CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 155/TT/2020

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of order: 06.05.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, revision of transmission tariff for 2001-04 tariff period, 2004-09 tariff period, 2009-14 tariff period and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of NLC II Transmission System in the Southern Region.

And in the matter of:

Power Grid Corporation of India Ltd., SAUDAMINI, Plot No-2, Sector-29, Gurgaon-122 001 (Harvana).

.....Petitioner

Vs

- Karnataka Power Transmission Corporation Ltd. (KPTCL), Kaveri Bhavan, Bangalore-560009.
- Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO), Vidyut Soudha, Hyderabad-500082.
- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695004.
- Tamil Nadu Generation and Distribution Corporation Ltd., (Formerly Tamilnadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
- 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. (APSPDCL), Srinivasasa Kalyana Mandapam Backside,

Tiruchanoor Road, Kesavayana Gunta,

Tirupati-517501,

Chittoor District, Andhra Pradesh.

8. Southern Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL), Corporate Office, Mint Compound,

Hyderabad-500063,

Telangana.

9. Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL),

Opp. NIT Petrol Pump,

Chaitanyapuri, Kazipet,

Warangal-506004,

Telangana.

10. Bangalore Electricity Supply Company Ltd. (BESCOM),

Corporate Office, K. R. Circle,

Bangalore-560001,

Karanataka.

11. Gulbarga Electricity Supply Company Ltd. (GESCOM),

Station Main Road, Gulburga,

Karnataka.

12. Hubli Electricity Supply Company Ltd. (HESCOM),

Navanagar, PB Road,

Hubli, Karnataka.

13. MESCOM Corporate Office.

Paradigm Plaza, AB Shetty Circle,

Mangalore-575001,

Karnataka.

14. Chamundeswari Electricity Supply Corporation Ltd. (CESC)

927,L J Avenue,

Ground Floor, New Kantharaj Urs Road,

Saraswatipuram, Mysore-570009,

Karnataka.



- 15. Electricity Department, Government of Goa, Vidyuti Bhawan, Panaji, Goa-403001.
- Transmission Corporation of Telangana Ltd., Vidhyut Sudha, Khairatabad, Hyderabad-500082.
- 17. Tamil Nadu Transmission Corporation, NPKRR Maaligai, 800, Anna Salai, Chennai-600002.

...Respondent(s)

For Petitioner: Ms. Ranjitha Ramachandran, Advocate, PGCIL

Shri S. S. Raju, PGCIL Shri A. K. Verma, PGCIL Shri B. Dash. PGCIL

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited for revision of transmission tariff for the 2001-04, 2004-09 and 2009-14 tariff period under applicable tariff regulations, for truing up of transmission tariff for the 2014-19 tariff period 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 for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of NLC II Transmission System in the Southern Region (hereinafter referred to as "the transmission asset").

- 2. The Petitioner has made the following prayers:
 - "1) Approve the revised Transmission Tariff for 2001-04 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 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.
- 6) Allow the petitioner to adjust the cumulative depreciation by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful life and to recover the unrecovered depreciation in case of Asset-I separately on account of decapitalization.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC 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

- The brief facts of the case are as follows:
 - a) The Investment Approval (IA) for the transmission asset was accorded by the Ministry of Coal, Government of India in 1990 at an estimated cost of ₹36774.00 lakh, including IDC of ₹1794.00 lakh. Subsequently, the revised investment approval for the transmission asset was accorded by Ministry of Power vide letter dated 30.7.1998 at a



revised cost of ₹42731.00 lakh, including IDC of ₹7957.00 lakh. The scope of the work covered in the transmission asset is as follows:

Transmission lines:

- (i) 400 kV Neyveli-II-Salem S/C
- (ii) 400 kV Salem-Udumalpet-1 S/C
- (iii) 400 kV Udamalpet-Madurai S/C
- (iv) 400 kV Udumalpet-Madurai S/C
- (v) 400 kV Neyveli (Nagapattinam)-Trichy D/C
- (vi) 400 kV Trichy-Madurai-Karaikudi D/C

Sub-stations:

- (i) 400 kV Salem Sub-station:400 kV Neyveli-II main bay, 400 kV Neyveli-II-UPDT-I Tie, 400 kV Udumalpet-I main bay
- (ii) 400 kV Udumalpet Sub-station: 400 kV Madurai main, 400 kV Salem-I-Madurai tie, 400 kV Salem-I main with line Reactor, Trichur (Palakkad-II) tie, Trichur (Palakkad)-II main bay, Trichur (Palakkad)-I main, Trichur (Palakkad-I) tie, ICT -I main, ICT-I7II tie, ICT-II Main, ICT-I &II 230 kV
- (iii) 400 kV Madurai Sub-station:400 kV Udumalpet main, 400 kV Udumalpet -Trichy tie, 400 kV Trichy main with LR
- (iv) 400 kV Trichy Sub-station:
 400 kV Nagapattinam-I Main & Tie, 400 kV Nagapattinam-II Main &Tie, 400 kV Madurai (Karaikudi)-II main-tie bays, 400 kV Madurai Main &Tie, 400 kV ICT0I main 400 kV ICT-I&II tie, 420 kV ICT-II main, 230 kV ICT-I&II
- (v) 400 kV Thrissur Sub-station:
 400 kV Udumalpet (Palakkad)-I Main &Tie, 400 kV Udumalpet (Palakkad)-II
 Main-tie future, 400 kV Bus Section-I, 400 kV Bus Section-II
- b) The transmission tariff from 1.4.2001 to 31.3.2004 was determined vide order dated 25.6.2003 in Petition No. 16/2002; for the period from 1.4.2004 to 31.3.2009 vide order dated 7.11.2005 and further revised on account of restoration of equity vide order dated 24.1.2008 in Petition No. 131/2004; and for the period from 1.4.2009 to 31.3.2014 vide order dated 1.8.2011 in Petition No. 90/2009. The tariff for the 2009-14 period was

trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 22.2.2016 in Petition No. 539/TT/2014.

- c) The Petitioner has sought revision of transmission tariff approved 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 judgements of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 and 13.6.2007 in Appeal No.81/2005 and 139/2006 respectively. The Petitioner has also sought consequential revision of tariff allowed for the 2009-14 tariff period, truing up of the tariff of 2014-19 tariff period and determination of tariff for 2019-24 tariff period for the transmission asset.
- d) APTEL, vide judgements 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 on, mainly, the following issues:
 - (a) Computation of interest on loan
 - (b) Consequences of refinancing of loan
 - (c) Depreciation as deemed repayment
 - (d) Admissibility of depreciation up to 90% of the value of the assets
 - (e) Consideration of maintenance of spares for working capital
 - (f) Depreciation of assets
- e) The Commission and certain beneficiaries preferred Civil 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 sought re-determination of tariff of its 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 said petition sine die and directed that the same be revived after the disposal of the Civil Appeals by the Hon'ble Supreme Court.
- g) The Hon'ble Supreme Court vide its judgment and final order dated 10.4.2018 dismissed the said Civil Appeals.

- 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 before the Commission 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 tariff period in respect of concerned transmission assets.
- i) The instant petition was heard on 17.7.2020 and subsequently on 10.8.2020 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the judgement of Hon'ble Supreme Court dated 10.4.2018, the tariff is being revised. Although, periodwise 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 have been indicated.
- j) The transmission asset was put under commercial operation on 1.10.1991. However, the tariff regulations came into effect from 2001-04 tariff period. The capital cost of ₹40407.00 lakh was considered by Ministry of Power *vide* its notifications dated 1.12.1998 and 14.5.1999, for the transmission asset covered in the instant petition, and the tariff for the same was valid upto 31.3.2001. The tariff from 1.4.2001 was worked out based on the admitted capital cost of ₹40407.00 lakh. Accordingly, considering the admitted capital cost of ₹40407.00 lakh, tariff is being revised for the 2001-04, 2004-09, 2009-14 tariff periods in terms of the APTEL's judgement dated 22.1.2007 and 13.6.2007.
- 4. The Respondents are distribution licensees and power departments, who are procuring transmission service from the Petitioner, mainly beneficiaries of the Southern Region.
- 5. The Petitioner has filed this petition against the Respondents and notice regarding the filing 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. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No.4, has

filed its reply *vide* affidavits dated 4.8.2020 and 9.9.2020 wherein the issues of revision of tariff and claimed and proposed ACE during the 2014-19 and 2019-24 tariff period has been raised by TANGEDCO. The Petitioner, *vide* its affidavit dated 11.9.2020, has also filed a rejoinder to the reply of TANGEDCO. The issues raised by TANGEDCO and the clarifications given by the Petitioner are considered in the relevant portions of this order.

