

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 156/TT/2015

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

Date of Order : 29.12.2016

In the matter of:

Approval of transmission tariff for **Asset-1:** 400 kV (Quad) 2xS/C Parbati-Koldam transmission line portion starting from Parbati-II HEP to LILO point of Parbati(Banala) Pooling Station to Koldam HEP (Ckt.-I) and **Asset-2:** Portion starting from Parbati-II HEP LILO point of Parbati-III HEP (Ckt.-II) in Northern Region for 2014-19 period under Regulation 86 of Central Electricity Regulatory Commission (Conduct of business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Parbati Koldam Transmission Company Limited,
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi-110 016

....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 TIA, Near 22 Phatak,
Patiala-147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
8. Power Development Department,
Government of Jammu & 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 Delhi Distribution Limited,
Cennet Building, Adjacent to 66/11kV Pitampura-3Grid Building,
Near PP Jewellers, Pitampura, New Delhi-110 034
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. Northern Region Electricity Board,
18-A, Shaheed Jeet Singh Marg,
Katwaria Sarai, New Delhi-110016



19. Power Grid Corporation of India Limited,
Saudamini, Plot No.-2, Sector-29
Gurgaon-122001 (Haryana)
20. National Hydro Power Corporation Limited,
NHPC Office Complex, Sector-33,
Faridabad, Haryana-121 003
21. NTPC Limited,
Scope Complex, Institutional Area,
Lodhi Road, Pragati Vihar,
New Delhi-110 016
22. Himachal Pradesh Power Corporation Limited,
Sainj (HEP), Himfed Bhawan, Below Old MLA Quarters,
Bypass Road, Tutikandi,
Shimla-171 005, Himachal Pradesh

....Respondents

For Petitioner : Shri Anil Rawal, PKTCL

For Respondents: None

ORDER

The instant petition has been filed by Parbati Koldam Transmission Company Limited (PKTCL), a joint venture company of Reliance Infrastructure Limited (RIL) (74%) and Power Grid Corporation of India Limited (PGCIL) (26%), incorporated under the Companies Act, 1956, seeking approval of transmission tariff for **Asset-1:** 400 kV (Quad) 2xS/C Parbati-Koldam transmission line, portion starting from Parbati-II HEP to LILO point of Parbati(Banala) Pooling Station to Koldam HEP (Ckt.-I) and **Asset-2:** Portion starting from Parbati-II HEP LILO point of Parbati-III HEP (Ckt.-II) (hereinafter referred to as “transmission asset”) in Northern Region for Tariff block 2014-19 under Central Electricity Regulation Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).



Background

2. The petitioner was entrusted with implementation of inter-State transmission system comprising the 400 kV (Quad) transmission lines for evacuation of power from the 4x200 MW Parbati-II Hydroelectric Power Project (“Parbati-II HEP”) and 4x200 MW Koldam Hydroelectric Power Project (“Koldam HEP”) in the state of Himachal Pradesh for its onward transmission to the beneficiary states in the Northern Region. The Standing Committee on Transmission System Planning of Northern Region, in its 14th and 15th meetings held on 30.12.2002 and 30.5.2003 respectively, approved the construction of the Project i.e., the Associated Transmission System for Koldam HEP implemented by NTPC and Parbati-II HEP implemented by NHPC Ltd. In a meeting held on 19.12.2011, it was reiterated that as agreed in earlier meetings, the petitioner’s lines shall continue to be part of a composite transmission scheme for Parbati II, Parbati III and Koldam Hydro Electric Power Project (“Koldam HEP”). A tender for selection of Joint Venture Partner (JVP) was floated by PGCIL on 2.2.2004 and Reliance Infrastructure Ltd. was selected as JVP for implementation of the project on 26.12.2005. In the meantime, PGCIL prepared the Feasibility Report on the basis of the Ministry of Power order dated 7.9.2005, granting Investment Approval for the transmission system associated with Koldam HEP. Ministry of Power decided to get the project executed on Build, Own and Operate (BOO) basis instead of initial approval for execution on Build, Own, Operate and Transfer (BOOT) basis. The petitioner company was formed on 23.11.2007 by executing Share Holders Agreement between Reliance Energy Ltd. and PGCIL and an Implementation Agreement was entered into between Reliance Energy Ltd. and PGCIL on 23.11.2007. As per para 2.0 of Schedule 5 of the



Implementation Agreement, the project consists of following transmission lines:-

Transmission line	Route length
(i) Parbati-Koldam 400 kV (Quad)	
a) S/C line-I	61 km
b) S/C line-II	68 km
c) D/C line	20 km
d) S/C line (Realignment at Koldam)	3 km
(ii) Koldam-Ludhiana 400 kV D/C (Triple ACSR)	153 km

3. Thereafter, the petitioner applied for grant of transmission licence on 17.3.2008 and was granted transmission licence by the Commission on 15.9.2008 to construct, maintain and operate for a period of 25 years the following transmission assets-(a) 400 kV S/C Parbati-Koldam transmission line-I (Quad Moose conductor) (b) 400 kV S/C Parbati-Koldam transmission line-II (Quad Moose conductor) (c) 400 kV D/C Parbati-Koldam transmission line (Quad Moose conductor) and (d) 400 kV D/C Koldam-Ludhiana transmission line (Triple Snowbird conductor).

4. Thereafter, Bulk Power Transmission Agreements (BPTA) were executed between PKTCL and Northern Region beneficiaries for supply of power from Parbati-II HEP, as the transmission system for evacuation of power of Parbati-II HEP was entrusted to PKTCL and that of Parbati-III HEP was entrusted to PGCIL.

5. Subsequently, in the 30th meeting of Standing Committee of Northern Region held on 19.12.2011, it was reiterated that as agreed in the 14th, 15th and 16th meetings of Standing Committee of Northern Region, the transmission lines as a composite transmission scheme for Parbati II, Parbati III and Koldam Hydro Electric Projects (HEPs) to be executed by the petitioner, were still required, but some changes in priorities were envisaged, due to commissioning



of Parbat-III-HEP and on account of delay in Parbati II-HEP. As such, the tariff for one element i.e. (3.518 km) section of 400 kV (Quad) S/C Parbati-II Koldam Transmission Line (Ckt-II) starting from LILO point of Parbati-III HEP to LILO point of Parbati Pooling Station, was claimed by the petitioner and allowed vide order dated 15.1.2016 in Petition No. 297/TT/2013. Thereafter, the petitioner has filed Petition No. 312/TT/2014 for final tariff of both circuits of 400 kV D/C Koldam-Ludhiana transmission line (Triple Snowbird Conductor) and Petition No. 384/TT/2014 for final tariff of both circuits comprising of 129.02 ckt. km section starting from LILO point of Parbati (Banala) Pooling Point to Koldam HEP, 2x400 kV (Quad) S/C Parbati-II to Koldam.

6. The administrative approval to the transmission system of 2xS/C 400 kV Parbati-Koldam transmission lines, to be executed by PKTCL, was given by the Board of Directors of PGCIL on 20.12.2005 at an estimated cost of the project of ₹35842 lakh including IDC of ₹2905 lakh (based on 2nd Quarter, 2005 price level). In addition, the administrative approval and expenditure sanction to the transmission project of Koldam-Ludhiana 400 kV D/C transmission line (Triple Aluminum Conductor Steel Reinforced) (also to be executed by PKTCL) was also accorded by the Ministry of Power (MoP) vide order No. 12/19/2003-PG dated 7.9.2005 for ₹30195 lakh including IDC of ₹2048 lakh (based on 2nd Quarter, 2005 price level). The project was scheduled to be completed in time frame of 36 months from the date of Investment Approval (IA) to match the commissioning of generation project.

