

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 142/TT/2020

Coram:

Shri P. K. Pujari, Chairperson

Shri I. S. Jha, Member

Shri Arun Goyal, Member

Date of Order: 12.05.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff for 2001-04, 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for combined elements of Talcher and Kolar (HVDC portion) (**Combined Asset-I**) consisting of **Asset-1**: Talcher-Kolar HVDC line (Pole-I), including the bipole line, HVDC terminal station (Pole-I) at Talcher and Kolar and the Earth electrode lines and **Asset-6**: HVDC terminal station at Talcher and Kolar with Pole II; and combined elements of Talcher and Kolar (AC Portion), (**Combined Asset-II**) consisting of **Asset-2**: LILO of 400 kV S/C Cuddapah-Bangalore line at Kolar, including associated bays and common facilities at Kolar and 400 kV S/C Kolar-Madras line, with associated bays, **Asset-3**: 400 kV S/C Hossur-Salem line, 315 MVA 400/220 kV Auto-transformer-I at Hossur, associated bays, and 220 kV switchyard at Hossur, **Asset-4**: 315 MVA 400/220 Auto-transformer-2 at Hossur, with associated bays, **Asset-5**: 500 MVA 400/220 kV Auto-transformer (comprising of 4x167 MVA single phase units) associated bays and 220 kV switchyard at Kolar, and 400 kV D/C Kolar-Hoody line along with associated bays, **Asset-7**: 400 kV D/C Kolar-Hosur line along with associated bays at Kolar and Hosur and **Asset-8**: 400 kV S/C Salem-Udumalpet line along with associated bay extensions at Salem and Udumalpet under Transmission System associated with Talcher II project in the Southern Region.

And in the matter of:

Power Grid Corporation of India Ltd.,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122001 (Haryana).

.....**Petitioner**

Versus

1. Karnataka Power Transmission Corporation Ltd.,
Kaveri Bhavan, Bangalore-560009.
2. Transmission Corporation of Andhra Pradesh Ltd.,
Vidyut Soudha, Hyderabad-500082.



3. Kerala State Electricity Board,
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695004.
4. Tamil Nadu Generation and Distribution Corporation Ltd.
(Formerly Tamil Nadu Electricity Board),
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.
5. Electricity Department,
Government of Pondicherry,
Pondicherry-605001.
6. Eastern Power Distribution Company of Andhra Pradesh Ltd.,
APEPDCL, P&T Colony,
Seethmmadhara, Vishakhapatnam,
Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Ltd.,
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517501, Chittoor District, Andhra Pradesh
8. Southern Power Distribution Company of Telangana Ltd.,
6-1-50, Corporate Office, Mint Compound,
Hyderabad-500063, Telangana.
9. Northern Power Distribution Company of Telangana Ltd.,
H. No. 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta,
Hanamkonda, Warangal-506001,
Telangana.
10. Bangalore Electricity Supply Company Ltd.,
Corporate Office, K.R. Circle,
Bangalore-560001,
Karnataka.
11. Gulbarga Electricity Supply Company Ltd.,
Station Main Road, Gulbarga,
Karnataka.
12. Hubli Electricity Supply Company Ltd.,
Navanagar, PB Road,
Hubli, Karnataka.
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
Mangalore-575001
Karnataka.
14. Chamundeswari Electricity Supply Corporation Ltd.,
927, L J Avenue
Ground Floor, New Kantharaj Urs Road,
Saraswatipuram, Mysore-570009,
Karnataka.



15. Electricity Department,
Government of Goa,
Vidyut Bhavan,
Panaji, Goa-403001.
16. Transmission Corporation of Telangana Ltd.,
Vidhyut Sudha,
Khairatabad, Hyderabad-500082.
17. Tamil Nadu Transmission Corporation,
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.
18. Bihar State Electricity Board,
Vidyut Bhawan, Bailey Road,
Patna-800001.
19. West Bengal State Electricity Distribution Company Ltd.,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.
20. Grid Corporation of Orissa Ltd.,
Shahid Nagar, Bhubaneswar-751007.
21. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP Road, Calcutta-700054.
22. Power Department,
Government of Sikkim, Gangtok-737101.
23. Jharkhand State Electricity Board,
In front of Main Secretariat,
Doranda, Ranchi-834002.

...Respondent(s)

For Petitioner: Ms. Ranjitha Ramachandran, Advocate, PGCIL
Shri S. S. Raju, PGCIL
Shri B. Dash, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO
Shri Ashutosh K. Srivastava, Advocate, BSPHCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”) for revision of transmission tariff of the 2001-04, 2004-09 and 2009-14 periods and truing of the capital expenditure for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred



to as “the 2014 Tariff Regulations”) and for determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of the period from 1.4.2019 to 31.3.2024 in respect of the combined elements of Talcher and Kolar (HVDC portion) and (AC portion) (hereinafter referred to as “the transmission assets” and collectively as “the Combined Asset-II”) under Transmission System associated with Talcher II project in the Southern Region (hereinafter referred to as “the transmission project”) consisting of:

Combined elements of Talcher and Kolar (HVDC portion)

Asset-1: Talcher-Kolar HVDC line (Pole-I), including the bipole line, HVDC terminal station (Pole-I) at Talcher and Kolar and the Earth electrode lines; and

Asset-6: HVDC terminal station at Talcher and Kolar with Pole II (hereinafter referred to as “the transmission assets” and collectively as “the Combined Asset-I”) and

Combined elements of Talcher and Kolar (AC Portion) consisting of:

Asset-2: LILO of 400 kV S/C Cuddapah-Bangalore line at Kolar, including associated bays and common facilities at Kolar and 400 kV S/C Kolar- Madras line, with associated bays;

Asset-3: 400 kV S/C Hossur-Salem line, 315 MVA 400/220 kV Auto-transformer-I at Hossur, associated bays, and 220 kV switchyard at Hossur;

Asset-4: 315 MVA 400/220 Auto-transformer-2 at Hossur, with associated bays;

Asset-5: 500 MVA 400/220 kV Auto-transformer (comprising of 4x167 MVA single phase units) associated bays and 220 kV switchyard at Kolar, and 400 kV D/C Kolar-Hoody line along with associated bays;

Asset-7: 400 kV D/C Kolar-Hosur line along with associated bays at Kolar and Hosur; and

Asset-8: 400 kV S/C Salem-Udumalpet line along with associated bay extensions at Salem and Udumalpet.

2. The Petitioner has made the following prayers in this Petition:

“1) Approve the revised Transmission Tariff for 2001-04, 2004-09 and 2009-14 block as per para 8 above.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.



3) A. Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 and 10 above for respective block.

B. Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

5) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 68 of the Tariff Regulations,2019

6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IWC on that security expenses as mentioned at para 10.5 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

3. The brief facts of the case are as under:

a) The Investment Approval (IA) for construction of the transmission system was accorded by the Ministry of Power, Government of India, vide letter dated 9.2.2000 at an estimated cost of ₹386561 lakh (2nd quarter 1998 price level), including IDC of ₹39107 lakh. The scope of work included:

Transmission Lines

- (i) Talcher-Kolar ± 500 kV, 2000 MW HVDC bi-pole,
- (ii) Kolar-Hoody 400 kV D/C with Quad. Bersimis conductor,
- (iii) Kolar-Madras 400 kV S/C line,
- (iv) Kolar-Hosur-Salem 400 kV S/C line,

- (v) Salem-Udumalpet 400 kV S/C line, and
- (vi) LILO of Cuddapah – Somanahalli 400 kV S/C at Kolar.

Sub-stations

- (i) Talcher Converter Station (New),
 - (ii) Kolar Converter Station (New),
 - (iii) Extension of existing 400/200 kV Hoody Sub-station of Karnataka Power Transmission Corporation Ltd.,
 - (iv) Hossur 400/220 kV Sub-station with 2x315 MVA transformer (new),
 - (v) Extension of existing 400/220 kV Salem Sub-station of POWERGRID,
 - (vi) Extension of existing 400/220 kV Udumalpet sub-station of POWERGRID, and
 - vii) Extension of existing 400 kV Madras Sub-station of POWERGRID.
- b) The transmission assets covered in the instant petition were progressively put into commercial operation from 1.12.2002 to 1.6.2003. These transmission assets have been clubbed by the Petitioner into (a) Combined elements of Talcher and Kolar (HVDC portion) and (b) Combined elements of Talcher and Kolar (AC portion). The entire scope of work is covered in the instant petition. The details of the dates of commercial operation of the transmission assets covered in the instant petition are as follows:

Assets	COD	Earlier covered in Petition No.	Asset nomenclature in order dated 7.1.2016 in Petition No. 499/TT/2014	Notional COD
Asset-1	1.12.2002	499/TT/2014	Combined Assets-I	1.3.2003
Asset-6	1.3.2003			
Asset-2	1.12.2002		Combined Assets-II	1.6.2003
Asset-3	1.2.2003			
Asset-4	1.12.2002			
Asset-5	1.2.2003			
Asset-7	1.4.2003			
Asset-8	1.6.2003			

- c) The Petitioner has sought revision of the approved transmission tariff for the 2001-04 and 2004-09 tariff periods on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the Appellate Tribunal for Electricity

judgments dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139/2006 and batch respectively. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 tariff period and truing up of tariff of 2014-19 tariff period and determination of tariff of 2019-24 tariff period for the transmission assets in the instant petition.

d) APTEL, *vide* judgement dated 22.1.2007 in Appeal No. 81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided mainly on the following issues:

- i. Computation of interest on loan.
- ii. Consequences of refinancing of loan.
- iii. Depreciation as deemed repayment.
- iv. Admissibility of depreciation up to 90% of the value of the assets.
- v. Consideration of maintenance of spares for working capital.
- vi. Depreciation of assets.

e) The Commission and certain beneficiaries filed Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.

f) Based on the APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner has sought re-determination of tariff of the transmission assets for the 2001-04 and 2004-09 tariff periods in Petition No. 121/2007. The Commission after taking into consideration the pending Appeals before the Hon'ble Supreme Court adjourned the matter sine die and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

- g) The Hon'ble Supreme Court dismissed the said Civil Appeals filed against the APTEL's said judgments *vide* its judgment dated 10.4.2018.
- h) Consequent to the Hon'ble Supreme Court's judgment dated 10.4.2018 in NTPC matters, Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission *vide* order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up of the petitions for the 2014-19 period in respect of concerned transmission assets.
- i) Instant petition was heard on 13.2.2020 and in view of APTEL's judgments dated 22.1.2007 and dated 13.6.2007 and the judgement of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Although, period wise tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.
- j) The transmission tariff allowed for the transmission assets for the 2014-19 tariff period *vide* order dated 7.1.2016 in Petition No. 499/TT/2014 and the trued-up tariff claimed by the Petitioner for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Annual Fixed Charges(AFC) approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	30683.69	19004.36	18689.91	18473.89	18332.21
AFC claimed by the Petitioner based on truing up in the instant petition	30699.18	19045.52	18701.90	18475.88	18283.41
Asset-II					
Annual Fixed Charges(AFC) approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	6518.69	6355.59	4628.32	4638.05	4666.93



AFC claimed by the Petitioner based on truing up in the instant petition	6555.14	6398.65	4717.24	4721.48	4750.50
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4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Southern and Eastern Regions. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Reply to the petition has been filed by TANGEDCO, Respondent No. 4, *vide* affidavit dated 4.8.2020 which has raised the issue of retrospective revision of tariff for 2001-04, 2004-09 and 2009-14 periods. The Petitioner *vide* affidavit dated 9.9.2020 has filed its rejoinder to the reply of TANGEDCO. The issue raised by TANGEDCO and the clarifications given by the Petitioner are dealt in this order.

5. The hearing in this matter was held on 10.8.2020 and the Commission reserved order in the matter.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 31.12.2019 and Petitioner's affidavits dated 5.5.2020 and 27.8.2020, reply affidavit of TANGEDCO dated 4.8.2020 and rejoinder thereto by Petitioner *vide* affidavit dated 9.9.2020.

7. Having heard the representatives of the Petitioner and perusal of the materials on record, we proceed to dispose of the petition.

8. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) has submitted that the Electricity Act, 2003 and the Central Electricity Regulatory Commission's Tariff Regulations do not envisage/permit retrospective revision of the bills with effect from 1.4.2001. TANGEDCO has further submitted that the Petitioner has not filed the copy of the judgments of Hon'ble APTEL dated 22.1.2007 and dated 13.6.2007 to which it is referring

to. TANGEDCO has submitted that the claim of the Petitioner is unjust and unreasonable and contrary to the settled position of law. This position has been settled by the Hon'ble Supreme Court in the judgment dated 3.3.2009 in the Civil Appeal No. 1110 of 2007 in the matter of U.P. Power Corporation Ltd. Vs. NTPC Ltd. {(2009) 6 SCC 235}.

9. TANGEDCO has further submitted that distribution companies have large customer base, which keeps changing every year. The various parameters on the basis of which ARR is determined and the tariff for consumers is determined keep changing and it is not possible to charge the tariff retrospectively. The consumers of one tariff period are different from that of the subsequent and earlier tariff periods. The arrears pertaining to two decades cannot be recovered from the present consumers and it is legally not tenable. Accordingly, TANGEDCO has prayed that retrospective revision of tariff may not be allowed to the Petitioner effective from 2001-04, and that the Petitioner may be directed to file a fresh petition for trueing up of the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period.

10. In response, the Petitioner *vide* affidavit dated 9.9.2020, has submitted that TANGEDCO's claim that the retrospective revision of the bills was not envisaged is erroneous and misconceived as there have been numerous instances wherein the tariffs for the past periods have been revised and the same is adjusted and recovered in the later year tariff. The concept of true-up by its very nature relates to adjustments for the past period. The Petitioner has further submitted that reliance placed by TANGEDCO on decision of the Hon'ble Supreme Court judgment dated 3.3.2009 in the Civil Appeal No. 1110 of 2007 in the matter of U.P. Power Corporation Ltd. Vs. NTPC Ltd. {(2009) 6 SCC 235} is misplaced as the said decision has upheld the Commission's power to revise the tariff of any utility. Accordingly, the Petitioner has requested to approve the tariff as claimed in the Petition.

11. We have considered the submissions made by TANGEDCO and the Petitioner. The Commission has rejected similar contentions of BRPL in order dated 6.11.2019 in Petition Nos. 288/TT/2019 and batch matters and has proceeded with the revision of tariff for the periods 2001-04, 2004-09 and 2009-14. The relevant extract is as follows:

“11. We have examined the above contentions of the parties. It is apparent from the record that the Central Commission and other beneficiaries filed Civil Appeal No. 5622 of 2007 and batch before the Hon’ble Supreme Court against the judgment dated 22.1.2007 in Appeal No. 81 of 2005 and other related appeals and judgment dated 13.6.2007 in Appeal No. 139 of 2006 of Appellate Tribunal for Electricity. In the meantime, the Petitioner filed a Petition No. 121 of 2007 in the year 2007 for extending the benefit of judgements dated 22.1.2007 and 13.6.2007 of the Appellate Tribunal in the case of appeals filed by NTPC, on the issue of (a) Computation of Interest on Loan, (b) Consequence of Refinancing of Loan, (c) Depreciation as Deemed Repayment, (d) Admissibility of Depreciation with specific reference to the interpretation of Tariff Regulations as propounded in Appellate Tribunal’s Judgments. As the said appeals against the Appellate Tribunal’s Judgments were then pending adjudication before Hon’ble Supreme Court, the Commission adjourned the proceedings sine die in Petition No. 121 of 2007 vide RoP dated 12.8.2008. The relevant portion of the ROP dated 12.8.2008 is extracted hereunder:-

“4. Request made by the learned counsel was allowed by the Commission. The application was adjourned sine die. The applicant may get the application revived after decision of the Hon’ble Supreme Court in the appeals pending”

This was done for the reason that the regulations as interpreted by Appellate Tribunal were under challenge before the Hon’ble Supreme Court. The Hon’ble Supreme Court vide order dated 10.4.2018 dismissed Civil Appeal No. 5622 of 2007 and batch filed by the Commission and other beneficiaries. Thus, the Appellate Tribunal’s Judgments attained finality. As the spirit of the regulations in question has authoritatively been interpreted in the Appellate Tribunal’s Judgments, the Commission is duty bound to apply the regulations uniformly to all without any discrimination. Accordingly, on dismissal of the said appeals by the Hon’ble Supreme Court, the Commission disposed of Petition No. 121 of 2007 vide order dated 18.1.2019 permitting the Petitioner to submit their claims, wherever applicable, alongwith truing up petitions for the 2014-19 period.

“6.Considering the submissions of the learned counsel for the petitioner, we dispose of the present petition with the direction that the petitioner shall separately submit its claim in the light of the APTEL’s judgments dated 22.1.2007 and 13.6.2007 along with the truing up petitions wherever applicable to be filed for the period 2014-19 in respect of concerned transmission assets.”

It is well settled law that an order or judgment from which review and/or appeal is allowed but not preferred by the aggrieved party attains finality. The said principle cannot be applied to the instant petitions as during the pendency of Petition No.121 of 2007, the Petitioner was not in a position to take up other legal remedies available to it under the law. Thus, we do not agree with the contentions of learned counsel for BRPL and BSPHCL that the present petitions cannot be entertained as the final orders passed therein have attained finality. In our opinion, the present matter significantly differs with the settled law wherein uniform treatment based regulations as interpreted by higher Courts is required to be given effect to without any discrimination to meet the ends of justice. For these reasons, we reject the said contentions of BRPL and BSPHCL and hold that in the facts and circumstances of this case, the general law that an order or judgment from which review and/or appeal is allowed but not preferred by the aggrieved party attains finality is not applicable here.”

In view of the above, we set aside the contention of TANGEDCO and proceed ahead with revision of tariff of the 2001-04 and 2004-09 tariff periods and consequent revision in the tariff approved for the 2009-04 tariff period.

12. APTEL while dealing with the issue of computation of interest on loan, in judgement dated 22.1.2007, observed that interest on loan for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. APTEL in its judgement dated 14.11.2006 set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher.

The relevant portions of the judgement of 14.11.2006 is as follows:

- “12. We have heard the arguments of the Senior Counsel(s) of appellant and respondents. We notice that the appellant has not challenged the formula for computing the annual repayment amount as provided in Appeal No. 96 of 2005 & IA No.117 of 2006 in Appeal No. 94 of 2005 para-22 of the impugned order and has only challenged the provisions at para 23 specifying that the amount of annual repayment for calculation of interest on loan is chosen higher of the normative debt and actual debt.*
- 13. As mentioned earlier the servicing of the capital (equity or debt) is financed by the recovery of interest on debt capital and through earning of return on equity capital. The actual loan repayment has been normalized to 50% of the total capital by the formula in para 22 of the impugned order given in para 11 above. Once it has been decided and agreed that the financing plan would be based on normative debt–equity ratio of 50:50 and not the actual debt-equity ratio, the same normative basis should be adopted for recovery of cost of servicing the capital.*
- 14. In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon.”*
- “18. In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum of debt repayment only on the basis of the normative debt with effect from 01.04.2004*
- 19. In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001.”*

In view of the above, the interest allowed for the 2001-04 and 2004-09 periods is revised on the basis of the normative debt repayment methodology.

13. APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that additional capital expenditure (ACE) after the date of commercial operation should also be considered for computation of maintenance spares as follows:

“Analysis and Decision

We are not inclined to agree with the contention of the respondents that escalation of 6% will take care of the additional capitalization. Escalation is meant to factor inflation and is allowed as per CERC Regulations whether or not additional capitalization takes place. Question before us is that: can the historical cost be frozen with the Commissioning of the station. It is quite normal and prudent to ensure earliest operation of the plant without necessarily 100% completion of plants and works, of course not at the cost of safety of the plant. Adding some of the plants and works after the commercial operation will reduce interest during construction. If technically it is possible to delay some of the plants or works, it is only prudent to do so. For example it is common to build redundancies in the plant at a little later stage. CERC’s own regulations rightly recognized additional capitalization. It is pertinent to set out excerpts pertaining to additional capitalization from CERC (Terms & Conditions of Tariff) Regulation, 2004 Clause 18 as below:-

“Additional capitalization (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities*
- (ii) Works deferred for execution*
- (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17.*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) On account of change in law.*

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station.”

It is clear from the abovementioned Clause 18 of the CERC Regulations that additional capitalization after the date of commercial operation is recognized as part of the capital expenditure. Historical cost does not literally mean that the cost on the date of the commercial operation. The term historical cost is used so as to distinguish it from ‘book value’ or ‘the replacement cost’. The cost of maintenance spares limited to 1% of the historical cost corresponds to the plant and equipment and installations which are required to be maintained. If the cost of additional equipment is not included in the historical cost, how spares for the additional equipment be procured for maintenance of the additional equipment. In this view of the matter, the CERC needs to examine afresh in the light of the aforesaid observations.”

14. In view of the above, the maintenance spares to be considered for computation of working capital for the 2001-04 and 2004-09 periods are also required to be revised taking into consideration the ACE after the date of commercial operation. Further, the

ACE admitted after COD has been considered for computation of maintenance spares.

15. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. The relevant portion of the judgement is as follows:

“Analysis and Decision

In the orders of this Tribunal dated November 14, 2006 and January 24, 2007 it has been laid down that the computation of outstanding loan will be on normative basis only (instead of normative or actual whichever is higher). In view of this there is no question of any adjustment of the depreciation amount as deemed repayment of loan.

It is to be understood that the depreciation is an expense and not an item allowed for repayment of loan. If a corporation does not borrow, it would not mean that the corporation will not be allowed any depreciation. Depreciation is an expense it represents a decline in the value of asset because of use, wear or obsolescence. The Accounting Principles Board of USA defines depreciation as under:-

“The cost of a productive facility is one of the costs of the service it renders during its useful economic life. Generally accepted accounting principles require that this cost be spread over the expected useful life of the facility in such a way as to allocate it as equitably as possible to the periods during which services are obtained from the use of the facility. This procedure is known as depreciation accounting, a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation”

It is well established that the depreciation is an expense and therefore, it cannot be deployed for deemed repayment of loan. In this view of the matter the CERC shall need to make a fresh computation of outstanding loan in the light of the aforesaid observations.”

16. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission assets covered in the present petition for the 2001-04 and 2004-09 periods is revised in the instant order.

17. We have considered the submissions. The revision of tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of tariff allowed for the 2009-14 period, which is also allowed in the instant order. The implementation of the directions of APTEL in case of the Petitioner has been kept pending waiting for the outcome of the Civil Appeals filed before the Hon’ble Supreme Court. Taking into consideration



the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the period 2001-04, 2004-09 and 2009-14 tariff periods. Therefore, the Petitioner will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

REVISION OF TRANSMISSION CHARGES ALLOWED FOR THE PERIOD FROM COD TO 31.3.2004 AND 2004-09 AND 2009-14 TARIFF PERIODS

2002-04 Period

18. The Commission vide order dated 10.5.2005 in Petition No. 122/2002 approved the transmission tariff for Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 and vide order dated 3.8.2005 in Petition No. 132/2002 for Asset-6, Asset-7 and Asset-8 from their respective CODs to 31.3.2004 and they are as follows:

(₹ in lakh)

Particulars	2002-03 (pro-rata)	2003-04
Asset-1		
Depreciation	1879.13	5637.38
Interest on Loan	3754.34	11215.96
Return on Equity	1822.20	5466.60
Advance against Depreciation	0.00	0.00
Interest on Working Capital	170.47	514.93
O&M Expenses	704.86	2241.41
Total	8331.00	25076.27
Asset-2		
Depreciation	106.60	319.79
Interest on Loan	304.44	910.12
Return on Equity	108.80	326.39
Advance against Depreciation	0.00	0.00
Interest on Working Capital	14.96	45.37
O&M Expenses	66.47	211.38
Total	601.26	1813.05
Asset-3		
Depreciation	64.25	192.74
Interest on Loan	183.31	549.88

Return on Equity	48.35	145.04
Advance against Depreciation	0.00	0.00
Interest on Working Capital	8.31	25.21
O&M Expenses	34.38	109.34
Total	338.59	1022.20
Asset-4		
Depreciation	4.29	25.72
Interest on Loan	8.55	52.62
Return on Equity	3.80	22.81
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.08	6.74
O&M Expenses	23.57	149.89
Total	41.29	257.78
Asset-5		
Depreciation	39.15	234.87
Interest on Loan	112.08	689.87
Return on Equity	28.39	170.36
Advance against Depreciation	0.00	0.00
Interest on Working Capital	5.63	34.57
O&M Expenses	38.52	245.02
Total	223.77	1374.70
Asset-6		
Depreciation	194.73	2336.70
Interest on Loan	295.40	3459.15
Return on Equity	179.11	2149.29
Advance against Depreciation	0.00	0.00
Interest on Working Capital	13.99	167.14
O&M Expenses	25.04	318.53
Total	708.26	8430.81