- 6. TANGEDCO *vide* its affidavit dated 4.8.2020 has submitted that the Petitioner has sought revision of transmission tariff for the 2001-04 and 2004-09 tariff periods for the transmission asset on account of change in loL and IWC to the extent of revision in loL and in Maintenance Spares on the basis of the APTEL judgments dated 22.1.2007 and 13.6.2007 in Appeal Nos. 81/2005 and 139/2006. It has further been submitted that it would be impossible to make the calculations retrospectively in the ARRs for two decades and bill the arrears to the same customers of the corresponding tariff periods. Therefore, the present consumers cannot be burdened with the liability of the past and even the Electricity Act, 2003 and the Tariff Regulations do not envisage/ permit retrospective revision of the bills with effect from 1.4.2011. This position has been settled by the Hon'ble Supreme Court in judgement dated 3.3.2009 in Civil appeal No. 1110 of 2007 in the matter of U.P. Power Corporation Ltd. vs. NTPC Ltd. {(2009) 6 SCC 235} and hence bad in law. it has further submitted that the Petitioner has also not filed the copy of the judgment of APTEL dated 22.1.2007 and 13.6.2007 on which it is placing reliance.
- 7. TANGEDCO has further submitted that the distribution companies have a huge customer base, which keeps on changing every year and the consumers of one tariff period are different from that of the subsequent and earlier tariff periods. Further, the various parameters on the basis of which ARR and the tariff for consumers are determined keep changing and it is not possible to charge the tariff retrospectively. Accordingly, the arrears

pertaining to two decades cannot be recovered from the present consumers as it legally not tenable.

- 8. In response to the reply filed by TANGEDCO, the Petitioner *vide* its affidavit dated 11.9.2020 has submitted that that there is no retrospective revision of bills and the arrears would be adjusted in the determination of tariff for 2019-24 as prior period expenses which is the normal procedure followed for any such revisions. Further, there have been numerous instances wherein the tariffs for the past period have been revised and the same is adjusted and recovered in the later year tariff. The concept of true up by its very nature is of adjusting the actuals against estimates and relates to the adjustments for the past period. Accordingly, the contentions of TANGEDCO are erroneous and misconceived. The Petitioner has submitted that the main contention of TANGEDCO that more than 20 years have lapsed since 2001 and revision of tariff be not allowed is not maintainable as TANGEDCO has ignored the process undertaken in the meantime.
- 9. The Petitioner has further submitted that the Commission had earlier determined the tariff of several parties including the Petitioner on various aspects pertaining to the principles of allowing the tariff elements which is common to all the utilities, in the tariff period 2001-04 and 2004-09. The tariff orders were challenged by NTPC before APTEL by filing a series of appeals which culminated into the judgment and orders dated 14.11.2016 and 13.6.2007. Thereafter, upon pronouncement of the judgment on 13.6.2007, the Petitioner, on 21.9.2007, had filed Petition No. 121 of 2017 seeking revision of tariff orders based on the judgment of APTEL on the following issues:
 - a. Computation of interest on loan;
 - b. Consequences of refinancing of loan;
 - c. Treatment of depreciation as deemed repayment of loan;
 - d. Admissibility of depreciation upto 90% of the value of assets;
 - e. Cost of maintenance of spares; and



- f. Impact of decapitalization of the assets on cumulative repayment of loan
- 10. However, by the time, the above petition could come up for hearing before this Commission, some of the beneficiaries had challenged the judgment dated 13.6.2007 before the Hon'ble Supreme Court. Accordingly, on 12.8.2008, it was recorded as under:

"The application has been made by Power Grid Corporation of India Limited (hereinafter referred to as "the applicant") for re-determination of tariff for the period 2001-04 and 2004-09 in terms of the Appellate Tribunal for Electricity's common judgment dated 22.1.2007 in Appeal No. 81/2005 and other related appeals and dated 13.6.2007 in Appeal No. 139/2006 and other related appeals.

- 2. The applicant had also filed Interlocutory Application No. 5/2008 for early hearing of petition.
- 3. Learned counsel for the applicant stated that re-determination of tariff sought in the application based on the judgment of the Appellate Tribunal, was under appeal before the Hon`ble Supreme Court. He further informed that application was made before the Hon`ble Supreme Court to expedite hearing of the appeals and accordingly requested for adjournment till decision on the appeals.
- 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.
- 5. Against the above background, I.A. No. 5/2008 has become infructuous."
- 11. It is further submitted by the Petitioner that during the above-mentioned proceedings, the Commission had the option to act either as per the decision of the APTEL or deferring the hearing till the decision of the Hon'ble Supreme Court. In case, the Commission had dismissed or disallowed the petition, the Petitioner could have gone in appeal at that stage but since the petition was only adjourned sine die, the Petitioner had no locus standi to file an appeal. The Petitioner has further submitted that the course adopted by the Commission in the interim was to defer the consideration till the decision of the Hon'ble Supreme Court of India. It was only after the disposal of the Civil Appeals by the Hon'ble Supreme Court on 10.4.2018, Petition No. 121/2007 was taken up by this Commission in January 2019 and the matter was disposed of with the direction to the Petitioner to 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.
- 12. The Petitioner has further submitted that in view of the liberty given to the Petitioner to raise the issues at the time of truing up of the respective tariff orders, the issues have been Page 10 of 63