7. Thereafter, a cost estimate of the combined transmission project was submitted for financing purpose and approved by the lenders and also admitted



by the Board of Directors of PKTCL in meeting held on 23.8.2010 for ₹110169 lakh including an IDC of ₹17267 lakh. Subsequently, the Revised Cost Estimate of the combined transmission project was approved by the Board of Directors of PKTCL vide meeting held on 19.5.2014 for ₹100653 lakh including IDC of ₹14340 lakh (based on November, 2013 price level). The details of the project costs are as follows:-

- a. Transmission system associated with Parbati-Koldam transmission lines-₹50897 lakh, including IDC of ₹7438 lakh.
- b. Transmission system associated with Koldam-Ludhiana transmission line-₹49756 lakh, including IDC of ₹6901 lakh.

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

Transmission Lines

- (i) 400 kV S/C Parbati-Koldam transmission line-I (Quad Moose Conductor);
- (ii) 400 kV S/C Parbati-Koldam transmission line-II (Quad Moose Conductor);
- (iii) 400 kV D/C Parbati-Koldam transmission line (Quad Moose Conductor); and
- (iv) 400 kV D/C Koldam-Ludhiana transmission line (Triple Snowbird Conductor).

9. However, based on the proceedings of 26th, 29th and 32nd meetings of Standing Committee Meeting of Power System Planning of Northern Region held on 13.10.2008, 29.12.2010 and 31.8.2013 respectively and the 26th TCC and 29th NRPC meetings held on 12.9.2013 and 13.9.2013 respectively, it was decided to apportion the complete 2XS/C line of Parbati-Koldam (Ckt-I and Ckt-II of Quad Moose conductor) traversing the total length of about 157 ckt. km to three distinct sections for the commissioning purposes as follows:-



(i) Section-I: 3.518 ckt. km section of the Ckt.-II of the 2x400 kV S/C Parbati-Koldam TL starting from LILO point of Parbati III HEP to LILO point of Parbati (Banala) Pooling Station (COD August, 2013)-(Tariff claimed in Petition No. 297/TT/2013).

(ii) Section-II: 129.02 ckt. km section starting from LILO point of Parbati (Banala) Pooling Point to Koldam HEP, 2x400 kV (Quad) S/C Parbati-II to Koldam-(Tariff claimed in Petition No. 384/TT/2014).

(iii) Section-III: 24 ckt. km section starting from LILO point of Parbati-III to Parbati-II having a line length of 8.25 km of S/C and from Parbati (Banala) Pooling point to Parbati-II with a line length of 12.838 km of S/C along with a stretch of 1.511 km of Double Circuit.

10. This order is issued after considering PKTCL's affidavits dated 21.7.2015 (filed before the bench), 4.9.2015, 18.12.2015, 22.12.2015, 11.2.2016, and 31.8.2016.

11. The petitioner, as per the original petition, claimed tariff for Section of 400 kV (Quad) 2xS/C Parbati-Koldam Transmission line, starting from Parbati-II HEP to LILO point of Parbati (Banala) Pooling Station for Circuit-I and from Parbati-II HEP to LILO point of Parbati-III HEP for Circuit-II, which was included in the original scope of work of Parbati HEP transmission system entrusted to PKTCL as per implementation agreement entered into between PGCIL and PKTCL as well as transmission licence granted by the Commission to PKTCL.

12. Annual Fixed Charges (AFC) for the transmission assets were allowed vide order dated 30.12.2015 under Regulation 7(7) of the 2014 Tariff



Regulations, subject to adjustment as per the said Regulation and final decision on COD of the instant assets after hearing NHPC and Sainj HEP.

13. The petition was heard on 21.7.2015 and the petitioner was directed to file certain information. The petitioner in reply vide affidavit dated 4.9.2015, has submitted the information and split the asset into two different assets as under:-

Name of the Assets
Asset-I: Starting from Parbati-II HEP to LILO point of Parbati Pooling Station (Ckt-I)
Asset-II: Starting from Parbati-II to HEP LILO point of Parbati-III HEP (Ckt-II)

14. The details of claim of the petitioner for the transmission charges for the instant assets are as follows:-

(₹ in lakh)

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	164.57	246.23	255.61	255.61
Interest on Loan	277.29	390.06	373.64	340.50
Return on Equity	184.96	277.04	287.49	287.49
Interest on working capital	14.81	21.54	21.64	20.89
O & M Expenses	6.83	9.39	9.70	10.03
Total	648.45	944.27	948.07	914.52

Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	144.44	216.13	224.35	224.35
Interest on loan	243.39	342.37	327.95	298.87
Return on equity	162.34	243.17	252.33	252.33
Interest on working capital	13.00	18.91	18.99	18.34
O & M Expenses	6.00	8.24	8.52	8.80
Total	569.17	828.81	832.15	802.69

15. The petitioner's claim for interest on working capital is as under:-

(₹ in lakh)

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	1.36	1.41	1.46	1.50



O & M Expenses	0.76	0.78	0.81	0.84
Receivables	143.84	157.38	158.01	152.42
Total	145.96	159.57	160.28	154.76
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	19.70	21.54	21.64	20.89

Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	1.20	1.24	1.28	1.32
O & M Expenses	0.67	0.69	0.71	0.73
Receivables	126.25	138.14	138.69	133.78
Total	128.12	140.07	140.68	135.83
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	13.00	18.91	18.99	18.34

16. 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. NHPC Limited (NHPC), Respondent No. 20 and Himachal Pradesh Power Corporation Ltd. (HPPCL), Respondent No. 22, (who were impleaded as respondents in terms of Commissions' directions as on 30.12.2015) have filed replies vide affidavits dated 30.1.2016 and 12.5.2016 respectively. Both NHPC and HPPCL in their replies have submitted that they are not responsible for the delay in commissioning of instant assets. The petitioner has not filed rejoinders to the replies of NHPC and HPPCL. The objections raised by the respondents are addressed in the relevant paragraphs of this order.

Approval of COD

17. The petitioner has claimed commercial operation w.e.f. 30.6.2015. The petitioner has submitted approval of CEA dated 30.6.2015 for energisation under Regulation 43 of Central Electricity Authority (Measures relating to safety and Electric Supply) Regulations, 2010 and a copy of NRLDC certificate of trial operation dated 20.7.2015 towards idle charging of 400 kV Banala (PG)-



Parbati-II (NHPC) transmission line. Further, the petitioner vide affidavit dated 22.12.2015 has submitted the NRLDC certificate of trial operation dated 30.11.2015 for starting of power flow through its portion of 400 kV Banala (PG)-Parbati-II (NHPC) transmission line and successful trial run operation of Circuit-I Parbati-II to LILO point of Banala Pooling Station and Circuit-II Parbati-II to LILO point of Parbati-III HEP on 3.11.2015.

18. The petitioner has further submitted that inspite of finishing construction on both the circuits and obtaining the energisation certificate, it was not able to charge the said line, as the bay to which the Circuit-II of the Parbati-III-Koldam lines connects at Parbati-III, was not charged by NHPC, as is evident from NHPC's email dated 2.7.2015 and therefore the petitioner was prevented from charging and putting the Parbati-III-Koldam lines to regular use and that the construction and commissioning of the said bay is the responsibility of NHPC. Therefore, the petitioner, on account of delay of NHPC in charging the bays, has been prevented from charging and putting the Parbati-III-Koldam lines to regular use. The petitioner has also submitted that at the 114th OCC meeting held on 17.8.2015, in NRPC, NHPC's representative has admitted that the charging of the bay is delayed further by one month. Therefore, the petitioner has prayed that the case accordingly qualifies for approval of the date of commercial operation (COD) as 30.6.2015 for instant assets prior to the element coming into regular service and grant of consequential tariff to it.

19. The dates of commercial operation of Asset-I and Asset-II were not approved by the Commission in order dated 30.12.2015, while allowing AFC under Regulation 7(7) of the 2014 Tariff Regulations which was left to be



decided at the time of final tariff after hearing NHPC and Sainj HEP. The relevant portion of the order is as under:-

“8. None of the respondents, including NHPC and Sainj HEP, made submissions during the hearing on 22.12.2015. As observed earlier, we would like to hear NHPC and Sainj HEP before approving the date of COD as claimed by the petitioner. As the instant assets were charged by the petitioner on 3.11.2015 and the power is flowing, we allow recovery of transmission tariff from 3.11.2015. The claim of the petitioner with regard to COD and sharing of transmission charges from COD to 2.11.2015 shall be decided at the time of final tariff after hearing NHPC and Sainj HEP.”