(₹ in lakh)

Particulars	2003-04	2003-04 (pro-rata)
	Asset-7	Asset-8
Depreciation	136.28	108.35
Interest on Loan	372.03	267.72
Return on Equity	207.99	199.28
Advance against Depreciation	0.00	0.00
Interest on Working Capital	21.45	16.71
O&M Expenses	115.52	96.23
Total	853.26	688.29

19. The Petitioner has claimed the following revised transmission charges for the transmission assets for the 2002-04 period in this petition:

(₹ in lakh)

Particulars	2002-03 (pro-rata)	2003-04
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Asset-1		
Depreciation	1879.13	5637.38
Interest on Loan	3754.04	11218.82
Return on Equity	1822.20	5774.06
Advance against Depreciation	0.00	0.00
Interest on Working Capital	171.19	522.17
O&M Expenses	704.86	2241.41
Total	8331.42	25393.84
Asset-2		
Depreciation	106.60	319.79
Interest on Loan	304.44	910.12
Return on Equity	108.80	362.48
Advance against Depreciation	0.00	0.00
Interest on Working Capital	15.03	47.03
O&M Expenses	66.47	211.38
Total	601.34	1850.80
Asset-3		
Depreciation	64.25	192.74
Interest on Loan	183.51	549.88
Return on Equity	48.35	222.23
Advance against Depreciation	0.00	0.00
Interest on Working Capital	8.43	26.40
O&M Expenses	34.38	109.34
Total	338.92	1100.59
Asset-4		
Depreciation	4.29	25.72
Interest on Loan	8.55	52.62
Return on Equity	3.80	22.81
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.08	6.78
O&M Expenses	23.57	149.89
Total	41.29	257.82
Asset-5		
Depreciation	39.15	234.87
Interest on Loan	112.08	689.87
Return on Equity	28.39	218.96
Advance against Depreciation	0.00	0.00
Interest on Working Capital	5.66	36.26
O&M Expenses	38.52	245.02
Total	223.80	1424.98
Asset-6		
Depreciation	194.73	2336.70
Interest on Loan	295.40	3576.41
Return on Equity	179.11	2149.29
Advance against Depreciation	0.00	0.00
Interest on Working Capital	14.07	171.72
O&M Expenses	25.04	318.53
Total	708.35	8552.66

(₹ in lakh)



Particulars	2003-04	2003-04 (pro-rata)
	Asset-7	Asset-8
Depreciation	136.28	108.35
Interest on Loan	372.14	267.67
Return on Equity	207.99	199.28
Advance against Depreciation	0.00	0.00
Interest on Working Capital	21.49	17.52
O&M Expenses	115.52	96.23
Total	853.41	689.05

20. We have considered the Petitioner's claim. The tariff is allowed for the transmission assets on the basis of following:

- a. As the ACE during the 2002-04 period is less than 20% of the apportioned approved cost for the transmission assets, the impact of the same has only been considered for revising the computation of Maintenance Spares component of IWC, in line with the judgement of the APTEL dated 13.6.2007 in Appeal No.139 of 2006 and batch. The impact of ACE has not been considered for computation of other AFC parameters during the 2002-04 period. The admitted capital cost and ACE approved by the Commission for the 2002-04 period are as follows:

(₹ in lakh)

Particulars	Admitted Capital Cost as on COD	ACE		Admitted Capital Cost as on 31.3.2004
		2002-03	2003-04	
Asset-1	184528.27	3953.83	1533.54	190015.64
Asset-2	11285.96	396.15	191.95	11874.06
Asset-3	6848.47	635.87	193.19	7677.53
Asset-4	714.58	0.00	8.92	723.50
Asset-5	8096.77	303.74	113.79	8514.30
Asset-6	64872.07	1731.49	10.38	66613.94
Asset-7	5246.92	N/A	69.16	5316.08
Asset-8	4844.62		744.93	5589.55

- b. The composition of capital cost approved by the Commission is as follows:

(₹ in lakh)

Particulars	As on COD	ACE		As on 31.3.2004	Debt : Equity ratio as on 31.3.2004	
		2002-03	2003-04			
Asset-1	Debt	150362.04	2032.21	788.21	153182.46	80.62%
	Equity	34166.23	1921.62	745.33	36833.18	19.38%
	Total	184528.27	3953.83	1533.54	190015.64	100.00%
Asset-2	Debt	9246.00	170.59	82.66	9499.25	80.00
	Equity	2039.96	225.56	109.29	2374.81	20.00
	Total	11285.96	396.15	191.95	11874.06	100.00
Asset-3	Debt	5942.00	153.41	46.61	6142.02	80.00
	Equity	906.47	482.46	146.58	1535.51	20.00
	Total	6848.47	635.87	193.19	7677.53	100.00
Asset-4	Debt	572.00	0.00	6.80	578.80	80.00
	Equity	142.58	0.00	2.12	144.70	20.00
	Total	714.58	0.00	8.92	723.50	100.00
Asset-5	Debt	7032.00	0.00	0.00	7032.00	82.59
	Equity	1064.77	303.74	113.79	1482.30	17.41
	Total	8096.77	303.74	113.79	8514.30	100.00
Asset-6	Debt	51439.00	1731.49	10.38	53180.87	79.83
	Equity	13433.07	0.00	0.00	13433.07	20.17
	Total	64872.07	1731.49	10.38	66613.94	100.00
Asset-7	Debt	3947.00	N/A	69.16	4016.16	75.55
	Equity	1299.92		0.00	1299.92	24.45
	Total	5246.92		69.16	5316.08	100.00
Asset-8	Debt	3350.00	N/A	744.93	4094.93	73.26
	Equity	1494.62		0.00	1494.62	26.74
	Total	4844.62		744.93	5589.55	100.00

- c. The loan repayment in tariff has now been modified as per the judgment of APTEL which has directed that normative repayment is to be considered. Therefore, now there is variation in the closing balance of loan vis-à-vis that was approved earlier. This closing balance of loan shall have impact on opening and closing loan balances of future tariff periods too.
- d. Weighted Average Rate of Interest on actual loan, as applied in tariff, have been derived/ adopted from the following orders:
- i. Order dated 10.5.2005 in Petition No. 122/2002 and order dated 9.5.2006 in Petition No. 84/2005 for Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5;

- ii. Order dated 3.8.2005 in Petition No. 132/2002 and order dated 9.5.2006 in Petition No. 127/2005 for Asset-6, Asset-7 and Asset-8.
- e. Weighted Average Rate of Depreciation, Rate of IWC and O&M Expenses as per order dated 10.5.2005 in Petition No. 122/2002 for Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 and order dated 3.8.2005 in Petition No. 132/2002 for Assets-6, Asset-7 and Asset-8.
- f. Maintenance Spares component of IWC are being revised on account of ACE in the 2002-04 period.

21. In view of the above, the revised transmission charges allowed for the transmission assets for the 2002-04 period is as follows:

(₹ in lakh)		
Particulars	2002-03 (pro-rata)	2003-04
Asset-1		
Depreciation	1879.13	5637.38
Interest on Loan	3754.34	11215.96
Return on Equity	1822.20	5466.60
Advance against Depreciation	0.00	0.00
Interest on Working Capital	171.19	520.35
O&M Expenses	704.86	2241.41
Total	8331.72	25081.70
Asset-2		
Depreciation	106.60	319.79
Interest on Loan	304.44	910.12
Return on Equity	108.80	326.39
Advance against Depreciation	0.00	0.00
Interest on Working Capital	15.03	45.93
O&M Expenses	66.47	211.38
Total	601.34	1813.62
Asset-3		
Depreciation	64.25	192.74
Interest on Loan	183.31	549.88
Return on Equity	48.35	145.04
Advance against Depreciation	0.00	0.00
Interest on Working Capital	8.42	26.06
O&M Expenses	34.38	109.34
Total	338.71	1023.05
Asset-4		
Depreciation	4.29	25.72

Interest on Loan	8.55	52.62
Return on Equity	3.80	22.81
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.08	6.74
O&M Expenses	23.57	149.89
Total	41.29	257.78
Asset-5		
Depreciation	39.15	234.87
Interest on Loan	112.08	689.87
Return on Equity	28.39	170.36
Advance against Depreciation	0.00	0.00
Interest on Working Capital	5.66	34.99
O&M Expenses	38.52	245.02
Total	223.80	1375.11
Asset-6		
Depreciation	194.73	2336.70
Interest on Loan	295.40	3459.15
Return on Equity	179.11	2149.29
Advance against Depreciation	0.00	0.00
Interest on Working Capital	14.07	169.15
O&M Expenses	25.04	318.53
Total	708.34	8432.82

(₹ in lakh)

Particulars	2003-04	2003-04 (pro-rata)
	Asset-7	Asset-8
Depreciation	136.28	108.35
Interest on Loan	372.03	267.72
Return on Equity	207.99	199.28
Advance against Depreciation	0.00	0.00
Interest on Working Capital	21.48	17.04
O&M Expenses	115.52	96.23
Total	853.30	688.62

22. The AFC allowed earlier for the 2002-04 period, the revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2002-03 (pro-rata)	2003-04
Asset-1		
AFC approved <i>vide</i> order dated 10.5.2005 in Petition No. 122/2002	8331.00	25076.27
AFC claimed by the Petitioner in the instant petition	8331.42	25393.84
AFC allowed in the instant order	8331.72	25081.70
Asset-2		
AFC approved <i>vide</i> order dated 10.5.2005	601.26	1813.05



in Petition No. 122/2002		
AFC claimed by the Petitioner in the instant petition	601.34	1850.80
AFC allowed in the instant order	601.34	1813.62
Asset-3		
AFC approved <i>vide</i> order dated 10.5.2005 in Petition No. 122/2002	338.59	1022.20
AFC claimed by the Petitioner in the instant petition	338.92	1100.59
AFC allowed in the instant order	338.71	1023.05
Asset-4		
AFC approved <i>vide</i> order dated 10.5.2005 in Petition No. 122/2002	41.29	257.78
AFC claimed by the Petitioner in the instant petition	41.29	257.82
AFC allowed in the instant order	41.29	257.78
Asset-5		
AFC approved <i>vide</i> order dated 10.5.2005 in Petition No. 122/2002	223.77	1374.70
AFC claimed by the Petitioner in the instant petition	223.80	1424.98
AFC allowed in the instant order	223.80	1375.11
Asset-6		
AFC approved <i>vide</i> order dated 3.8.2005 in Petition No. 132/2002	708.26	8430.81
AFC claimed by the Petitioner in the instant petition	708.35	8552.66
AFC allowed in the instant order	708.34	8432.82

(₹ in lakh)	
Particulars	2003-04
Asset-7	
AFC approved <i>vide</i> order dated 3.8.2005 in Petition No. 132/2002	853.26
AFC claimed by the Petitioner in the instant petition	853.41
AFC allowed in the instant order	853.30

(₹ in lakh)	
Particulars	2003-04 (pro-rata)
Asset-8	
AFC approved <i>vide</i> order dated 3.8.2005 in Petition No. 132/2002	688.29
AFC claimed by the Petitioner in the instant petition	689.05
AFC allowed in the instant order	688.62

