt-1 was charged on 1.3.2014 before COD of generation (13.5.2014). Therefore, the total delay of 27 months in the commissioning of the instant asset is condoned.

Cost over-run

28. The total estimated completion cost of the instant asset is ₹1491.01 lakh against the apportioned approved cost of ₹864.29 lakh. Thus, there is cost over-run in the instant case. In addition, there is substantial variation in cost of certain items as per Form-5B submitted for the instant asset. UPPCL has submitted that the petitioner be directed to provide reasons of increase in the cost of various items as the petitioner has not explained the cost over-run properly. PSPCL has

also made similar submissions. The petitioner was directed to submit the reasons for increase in overall cost by 111.05% along with documentary evidence and for the cost variation under certain heads.

29. The petitioner vide affidavit dated 10.3.2014 submitted that the total cost for the asset "LILO of 400 kV D/C Nathpa Jhakri-Nallagarh (Triple Snowbird) line at Rampur" as per FR is ₹1178.48 lakh including IEDC of ₹122.09 lakh and IDC of ₹86.01 lakh, whereas actual cost of the asset is ₹2487.20 lakh including IEDC of ₹6.34 lakh and IDC of ₹211.23 lakh. Thus, the total increase is of about ₹1300 lakh. The cost variation is due to higher tender cost although for procurement, open competitive bidding route is followed by providing equal opportunity to all eligible firms. Through this process, lowest possible market price for required product/services/as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements, whereas, the estimates are prepared by the petitioner as per well defined procedures for cost estimate. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. The petitioner has further submitted that the difference in FR cost and actual cost in case of erection, stringing and civil works is due to variation in unit erection rates and erection quantities on account of actual site condition. The variation in cost in case of preliminary investigation, Right of Way, forest clearance, PTCC, general civil works etc. is due to increase in actual cost. The petitioner has also submitted comparative statement

indicating major items, unit, quantity, unit erection charges, total erection charges as per FR and as per actual.

30. There is substantial variation in the actual cost of a number of items as compared to the FR estimates. The petitioner has not submitted the cost details of projects which formed the basis of preparation of FR. The petitioner has simply submitted a stock reply that the estimates are prepared as per well defined procedure and the best competitive bid price against the tender may vary as compared to the cost estimates depending upon prevailing market conditions. We are not convinced with the justification given by the petitioner for the increase in cost. In the absence of any reasonable justification, we are not inclined to allow the cost increase. Accordingly, the cost over-run in the instant petition is not allowed and the total estimated expenditure in case of the instant asset is restricted to the approved apportioned cost of ₹864.29 lakh. The petitioner is directed to submit proper and justified reasons, if any, for cost over-run in case of instant asset at the time of truing up.

IDC and IEDC

31. The petitioner has claimed ₹177 lakh as Interest During Construction (IDC) for the instant asset. As per the provisions of Regulation 7(1) read with Regulation 3(2) of the 2009 Tariff Regulations, IDC has to be worked out on cash basis. As per the details of loans as per Form-13 submitted by the petitioner and presuming that there has been no default in the payment of interest, IDC upto to date of commercial operation i.e. 1.3.2014 works out to ₹118.41 lakh. Therefore, amount of IDC accrued

as on the date of commercial operation and to be discharged after date of commercial operation has not been considered in capital cost on account of unavailability of adequate information. The undischarged liability would be considered once it is discharged subject to prudence check and submission of adequate information by the petitioner at the time of truing-up.

32. Similarly, the petitioner has claimed ₹16.63 lakh as Incidental Expenditure During Construction (IEDC) as on COD for the instant asset. As the detailed computations for the IEDC are not available, therefore, claimed IEDC as on COD has been considered for the purpose of the tariff calculation in the instant petition, in view of the claim being within the percentage on Hard Cost indicated in the Abstract Cost Estimates submitted by the petitioner in the original petition.

33. Regulation 9 of the 2009 Tariff Regulations, provides for the treatment of undischarged liabilities after the same are discharged. However, as the required information with regard to the IDC/IEDC actually discharged is not available, we are not inclined to allow the amount of IDC/IEDC as claimed by the petitioner. The petitioner is directed to submit the amount of IDC/IEDC paid and specific to the transmission asset considered in this petition upto the date of commercial operation and balance IDC/IEDC discharged after the date of commercial operation. The IDC/IEDC allowed, will be reviewed on submission of detailed working and actual cash expenditure information in Form 14A in respect of interest during construction and year wise details of actual incidental expenses during construction paid till COD, by the petitioner at the time of truing-up.