20. NHPC, in response, vide affidavit dated 30.1.2016 has submitted that the claim made by the petitioner on non-commissioning/commissioning of switchyard/Gantry of Parbati-II HEP is not correct, as erection at GIS & Pot Head Yard of Parbati-II is under progress and is scheduled to be commissioned in September, 2018. However, 2nd evacuation line of Parbati-III has been charged by passing Parbati-II GIS on 2.11.2015 and power flow started on 3.11.2015. Further, commissioning of bay at Parbati-II was in no way required for immediate charging of this line and NHPC also suggested exploring possibility of power flow in second evacuation circuit of Parbati-III power station by by-passing Parbati-II HEP Project vide letter dated 18.8.2015. Therefore, NHPC has requested to allow the AFC to the petitioner for the subject line segment w.e.f. 3.11.2015, and not from 30.6.2015.

21. As per proviso (ii) of Regulation 4 (3) of the 2014 Tariff Regulations, in case of non-readiness of downstream/upstream system, the transmission licensee shall approach the Commission for approval of the COD of such transmission system. Regulation 4(3) of the 2014 Tariff Regulations, provides as under:-



"4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxxxx]

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

Provided that:

i) Where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:

ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."

22. Thus, an element of the transmission system can be in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end. Regulation 5(2) of the 2014 Tariff Regulations specifies as follows:-

"5. Trial Run and Trial Operation.-

(2) Trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power, and communication signal from sending end to receiving end and with requisite metering system, telemetry and protection system in service enclosing certificate to that effect from concerned Regional Load Dispatch Centre."

23. In the light of the above statutory provisions, we have considered the submissions of the petitioner and NHPC and the documents available on



record. It is observed that the petitioner was ready with the circuit-I and circuit-II of Parbati-III-Koldam line for charging after receiving the 'Approval for Energization' certificate from CEA under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010 on 30.6.2015. The upstream 400 kV bays for the Parbati-III-Koldam line were within the scope of NHPC and were required to be matched with the commissioning of Parbati-III-Koldam line for regular service of the transmission line. These upstream 400 kV bays for the Parbati-III-Koldam line at Parbati-II pot head yard of NHPC was not ready on 30.6.2015, but ckt.-I and ckt.-II of Parbati-III-Koldam line were commissioned on 30.6.2015. However, actual power flow started on Parbati-III-Koldam line on 3.11.2015 and Parbati-III-Koldam line is being put to use only with effect from 3.11.2015. Since Parbati-III-Koldam line did not fulfill the condition of successful trial operation on 30.6.2015, the said line could not be said to be ready for declaration of commercial operation. Accordingly, we are not inclined to approve the petitioner's prayer for approval of COD of the ckt.-I and ckt.-II of Parbati-III-Koldam line as 30.6.2015 under Regulation 4(3)(ii) of the 2014 Tariff Regulations. The COD of both Ckt.-I and Ckt.-II of Parbati-III-Koldam line shall be reckoned as 3.11.2015.

24. It is observed that Ckt.-I and Ckt.-II of Parbati-III-Koldam line were originally envisaged to be commissioned with the 400 kV bays in Parbati-II switchyard of NHPC. On account of delay in commissioning of 400 kV bays in Parbati-II switchyard of NHPC, the Ckt.-I and Ckt.-II of Parbati-III-Koldam line were put into use only on 3.11.2015 through an alternate arrangement. Since the delay is attributable to the non-commissioning of 400 kV bays by NHPC, we



are of the view that the IDC and IEDC from 30.6.2015 for instant assets till 2.11.2015 shall be borne by NHPC. With effect from 3.11.2015, the transmission charges for the instant assets shall be serviced in accordance with Sharing Regulations. The IDC and IEDC borne by NHPC shall not be capitalized by NHPC in its book of accounts for the purpose of claiming tariff for its generation from Parbati HEPs as well as for transmission services by the petitioner.

Capital cost

25. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.



26. The petitioner has submitted Management Certificates for expenditure incurred/projected to be incurred along with revised tariff forms and other information as sought for the expenditure incurred against the instant assets. The details of apportioned approved cost, expenditure incurred/projected to be incurred as on COD claimed vide reply dated 4.9.2015 and details of additional capitalization incurred/ projected to be incurred for the period from claimed COD to 31.3.2019 for the assets covered in the petition are as under:-

Particulars	Apportioned /approved cost	Expenditure up to claimed COD (30.6.2015)	Estimated add-cap		Total estimated completion cost up to 31.3.2017
			2015-16	2016-17	
Asset-I	4943.01	3836.88	694.82	355.01	4886.71
Asset-II	4338.60	3367.72	609.86	311.61	4289.19

27. Further, the petitioner has also submitted the details of IEDC and IDC estimated to be paid after claimed COD of 30.6.2015 to 31.3.2016, which are as below:-

Particulars	(₹ in lakh)		
	IEDC	IDC	Total
Asset-I	10.65	45.27	55.92
Asset-II	9.35	39.73	49.08

28. The petitioner has further submitted vide affidavits dated 22.12.2015 and 31.8.2016 that the instant assets have been put under commercial operation on 3.11.2015 but the petitioner has neither submitted any revised Management certificates/Auditors' Certificates nor any revised tariff forms. Therefore, on the basis of available information, the IDC and IEDC claimed on estimated basis and included in the add-cap of 2015-16 have not been allowed. Further, we have considered pro-rata add-cap claimed during the 2015-16 as a part of capital cost as on tariff COD i.e. 3.11.2015 and considered the details of



additional capitalization incurred/projected to be incurred for the period from Tariff COD of 3.11.2015 to 31.3.2019 for the purpose of working out tariff for instant assets as under:-

Particulars	Apportioned /approved cost	Expenditure up to tariff COD (3.11.2015)	(₹ in lakh)		
			2015-16	2016-17	Total estimated completion cost up to 31.3.2017
Asset-I	4943.01	4130.87	344.91	355.01	4830.79
Asset-II	4338.60	3625.76	302.74	311.61	4240.11

Cost Over-run

29. The total estimated completion cost of instant assets is within the RCE. Hence, there is no cost over-run in the case of instant assets.

Time Over-run:

30. As per the Investment Approval, the instant assets were scheduled to be commissioned within 36 months as per the Investment Approval dated 26.12.2005, matching with the commissioning of generation project. Thus, the scheduled COD of the instant assets was 25.12.2008, say 1.1.2009 whereas the COD accepted in this order is 3.11.2015. Excluding the period for which NHPC has been held liable to pay IDC and IEDC, there is a time over-run of approximately 78 months. The petitioner has attributed the time over-run to events as shifting of COD due to delay in the commissioning of HEPs, delay in obtaining forest clearance, ROW issues and adverse weather conditions. The submissions made by the petitioner are as under:-