2004-09 Tariff Period

23. The Commission approved the transmission charges for the 2004-09 tariff period *vide* order dated 29.6.2011 in Petition No. 58/2010 for Asset-1, Asset-2, Asset-3 and Asset-5, *vide* order dated 9.5.2006 in Petition No. 84/2005 for Asset-4, *vide*

order dated 1.6.2010 in Petition No. 49/2010 for Asset-6, order dated 20.4.2007 in I.A. No. 72/2006 in Petition No. 127/2005 for Asset-7 and *vide* order dated 9.5.2006 in Petition No. 127/2005 for Asset-8. The transmission charges allowed for the transmission assets for the 2004-09 tariff period were as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-1					
Depreciation	5933.03	5938.67	5939.42	5938.08	5931.69
Interest on Loan	10879.23	9940.30	8900.02	7855.33	6800.49
Return on Equity	5164.48	5173.47	5174.69	5172.50	5162.06
Advance against Depreciation	4162.29	8579.84	8577.06	8578.71	8573.74
Interest on Working Capital	704.61	779.49	776.43	774.03	772.14
O&M Expenses	1620.58	1685.36	1754.34	1821.92	1897.21
Total	28464.22	32097.12	31121.95	30140.57	29137.33
Asset-2					
Depreciation	340.42	340.00	339.37	340.60	340.63
Interest on Loan	901.55	840.17	762.88	685.77	604.98
Return on Equity	332.85	332.49	331.80	333.87	333.96
Advance against Depreciation	0.00	197.00	469.81	468.79	477.05
Interest on Working Capital	44.46	47.74	52.11	51.85	51.70
O&M Expenses	167.23	173.93	181.02	188.03	195.76
Total	1786.50	1931.32	2136.98	2068.91	2004.07
Asset-3					
Depreciation	221.78	222.14	221.35	221.21	221.06
Interest on Loan	557.52	536.36	499.49	451.30	411.88
Return on Equity	216.88	217.95	217.03	216.87	222.43
Advance against Depreciation	0.00	0.00	77.72	291.97	291.85
Interest on Working Capital	30.19	30.51	31.90	35.52	35.71
O&M Expenses	197.56	205.49	213.78	222.18	231.20
Total	1223.93	1212.47	1261.28	1439.05	1414.13
Asset-4					
Depreciation	26.05	26.05	26.05	26.05	26.05
Interest on Loan	51.74	49.14	45.67	41.32	36.97
Return on Equity	20.25	20.25	20.25	20.25	20.25
Advance against Depreciation	0.00	0.00	0.00	15.39	20.82
Interest on Working Capital	5.43	5.55	5.67	6.04	6.25
O&M Expenses	112.48	117.00	121.68	126.52	131.60
Total	215.95	217.99	219.32	235.57	241.94
Asset-5					
Depreciation	249.30	248.35	247.37	246.51	244.97



Interest on Loan	671.33	627.60	567.31	507.27	445.64
Return on Equity	206.79	205.49	204.12	202.77	200.29
Advance against Depreciation	0.00	114.50	340.89	338.90	338.26
Interest on Working Capital	36.57	38.62	42.37	42.21	42.06
O&M Expenses	304.34	316.55	329.27	342.29	356.11
Total	1468.33	1551.11	1731.34	1679.95	1627.33
Asset-6					
Depreciation	2388.26	2389.19	2398.34	2417.91	2428.32
Interest on Loan	3388.18	3184.51	2927.98	2632.94	2324.21
Return on Equity	1881.21	1881.79	1881.79	1886.65	1891.51
Advance against Depreciation	119.94	1348.59	2461.34	2440.48	2467.90
Interest on Working Capital	219.71	242.37	262.51	262.84	263.93
O&M Expenses	478.04	497.25	517.14	537.71	559.30
Total	8475.33	9543.70	10449.10	10178.53	9935.17
Asset-7					
Depreciation	138.53	138.55	138.55	138.55	138.55
Interest on Loan	365.70	344.35	316.44	284.10	251.76
Return on Equity	182.01	182.02	182.02	182.02	182.02
Advance against Depreciation	0.00	54.20	201.97	201.97	201.97
Interest on Working Capital	20.01	21.02	23.57	23.49	23.45
O&M Expenses	87.57	91.07	94.79	98.45	102.51
Total	793.82	831.21	957.34	928.58	900.26
Asset-8					
Depreciation	149.16	149.16	149.16	149.16	149.16
Interest on Loan	377.22	350.47	318.91	285.15	251.40
Return on Equity	209.25	209.25	209.25	209.25	209.25
Advance against Depreciation	29.63	148.33	199.26	199.26	199.26
Interest on Working Capital	20.89	22.90	23.67	23.53	23.43
O&M Expenses	87.55	91.05	94.77	98.43	102.48
Total	873.69	971.15	995.01	964.78	934.97

24. The Petitioner has claimed the following revised AFC for the transmission assets for the 2004-09 tariff period in the instant petition:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-1					
Depreciation	5933.03	5938.67	5939.42	5938.08	5931.69
Interest on Loan	10884.86	9949.69	8908.52	7861.87	6808.34
Return on Equity	5164.48	5173.47	5174.69	5172.50	5162.06
Advance against Depreciation	4174.39	8595.00	8592.21	8593.87	8588.90
Interest on Working Capital	719.60	795.72	793.62	792.19	791.40



O&M Expenses	1620.58	1685.36	1754.34	1821.92	1897.21
Total	28496.94	32137.90	31162.80	30180.43	29179.59
Asset-2					
Depreciation	340.42	340.00	339.37	340.60	340.63
Interest on Loan	901.51	840.56	763.26	685.85	605.10
Return on Equity	332.85	332.49	331.80	333.87	333.96
Advance against Depreciation	0.00	196.13	469.90	468.88	477.14
Interest on Working Capital	45.64	49.00	53.46	53.33	53.33
O&M Expenses	167.23	173.93	181.02	188.03	195.76
Total	1787.65	1932.11	2138.81	2070.56	2005.91
Asset-3					
Depreciation	221.78	222.14	221.35	221.21	221.06
Interest on Loan	560.96	544.06	507.59	458.88	418.60
Return on Equity	216.88	217.95	217.03	216.87	222.43
Advance against Depreciation	0.00	0.00	0.00	292.29	300.37
Interest on Working Capital	31.29	31.86	32.03	37.08	37.50
O&M Expenses	197.56	205.49	213.78	222.18	231.20
Total	1228.47	1221.50	1191.78	1448.52	1431.16
Asset-4					
Depreciation	26.05	26.05	26.05	26.05	26.05
Interest on Loan	52.77	52.21	51.72	51.29	50.85
Return on Equity	20.25	20.25	20.25	20.25	20.25
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	6.24	6.43	6.63	6.83	7.05
O&M Expenses	112.48	117.00	121.68	126.52	131.60
Total	217.79	221.94	226.33	230.95	235.81
Asset-5					
Depreciation	249.30	248.35	247.37	246.51	244.97
Interest on Loan	672.01	629.57	568.86	508.53	446.73
Return on Equity	206.79	205.49	204.12	202.77	200.29
Advance against Depreciation	0.00	98.09	342.47	340.48	339.84
Interest on Working Capital	37.51	39.35	43.47	43.36	43.28
O&M Expenses	304.34	316.55	329.27	342.29	356.11
Total	1469.95	1537.40	1735.57	1683.95	1631.22
Asset-6					
Depreciation	2388.26	2389.19	2398.34	2417.91	2428.32
Interest on Loan	3387.00	3183.39	2926.82	2633.27	2324.39
Return on Equity	1881.21	1881.79	1881.79	1886.65	1891.51
Advance against Depreciation	128.04	1347.28	2459.64	2438.80	2466.22
Interest on Working Capital	225.83	248.72	269.40	270.52	272.26
O&M Expenses	478.04	497.25	517.14	537.71	559.30
Total	8488.39	9547.62	10453.13	10184.86	9941.99
Asset-7					



Depreciation	138.53	138.55	138.55	138.55	138.55
Interest on Loan	365.75	344.40	316.49	284.14	251.80
Return on Equity	182.01	182.02	182.02	182.02	182.02
Advance against Depreciation	0.00	53.67	202.02	202.02	202.02
Interest on Working Capital	20.09	21.09	23.66	23.59	23.55
O&M Expenses	87.57	91.07	94.79	98.45	102.51
Total	793.95	830.81	957.53	928.77	900.45
Asset-8					
Depreciation	149.16	149.16	149.16	149.16	149.16
Interest on Loan	377.99	351.30	321.62	290.76	259.54
Return on Equity	209.25	209.25	209.25	209.25	209.25
Advance against Depreciation	22.27	147.16	160.01	174.47	176.08
Interest on Working Capital	20.75	22.87	23.01	23.18	23.15
O&M Expenses	87.55	91.05	94.77	98.43	102.48
Total	866.98	970.79	957.82	945.26	919.65

25. We have considered the Petitioner's claim. The revised tariff approved for the transmission assets for the 2004-09 tariff period on the basis of the following:

- a. The admitted capital cost and ACE approved by the Commission for the 2004-09 period are as follows:

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2004	ACE					Admitted Capital Cost as on 31.3.2009
		2004-05	2005-06	2006-07	2007-08	2008-09	
Asset-1	194106.12*	373.17	54.64	3.43	(107.59)	(389.46)	194040.31
Asset-2	11874.06	18.11	(35.54)	2.74	96.06	(92.12)	11863.31
Asset-3	7677.53	90.88	(39.70)	(4.26)	(3.54)	268.51	7989.42
Asset-4	723.50	0.00	0.00	0.00	0.00	0.00	723.50
Asset-5	8514.30	(35.05)	(26.81)	(38.19)	(26.08)	(92.12)	8296.05
Asset-6	66272.23*	41.39	0.00	305.19	347.01	0.00	66965.82
Asset-7	5316.08	1.21	0.00	0.00	0.00	0.00	5317.29
Asset-8	5589.55	0.00	0.00	0.00	0.00	0.00	5589.55

*FERV impact of ₹4090.49 lakh and (₹341.71) lakh considered for Asset-1 and Asset-6 respectively

- b. The composition of capital cost approved by the Commission is as follows:

(₹ in lakh)

Particulars	As on 1.4.2004	ACE					As on 31.3.2009	Debt: Equity Ratio as on 31.3.2009	
		2004-05	2005-06	2006-07	2007-08	2008-09			
Asset-1	Debt	157272.94	261.22	38.25	2.40	(75.31)	(272.62)	157226.88	81.03%
	Equity	36833.18	111.95	16.39	1.03	(32.28)	(116.84)	36813.43	18.97%



	Total	194106.12	373.17	54.64	3.43	(107.59)	(389.46)	194040.31	100.00%
Asset-2	Debt	9499.25	12.68	(24.88)	1.92	67.24	(64.48)	9491.73	80.01%
	Equity	2374.81	5.43	(10.66)	0.82	28.82	(27.64)	2371.58	19.99%
	Total	11874.06	18.11	(35.54)	2.74	96.06	(92.12)	11863.31	100.00%
Asset-3	Debt	6142.02	63.62	(27.79)	(2.98)	(2.48)	187.96	6360.35	79.61%
	Equity	1535.51	27.26	(11.91)	(1.28)	(1.06)	80.55	1629.07	20.39%
	Total	7677.53	90.88	(39.70)	(4.26)	(3.54)	268.51	7989.42	100.00%
Asset-4	Debt	578.80	0.00	0.00	0.00	0.00	0.00	578.80	80.00%
	Equity	144.70	0.00	0.00	0.00	0.00	0.00	144.70	20.00%
	Total	723.50	0.00	0.00	0.00	0.00	0.00	723.50	100.00%
Asset-5	Debt	7032.00	(24.53)	(18.77)	(26.73)	(18.26)	(64.48)	6879.23	82.92%
	Equity	1482.30	(10.52)	(8.04)	(11.46)	(7.82)	(27.64)	1416.82	17.08%
	Total	8514.30	(35.05)	(26.81)	(38.19)	(26.08)	(92.12)	8296.05	100.00%
Asset-6	Debt	52839.16	33.11	0.00	305.19	277.61	0.00	53455.07	79.82%
	Equity	13433.07	8.28	0.00	0.00	69.40	0.00	13510.75	20.18%
	Total	66272.23	41.39	0.00	305.19	347.01	0.00	66965.82	100.00%
Asset-7	Debt	4016.16	0.96	0.00	0.00	0.00	0.00	4017.12	75.55%
	Equity	1299.92	0.24	0.00	0.00	0.00	0.00	1300.16	24.45%
	Total	5316.08	1.21	0.00	0.00	0.00	0.00	5317.29	100.00%
Asset-8	Debt	4094.93	0.00	0.00	0.00	0.00	0.00	4094.93	73.26%
	Equity	1494.62	0.00	0.00	0.00	0.00	0.00	1494.62	26.74%
	Total	5589.55	0.00	0.00	0.00	0.00	0.00	5589.55	100.00%

- c. Weighted Average Rate of Interest on actual loan is considered from order dated 29.6.2011 in Petition No. 58/2010 for Asset-1, Asset-2, Asset-3 and Asset-5, order dated 9.5.2006 in Petition No. 84/2005 for Asset-4, order dated 1.6.2010 in Petition No. 49/2010 for Asset-6, order dated 20.4.2007 in I.A. No. 72/2006 in Petition No. 127/2005 for Asset-7 and order dated 9.5.2006 in Petition No. 127/2005 for Asset-8.
- d. Weighted Average Rate of Depreciation, Rate of IWC and O&M Expenses as per order dated 29.6.2011 in Petition No. 58/2010 for Assets-1, Asset-2, Asset-3 and Asset-5, order dated 9.5.2006 in Petition No. 84/2005 for Asset-4, order dated 1.6.2010 in Petition No. 49/2010 for Asset-6, order dated 20.4.2007 in I.A. No. 72/2006 in Petition No. 127/2005 for Asset-7 and order dated 9.5.2006 in Petition No. 127/2005 for Asset-8.
- e. Maintenance Spares component of IWC are revised with respect to ACE incurred during the 2004-09 period.