raised in the instant petition. The Petitioner has also submitted that in similar petitions, the Commission has already allowed revision in tariff. Copies of the orders passed in Petition No. 288/TT/2019, Petition No. 300/TT/2019, Petition No. 301/TT/2019 and Petition No. 305/TT/2019 were also submitted by the Petitioner. In the said decision, the Commission had rejected the contention of the Respondents for non-revision of tariff and held that the Commission has the power to revise the tariff of any utility as upheld by the Hon'ble Supreme Court in the case of UP Power Corporation Limited vs. National Thermal Power Corporation Limited (2009) 6 SCC 235. The Petitioner has further submitted that TANGEDCO has placed reliance on the selective portion of the said judgment of the Hon'ble Supreme Court and has highlighted the portion of the said judgment wherein it was observed that "(a) the regulations do not restrict the power of the Commission to make additions or alterations to the tariff, (b) the making of a tariff is a continuous process, (c) the tariff can be amended or altered by the Commission, if any occasion arises therefore and the said power can be exercised not only on an application but by the Commission on its own motion, and (d) the concept of regulatory jurisdiction provides for revisiting the tariff determined". The Petitioner has also pointed out that the said judgment deals with a particular case wherein the generator had passed through many stages without raising the issue of revision of tariff. The Petitioner has also submitted that the Petitioner had raised the issue in 2007 itself and, therefore, it cannot be penalized, more particularly, when the reason for the delay is not on account of fault by the Petitioner but owing to the pendency of the proceedings before the Hon'ble Supreme Court. The Petitioner has further submitted that the Hon'ble Supreme Court has itself observed that the framing of tariff is in several stages and in case the interpretations of the said observations of the Hon'ble Supreme Court in U.P. Power Corporation Ltd. vs. NTPC Ltd. {(2009) 6 SCC 235} is accepted, there can never be any revision in tariff. The entire concept of true up would no longer be feasible as by its very nature true up relates to the period for which the services have already been used. Similarly, the revision of tariff necessitated by decisions of the Page 11 of 63

Hon'ble Courts/ Tribunals also would no longer be possible as they may relate to the period already passed. Placing reliance on APTEL's judgment dated 1.7.2014 in Appeal No. 232 of 2013, the Petitioner has submitted that APTEL in a number of judgments has reiterated the principle that tariff is a continuous process and can be retrospectively implemented. Referring to the judgment by the Hon'ble Supreme Court in Neeraj Kumar Sainy & Ors. Vs. State of U.P & Ors. (2017) 14 SCC 136, the Petitioner has submitted that an act of the Court shall prejudice no man and the same principle is applicable in the instant case.

- 13. The Petitioner has submitted that it cannot be rendered remediless after having waited for so many years for the decision to be implemented. The Petitioner has submitted that it cannot be denied of its legitimate dues merely because of matters being pending in the Courts. The decision of Tribunal came in 2007 and the decision of the Hon'ble Supreme Court came in 2018. Accordingly, the claim of TANGEDCO that the application has now become infructuous is misconceived.
- 14. The Petitioner has reiterated that if the contention of TANGEDCO is accepted, there can never be any true up or revision in tariff and further any appeal or review against tariff orders would be rendered infructuous. Further, NTPC would not be entitled to claim any benefit of the decision of the Tribunal and the Hon'ble Supreme Court of India based on the above rationale. The passage of time due to pendency of the proceedings cannot be a reason to deny the legitimate dues of any entity.
- 15. The Petitioner has also highlighted that the contention of TANGEDCO that the judgment of Tribunal dated 22.1.2007 and 13.6.2007 have not been filed has no relevance. More so, for the reason that the judgments are publicly available and in fact the predecessor of TANGEDCO was a party to the said judgment. However, for the sake of reference, copies of the Judgments in Appeal No. 81 of 2005 and batch dated 22.1.2007 and Appeal No. 139 of

2006 and batch dated 13.6.2007 have been submitted and marked as Annexure C in rejoinder for Petition No. 142/TT/2020.