A. Shifting of COD

i. **COD shifted from 25.12.2008 to 31.12.2011:** In the 26th Meeting of the Standing Committee on Power System Planning of Northern Region held



on 13.10.2008, it was agreed that NHPC would inform the possible date of commissioning of Parbati-II HEP to work out the Revised Commercial Operation Date (RCOD) of the Parbati-II-Koldam. The petitioner signed an Indemnification Agreement with NHPC. As per the said agreement, the COD of first unit of Parbati-II HEP was scheduled on 31.12.2011 (Zero Date) which was subject to review on account of the change in commissioning schedule of Parbati-II HEP. On account of delay in COD of Parbati-II HEP, the petitioner, vide letters dated 13.2.2009 and 5.3.2009 requested PGCIL to amend the Implementation Agreement and suitably revise the RCOD. PGCIL (CTU) amended the Implementation Agreement on 22.4.2009 revising the RCOD as 31.12.2011

ii. **COD shifted from 31.12.2011 to 30.6.2012** : NHPC vide its letter dated 26.3.2009, informed that the zero date was further required to be revised to December, 2012 on account of delay in COD of Parbati II HEP. A supplementary agreement was signed with NHPC on 15.6.2009 revising the zero date to 31.12.2012. Accordingly, on 27.8.2009, the CTU and the petitioner amended the Implementation Agreement revising the RCOD to 30.6.2012

iii. **COD Shifted From 30.6.2012 to 31.3.2013**: NHPC on 16.3.2011 informed the petitioner that the revised COD of Parbati-II is July, 2014. Thereafter, CEA sent a letter dated 18.5.2011 to the petitioner intimating that the commissioning schedules of the transmission lines associated with Koldam HEP and Parbati-II HEP were as under:-

(a) Koldam HEP-March 2013 onwards;

(b) Parbati-II HEP-2014-15



In view of the periodic shifting of the COD of the Koldam HEP and Parbati-II HEP, the commissioning of the Parbati-II-Koldam Transmission Line was revised. Further, in the 30th Meeting of the Standing Committee on Power System Planning of Northern Region held on 19.12.2011, the petitioner confirmed that though it was putting in its best efforts for completion of these lines, the pace of execution is hampered on account of non-receipt of the Stage-II forest clearance. Accordingly, CTU amended the Implementation Agreement on 12.9.2012 revising the RCOD to 31.3.2013.

B. Delay due to Forest Clearance

The Parbati-Koldam line 2xS/C 400 kV (Quad) traverses through 231.347 ha. of forest area in Banjar, Mandi, Nachan, Suket and Bilaspur forest divisions of the state of Himachal Pradesh and out of this, about 76 ha. are of Parbati-III-Koldam line. Thus, forest clearance was required for total 231.347 ha. of forest area. The portion of the Parbati-III-Koldam line falling in forest areas is approximately 61.28 km, although construction is affected to the extent of approximately 13.30 km. PGCIL submitted proposals for diversion of forest land in Himachal Pradesh during the period of 2005 to 2006, before the formation of the joint venture company, Parbati-Koldam Transmission Company Limited, to the concerned Divisional Forest Officers in the aforesaid forest divisions in Himachal Pradesh. The Petitioner has submitted about the reasons for delay in obtaining forest clearance as under:

- i. **Forest Clearance for Himachal Pradesh Portion:** Stage-I (in-principle) Forest Clearance in respect of the State of Himachal Pradesh



was granted on 5.12.2007 by MoEF. Stage-II (final) Forest Clearance was granted on 30.11.2012 in the name of PGCIL. It took 89 months and 30 days to obtain the forest approval. However, as the clearance was issued in the name of PGCIL, the petitioner requested MoEF on 12.11.2011 for change in the name of user agency. Thereafter, it sent a letter to PGCIL on 19.3.2013 intimating receipt of Stage-II Forest Clearance, wherein it was stated that, considering the work involved in the forest stretches, it would be able to complete the line by the last quarter 2013 or the first quarter of 2014. This letter dated 19.3.2013 was also deliberated upon, in the 25th Meeting of Technical Coordination Sub-committee held on 25.4.2013 and the 28th Meeting of Northern Region Power Committee held on 26.4.2013. Further, upon receipt of Stage-II Forest Clearance in Himachal Pradesh, the petitioner came to know that a separate tree cutting approval was required from the State authorities for felling of trees in forest stretches en-route the transmission line. The tree cutting was a very lengthy and tedious exercise which was to be exclusively carried out by the State Forest Authorities and included recounting/enumeration as per the locations and approval by divisional forest tender economics/cost estimate prepared and approved by Director, HPSFDC. Thereafter, bids were invited and scrutinized to determine the lowest bidder. The consolidated report, after discounted price of lowest bidder, was sent to Director for approval and placement of award. Thereafter, all the tree cutting approvals were obtained by late September, 2013. The actual site was available for work only in the month of October, 2013 after cutting of trees in the forest area and the construction could be started thereafter.



The Board of Directors of the petitioner company, at its 59th meeting held on 16.8.2013, deliberated in detail, on the developments and approved the revision of COD to 30.6.2014. CTU on 24.1.2014 amended the Implementation Agreement to further revise the RCOD to 31.12.2014.

C. Delay due to ROW issues

The Petitioner has submitted that in addition to usual challenges faced while undertaking construction of transmission lines in hilly areas, severe right of way challenges were faced, while implementing the Parbati-III-Koldam Line despite having secured authorization under Section 164 of the Electricity Act, 2003. The local panchayats and local administration were involved to persuade the landowners to settle out of court by holding meetings with all stakeholders. The land owners, local administration and local leaders were impressed upon about the national importance of project and authorization under Section 164 of the Electricity Act, 2003 granted to the Petitioner to develop the project. However, many landowners/occupiers moved the courts. 35 court cases were filed affecting a large stretch of the Parbati-III-Koldam Line. Landowners demanded unreasonable amounts in terms of crop compensation defying the rates prescribed by the State authorities and the prevailing rates in the area. Therefore, time taken for disposal and final settlement of the court cases prevented construction of work on the affected portions of the line route for varying periods of time ranging from one month to one year. By December, 2014, 64% of the foundation work, 50% of erection and 20% of stringing work were completed for Ckt.-I and 83% of foundation work, 75%



of erection work and 40% of stringing work were completed for Ckt.-II. Significant portion of balance work got delayed on account of the shifting in construction schedule. It was the last stretch of the Parbati-Koldam Transmission line and the locals were aware of the fact. As there was delay in disposal of the court cases, out-of-court settlements were reached with the land owners with the help of local administration. Wherever, the cases could not be settled out of court, the cases were pursued in court, police protection was sought and under situations of extreme resistance and distress, the work was completed. While the final orders from various courts on any additional compensation required to be paid were awaited, the transmission line was expected to be commissioned by 31.5.2015. In some of the cases, odds were too high and the executives and workers on site were mistreated, manhandled and threatened by land owners. Thus, court cases regarding right of way on some of the locations were taking long periods of time to resolve leading to inordinate delays in completion of the line.

The RoW problems started on 19.3.2013. PKTCL intimated Deputy Collector, Kullu that the obstruction was being faced at Location No. 17 and requested for issuance of orders under Section 16 of Indian Telegraph Act, 1885 and pursued the matter with SDM/DM/Police officers and meeting with MLA of the area. Thereafter, the issue of RoW could be resolved on 26.11.2014, thus the RoW issue took about more than 20 months (19.3.2013 to 26.11.2014). The sequence of events is as follows:-