26. In view of the above, the revised AFC allowed for the transmission assets for the 2004-09 tariff period is as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-1					
Depreciation	5933.03	5938.67	5939.42	5938.08	5931.69
Interest on Loan	10879.23	9940.30	8900.02	7855.33	6800.49
Return on Equity	5164.48	5173.47	5174.69	5172.50	5162.06
Advance against Depreciation	4162.29	8579.84	8577.06	8578.71	8573.74
Interest on Working Capital	711.13	786.64	784.04	782.04	780.37
O&M Expenses	1620.58	1685.36	1754.34	1821.92	1897.21
Total	28470.74	32104.27	31129.56	30148.58	29145.56
Asset-2					
Depreciation	340.42	340.00	339.37	340.60	340.63
Interest on Loan	901.55	840.17	762.88	685.77	604.98
Return on Equity	332.85	332.49	331.80	333.87	333.96
Advance against Depreciation	0.00	197.00	469.81	468.79	477.05
Interest on Working Capital	45.14	48.46	52.85	52.69	52.59
O&M Expenses	167.23	173.93	181.02	188.03	195.76
Total	1787.20	1932.05	2137.73	2069.75	2004.97
Asset-3					
Depreciation	221.78	222.14	221.35	221.21	221.06
Interest on Loan	560.97	544.13	507.75	458.77	418.56
Return on Equity	216.88	217.95	217.03	216.87	222.43
Advance against Depreciation	0.00	0.00	0.00	292.54	300.34
Interest on Working Capital	31.25	31.74	31.83	36.86	37.39
O&M Expenses	197.56	205.49	213.78	222.18	231.20
Total	1228.44	1221.46	1191.75	1448.44	1430.98
Asset-4					
Depreciation	26.05	26.05	26.05	26.05	26.05
Interest on Loan	52.36	50.77	47.61	43.07	38.54
Return on Equity	20.25	20.25	20.25	20.25	20.25
Advance against Depreciation	0.00	0.00	0.00	0.00	19.98
Interest on Working Capital	5.45	5.59	5.71	5.81	6.27
O&M Expenses	112.48	117.00	121.68	126.52	131.60
Total	216.59	219.66	221.30	221.71	242.69
Asset-5					
Depreciation	249.30	248.35	247.37	246.51	244.97
Interest on Loan	672.21	629.29	568.83	508.64	446.86
Return on Equity	206.79	205.49	204.12	202.77	200.29
Advance against Depreciation	0.00	98.10	342.47	340.48	339.84
Interest on Working	37.05	38.82	42.88	42.70	42.51

Capital					
O&M Expenses	304.34	316.55	329.27	342.29	356.11
Total	1469.68	1536.60	1734.95	1683.40	1630.59
Asset-6					
Depreciation	2388.26	2389.19	2398.34	2417.91	2428.32
Interest on Loan	3388.18	3184.51	2927.98	2632.94	2324.21
Return on Equity	1881.21	1881.79	1881.79	1886.65	1891.51
Advance against Depreciation	119.94	1348.59	2461.34	2440.48	2467.90
Interest on Working Capital	221.77	244.58	265.01	265.84	267.30
O&M Expenses	478.04	497.25	517.14	537.71	559.30
Total	8477.40	9545.90	10451.61	10181.53	9938.54
Asset-7					
Depreciation	138.53	138.55	138.55	138.55	138.55
Interest on Loan	365.70	344.35	316.44	284.10	251.76
Return on Equity	182.01	182.02	182.02	182.02	182.02
Advance against Depreciation	0.00	54.20	201.97	201.97	201.97
Interest on Working Capital	20.09	21.10	23.66	23.59	23.55
O&M Expenses	87.57	91.07	94.79	98.45	102.51
Total	793.90	831.29	957.43	928.68	900.37
Asset-8					
Depreciation	149.16	149.16	149.16	149.16	149.16
Interest on Loan	377.22	350.47	318.91	285.15	251.40
Return on Equity	209.25	209.25	209.25	209.25	209.25
Advance against Depreciation	29.63	148.33	199.26	199.26	199.26
Interest on Working Capital	21.71	23.77	24.59	24.51	24.47
O&M Expenses	87.55	91.05	94.77	98.43	102.48
Total	874.51	972.02	995.94	965.76	936.02

27. The AFC allowed earlier for 2004-09 period, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-1					
AFC approved <i>vide</i> order dated 29.6.2011 in Petition No. 58/2010	28464.22	32097.12	31121.95	30140.57	29137.33
AFC claimed by the Petitioner in the instant petition	28496.94	32137.90	31162.80	30180.43	29179.59
AFC allowed in the instant order	28470.74	32104.27	31129.56	30148.58	29145.56
Asset-2					
AFC approved <i>vide</i> order dated 29.6.2011 in Petition No. 58/2010	1786.50	1931.32	2136.98	2068.91	2004.07

AFC claimed by the Petitioner in the instant petition	1787.65	1932.11	2138.81	2070.56	2005.91
AFC allowed in the instant order	1787.20	1932.05	2137.73	2069.75	2004.97
Asset-3					
AFC approved <i>vide</i> order dated 29.6.2011 in Petition No. 58/2010	1223.93	1212.47	1261.28	1439.05	1414.13
AFC claimed by the Petitioner in the instant petition	1228.47	1221.50	1191.78	1448.52	1431.16
AFC allowed in the instant order	1228.44	1221.46	1191.75	1448.44	1430.98
Asset-4					
AFC approved <i>vide</i> order dated 9.5.2006 in Petition No. 84/2005	215.95	217.99	219.32	235.57	241.94
AFC claimed by the Petitioner in the instant petition	217.79	221.94	226.33	230.95	235.81
AFC allowed in the instant order	216.59	219.66	221.30	221.71	242.69
Asset-5					
AFC approved <i>vide</i> order dated 29.6.2011 in Petition No. 58/2010	1468.33	1551.11	1731.34	1679.95	1627.33
AFC claimed by the Petitioner in the instant petition	1469.95	1537.40	1735.57	1683.95	1631.22
AFC allowed in the instant order	1469.68	1536.60	1734.95	1683.40	1630.59
Asset-6					
AFC approved <i>vide</i> order dated 1.6.2010 in Petition No. 49/2010	8475.33	9543.70	10449.10	10178.53	9935.17
AFC claimed by the Petitioner in the instant petition	8488.39	9547.62	10453.13	10184.86	9941.99
AFC allowed in the instant order	8477.40	9545.90	10451.61	10181.53	9938.54
Asset-7					
AFC approved <i>vide</i> order dated 20.4.2007 in I.A. No. 72/2006 in Petition No. 127/2005	793.82	831.21	957.34	928.58	900.26
AFC claimed by the Petitioner in the instant petition	793.95	830.81	957.53	928.77	900.45
AFC allowed in the instant order	793.90	831.29	957.43	928.68	900.37
Asset-8					
AFC approved <i>vide</i> order dated 9.5.2006 in Petition No. 127/2005	873.69	971.15	995.01	964.78	934.97
AFC claimed by the Petitioner in the instant	866.98	970.79	957.82	945.26	919.65

petition					
AFC allowed in the instant order	874.51	972.02	995.94	965.76	936.02

2009-14 Tariff Period

28. The Commission *vide* order dated 12.3.2013 in Petition No.188/TT/2011 approved the tariff for 2009-14 tariff period and subsequently, *vide* order dated 7.1.2016 in Petition No. 499/TT/2014 trued up the tariff allowed for the 2009-14 tariff period for Combined Asset-I and Combined Asset-II and the same is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I					
Depreciation	13744.53	13740.92	13740.92	13740.92	13740.92
Interest on Loan	8040.34	7185.86	6511.53	5667.81	4814.68
Return on Equity	9393.71	9733.81	9743.36	9743.36	9860.52
Interest on Working Capital	800.94	798.80	794.10	786.19	780.99
O&M Expenses	3020.97	3193.93	3377.05	3570.48	3773.08
Total	35000.50	34653.32	34166.96	33508.77	32970.19
Combined Asset-II					
Depreciation	2064.79	2064.79	2064.79	2064.79	2064.79
Interest on Loan	1798.09	1617.03	1469.39	1251.46	1031.18
Return on Equity	1560.58	1617.74	1619.33	1619.33	1638.80
Interest on Working Capital	191.34	193.23	194.93	195.40	196.50
O&M Expenses	1565.43	1654.84	1749.73	1849.79	1955.43
Total	7180.23	7147.63	7098.17	6980.77	6886.70

29. The Petitioner has claimed the following revised transmission charges for the Combined Asset-I and Combined Asset-II for the 2009-14 tariff period in the instant petition:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I					
Depreciation	13744.53	13740.92	13740.92	13740.92	13740.92
Interest on Loan	8046.10	7191.76	6517.85	5674.50	4821.96
Return on Equity	9393.71	9733.81	9743.36	9743.36	9860.52
Interest on Working Capital	801.06	798.92	794.23	786.33	781.14
O&M Expenses	3020.97	3193.93	3377.05	3570.48	3773.08
Total	35006.37	34659.34	34173.41	33515.59	32977.62
Combined Asset-II					
Depreciation	2064.79	2064.79	2064.79	2064.79	2064.79

Interest on Loan	1831.93	1651.26	1504.89	1286.70	1065.99
Return on Equity	1560.58	1617.74	1619.33	1619.33	1638.80
Interest on Working Capital	192.05	193.95	195.67	196.13	197.22
O&M Expenses	1565.43	1654.84	1749.73	1849.79	1955.43
Total	7214.77	7182.57	7134.42	7016.75	6922.23

30. We have considered the Petitioner's claim. The tariff is allowed for the Combined Asset-I and Combined Asset-II covered in the present petition on the basis of following:

- a. The admitted capital cost and ACE approved by the Commission for the 2009-14 period are as follows:

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2009	ACE	Admitted Capital Cost as on 31.3.2014
		2009-10	
Combined Asset-I	261006.13	(136.84)	260869.29
Combined Asset-II	39779.11	0.00	39779.11

- b. Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 7.1.2016 in Petition No. 499/TT/2014.
- c. Weighted Average Rate of Depreciation as per order dated 7.1.2016 in Petition No. 499/TT/2014.