- 16. The Petitioner has submitted that once the principles of Regulations have been settled by APTEL and the Hon'ble Supreme Court, the same are required to be applied uniformly to all entities. The Petitioner who is equally subjected to the said regulations cannot be made to suffer the erroneous interpretation of the said Regulations despite raising the issue and seeking relief relying on the decision of the APTEL. The claim of TANGEDCO that the relief should be limited to NTPC who had filed appeals is entirely incorrect. The above decision of the Hon'ble Supreme Court is not on the basis of whether an appeal has been filed but is on the concept of regulatory powers of this Commission.
- 17. Further, it is also a settled position that if in the tariff order an aspect has been decided against the Regulations, the same can be corrected in truing up (Reference: Chhattisgarh State Power Distribution Company Limited v Chhattisgarh State Electricity Regulatory Commission (2012) SCC Online APTEL 140, Paras 7.1 to 7.4). Therefore, it has been submitted by the Petitioner that at the stage of truing up, the Petitioner is entitled to the consequential relief and has pleaded to dismiss the submissions of the Respondent and grant tariff in accordance with the Tariff Regulations and sharing it as per the Sharing Regulations.
- 18. We have considered the submissions of TANGEDCO and the Petitioner. The basic contention of TANGEDCO is that the tariff of the transmission asset cannot be revised retrospectively and that it is not possible for TANGEDCO to recover the revised tariff as its consumer base keeping changing every year. The Petitioner has contended that it approached the Commission in the year 2007 itself for implementation of APTEL judgments dated 22.1.2007 and 13.6.2007 in Appeal No. 81/2005 and Appeal No. 139/2006, respectively, which were implemented in the case of NTPC. However, they were not

implemented in the case of the Petitioner because of the pending Appeals before the Hon'ble Supreme Court. The Petitioner has further contended that its claim for revision of tariff of the transmission is legitimate and it is as per the Commission's order dated 18.1.2007.

19. The Petitioner had filed Petition No.121/2007 for implementation of the directions of APTEL in judgments dated 22.1.2007 and 13.6.2007. However, they could not be implemented because of the pending Appeals before the Hon'ble Supreme Court and that the Petitioner is eligible for revision of tariff. Similar issues were raised by BRPL and BSPHCL and the Commission in order dated 6.11.2019 in Petition No.288/TT/2019 and batch held that the Petitioner is eligible for revision of tariff of its transmission assets on the basis of the APTEL judgements dated 22.1.2007 and 13.6.2007. The relevant portion of the order dated 6.11.2019 is extracted hereunder, in view of which, we allow the Petitioner's prayer and accordingly revise the tariff for the 2001-04, 2004-09 and 2009-14 tariff periods of the transmission asset.

"16. On examination of above contentions of the parties, we agree that the principle of functus officio creates a legal bar on an authority to re-hear a case after it has delivered order/judgment in a particular case and it ceases to have jurisdiction over it. However, the above complexities of law, to our understanding are applied by Courts to deal with litigation purely civil in nature and that is not the case here. One of the main functions of the Central Commission is determination of tariff in terms of regulations framed and notified by it. Further, the tariff determination is a continuous process and is not akin to the nature of disputes purely of civil nature with which the Civil Courts deal with day in and day out. We do not agree with the contention of BRPL and BSPHCL that the Petitioner is attempting to reopen the order in petitions where tariff was granted for 2001-04 and 2004-09 tariff periods as the Commission has become functus officio. As we observed that one of the prime duties of the Commission is to determine tariff in terms of the notified regulations and it being a continuous process, in deserving cases, the same is required to be revised as provided for in Regulation 92 of 1999 Regulations, which provides as follows:-

"92. The Commission on its own on being satisfied that there is need to review the tariff of any utility shall initiate the process of revision in accordance with the procedure as may be prescribed. The suo-motu review of the tariff shall be the same as set out in Chapter II of these Regulations."

17. We further agree with the contention of the Petitioner that the power of the Commission to revise the tariff of any utility under Regulation 92 of 1999 Regulations is upheld by Hon"ble Supreme Court in the matter of U.P. Power Corporation Limited Vs. National Thermal Power Corporation Limited reported in (2009) 6 SCC 235. In the said judgment, Hon'ble Supreme Court in para 36 observed that in a case of the nature as their Lordship were then considering, even principles of res judicata will have no application. In view of above discussions, we

observe that the principle of functus officio is not applicable in the facts and circumstances of these cases."

- 20. This order is issued considering the submissions made by the Petitioner dated 15.1.2020, 15.5.2020, 11.9.2020 and 30.9.2020, TANGEDCO's reply vide affidavit dated 4.8.2020 and 9.9.2020 and the Petitioner's rejoinder vide affidavit dated 11.9.2020.
- 21. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 22. The Petitioner has sought revision of the computation of the interest on loan, maintenance spares for working capital and depreciation allowed for the 2001-04 and 2004-09 tariff periods on the basis of the judgements of the APTEL dated 22.1.2007 in Appeal No.81 of 2005 and 13.6.2007 in Appeal No. 139/2006. 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 and held that the Commission is required to adopt normative debt repayment methodology for working out loL liability for the period from 1.4.1998 to 31.3.2001. 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."
- 23. In view of the above, the interest allowed for the 2001-04 and 2004-09 tariff periods is revised on the basis of the normative debt repayment methodology.
- 24. APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that ACE (additional capital expenditure) after the date of commercial operation should also be considered for computation of maintenance spares as under:

"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."