Srl. No.	Date	Events
1	19.3.2013	PKTCL intimated the obstruction being faced at Loc. No. 17 to DC, Kullu and requested for issuance of orders u/s 16 of Indian Telegraph Act, 1885. Letter was forwarded by DC, Kullu to SDM, Banjar to look into the matter and resolve the issue.
2	23.3.2013	One of the land owners Sh. Narain Chand filed a civil suit in the court of Civil Judge (Sr. Division), Lauhal and Spiti at Kullu for permanent injunction
3	27.7.2013	Application of injunction was dismissed in the civil Court
4	27.7.2013	PKTCL filed application for issuance of orders under Section 16 of Indian Telegraph Act, 1885 to remove the obstruction
5	3.8.2013	Interim order was passed by Distt. Magistrate, Kullu with the direction to SDM, Banjar to hear both the parties on 16.9.2013 for consideration of compensation
6	7.9.2013	SDM, Banjar fixed the hearing for 19.9.2013 and directed the Horticulture, Agriculture and Forest officials to assess the compensation
7	10.9.2013	PKTCL requested Naib-Tehsildar, Sainj to depute the concerned Patwari to accompany the team for assessment of compensation on 12.9.2014
8	11.9.2013	PKTCL requested SP, Kullu for police assistance
9	12.9.2013	Officials of Horticulture, Forest, Agriculture and Revenue along with police visited the site but the land owners did not allow to enter into the land. Joint inspection Report submitted by them to SDM, Banjar
10	19.9.2013	SDM heard both the parties. Sh. Narain Chand stated that the installation of the tower would lead to damage to his house, crops and fruit bearing trees and requested for site inspection. SDM, Banjar constituted a committee under the chairmanship of Naib Tehsildar, Sainj
11	28.9.2013	Committee alongwith police personnel visited the site but the land owners did not allow to enter the team in their land. Neither the compensation could be assessed nor work was allowed to be started.
12	29.10.2013	Sh. Ludar Chand and other villagers filed another suit in the court of civil Judge (Sr. Division), Kullu for permanent prohibitory injunction
13	10.1.2014	Suit for permanent Prohibitory injunction was dismissed
14	3.2.2014	SDM, Banjar hold a meeting with the land owners but they refused to allow the start of work
15	4.2.2014	SDM, Banjar submitted his report to DC, Kullu
16	11.2.2014	PKTCL requested DC, Kullu for police assistance for implementation of order dated 3.8.2013
17	12.2.2014	Distt. Magistrate passed order for providing assistance to PKTCL for start of work
18	21.2.2014	PKTCL requested SP, Kullu for providing police assistance as per order dt. 12.2.2014
19	21.2.2014	PKTCL requested SDM, Banjar for deputation of officials of Revenue, Agriculture, forest and Horticulture Deptt. For assessment of compensation
20	25.2.2014	The officials of revenue, agriculture, forest and horticulture deptts. alongwith police personnel visited the spot. The land owners did not allow to enter into the land



21	27.2.2014	SHO, Bhunter along with police personnel visited the spot and tried to get the work start but there was some political pressure due to which SHO had to withdraw the action and work could not be started
22	5.3.2014	Land owners along with other villagers met DC, Kullu and requested for shifting of line. Accordingly a meeting was held in the office of ADM, Kullu which was attended by MLA, Kullu, SDM, Banjar, Land owner Sh. Narain Chand and rep. of PKTCL. Land owner alleged that the line is passing over the houses and requested for site inspection. ADM, Kullu directed SDM, Banjar to inspect the site and report
23	1.4.2014	SDM, Banjar fixed the site inspection for 5.4.2014
24	5.4.2014	Site inspection was carried out by SDM in the presence of land owners and villagers.
25	11.4.2014	PKTCL Submitted the measurement details taken at site
26	17.4.2014	SDM, Banjar asked PKTCL to explore alternative alignment to avoid the present location of towers.
27	28.4.2014	PKTCL submitted the letter regarding inability to shift the alignment
28	17.6.2014	SDM, Banjar submitted his report to DC, Kullu depicting the constraints for shifting of alignment
29	25.6.2014	PKTCL requested DC, Kullu to remove the obstruction for start of work
30	15.7.2014	Based on the report of SDM, Banjar, Distt. Magistrate, Kullu passed order for police assistance and directed Executive Magistrate to ensure that work is not obstructed by any one
31	1.8.2014	PKTCL intimated SP, Kullu, SDM, Banjar and executive Magistrate regarding deployment of manpower on 5.8.2014
32	21.8.2014	SDM, Banjar requested the officials and police to be present on the spot on 25.8.2014 to start the work
33	25.8.2014	Tehsildar, officials of revenue, horticulture, agriculture and forest along with police visited the site. Again the land owners did not allow to start the work. Tehsildar intimated the situation to SDM who directed him to record the statements of both the parties and keep the matter pending till he discusses the matter with DC, Kullu
34	28.8.2014	Met with SDM, Banjar who talked to DC, Kullu and suggested him that before taking police action, they must verify the record regarding proper public notification/information as the villagers alleged that they were not given any opportunity to submit their objections during the preparation of scheme. SDM asked us to show the record regarding publication of the scheme.
35	3.9.2014	All the record was placed before SDM who was satisfied and intimated the DC, Kullu in this regard. DC called petitioner and SDM, Banjar to meet in his office
36	5.9.2014	Met with DC, Kullu along with SDM, Banjar. SDM, Banjar intimated that the people had represented to MLA, Banjar, however, he has appraised the MLA and asked him to persuade the villagers let the work start. SDM intimated that MLA has asked him to wait for two weeks to let him talk with villagers
37	24.9.2014	Director (Projects) met with DC, Kullu. SDM was also present during this meeting. DC and SDM suggested PKTCL to have a meeting with MLA, Banjar to sort out the issue



38	24.9.2014	Director (Projects) met with MLA, Banjar who assured to resolve the issue and convene a meeting of PKTCL and villagers. Meeting was fixed for 19th October. But could not be held due to the tour programme of MLA, Banjar. Njow has been proposed for 24th/25th Oct, which is yet to be finalized for availability MLA,SDM and villagers.
39	30.10.2014	MLA called the meeting with villagers, land owners did not attend the meeting; some villagers were present and demanded for the shifting of the line. MLA tried to make them understand that alignment cannot be changed and suggested them that he can request PKTCL to carry out some development for the community Brahen and deputed a person to have a meeting with villagers at Brahen in line with the proposal. The meeting was fixed for 3.11.2014
40	31.10.2014	PKTCL filed an application in the court of district magistrate, Kullu for implementation of order passed under Section 16 of Telegraph Act.
41	7.11.2014	DC, Kullu directed SDM, Banjar to implement the order passed under Section 16 of Telegraph Act, 1885.
42	15.11.2014	PKTCL, filed in HP Court, Shimla to direct Distt. Magistrate, Kullu for implementation of his orders.
43	18.11.2014	SDM, Banjar fixed the date for start the work on 25.11.2014 and requested SP, Kullu for providing police protection
44	25.11.2014	Tehsildar, Banjar along with police officials of horticulture, agriculture, forest and revenue visited Loc no. 17. Layout of the tower was completed and assessment of the compensation was assessed by the officials. We started the digging up work but the land owners and their relatives attacked our employees, Police and Tehsildar. The situation had gone out of control. Police arrested 5 persons. FIR was lodged by the Tehsildar in Police Station, Bhunter.
45	26.11.2014	PKTCL wrote to SDM about the attack on PKTCL officials at Loc. 17 A and sought additional police force with male and female police officials and provide safety to the PKTCL officials and help in start -up of construction work.

D. Delay due to adverse weather conditions:-

A portion of the transmission line passed through snow bound area and the construction work was minimal in the months of December, 2014, January, and February, 2015. The work could again gain momentum by March, 2015 and was ready for commissioning by May, 2015.

E. Delay in commissioning of bays in Parbati-II switchyard by NHPC:-

CEA conveyed the approval for energisation of Parbati-III-Koldam line vide letter dated 30.6.2015, under Regulation 43 of CEA (Measurers relating to safety and Electric Supply) Regulations, 2010. Despite finishing the



construction of both the circuits and obtaining the energisation certificate, the petitioner was not able to charge the Parbati-III-Koldam Line as the bay to which the Ckt.-II of the line had to be connected was not charged by NHPC. The Parbati-III-Koldam Line was finally charged on 3.11.2015.

31. We have considered the submissions of the petitioner. Thus, there was time over-run of 78 months in execution of the instant assets. The petitioner has attributed the time over-run to delay in commissioning of generation project, forest clearance, RoW issues and adverse weather conditions. The details of the period of time over-run due to these reasons is under:-

S. No.	Reason for time over-run	Duration	Period
1.	Rescheduling of COD due to delay in commissioning of generation	25.12.2008 to 31.3.2013	51 months
2.	Forest clearance	31.5.2005 to 30.11.2012	90 months
3.	Row Issues	19.3.2013 to 26.11.2013	20 months
4.	Adverse weather conditions	December, 2014 to March, 2015	3 months

32. It is observed that the commissioning of the instant assets was initially revised from 25.12.2008 to 31.3.2013 to match with the commissioning of Koldam HEP and Parbati-II HEP. We are of the view that time over-run due to the delay in commissioning of the instant assets on account of rescheduling of Koldam HEP and Parbati-II HEP cannot be attributed to the petitioner.