31. In view of the above, the revised transmission charges allowed for the Combined Asset-I and Combined Asset-II for the 2009-14 tariff period is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I					
Depreciation	13744.53	13740.92	13740.92	13740.92	13740.92
Interest on Loan	8040.34	7185.86	6511.53	5667.81	4814.68
Return on Equity	9393.71	9733.81	9743.36	9743.36	9860.52
Interest on Working Capital	800.94	798.80	794.10	786.19	780.99
O&M Expenses	3020.97	3193.93	3377.05	3570.48	3773.08
Total	35000.50	34653.32	34166.96	33508.77	32970.19
Combined Asset-II					
Depreciation	2064.79	2064.79	2064.79	2064.79	2064.79
Interest on Loan	1807.39	1626.43	1479.15	1261.14	1040.75
Return on Equity	1560.58	1617.74	1619.33	1619.33	1638.80

Interest on Working Capital	191.54	193.43	195.14	195.60	196.70
O&M Expenses	1565.43	1654.84	1749.73	1849.79	1955.43
Total	7189.72	7157.23	7108.14	6990.65	6896.46

32. The AFC allowed vide order dated 7.1.2016 in Petition No. 499/TT/2014 for 2009-14 tariff period, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I					
AFC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	35000.50	34653.32	34166.96	33508.77	32970.19
AFC claimed by the Petitioner in the instant petition	35006.37	34659.34	34173.41	33515.59	32977.62
AFC allowed in the instant order	35000.50	34653.32	34166.96	33508.77	32970.19
Combined Asset-II					
AFC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	7180.23	7147.63	7098.17	6980.77	6886.70
AFC claimed by the Petitioner in the instant petition	7214.77	7182.57	7134.42	7016.75	6922.23
AFC allowed in the instant order	7189.72	7157.23	7108.14	6990.65	6896.46

TRUING UP OF ANNUAL FIXED CHARGES OF THE 2014-19 TARIFF PERIOD

33. The details of the trued up transmission charges claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Depreciation	13740.91	3105.33	3105.33	3111.72	3118.61
Interest on Loan	3648.96	2695.92	2202.51	1795.11	1382.61
Return on Equity	9868.07	9913.32	9908.29	9914.59	9947.60
Interest on Working Capital	774.73	517.16	514.39	514.61	515.92
O&M Expenses	2666.51	2813.79	2971.38	3139.85	3318.67
Total	30699.18	19045.52	18701.90	18475.88	18283.41
Combined Asset-II					
Depreciation	2064.79	2064.79	508.67	508.67	508.67
Interest on Loan	850.84	628.59	478.35	417.02	373.13
Return on Equity	1640.05	1647.57	1646.74	1646.74	1651.17
Interest on Working Capital	204.05	202.41	166.52	168.62	171.34
O&M Expenses	1795.41	1855.29	1916.96	1980.43	2046.19

Total	6555.14	6398.65	4717.24	4721.48	4750.50
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34. The details of the trued up IWC claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
O&M Expenses	222.21	234.48	247.62	261.65	276.56
Maintenance Spares	399.98	422.07	445.71	470.98	497.80
Receivables	5116.53	3174.25	3116.98	3079.32	3047.24
Total Working Capital	5738.72	3830.80	3810.31	3811.95	3821.60
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	774.73	517.16	514.39	514.61	515.92
Combined Asset-II					
O&M Expenses	149.62	154.61	159.75	165.04	170.52
Maintenance Spares	269.31	278.29	287.54	297.06	306.93
Receivables	1092.52	1066.44	786.21	786.91	791.75
Total Working Capital	1511.45	1499.34	1233.50	1249.01	1269.20
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	204.05	202.41	166.52	168.62	171.34

Capital Cost

35. The capital cost as on 31.3.2014 of ₹260869.29 lakh for Combined Asset-I and ₹39779.11 lakh for Combined Asset-II admitted by the Commission *vide* order dated 7.1.2016 in Petition No. 499/TT/2014 has been considered as opening capital cost as on 1.4.2014 by the Petitioner for determination of tariff. The Commission has considered the same to work out trued up tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure (ACE)

36. The Commission *vide* order dated 7.1.2016 in Petition No. 499/TT/2014 had allowed ACE of ₹270.95 lakh for Combined Asset-I in 2015-16 against procurement of additional man-lifts for Talcher HVDC sub-station. The procurement was approved in the 36th meeting of Standing Committee on Power System Planning of Southern Region held on 4.9.2013 and ratification of the same was done in the 23rd SRPC meeting held on 26.10.2013.

37. Against the projected ACE of ₹270.95 lakh, the Petitioner has claimed following ACE for Combined Asset-I based on actual expenditure:

(₹ in lakh)

Particulars	2017-18	2018-19	Total
ACE claimed for Combined Asset-I	213.18	0.87	214.05

38. The Petitioner has submitted that the ACE incurred during 2014-19 is after the cut-off date and is on account of additional expenditure against procurement of additional man lifts for Talcher HVDC Sub-station, which is claimed under Regulation 14(3)(ix) of the 2014 Tariff Regulations. We have considered the submissions made by the Petitioner. The ACE for procurement of additional man-lifts for Talcher HVDC Sub-station was approved *vide* order dated 7.1.2016 in Petition No. 499/TT/2014. The actual ACE claimed has been verified from the Auditor's Certificate. Further, the capital cost of ₹300862.45 lakh as on 31.3.2019 for the transmission project is within the apportioned approved capital cost of ₹386561 lakh. The ACE claimed by the Petitioner has been allowed under Regulation 14(3)(ix) of the 2014 Tariff Regulations as it pertains to expenditure which has become necessary for successful and efficient operation of the transmission system. The ACE allowed for the 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	Apportioned Approved Capital Cost	Admitted Capital Cost as on 31.3.2014	2017-18	2018-19	Total Capital Cost as on 31.3.2019
Combined Asset-I	386561.00	260869.29	213.18	0.87	261083.34
Combined Asset-II		39779.11	0.00	0.00	39779.11

Debt-Equity ratio

39. The Petitioner has claimed opening Debt-Equity ratio approved by the Commission *vide* order dated 7.1.2016 in Petition No. 499/TT/2014 and Debt-Equity ratio of 70:30 for the ACE. The same ratio has been considered in the instant order as provided under Regulation 19(3) of the 2014 Tariff Regulations. The details of Debt-

Equity ratio in respect of the Combined Asset-I and Combined Asset-II as on 1.4.2014 and as on 31.3.2019 are as follows:

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Combined Asset-I						
Debt	210586.15	80.72	149.84	70.00	210735.99	80.72
Equity	50283.14	19.28	64.22	30.00	50347.35	19.28
Total	260869.29	100.00	214.05	100.00	261083.34	100.00
Combined Asset-II						
Debt	31422.14	78.99	0.00	N/A	31422.14	78.99
Equity	8356.97	21.01	0.00		8356.97	21.01
Total	39779.11	100.00	0.00		39779.11	100.00

Depreciation

40. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD). The WAROD has been worked out (as placed in Annexure-I and Annexure-II for Combined Asset-I and Combined Asset-II respectively) after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Combined Asset-I and Combined Asset-II complete 12 years of useful life at the closing of 2014-15 and 2015-16 respectively, after which the remaining depreciable value is spread over the balance useful life of the assets as per Regulation 27(5) of the 2014 Tariff Regulations. Accordingly, depreciation allowed during 2014-19 is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Opening Gross Block	260869.29	260869.29	260869.29	260869.29	261082.47
Additional Capitalisation	0.00	0.00	0.00	213.18	0.87
Closing Gross Block	260869.29	260869.29	260869.29	261082.47	261083.34
Average Gross Block	260869.29	260869.29	260869.29	260975.88	261082.91
Freehold Land	452.81	452.81	452.81	452.81	452.81
Weighted average rate of Depreciation (WAROD) (%)	5.27	1.19	1.19	1.19	1.19
Balance useful life of the asset (Year)	18	17	16	15	14

Elapsed life at the beginning of the year (Year)	11	12	13	14	15
Depreciable Value	234374.83	234374.83	234374.83	234470.76	234567.09
Depreciation during the year	13740.92	3100.91	3100.91	3107.31	3114.19
Cumulative Depreciation	181659.31	184760.22	187861.13	190968.44	194082.63
Remaining Depreciable Value	52715.52	49614.61	46513.70	43502.32	40484.45
Combined Asset-II					
Opening Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Average Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Freehold Land	493.64	493.64	493.64	493.64	493.64
Weighted average rate of Depreciation (WAROD) (%)	5.19	5.19	1.18	1.18	1.18
Balance useful life of the asset (Year)	22	21	20	19	18
Elapsed life at the beginning of the year (Year)	10	11	12	13	14
Depreciable Value	35356.92	35356.92	35356.92	35356.92	35356.92
Depreciation during the year	2064.79	2064.79	463.76	463.76	463.76
Cumulative Depreciation	24016.85	26081.64	26545.40	27009.17	27472.93
Remaining Depreciable Value	11340.08	9275.29	8811.52	8347.76	7883.99

41. Accordingly, depreciation approved vide order dated 7.1.2016 in Petition No. 499/TT/2014, claimed by the Petitioner in the instant petition and true up depreciation is shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	13740.92	3108.09	3115.71	3115.71	3115.71
Claimed by the Petitioner in the instant petition	13740.91	3105.33	3105.33	3111.72	3118.61
Allowed after true-up in this order	13740.92	3100.91	3100.91	3107.31	3114.19
Combined Asset-II					
AFC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	2064.79	2064.79	458.94	458.94	458.94
Claimed by the Petitioner in the instant petition	2064.79	2064.79	508.67	508.67	508.67
Allowed after true-up in this order	2064.79	2064.79	463.76	463.76	463.76

Interest on Loan (IoL)

42. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. Further, as there is no actual loan remaining for Combined Asset-II in 2018-19, the weighted average rate of IoL for 2017-18 i.e. the last available weighted average rate of IoL for Combined Asset-II has been considered for 2018-19 as per Regulation 26(5) of the 2014 Tariff Regulations. The trued up IoL allowed for the 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Gross Normative Loan	210586.15	210586.15	210586.15	210586.15	210735.38
Cumulative Repayments upto Previous Year	167918.39	181659.31	184760.22	187861.13	190968.44
Net Loan-Opening	42667.76	28926.84	25825.93	22725.02	19766.94
Additions	0.00	0.00	0.00	149.23	0.61
Repayment during the year	13740.92	3100.91	3100.91	3107.31	3114.19
Net Loan-Closing	28926.84	25825.93	22725.02	19766.94	16653.36
Average Loan	35797.30	27376.39	24275.47	21245.98	18210.15
Weighted Average Rate of Interest on Loan (%)	10.1721	9.8215	9.0475	8.4238	7.5677
Interest on Loan	3641.35	2688.77	2196.32	1789.72	1378.10
Combined Asset-II					
Gross Normative Loan	31422.14	31422.14	31422.14	31422.14	31422.14
Cumulative Repayments upto Previous Year	21952.06	24016.85	26081.64	26545.40	27009.17
Net Loan-Opening	9470.08	7405.30	5340.51	4876.74	4412.98
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2064.79	2064.79	463.76	463.76	463.76
Net Loan-Closing	7405.29	5340.51	4876.74	4412.98	3949.21
Average Loan	8437.69	6372.90	5108.63	4644.86	4181.10
Weighted Average Rate of Interest on Loan (%)	9.7883	9.4843	8.9562	8.6300	8.6300
Interest on Loan	825.90	604.43	457.54	400.85	360.83

43. Accordingly, IoL approved vide order dated 7.1.2016 in Petition No. 499/TT/2014, claimed by the Petitioner in the instant petition and trued up IoL is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	3641.37	2697.76	2212.23	1827.31	1504.35
Claimed by the Petitioner in the instant petition	3648.96	2695.92	2202.51	1795.11	1382.61
Allowed after true-up in this order	3641.35	2688.77	2196.32	1789.72	1378.10
Combined Asset-II					
AFC approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	816.46	595.27	449.11	393.14	353.54
Claimed by the Petitioner in the instant petition	850.84	628.59	478.35	417.02	373.13
Allowed after true-up in this order	825.90	604.43	457.54	400.85	360.83

Return on Equity (RoE)

44. The Petitioner has claimed RoE for the Combined Asset-I and Combined Asset-II in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 period:

Year	Claimed effective tax (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758

45. We have considered the submissions of the Petitioner. The Commission *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as follows:

“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the

provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term transmission customers / DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

”

46. The MAT rates considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period, in terms of the provisions of the 2014 Tariff Regulations, and are as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

47. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. The RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Opening Equity	50283.14	50283.14	50283.14	50283.14	50347.09
Additions due to ACE	0.00	0.00	0.00	63.95	0.26
Closing Equity	50283.14	50283.14	50283.14	50347.09	50347.35
Average Equity	50283.14	50283.14	50283.14	50315.12	50347.22
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500

MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	9860.52	9908.29	9908.29	9914.59	9947.60
Combined Asset-II					
Opening Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Average Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	1638.80	1646.74	1646.74	1646.74	1651.17

48. Accordingly, RoE approved vide order dated 7.1.2016 in Petition No. 499/TT/2014, claimed by the Petitioner in the instant petition and true up RoE is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	9860.52	9868.49	9876.46	9876.46	9876.46
Claimed by the Petitioner in the instant petition	9868.07	9913.32	9908.29	9914.59	9947.60
Allowed after true-up in this order	9860.52	9908.29	9908.29	9914.59	9947.60
Combined Asset-II					
AFC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	1638.80	1638.80	1638.80	1638.80	1638.80
Claimed by the Petitioner in the instant petition	1640.05	1647.57	1646.74	1646.74	1651.17
Allowed after true-up in this order	1638.80	1646.74	1646.74	1646.74	1651.17

Operation & Maintenance Expenses (O&M Expenses)

49. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses claimed by the Petitioner for the Combined Asset-I and Combined Asset-II are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	2666.51	2813.79	2971.38	3139.85	3318.67
Combined Asset-II	1795.41	1855.29	1916.96	1980.43	2046.19

50. We have considered the submissions made by the Petitioner. The O&M Expenses determined are in line with the norms specified in Regulation 29(4) of the 2014 Tariff Regulations and are allowed as follows:

O&M Expenses					
Combined Asset-I					
HVDC Station					
400 kV bay					
Talcher- Kolar HVDC bi-pole scheme (₹ lakh)	1173.00	1271.00	1378.00	1493.00	1617.00
Transmission line					
D/C (bundled conductor with four sub-conductors) (km)	1369.16	1369.16	1369.16	1369.16	1369.16
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
S/C (bundled conductor with four sub-conductors) (km)	65.11	65.11	65.11	65.11	65.11
Norms (₹ lakh/km)	0.606	0.627	0.647	0.669	0.691
Total O&M Expense (₹ in lakh)	2666.50	2813.79	2971.38	3139.84	3318.67
Combined Asset-II					
Sub-station bays					
400 kV					
Number of bays	17	17	17	17	17
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
220 kV					
Number of bays	11	11	11	11	11
Norms (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.1
Transmission line					
S/C Twin Conductor (km)	476.36	476.36	476.36	476.36	476.36
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
D/C (bundled conductor with four sub-conductors) (km)	51.067	51.067	51.067	51.067	51.067
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
D/C Twin Conductor (km)	83.91	83.91	83.91	83.91	83.91
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expense (₹ in lakh)	1795.42	1855.29	1916.95	1980.43	2046.19

51. Accordingly, O&M Expenses approved claimed by the Petitioner, claimed by the Petitioner in the instant petition and tried up O&M Expenses are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	2666.50	2813.79	2971.38	3139.84	3318.67
Claimed by the Petitioner in the instant petition	2666.51	2813.79	2971.38	3139.85	3318.67
Allowed after true-up in this order	2666.50	2813.79	2971.38	3139.84	3318.67
Combined Asset-II					
AFC approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	1795.42	1855.29	1916.95	1980.43	2046.19
Claimed by the Petitioner in the instant petition	1795.41	1855.29	1916.96	1980.43	2046.19
Allowed after true-up in this order	1795.42	1855.29	1916.95	1980.43	2046.19

Interest on Working Capital (IWC)

52. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
O&M Expenses (O&M Expenses for 1 month)**	222.21	234.48	247.62	261.65	276.56
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses)**	399.98	422.07	445.71	470.98	497.80
Receivables (Receivables equivalent to 2 months of fixed cost)**	5113.95	3171.42	3115.18	3077.64	3045.71
Total Working Capital	5736.13	3827.98	3808.50	3810.27	3820.07
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	774.38	516.78	514.15	514.39	515.71
Combined Asset-II					
O&M Expenses (O&M Expenses for 1 month)**	149.62	154.61	159.75	165.04	170.52
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses)**	269.31	278.29	287.54	297.06	306.93
Receivables (Receivables equivalent to 2 months of fixed cost)**	1088.06	1062.18	775.00	776.50	782.00
Total Working Capital	1506.99	1495.08	1222.29	1238.60	1259.44
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	203.44	201.84	165.01	167.21	170.02

**As per the 2014 Tariff Regulations



53. Accordingly, IWC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014, claimed by the Petitioner in the instant petition and trued up IWC is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	774.38	516.23	514.12	514.57	517.01
Claimed by the Petitioner in the instant petition	774.73	517.16	514.39	514.61	515.92
Allowed after true-up in this order	774.38	516.78	514.15	514.39	515.71
Combined Asset-II					
AFC approved vide order dated 7.1.2016 in Petition No. 499/TT/2014	203.23	201.44	164.52	166.74	169.46
Claimed by the Petitioner in the instant petition	204.05	202.41	166.52	168.62	171.34
Allowed after true-up in this order	203.44	201.84	165.01	167.21	170.02

Approved Annual Fixed Charges of the 2014-19 Tariff Period

54. The trued up annual fixed charges approved for the Combined Asset-I and Combined Asset-II for the tariff period 2014-19 are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
Depreciation	13740.92	3100.91	3100.91	3107.31	3114.19
Interest on Loan	3641.35	2688.77	2196.32	1789.72	1378.10
Return on Equity	9860.52	9908.29	9908.29	9914.59	9947.60
Interest on Working Capital	774.38	516.78	514.15	514.39	515.71
O&M Expenses	2666.50	2813.79	2971.38	3139.84	3318.67
Total	30683.67	19028.54	18691.05	18465.85	18274.27
Combined Asset-II					
Depreciation	2064.79	2064.79	463.76	463.76	463.76
Interest on Loan	825.90	604.43	457.54	400.85	360.83
Return on Equity	1638.80	1646.74	1646.74	1646.74	1651.17
Interest on Working Capital	203.44	201.84	165.01	167.21	170.02
O&M Expenses	1795.42	1855.29	1916.95	1980.43	2046.19
Total	6528.36	6373.08	4650.00	4658.99	4691.98

55. Accordingly, the Annual Transmission Charges approved vide order dated 7.1.2016 in Petition No. 499/TT/2014, claimed by the Petitioner and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I					
AFC approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	30683.69	19004.36	18689.91	18473.89	18332.21
AFC claimed by the Petitioner in the instant petition	30699.18	19045.52	18701.90	18475.88	18283.41
AFC allowed in the instant order	30683.67	19028.54	18691.05	18465.85	18274.27
Combined Asset-II					
AFC approved <i>vide</i> order dated 7.1.2016 in Petition No. 499/TT/2014	6518.69	6355.59	4628.32	4638.05	4666.93
AFC claimed by the Petitioner in the instant petition	6555.14	6398.65	4717.24	4721.48	4750.50
AFC allowed in the instant order	6528.36	6373.08	4650.00	4658.99	4691.98

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 PERIOD

56. The Petitioner has claimed the following transmission charges for the 2019-24 period for the Combined Asset-I and Combined Asset-II:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Depreciation	3118.63	3118.64	3118.63	3118.64	3118.63
Interest on Loan	1131.66	882.35	644.04	417.54	192.85
Return on Equity	9456.24	9456.24	9456.24	9456.24	9456.24
Interest on Working Capital	396.02	399.64	402.91	406.62	409.80
O&M Expenses	4357.58	4509.25	4666.79	4830.08	4997.86
Total	18460.13	18366.12	18288.61	18229.12	18175.38
Combined Asset-II					
Depreciation	508.67	508.67	508.67	508.67	508.67
Interest on Loan	329.23	285.33	241.43	197.53	153.64
Return on Equity	1569.60	1569.60	1569.60	1569.60	1569.60
Interest on Working Capital	105.37	107.32	109.16	111.12	112.93
O&M Expenses	1587.09	1643.20	1700.52	1760.51	1821.11
Total	4099.96	4114.12	4129.38	4147.43	4165.95

57. The Petitioner has claimed the following IWC for the 2019-24 period in respect of Combined Asset-I and Combined Asset-II:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
O&M Expenses	363.13	375.77	388.90	402.51	416.49
Maintenance Spares	653.64	676.39	700.02	724.51	749.68
Receivables	2269.69	2264.32	2254.76	2247.43	2234.68
Total Working Capital	3286.46	3316.48	3343.68	3374.45	3400.85
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	396.02	399.64	402.91	406.62	409.80
Combined Asset-II					
O&M Expenses	132.26	136.93	141.71	146.71	151.76
Maintenance Spares	238.06	246.48	255.08	264.08	273.17
Receivables	504.09	507.22	509.10	511.33	512.21
Total Working Capital	874.41	890.63	905.89	922.12	937.14
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	105.37	107.32	109.16	111.12	112.93

Capital Cost

58. Regulation 19 of the 2019 Tariff Regulations provide as follows:

“19. Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for 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) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*



- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

(4) The Capital Cost in case of existing or new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*

(5) The following shall be excluded from the Capital Cost of the existing and new projects:

- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

59. The Petitioner has claimed capital cost of ₹261083.34 lakh for Combined Asset-I and ₹39779.11 lakh for Combined Asset-II as on 31.3.2019, which is the same as worked out by the us. Accordingly, ₹261083.34 lakh for Combined Asset-I and ₹39779.11 lakh for Combined Asset-II has been considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

60. The Petitioner has not claimed any ACE for the 2019-24 tariff period.

Debt-Equity ratio

61. Regulation 18 of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the Capital Cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as ACE 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.”

62. We have considered the debt:equity ratio as on 31.3.2019 as provided in Regulation 18(3) of the 2019 Tariff Regulations for the Combined Asset-I and Combined Asset-II for the 2019-24 Tariff Period. Accordingly, the debt and equity considered for the purpose of tariff for 2019-24 tariff period is as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	ACE 2019-24 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Combined Asset-I						
Debt	210735.99	80.72	0.00	N/A	210735.99	80.72
Equity	50347.35	19.28	0.00		50347.35	19.28
Total	261083.34	100.00	0.00		261083.34	100.00
Combined Asset-II						
Debt	31422.14	78.99	0.00	N/A	31422.14	78.99
Equity	8356.97	21.01	0.00		8356.97	21.01
Total	39779.11	100.00	0.00		39779.11	100.00

Depreciation

63. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provide as follows:-

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication

project 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 project taking into consideration the depreciation of individual units:

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 project, 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 a transmission project, weighted average life for the generating station of the transmission project 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 the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

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

Provided also 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 unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or 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-I 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 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.”

64. Combined Asset-I and Combined Asset-II have completed 12 years of useful life during the 2014-19 tariff period. Therefore, the remaining depreciable value is

spread over the balance useful life of the assets in the 2019-24 period as prescribed in Regulation 33(5) of the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset-I and Combined Asset-II for the 2019-24 Tariff Period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Opening Gross Block	261083.34	261083.34	261083.34	261083.34	261083.34
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	261083.34	261083.34	261083.34	261083.34	261083.34
Average Gross Block	261083.34	261083.34	261083.34	261083.34	261083.34
Freehold Land	452.81	452.81	452.81	452.81	452.81
WAROD(%)	1.19	1.19	1.19	1.19	1.19
Balance useful life of the asset (Year)	13	12	11	10	9
Elapsed life at the beginning of the year (Year)	16	17	18	19	20
Depreciable Value	234567.48	234567.48	234567.48	234567.48	234567.48
Depreciation during the year	3114.22	3114.22	3114.22	3114.22	3114.22
Cumulative Depreciation	197196.86	200311.08	203425.29	206539.51	209653.73
Remaining Depreciable Value	37370.62	34256.40	31142.18	28027.96	24913.75
Combined Asset-II					
Opening Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Average Gross Block	39779.11	39779.11	39779.11	39779.11	39779.11
Freehold Land	493.64	493.64	493.64	493.64	493.64
WAROD(%)	1.18	1.18	1.18	1.18	1.18
Balance useful life of the asset (Year)	17	16	15	14	13
Elapsed life at the beginning of the year (Year)	15	16	17	18	19
Depreciable Value	35356.92	35356.92	35356.92	35356.92	35356.92
Depreciation during the year	463.76	463.76	463.76	463.76	463.76
Cumulative Depreciation	27936.69	28400.46	28864.22	29327.99	29791.75
Remaining Depreciable Value	7420.23	6956.46	6492.70	6028.94	5565.17

Interest on Loan (IoL)

65. Regulation 32 of the 2019 Tariff Regulations provides as follows:



“32. Interest on loan capital: (1) *The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) *The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization 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 de-capitalisation 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.*

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

66. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Further, as there is no actual loan remaining for Combined Asset-II, the weighted average rate of IoL for 2017-18 i.e. the last available weighted average rate of IoL for Combined Asset-II has been considered. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset-I and Combined Asset-II for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Gross Normative Loan	210735.99	210735.99	210735.99	210735.99	210735.99
Cumulative Repayments up to Previous Year	194082.64	197196.86	200311.08	203425.29	206539.51
Net Loan-Opening	16653.35	13539.13	10424.91	7310.69	4196.47
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	3114.22	3114.22	3114.22	3114.22	3114.22
Net Loan-Closing	13539.13	10424.91	7310.69	4196.47	1082.26
Average Loan	15096.24	11982.02	8867.80	5753.58	2639.37
Weighted Average Rate of Interest on Loan (%)	7.4690	7.3329	7.2249	7.2047	7.2046
Interest on Loan	1127.53	878.63	640.69	414.53	190.15
Combined Asset-II					
Gross Normative Loan	31422.14	31422.14	31422.14	31422.14	31422.14
Cumulative Repayments up to Previous Year	27472.93	27936.69	28400.46	28864.22	29327.99
Net Loan-Opening	3949.21	3485.45	3021.69	2557.92	2094.16
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	463.76	463.76	463.76	463.76	463.76
Net Loan-Closing	3485.45	3021.69	2557.92	2094.16	1630.39
Average Loan	3717.33	3253.57	2789.80	2326.04	1862.27
Weighted Average Rate of Interest on Loan (%)	8.6300	8.6300	8.6300	8.6300	8.6300
Interest on Loan	320.81	280.78	240.76	200.74	160.71

Return on Equity (RoE)

67. Regulations 30 and 31 of the 2019 Tariff Regulations specify as follows:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% 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) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load



dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.”