Treatment of Initial Spares

34. The petitioner has not claimed any initial spares in the instant petition. The capital cost as on 31.3.2014 deemed to be claimed by the petitioner for the purpose of transmission tariff in the instant petition after scrutiny of IDC/IEDC and Initial Spares is as under:-

(₹ in lakh)

Capital cost as on COD claimed including IDC/IEDC (A)	Amount of claim of IDC on accrual basis (B)	Amount of IDC allowable on cash basis (C)	Add-cap claimed for 2013-14 (D)	Total Capital Cost deemed to be claimed as on 31.3.2014 {(A)-(B)}+{(C)+(D)}
1466.01	177.00	118.41	25.00	1432.42

35. The total completion cost as on 31.3.2014 as worked out at para 34 above, is still higher than the apportioned approved cost of the instant asset. Therefore, as discussed at para 30, capital cost as on COD remains restricted to the apportioned approved cost of ₹864.29 lakh for the purpose of tariff.

Additional Capital Expenditure

36. Regulation 9 of the 2009 Tariff Regulations provides as follows:-

"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:

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system."

37. Clause (11) of Regulation 3 of 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 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".

38. Accordingly, the cut-off date for the instant asset is 31.3.2017.

39. The petitioner has claimed ₹25 lakh as additional capital expenditure for the period 1.3.2014 to 31.3.2014 under Clause 9(1) of the 2009 Tariff Regulations. The petitioner's claim of additional capitalisation is disallowed as the capital cost is being restricted to the apportioned approved cost.

Debt-Equity Ratio

40. Regulation 12 of the 2009 Tariff Regulations provides as follows:-

“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.”

41. The petitioner has claimed tariff based on debt: equity ratio of 70:30 for the instant transmission asset. The same debt: equity ratio has been considered in the case of instant asset.

42. The details of the debt: equity ratio considered for the purpose of tariff determination as on COD and as on 31.3.2014, are same as the capital cost has been restricted to the capital cost as on COD and are as under:-

(₹ in lakh)

Particulars	**Capital cost as on COD and as on 31.3.2014**	
	Amount	**(%)**
Debt	605.00	70.00
Equity	259.29	30.00
Total	**864.29**	**100.00**

Return on Equity

43. Regulation 15 of the 2009 Tariff Regulations provides for working out return on equity as under:-

> "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".

44. Accordingly, the return on equity has been computed as overleaf:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Opening Equity	259.29
Addition due to Additional capitalisation	-
Closing Equity	259.29
Average Equity	259.29
Return on Equity (Base Rate)	**15.50%**
Tax rate for the year 2008-09 (MAT)	11.33%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	**3.78**

45. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(5). Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.

Interest on Loan

46. 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."

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

a) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per the petition;

b) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period;

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

48. The detailed calculations in support of the weighted average rate of interest on loan are attached at Annexure to this order.

49. Details of the interest calculated on normative loan are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Gross Normative Loan	605.00
Cumulative Repayment upto Previous Year	-
Net Loan-Opening	605.00
Addition due to Additional capitalisation	-
Repayment during the year	3.82
Net Loan-Closing	601.19
Average Loan	603.10
Weighted Average Rate of Interest on Loan	8.9562%
Interest	**4.50**

Depreciation

50. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner:-

"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."