33. As regards the delay in obtaining forest clearance approval, it is observed that PGCIL approached the DFO, Himachal Pradesh for obtaining forest clearance approval for Parbati-III-Koldam line on 31.5.2005 i.e. 6 months 25 days before the Investment Approval dated 26.12.2005. As per the Forest (Conservation) Amendment Rules, 2004 notified by MoEF dated 3.2.2004, the



timeline for forest approval after submission of proposal is 210 days by State Government and 90 days by Forest Advisory Committee of Central Government i.e. total 300 days. Accordingly, the petitioner should have obtained the forest clearance in 300 days of application. However, the stage-II clearance for Parbati-III-Koldam line was granted on 30.11.2012. It took 90 months for the petitioner to obtain all the forest clearance. Considering a normal period of 10 months required for forest clearance, we are of the view that the delay of 80 months in getting forest approval was also beyond the control of the petitioner.

34. It is observed that there were RoW issues leading to filing of court cases by land owners. The petitioner has submitted that on 19.3.2013 it intimated the obstruction being faced at Location 17 to Deputy Collector, Kullu and requested for issuance of orders under Section 16 of Indian Telegraph Act, 1885 and only after pursuing the matter with SDM/DM/Police officers and meeting with MLA of the area, the issue was resolved on 26.11.2014. Thus, it took about 20 months to settle the RoW issues. The RoW issues and court cases hindered the progress of work. In our view, the delay due to RoW issues and court case was beyond the control of the petitioner.

35. The petitioner has also submitted that it was able to carry out only minimal work during the peak winter months of December, 2014, January and February, 2015 which led to delay in commissioning of the instant assets. The momentum of work picked up March, 2015 and the remaining work was completed and the line was ready for commissioning by May, 2015. It is observed that the petitioner approached CEA on 28.5.2015 for inspection and CEA issued the Inspection Report on 30.6.2015. As stated earlier, due to non-availability of 400



kV bays at Parbati-III HEP of NHPC, the actual power flow took place on 3.11.2015. We are of the view that the petitioner should have been aware of heavy snow during the winter months and be prepared to meet such eventualities. However, taking into consideration that the work did not completely come to standstill and the work was under progress during December, 2014 to March, 2015, the time over-run of three months due to adverse weather conditions is condoned.

36. We are of the view that time over-runs due to delay in commissioning of Koldam HEP, Parbati III HEP, forest clearance, RoW issues and adverse weather conditions were beyond the control of petitioner. Accordingly, the time over-run of 78 months in commissioning of the instant assets is condoned.

Treatment of IDC and IEDC

37. The petitioner has claimed Interest During Construction (IDC) of ₹923.33 lakh and ₹810.43 lakh for Asset-I and Asset-II respectively. However, out of the IDC claimed, ₹45.27 lakh and ₹39.73 lakh for Asset-I and Asset-II respectively are not allowed, as it is the estimated IDC payment beyond 30.6.2015. Further, the petitioner has not submitted the documents in support of dates of drawl of loans, repayment schedule of loans, interest rate, interest payment dates of the loans and undischarged liability of IDC. Accordingly, IDC of ₹878.06 lakh and ₹770.70 lakh for Asset-I and Asset-II respectively, has been considered for computation of capital cost and tariff. Further, the IDC from 30.6.2015 for Ckt.-I and Ckt.-II of Parbati-III-Koldam line respectively, till the date of usage of the Parbati-III-Koldam Line i.e. 3.11.2015, would be borne by NHPC. The details of IDC allowed and disallowed are as follows:-



(₹ in lakh)

Particulars	IDC claimed	IDC disallowed due to estimation beyond 30.6.2015 (to be borne by NHPC)	IDC allowed
Asset-I	923.33	45.27	878.06
Asset-II	810.43	39.73	770.70

38. The petitioner is directed to submit documents in support of date of drawl of loans, repayment schedule, dates of interest payments, documentary proof of interest rate of the loans and details of undischarged liability of IDC for the instant assets covered in the instant petition, as well as information related to the discharge of IDC on cash basis (3.11.2015) i.e. IDC discharged from 30.6.2015 upto COD on cash basis and IDC discharged after tariff COD during the years 2015-16 and 2016-17, if any. The IDC allowed shall be subject to prudence check and review at the time of the true-up petition.

39. The petitioner has submitted vide affidavit dated 4.9.2015, Management Certificate for its claim of IEDC of ₹334.87 lakh and ₹293.93 lakh for Asset-I and Asset-II respectively and is also indicated in Form-12A for instant assets. However, IEDC of ₹10.65 lakh and ₹9.35 lakh in case of Assets-I and Asset-II respectively claimed as estimated expenses and included in add-cap for 2015-16 is not allowed. Further, the IEDC from 30.6.2015 both for Ckt.-I and Ckt.-II of Parbati-III-Koldam line, till the date of usage of the Parbati-III-Koldam line i.e. 3.11.2015, would be borne by NHPC.

40. Further, the petitioner has submitted "RCE abstract cost estimate" which indicates the limit of IEDC as 5.00% of the estimated Hard Cost. Therefore, IEDC limit of 5.00% on Hard Cost is the allowable limit and it works out to ₹163.68 lakh and ₹143.66 lakh for Assets-I and Asset-II respectively. Thus, the



additional excess amount of ₹160.55 lakh and ₹140.92 lakh, claimed on account of IEDC for Asset-I and Asset-II respectively, is disallowed. Accordingly, the details of IEDC allowed and disallowed are as under:-

Particulars	IEDC claimed	IEDC disallowed		IEDC allowed
		due to estimation beyond 30.6.2015	Due to excess over allowable limit	
Asset-I	334.87	10.65	177.79	146.43
Asset-II	293.93	9.35	156.56	128.52

41. However, the petitioner is directed to submit details of expenditure, duly audited statement of IEDC and separate information related to the discharge of IEDC i.e. IEDC discharged upto COD and IEDC discharged after tariff COD in 2015-16 and 2016-17, if any. The IEDC allowed shall be subject to prudence check and review at the time of the true-up petition.

42. As discussed, IDC and IEDC incurred by the petitioner from 30.6.2015 upto 2.11.2015 would be borne by NHPC. However, the petitioner has neither submitted any calculations regarding IDC and IDC for the period 30.6.2015 upto 2.11.2015 nor has submitted the relevant information required for working out the IDC and IEDC incurred for this period. Therefore, we direct the petitioner and NHPC to settle the billing and payment of IDC and IEDC for period 30.6.2015 upto 2.11.2015 mutually amongst themselves. In case of any difference, both PKTCL and NHPC or one of them may file an appropriate petition before the Commission.

Treatment of Initial Spares

43. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

- (i) Transmission line - 1.00%
- (ii) Transmission Sub-station (Green Field)-4.00%
- (iii) Transmission Sub-station (Brown Field)-6.00%
- (iv) Series Compensation devices and HVDC Station-4.00%
- (v) Gas Insulated Sub-station (GIS)-5.00%
- (vi) Communication system-3.5%

Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) where the generating station has any transmission equipment forming part of the generation project, the ceiling norms for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations;

(iii) once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

44. The petitioner has claimed initial spares of ₹34.74 lakh and ₹30.49 lakh for Assets-I and Asset-II respectively, pertaining to the transmission line, which are within the ceiling limit and are allowed as per Regulation 13 of the 2014 Tariff Regulations.