“31. Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations 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 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 paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;



(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

68. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for Combined Asset-I and Combined Asset-II for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Opening Equity	50347.35	50347.35	50347.35	50347.35	50347.35
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	50347.35	50347.35	50347.35	50347.35	50347.35
Average Equity	50347.35	50347.35	50347.35	50347.35	50347.35
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	9456.24	9456.24	9456.24	9456.24	9456.24
Combined Asset-II					
Opening Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Average Equity	8356.97	8356.97	8356.97	8356.97	8356.97
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	1569.61	1569.61	1569.61	1569.61	1569.61

Operation & Maintenance Expenses (O&M Expenses)

69. The Petitioner has claimed the O&M Expenses for the 2019-24 tariff period as follows:



(₹ in lakh)

Name of the Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Talcher- Kolar HVDC bi-pole scheme	2468.00	2555.00	2645.00	2738.00	2834.00
Talcher- Kolar HVDC D/C (bundled conductor with four sub-conductors) line (1369.16 km)	1810.03	1873.01	1938.73	2007.19	2077.02
Earth Electrode S/C (bundled conductor with four sub-conductors) line at Talcher and Kolar end (65.11 km)	49.16	50.85	52.67	54.50	56.45
PLCC	30.39	30.39	30.39	30.39	30.39
Total O&M Expenses	4357.58	4509.25	4666.79	4830.08	4997.86
Combined Asset-II					
17 number of 400 kV sub-station bays at Hosur, Kolar, Sriperumbudur and Salem	546.55	565.76	585.65	606.22	627.47
11 number of 220 kV sub-station bays Hosur and Kolar	247.61	256.30	265.32	274.56	284.24
400 kV ICT I and ICT II at Hosur and 400 kV ICT I at Kolar (1130 MVA)	404.54	419.23	433.92	449.74	464.43
Hosur-Salem, Kolar-Madras and Salem-Udumalpet S/C Twin Conductor lines (476.36 km)	239.61	248.18	256.76	265.81	275.33
Kolar-Hoody D/C (bundled conductor with four sub-conductors) line (51.067 km)	67.51	69.86	72.31	74.86	77.47
Kolar-Madras and Kolar-Hossur D/C Twin Conductor lines (83.91 km)	73.93	76.53	79.22	81.98	84.83
PLCC	7.34	7.34	7.34	7.34	7.34
Total O&M expenses	1587.09	1643.20	1700.52	1760.51	1821.11

70. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations is as follows:

“35. Operation and Maintenance Expenses:

...

(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 Kv	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282



<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
<i>Single Circuit (Bundled Conductor with six or more sub-conductors)</i>	0.881	0.912	0.944	0.977	1.011
<i>Single Circuit (Bundled conductor with four sub-conductors)</i>	0.755	0.781	0.809	0.837	0.867
<i>Single Circuit (Twin & Triple Conductor)</i>	0.503	0.521	0.539	0.558	0.578
<i>Single Circuit (Single Conductor)</i>	0.252	0.260	0.270	0.279	0.289
<i>Double Circuit (Bundled conductor with four or more sub-conductors)</i>	1.322	1.368	1.416	1.466	1.517
<i>Double Circuit (Twin & Triple Conductor)</i>	0.881	0.912	0.944	0.977	1.011
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole*

scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

71. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission *vide* order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are as follows:

“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.”

“105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner’s prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

72. Accordingly, the O&M Expenses allowed for Combined Asset-I and Combined Asset-II for the 2019-24 Tariff Period as per the norms are as follows:

O&M Expenses					
Combined Asset-I					
HVDC Station					
400 kV					
Talcher- Kolar HVDC bi-pole scheme (₹ lakh)	2468.00	2555.00	2645.00	2738.00	2834.00
Transmission line					
D/C (bundled conductor with four sub-conductors) (km)	1369.16	1369.16	1369.16	1369.16	1369.16
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
S/C (bundled conductor with four sub-conductors) (km)	65.11	65.11	65.11	65.11	65.11
Norms (₹ lakh/km)	0.755	0.781	0.809	0.837	0.867
Total O&M Expense (₹ in lakh)	4327.19	4478.86	4636.40	4799.69	4967.47

Combined Asset-II					
Sub-station bays (Number)					
400 kV					
Number of bays	17	17	17	17	17
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
220 kV					
Number of bays	11	11	11	11	11
Norms (₹ lakh/bay)	22.51	23.30	24.12	24.96	25.84
Transformer					
400 kV					
ICT I and ICT II at Hosur and ICT I at Kolar (MVA)	1130.00	1130.00	1130.00	1130.00	1130.00
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
Transmission line					
S/C Twin Conductor (km)	476.36	476.36	476.36	476.36	476.36
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
D/C (bundled conductor with four sub-conductors) (km)	51.067	51.067	51.067	51.067	51.067
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
D/C Twin Conductor (km)	83.91	83.91	83.91	83.91	83.91
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Total O&M Expense (₹ in lakh)	1579.74	1635.86	1693.17	1753.17	1813.78

Interest on Working Capital (IWC)

73. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:

“34. Interest on Working Capital

(1) ...

(c) *For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*

- i. Receivables equivalent to 45 days of fixed cost;*
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. Operation and maintenance expenses, including security 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 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 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:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.

“3. Definitions ...

(7) ‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

74. The Petitioner has submitted that it has computed interest on working capital for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of interest on working capital as 12.05%. The interest on working capital is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, rate of IWC for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed for the Combined Asset-I and Combined Asset-II for the 2019-24 Tariff Period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
O&M Expenses (O&M Expenses including security expenses for 1 month)**	360.60	373.24	386.37	399.97	413.96
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses including security expenses)**	649.08	671.83	695.46	719.95	745.12
Receivables (Receivables equivalent to 45 days of annual fixed cost)**	2264.72	2256.08	2246.55	2239.22	2226.51
Total Working Capital	3274.40	3301.15	3328.38	3359.15	3385.59
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	394.57	371.38	374.44	377.90	380.88
Combined Asset-II					
O&M Expenses (O&M Expenses including security expenses for 1 month)**	131.65	136.32	141.10	146.10	151.15
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses including security expenses)**	236.96	245.38	253.98	262.98	272.07
Receivables (Receivables equivalent to 45 days of annual	496.50	499.21	501.56	504.25	505.62

fixed cost)**					
Total Working Capital	865.10	880.91	896.63	913.32	928.83
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	104.24	99.10	100.87	102.75	104.49

Annual Fixed Charges of the 2019-24 Tariff Period

75. The transmission charges allowed for the Combined Asset-I and Combined Asset-II for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I					
Depreciation	3114.22	3114.22	3114.22	3114.22	3114.22
Interest on Loan	1127.53	878.63	640.69	414.53	190.15
Return on Equity	9456.24	9456.24	9456.24	9456.24	9456.24
Interest on Working Capital	394.57	371.38	374.44	377.90	380.88
O&M Expenses	4327.19	4478.86	4636.40	4799.69	4967.47
Total	18419.74	18299.33	18222.00	18162.58	18108.96
Combined Asset-II					
Depreciation	463.76	463.76	463.76	463.76	463.76
Interest on Loan	320.81	280.78	240.76	200.74	160.71
Return on Equity	1569.61	1569.61	1569.61	1569.61	1569.61
Interest on Working Capital	104.24	99.10	100.87	102.75	104.49
O&M Expenses	1579.74	1635.86	1693.17	1753.17	1813.78
Total	4038.16	4049.11	4068.17	4090.03	4112.36

Filing Fee and the Publication Expenses

76. 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 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

77. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period.

78. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period.

Goods and Services Tax

79. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

80. We have considered the submission of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Security Expenses

81. The Petitioner has submitted that security expenses for the transmission assets/Combined Assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

82. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Capital Spares

83. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

84. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

85. To summarise:

(a) The revised Annual Fixed Charges allowed for the transmission assets for the period from their respective COD to 31.3.2004 as per the APTEL's judgements are:

(₹ in lakh)		
Particulars	2002-03 (pro-rata)	2003-04
Asset-1	8331.72	25081.70
Asset-2	601.34	1813.62
Asset-3	338.71	1023.05
Asset-4	41.29	257.78
Asset-5	223.80	1375.11
Asset-6	708.34	8432.82

(₹ in lakh)	
Particulars	2003-04
Asset-7	853.30

(₹ in lakh)	
Particulars	2003-04 (pro-rata)
Asset-8	688.62

(b) The revised Annual Fixed Charges allowed for the transmission assets for the 2004-09 Tariff Period as per the APTEL's judgements are:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-1	28470.74	32104.27	31129.56	30148.58	29145.56
Asset-2	1787.20	1932.05	2137.73	2069.75	2004.97
Asset-3	1228.44	1221.46	1191.75	1448.44	1430.98
Asset-4	216.59	219.66	221.30	221.71	242.69
Asset-5	1469.68	1536.60	1734.95	1683.40	1630.59
Asset-6	8477.40	9545.90	10451.61	10181.53	9938.54
Asset-7	793.90	831.29	957.43	928.68	900.37
Asset-8	874.51	972.02	995.94	965.76	936.02

(c) The consequential revision of Annual Fixed Charges allowed for the Combined Asset-I and Combined Asset-II for the 2009-14 tariff period are:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I	35000.50	34653.32	34166.96	33508.77	32970.19
Combined Asset-II	7189.72	7157.23	7108.14	6990.65	6896.46

(d) The trued-up Annual Fixed Charges allowed for the Combined Asset-I and Combined Asset-II for the 2014-19 tariff period are:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	30683.67	19028.54	18691.05	18465.85	18274.27
Combined Asset-II	6528.36	6373.08	4650.00	4658.99	4691.98

(e) The Annual Fixed Charges allowed for the 2019-24 tariff period in this order are:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I	18419.74	18299.33	18222.00	18162.57	18108.96
Combined Asset-II	4038.16	4049.11	4068.17	4090.03	4112.36

86. The Annexure to this order form part of the order.

87. This order disposes of Petition No. 142/TT/2020 in terms of the above discussion and findings.

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P.K. Pujari)
Chairperson

ANNEXURE-1

Combined Asset-I

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
Capital Expenditure		Total			2014-15
Land - Freehold	452.81	-	452.81	-	-
Land - Leasehold	53.42	-	53.42	3.34%	1.78
Building Civil Works & Colony	1236.69	-	1236.69	3.34%	41.31
Transmission Line	100634.74	-	100634.74	5.28%	5313.51
Sub Station	156972.05	214.05	157186.10	5.28%	8288.12
PLCC	1519.58	-	1519.58	6.33%	96.19
IT Equipment (Incl. Software)	-	-	-	5.28%	-
Total	260869.29	214.05	261083.34		13740.92
			Average Gross Block (₹ in lakh)		260869.29
			Weighted Average Rate of Depreciation		5.27%

Combined Asset-II

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
				2014-15	2015-16
Land - Freehold	493.64	493.64	-	-	-
Land - Leasehold	-	-	3.34%	-	-
Building Civil Works & Colony	687.43	687.43	3.34%	22.96	22.96
Transmission Line	28422.84	28422.84	5.28%	1500.73	1500.73
Sub Station	9808.22	9808.22	5.28%	517.87	517.87
PLCC	366.98	366.98	6.33%	23.23	23.23
IT Equipment (Incl. Software)	-	-	5.28%	-	-
Total	39779.11	39779.11		2064.79	2064.79
			Average Gross Block (₹ in lakh)	39779.11	39779.11
			Weighted Average Rate of Depreciation	5.19%	5.19%