51. Clause 17 (4) of the 2009 Tariff Regulations provides that 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. It further provides 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 asset. The transmission asset in the instant petition was put on commercial operation during the financial year 2013-14 and will complete 12 years beyond 2013-14. Accordingly, the depreciation has been calculated as under:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Gross Block as on COD	864.29
Projected Additional Capitalization	-
Closing Gross Block	864.29
Average Gross Block	864.29
Rate of Depreciation	5.3001%
Depreciable Value	777.86
Remaining Depreciable Value	777.86
Depreciation	**3.82**

Operation and Maintenance Expenses (O&M Expenses)

52. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies norms for O&M Expenses for transmission system based on type of sub-stations and the transmission line. Norms specified in respect of O&M Expenses for assets covered in the petition are as follows:-

Elements	2011-12	2012-13	2013-14
Double circuit (twin and triple conductor) T/L (₹ lakh per km)	0.701	0.741	0.783

53. Accordingly, the petitioner's entitlement to O & M Expenses has been worked out as under:-

(₹ in lakh)

Elements	2013-14 (Pro-rata)
2.681 km D/C (twin and triple conductor) transmission line	0.17
Total	**0.17**

54. The petitioner has submitted that O&M Expenses for the year 2009-14 had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms for the years of tariff period. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further submitted that it may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

55. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. Further, while specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, also given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultation with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

Interest on Working Capital

56. The components of the working capital and the interest thereon are discussed hereunder:-

(i) 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 petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(ii) O & M Expenses

Regulation 18 (1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M expenses for the instant assets and value of

O & M expenses has accordingly been worked out by considering 1 month O & M Expenses.

(iii) Receivables

As per Regulation 18 (1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual transmission charges in the petition. In the transmission charges being allowed, receivables have been worked out on the basis of 2 months of transmission charges.

(iv) Rate of Interest on Working Capital

In accordance with the 2009 Tariff Regulations, SBI Base Rate as on 1.4.2013 i.e. 9.70% Plus 350 bps (13.20%) has been considered as the rate of interest on working capital. The interest on working capital for the instant asset has been worked out accordingly in the instant petition.

57. The necessary computation in support of the interest on working capital is as under:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Maintenance Spares	0.31
O & M expenses	0.17
Receivables	25.09
Total	**25.57**
Rate of Interest	13.20%
Interest	**0.28**

Transmission Charges

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

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Depreciation	3.82
Interest on Loan	4.50
Return on Equity	3.78
Interest on Working Capital	0.28
O & M Expenses	0.17
Total	**12.55**

Filing Fee and the Publication Expenses

59. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42 A (1) (a) of the 2009 Tariff Regulations.

Licence Fee

60. 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 bill and recover license fee separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

Service Tax

61. 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. The petitioner has clarified that if 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 petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

62. SJVNL shall bear the transmission charges for the instant asset, as stated in para 26 above, from 1.3.2014 to 12.5.2014, i.e. upto the commissioning of the first unit of Rampur HEP as provided under Regulation 8(6) of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses). Thereafter, the billing, collection and disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

63. This order disposes of Petition No. 288/TT2013.

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

Annexure

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	**2013-14**
1	**Bond XXXV**	
	Gross loan opening	12.70
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	12.70
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	12.70
	Average Loan	12.70
	Rate of Interest	9.64%
	Interest	1.22
	Rep Schedule	12 annual instalments from 31.05.2015.
2	**Bond XXXVI**	
	Gross loan opening	390.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	390.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	390.00
	Average Loan	390.00
	Rate of Interest	9.35%
	Interest	36.47
	Rep Schedule	15 annual instalments from 29.08.2016.
3	**Bond XXXVII**	
	Gross loan opening	**110.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**
	Net Loan-Opening	110.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	110.00
	Average Loan	110.00
	Rate of Interest	9.25%
	Interest	10.18
	Rep Schedule	12 annual instalments from 26.12.2015.
4	**Bond XXXVIII**	
	Gross loan opening	42.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	42.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	42.00
	Average Loan	42.00

	Rate of Interest	9.25%
	Interest	3.89
	Rep Schedule	Bullet Payment as on 09.03.2027
5	**Bond XL**	
	Gross loan opening	202.15
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	202.15
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	202.15
	Average Loan	202.15
	Rate of Interest	9.30%
	Interest	18.80
	Rep Schedule	12 annual instalments from 28.06.2016
6	**Bond XLIII**	
	Gross loan opening	269.36
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	269.36
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	269.36
	Average Loan	269.36
	Rate of Interest	7.93%
	Interest	21.36
	Rep Schedule	12 annual instalments from 28.05.2017
	Total Loan	
	Gross loan opening	1026.21
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1026.21
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1026.21
	Average Loan	1026.21
	Rate of Interest	**8.9562%**
	Interest	**91.91**