Capital cost as on COD i.e. 3.11.2015

45. The detail of capital cost considered as on COD after adjusting the claim of IDC, IEDC and initial spares are as under:-

(₹ in lakh)

Particulars	Capital cost deemed to be claimed as on COD	Less: disallowed			Capital cost as on COD after adjustment of IDC/IEDC/initial spares
		IDC	IEDC	initial spares	
Asset-I	4130.87	-	177.79	-	3953.08
Asset-II	3625.76	-	156.06	-	3469.70

Projected additional capital expenditure

46. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“ (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law.”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

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

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



48. The cut-off date in the case of instant combined transmission asset is 31.3.2018.

49. The petitioner has claimed amount of ₹694.82 lakh and ₹355.01 lakh for Asset-I and ₹609.86 lakh and ₹311.61 lakh for Asset-II towards additional capital expenditure for 2015-16 and 2016-17 respectively. The petitioner has submitted that the additional capital expenditure claimed is including IDC and IEDC to be incurred in 2015-16 and for balance and retention payments. However, as discussed earlier, both IDC and IEDC claimed to be incurred on estimated basis in 2015-16 have not been allowed. Therefore, amounts of ₹45.27 lakh and ₹39.73 lakh on account of estimated IDC and ₹10.65 lakh and ₹9.35 lakh on account of estimated IEDC in respect of Asset-I and Asset-II respectively have been reduced to determine the hard cost portion of additional capital expenditure, which is as under:-

(₹ in lakh)

Particulars	Estimated add-cap		Total
	2015-16	2016-17	
Asset-I	638.90	355.01	993.91
Asset-II	560.78	311.61	872.39

50. Further, as discussed, pro-rata of the additional capital expenditure during 2015-16, is being adjusted so as to arrive at the capital cost as on COD (3.11.2015) and the balance additional capital expenditure estimated to be incurred for the period from COD (3.11.2015) to 31.3.2016 has been considered as add-cap for 2015-16 and during 2016-17 as below:-

(₹ in lakh)

Particulars	Estimated add-cap		Total
	2015-16	2016-17	
Asset-I	344.91	355.01	699.92
Asset-II	302.74	311.61	614.35



51. In view of above, the total estimated cost allowed from COD to 31.3.2017 for the purpose of working out tariff is summarized as under:-

(₹ in lakh)		
Particulars	Asset-I	Asset-II
Total Capital Cost claimed up to 31.3.2017	4886.71	4289.19
(-) Add Cap during 2016-17	355.01	311.61
Capital Cost claimed up to 31.3.2016	4531.70	3977.58
*(-) IEDC and IDC not considered being claimed on estimated basis for payment beyond 30.6.2015	55.92	49.08
(-) Pro-rata Add Cap (Hard Cost) claimed for the period from Tariff-COD (3.11.2015 to 31.3.2016)	344.91	302.74
Capital Cost deemed to be claimed up to COD (3.11.2015)	4130.87	3625.76
(-) IEDC/IDC disallowed as on COD due to Time over-run	-	-
(-) IEDC disallowed as on COD due to Excess Limit	177.79	156.06
(-) Excess Initial Spares disallowed as on COD	-	-
Total Capital Cost allowable as on COD (3.11.2015)	3953.08	3469.70

*This expenditure has been claimed as a part of add-cap during 2015-16.

Debt-Equity Ratio

52. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.”



“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”

53. The petitioner has claimed debt: equity ratio of 70:30 as on the tariff date of commercial operation of the instant assets. The details of debt: equity in respect of the instant assets covered in the instant petition as on tariff date of commercial operation and as on 31.3.2019 respectively are as under:-

Particulars	Asset-I			
	Capital cost as on COD (3.11.2015)		Capital cost as on 31.3.2019	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	2767.15	70.00	3257.10	70.00
Equity	1185.92	30.00	1395.90	30.00
Total	3953.08	100.00	4653.00	100.00
Particulars	Asset-II			
	Capital cost as on COD (3.11.2015)		Capital cost as on 31.3.2019	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	2428.79	70.00	2858.84	70.00
Equity	1040.91	30.00	1225.22	30.00
Total	3469.70	100.00	4084.05	100.00

54. The above stated debt-equity ratio has been applied for the purpose of tariff calculation in this order.

Return on Equity

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

“**24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the



storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”



56. The petitioner has submitted that it may be allowed 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.

57. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as under:-

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1185.92	1289.40	1395.90	1395.90
Addition due to Additional Capitalisation	103.47	106.50	-	-
Closing Equity	1298.40	1395.90	1395.90	1395.90
Average Equity	1237.66	1342.65	1395.90	1395.90
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	99.74	263.29	273.74	273.74
Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1041.90	1131.73	1225.22	1225.22
Addition due to Additional Capitalisation	90.82	93.48	-	-
Closing Equity	1131.73	1225.22	1225.22	1225.22
Average Equity	1086.32	1178.48	1225.22	1225.22

(₹ in lakh)



Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	87.55	231.10	240.27	240.27

Interest on loan

58. Regulation 26 of the 2014 Tariff Regulations are provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

59. In these calculations, interest on loan has been worked out as hereinafter:-

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



(ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year;

(iii) 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; and

(iv) Loan portfolio for working out weighted average rate of interest has also been adjusted pro-rata.

60. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents. Interest on loan has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest subsequent to the tariff date of commercial operation will be considered on submission of revised actual loan details as per Form-9Cat the time of truing-up.

61. Detailed calculation of the weighted average rate of interest has been given at Annexure-1 and Annexure-2 to this order.

62. Based on above, details of Interest on Loan calculated are as under:-

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Normative Loan	2767.15	3008.50	3257.10	3257.10
Cumulative Repayment upto Previous Year	-	89.02	323.85	568.05
Net Loan-Opening	2767.15	2919.58	2933.25	2689.05
Addition due to Additional Capitalisation	241.44	248.51	-	-
Repayment during the year	89.02	234.83	244.20	244.20
Net Loan-Closing	2919.58	2933.25	2689.05	2444.85
Average Loan	2843.37	2926.42	2811.15	2566.95
Weighted Average Rate of Interest on Loan	12.9642%	12.9642%	12.9642%	12.9642%
Interest	151.59	379.39	364.44	332.78

(₹ in lakh)



Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Normative Loan	2428.79	2640.71	2858.84	2858.84
Cumulative Repayment upto Previous Year	-	78.13	284.25	498.59
Net Loan-Opening	2428.79	2562.58	2574.59	2360.24
Addition due to Additional Capitalisation	211.92	218.13	-	-
Repayment during the year	78.13	206.12	214.34	214.34
Net Loan-Closing	2562.58	2574.59	2360.24	2145.90
Average Loan	2495.69	2568.58	2467.42	2253.07
Weighted Average Rate of Interest on Loan	12.9642%	12.9642%	12.9642%	12.9642%
Interest	132.96	333.00	319.88	292.09

Depreciation

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

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the



percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

64. The petitioner has claimed actual depreciation as a component of annual fixed charges. In our calculations, depreciation has been calculated in accordance with Regulation 27 of the 2014 Tariff Regulations extracted above.

65. The instant transmission assets were put under commercial operation during 2015-16. Accordingly, these will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

66. Details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross Block	3953.08	4297.99	4653.00	4653.00
Additional Capital expenditure	344.91	355.01	-	-
Closing Gross Block	4297.99	4653.00	4653.00	4653.00
Average Gross Block	4125.53	4475.99	4653.00	4653.00



Rate of Depreciation	5.2504%	5.2471%	5.2483%	5.2483%
Depreciable Value	3696.64	4005.40	4165.15	4165.15
Remaining Depreciable Value	3696.64	3916.38	3841.30	3597.10
Depreciation	89.02	234.83	244.20	244.20
Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross Block	3469.70	3772.44	4084.05	4084.05
Additional Capital expenditure	302.74	311.61	-	-
Closing Gross Block	3772.44	4084.05	4084.05	4084.05
Average Gross Block	3621.07	3928.25	4084.05	4084.05
Rate of Depreciation	5.2504%	5.2471%	5.2483%	5.2483%
Depreciable Value	3244.62	3515.63	3655.85	3655.85
Remaining Depreciable Value	3244.62	3437.50	3371.60	3157.26
Depreciation	78.13	206.12	214.34	214.34

Operation & Maintenance Expenses (O & M Expenses)

67. Regulation 29(4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

Elements	2015-16	2016-17	2017-18	2018-19
S/C quad conductor T/L (₹ lakh per km)	0.627	0.647	0.669	0.691
D/C quad conductor T/L (₹ lakh per km)	1.097	1.133	1.171	1.210

68. Accordingly, as per norms specified in the 2014 Tariff Regulations, O&M Expenses have been allowed and they are as under:-

Element	(₹ in lakh)			
	Asset-I:			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
12.84 km, 400 kV S/C quad T/L (Ckt.-I)	3.37	8.30	8.58	8.87
	Asset-II			
(i) 8.25 km, S/C quad T/L (Ckt.-II)	5.47	5.33	5.51	5.70
(ii) 1.51 km, D/C quad T/L (Ckt.-II)	1.75	1.71	1.76	1.82
Sub-Total	7.22	7.04	7.27	7.52
Total	10.59	15.34	15.85	16.39

69. The petitioner has submitted that the claim for transmission tariff is inclusive of income tax but exclusive of any late payment surcharge, foreign exchange variations, any statutory taxes, levies, duties, cess, filing fees, license fee or any other kind of impositions levied by any government, local bodies/authorities and/or regulatory authorities etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2014 Tariff Regulations, given effect to the impact of such charges/levies after extensive consultations with the stakeholders as one time compensation for O&M cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the O&M cost. In this order, we have allowed O&M Expenses as per the existing norms.

Interest on working capital

70. Clause (1) (c) and (3) of Regulation 28 and Clause (5) of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.



“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

71. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital has been accordingly allowed.

72. Necessary computations in support of interest on working capital are as below:-

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	1.23	1.25	1.29	1.33
O & M expenses	0.68	0.69	0.72	0.74
Receivables	142.61	151.08	151.96	146.61
Total	144.52	153.01	153.96	149.22
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	8.02	20.66	20.78	20.07
Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	2.64	1.06	1.09	1.13
O & M expenses	1.46	0.59	0.61	0.63
Receivables	126.99	132.56	133.33	128.64
Total	131.09	134.20	135.03	130.39
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	7.27	18.12	18.23	17.60

Transmission charges

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

Particulars	Asset-I			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	89.02	234.83	244.20	244.20



Interest on Loan	151.49	379.39	364.44	332.78
Return on equity	99.74	263.29	273.74	273.74
Interest on Working Capital	8.02	20.66	20.78	20.07
O & M Expenses	3.37	8.30	8.58	8.87
Total	351.63	906.47	911.75	879.66
Particulars	Asset-II			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	78.13	206.12	214.34	214.34
Interest on Loan	132.96	333.00	319.88	292.09
Return on equity	87.55	231.10	240.27	240.27
Interest on Working Capital	7.27	18.12	18.23	17.60
O & M Expenses	7.22	7.04	7.27	7.52
Total	313.13	795.37	799.99	771.82

Filing fee and the publication expenses

74. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC fees and Charges

75. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service tax

76. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any



time the exemption is withdrawn and the transmission of power is notified as a taxable service. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

77. The billing, collection and disbursement of the transmission charges approved (w.e.f. 3.11.2015, the tariff date) shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

78. This order disposes of Petition No. 156/TT/2015.

sd/-
(M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
	Details of Loan	2015-16	2016-17	2017-18	2018-19
1	Loan-1 (PFC)				
	Gross loan opening	1697.82	1851.04	1996.05	1996.05
	Cumulative Repayment upto DOCO/previous year	0.00	110.73	271.69	445.26
	Net Loan-Opening	1697.82	1740.31	1724.36	1550.79
	Additions during the year	153.22	145.01	0.00	0.00
	Repayment during the year	110.73	160.96	173.57	173.57
	Net Loan-Closing	1740.31	1724.36	1550.79	1377.22
	Average Loan	1719.07	1732.34	1637.58	1464.01
	Rate of Interest	12.96%	12.96%	12.96%	12.96%
	Interest	222.79	224.51	212.23	189.74
	Rep Schedule	46 Quarterly Repayment w.e.f. 15.07.2015			
2	Loan-2 (REC)				
	Gross loan opening	1211.79	1321.14	1424.64	1424.64
	Cumulative Repayment upto DOCO/previous year	0.00	79.03	193.91	317.79
	Net Loan-Opening	1211.79	1242.11	1230.73	1106.85
	Additions during the year	109.35	103.50	0.00	0.00
	Repayment during the year	79.03	114.88	123.88	123.88
	Net Loan-Closing	1242.11	1230.73	1106.85	982.97
	Average Loan	1226.95	1236.42	1168.79	1044.91
	Rate of Interest	12.97%	12.97%	12.97%	12.97%
	Interest	159.14	160.36	151.59	135.52
	Rep Schedule	46 Quarterly Repayment w.e.f. 30.09.2015			
	Total Loan				
	Gross loan opening	2909.61	3172.18	3420.69	3420.69
	Cumulative Repayment upto DOCO/previous year	0.00	189.76	465.60	763.05
	Net Loan-Opening	2909.61	2982.42	2955.09	2657.64
	Additions during the year	262.57	248.51	0.00	0.00
	Repayment during the year	189.76	275.84	297.45	297.45
	Net Loan-Closing	2982.42	2955.09	2657.64	2360.19
	Average Loan	2946.02	2968.76	2806.37	2508.91
	Rate of Interest	12.9642%	12.9642%	12.9642%	12.9642%
	Interest	381.93	384.87	363.82	325.26



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
	Details of Loan	2015-16	2016-17	2017-18	2018-19
1	Loan-1 (PFC)				
	Gross loan opening	1490.23	1624.71	1751.99	1751.99
	Cumulative Repayment upto DOCO/previous year	0.00	97.19	238.47	390.81
	Net Loan-Opening	1490.23	1527.52	1513.52	1361.18
	Additions during the year	134.48	127.28	0.00	0.00
	Repayment during the year	97.19	141.28	152.35	152.35
	Net Loan-Closing	1527.52	1513.52	1361.18	1208.83
	Average Loan	1508.87	1520.52	1437.35	1285.00
	Rate of Interest	12.96%	12.96%	12.96%	12.96%
	Interest	195.55	197.06	186.28	166.54
	Rep Schedule	46 Quarterly Repayment w.e.f. 15.07.2015			
2	Loan-2 (REC)				
	Gross loan opening	1063.62	1159.61	1250.45	1250.45
	Cumulative Repayment upto DOCO/previous year	0.00	69.37	170.20	278.94
	Net Loan-Opening	1063.62	1090.24	1080.25	971.51
	Additions during the year	95.99	90.84	0.00	0.00
	Repayment during the year	69.37	100.84	108.73	108.73
	Net Loan-Closing	1090.24	1080.25	971.51	862.78
	Average Loan	1076.93	1085.25	1025.88	917.15
	Rate of Interest	12.97%	12.97%	12.97%	12.97%
	Interest	139.68	140.76	133.06	118.95
	Rep Schedule	46 Quarterly Repayment w.e.f. 30.09.2015			
	Total Loan				
	Gross loan opening	2553.85	2784.32	3002.44	3002.44
	Cumulative Repayment upto DOCO/previous year	0.00	166.56	408.67	669.75
	Net Loan-Opening	2553.85	2617.76	2593.77	2332.69
	Additions during the year	230.47	218.12	0.00	0.00
	Repayment during the year	166.56	242.11	261.08	261.08
	Net Loan-Closing	2617.76	2593.77	2332.69	2071.61
	Average Loan	2585.81	2605.77	2463.23	2202.15
	Rate of Interest	12.9642%	12.9642%	12.9642%	12.9642%
	Interest	335.23	337.82	319.34	285.49