- 25. In view of the above, the maintenance spares to be considered for computation of working capital for the 2001-04 and 2004-09 tariff periods are also required to be revised taking into consideration the additional capital expenditure (ACE) after the date of commercial operation. We observe that, in the instant petition, there has been no ACE after the date of commercial operation which, otherwise, would have necessitated a revision in maintenance spares.
- 26. 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 under:

"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."

- 27. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2001-04 tariff period is revised in the instant order.
- 28. The revision of tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of tariff allowed for the 2009-14 tariff period, which is also allowed in the instant order. The implementation of the directions of APTEL in case of the Petitioner was kept pending 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 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 2001-04, 2004-09 AND 2009-14 TARIFF PERIODS

2001-04 Period

29. The Commission in order dated 25.6.2003 in Petition No. 16/2002 had approved the following transmission charges for the transmission asset for the 2001-04 period:

Particulars	2001-02	2002-03	2003-04
Depreciation	1169.76	1169.76	1169.76
Return on Equity (RoE)	2652.08	2652.08	2652.08

Particulars	2001-02	2002-03	2003-04
O&M Expenses	1023.99	1085.43	1150.55
Advance Against Depreciation (AAD)	211.53	211.53	211.53
Interest on Loan (IoL)	751.50	411.62	137.21
Interest on Working Capital (IWC)	183.76	182.53	182.91
Total	5992.62	5712.95	5504.05

30. The Petitioner has claimed the following revised transmission charges for the transmission asset for the 2001-04 period in this petition:

Particulars	2001-02	2002-03	2003-04
Depreciation	1169.76	1169.76	1169.76
Return on Equity	2652.08	2652.08	2652.08
O&M Expenses	1023.99	1085.43	1150.55
Advance Against Depreciation	211.53	211.53	211.53
Interest on Loan	751.46	411.62	137.21
Interest on Working Capital	183.76	182.53	182.91
Total	5992.58	5712.96	5504.04

- 31. We have considered the Petitioner's claim. The tariff is allowed for the transmission asset on the basis of the following:
 - a) Admitted capital cost of ₹40407.00 lakh as on 1.4.2001.
 - b) In the tariff order dated 25.6.2003 in Petition No. 16/2002, on the basis of actual rate of interest on actual average loans based on information available in the petition and loan allocation details, the weighted rate of interest on loan has been worked out and the same has been applied on the normative average loan during the year to arrive at the interest on loan. The loan repayment in tariff has now been modified as per the judgment of APTEL that has directed that normative repayment is to be considered and not "higher of normative or actual repayment" as was considered by the Commission earlier. Therefore, now there is variation in the closing balance of loan vis-à-vis that in the order dated 25.6.2003. This closing balance of loan shall have impact on opening and closing loan balances of future tariff periods too.
 - c) Weighted Average Rate of Interest on actual loan, as applied in tariff, has been derived/adopted from the said order dated 25.6.2003.

- d) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 25.6.2003 in Petition No 16/2002.
- 32. In view of the above, the revised transmission charges allowed for the transmission asset for the 2001-04 tariff period is as follows:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
Depreciation	1169.76	1169.76	1169.76
Return on Equity	2652.08	2652.08	2652.08
O&M Expenses	1023.99	1085.43	1150.55
Advance Against Depreciation	211.53	211.53	211.53
Interest on Loan	751.46	411.62	137.21
Interest on Working Capital	183.76	182.53	182.91
Total	5992.58	5712.95	5504.05

33. AFC allowed earlier for 2001-04 period vide order dated 25.6.2003 in Petition No. 16/2002, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
AFC approved <i>vide</i> order dated 25.6.2003 in Petition No. 16/2002	5992.62	5712.95	5504.04
Claimed by the Petitioner in the instant petition	5992.58	5712.96	5504.04
AFC allowed after true-up in the instant order	5992.58	5712.95	5504.05

2004-09 Period

34. The Commission in Petition No. 131/2004 vide order dated 7.11.2005 determined and later revised vide order dated 24.1.2008 on account of restoration of equity for the transmission asset for the 2004-09 tariff period. The revised tariff allowed vide order dated 24.1.2008 is as follows:

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	718.09	718.09	718.09	718.09	718.09
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	2828.49	2828.49	2828.49	2828.49	2828.49
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Working Capital	166.14	171.93	178.07	184.51	191.38
O&M Expenses	914.97	951.57	990.37	1028.74	1071.04
Total	4627.69	4670.08	4715.03	4759.83	4809.00

- 35. The Petitioner has claimed that since the entire loan has been repaid during 2003-04, there is no impact of repayment on IoL and hence there is no change in the tariff during 2004-09 period.
- 36. We have considered the Petitioner's claim. Since the entire loan has been repaid during 2003-04, there is no impact of repayment on IoL and hence there is no change in the tariff during 2004-09 period.

2009-14 Period

37. The Commission vide order dated 1.8.2011 in Petition No. 90/2009 had approved the tariff for the transmission asset for the 2009-14 period and in order dated 22.2.2016 in Petition No 539/TT/2014 had trued up the tariff allowed for the 2009-14 period that was earlier allowed in order dated 1.8.2011 and the same is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	718.09	718.09	718.09	718.09	718.09
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	3772.80	3910.99	3914.83	3914.83	3961.91
Interest on Working Capital	172.75	180.15	185.03	190.09	196.41
O&M Expenses	1582.36	1672.77	1768.68	1869.86	1976.52
Total	6246.00	6482.01**	6586.64	6692.87	6852.93

^{**}The Commission vide order dated 22.2.2016 in Petition No 539/TT/2014 decided that the tariff for the utilised portion of the asset needed to be allowed and accordingly adjusted the impact of un-utilised portion of the asset for 2010-11 and therefore total AFC approved was ₹6464.90 lakh.

38. The Petitioner has claimed that the entire loan has been repaid during 2003-04 and, therefore, there is no impact of repayment on IoL and hence no change in the tariff during 2009-14 period.

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

39. The Commission vide order dated 22.2.2016 in Petition No. 539/TT/2014 had approved the tariff for the 2014-19 period, which is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	718.09	718.10	796.52	984.69	923.00
Interest on Loan	0.00	0.00	0.00	0.00	10.22
Return on Equity	3961.91	3961.91	3983.07	4004.23	4053.24
Interest on Working Capital	207.77	211.12	216.85	225.20	228.81
O&M Expenses	1811.11	1871.69	1933.81	1997.89	2064.17
Total	6698.89	6762.81	6930.25	7212.02	7279.44

40. The details of the transmission charges claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

					(III Iakii)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	718.09	718.10	718.08	803.59	851.68
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	3964.94	3983.12	3981.10	3986.87	4001.32
Interest on Working Capital	207.85	211.61	214.99	219.80	225.69
O&M Expenses	1811.10	1871.69	1933.80	1997.90	2064.17
Total	6701.98	6784.52	6847.97	7008.16	7142.86

41. The details of IWC claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	150.93	155.97	161.15	166.49	172.01
Maintenance Spares	271.67	280.75	290.07	299.69	309.63
Receivables	1117.00	1130.75	1141.33	1161.95	1190.13
Total Working Capital	1539.60	1567.47	1592.95	1628.13	1671.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	207.85	211.61	214.99	219.80	225.69

Capital Cost as on 1.4.2014

42. The capital cost of the transmission asset has been calculated in accordance with Regulation 9(3) and Regulation 9(6) of the 2014 Tariff Regulations. The Commission vide

order 22.2.2016 in Petition No. 539/TT/2014 had allowed capital cost as on 1.4.2014 of ₹40407.00 lakh and capital cost as on 1.4.2019 of ₹42792.58 lakh including projected net ACE of ₹2385.58 lakh for determination of tariff for the 2014-19 period for transmission asset covered under instant petition as shown under:

(₹ in lakh)

Admitted Capital		Admitted AC	Total admitted	
Cost as on 1.4.2014	2016-17	2017-18	2018-19	Capital Cost as on 31.3.2019
40407.00	719.43*	0.00	1666.15**	42792.58

^{*}Net of ACE of ₹1236.05 lakh and De-Capitalization of ₹516.62 lakh

Additional Capital Expenditure (ACE)

- 43. The Commission had allowed net ACE of ₹2385.58 lakh for transmission asset in 2014-19 towards balance and retention payments vide order dated 22.2.2016 in Petition No. 539/TT/2014.
- 44. The Petitioner has submitted that against net ACE of ₹2385.58 lakh allowed by the Commission for the 2014-19 period on account of additional expenditure for replacement of problematic/ defective equipment that are completing 25 years of service during 2014-19 for efficient and secure operation of the transmission system, the actual net ACE incurred for the same is ₹558.35 lakh during the period 2014-19. This is line with the provision of Regulation 14(3)(vii) and 14(3)(ix) of the 2014 Tariff Regulations. The Petitioner has claimed net ACE of ₹558.35 lakh as under:

(₹ in lakh)

Admitted Capital	ed Capital ACE		De-Capit	alization	Total Capital
Cost as on 1.4.2014	2017-18	2018-19	2017-18	2018-19	Cost claimed as on 31.3.2019
40407.00	668.35	538.64	283.94	364.70	40965.35

45. TANGEDCO vide affidavit dated 9.9.2020 has submitted that the Petitioner in the petition has stated that the actual net ACE of ₹558.35 lakh, against the approved net ACE of ₹2385.58 lakh, has been claimed by the Petitioner. TANGEDCO has submitted that it is

^{**}Net of ACE cap of ₹ 3255.68 lakh and De-Capitalization of ₹1589.53 lakh

evident from the claim of the Petitioner that the Petitioner is not following any prudent utility practices in estimation of cost and claiming projected ACE results in parking of public funds which exhibits their hasty approach in handling public funds. The Petitioner has not furnished any justification for the huge variations between their projections and actual expenditure. TANGEDCO has requested that the Commission may direct the Petitioner to explain such huge variations in the claims made. In response, the Petitioner vide affidavit dated 30.9.2020 submitted that:

- There was no imprudent projection or claim. It has projected costs on bona fide and genuine estimates and had sought to complete the work in terms of the estimate.
- The work was completed within 2 years after 31.3.2019 and therefore the expenditure was incurred in 2019-24 period and not shown in 2014-19.
- The above ACE has already been approved by the Commission and the same may be allowed for 2019-24 period.
- The details of approved ACE and actual ACE during 2014-19 period is as follows:

(₹ in lakh)

Total approved ACE during 2014-19 vide order dated 22.2.2016 in Petition No. 539/TT/2014	Total approved De-capitalization during 2014-19 vide order dated 22.2.2016 in Petition No. 539/TT/2014	Total approved Net ACE during 2014-19 vide order dated 22.2.2016 in Petition No. 539/TT/2014	Total Actual ACE claimed during 2014-19	Total Actual De- capitalization claimed during 2014-19	Net ACE claimed during 2014-19
(A)	(B)	(C=A-B)	(D)	(E)	(F=D-E)
4491.73	2106.15	2385.58	1206.99	648.64	558.35

46. We have considered the submissions made by TANGEDCO and the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 14(3)(vii) and 14(3)(ix) of the 2014 Tariff Regulations. Accordingly, ACE and de-capitalisation allowed for the 2014-19 tariff period is as under:

Particulars		2017-18	2018-19	Total
ACE	Α	668.35	538.64	1206.99
De-capitalisation	В	283.94	364.70	648.64
Net ACE	C=A-B	384.41	173.94	558.35

47. Accordingly, the capital cost considered for the 2014-19 tariff period is as follows:

(₹ in lakh)

Capital Cost as on 1.4.2014	Net	ACE	Capital Cost as on 31.3.2019
Capital Cost as off 1.4.2014	2017-18	2018-19	Capital Cost as on 31.3.2019
40407.00	384.41	173.94	40965.35

Debt-Equity ratio

- 48. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 is required to be considered. Accordingly, the debt-equity ratio of 50:50 for the period ending on 31.3.2014 considered for the purpose of determination of tariff of the 2014-19 tariff period is considered for the purpose of truing up of the tariff of the transmission asset for the 2014-19 tariff period. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 tariff period in accordance with Regulation 19(5) of the 2014 Tariff Regulations. The de-capitalisation of asset in the instant case is carried out in the debt-equity ratio as on the date of capitalisation as per the details submitted by the Petitioner in Form 10B.
- 49. The details of debt and equity as on 1.4.2014 and 31.3.2019 for the transmission asset considered for the purpose of tariff for the 2014-19 tariff period are as follows:

Debt-Equity for Capital Cost as on 1.4.2014

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)
Debt	20203.50	50.00
Equity	20203.50	50.00
Total	40407.00	100.00

Debt-Equity for ACE and De-capitalisation during 2014-19

(₹ in lak

	(× III lak										
Particulars	ACE	ACE	ACE	AC	E	De-capital	lisation	AC	CE	De-capita	lisatio
Faiticulais	2014-15	2015-16	2016-17	2017-18	(%)	2017-18	(%)	2018-19	(%)	2018-19	(%)
Debt	0.00	0.00	0.00	467.85	70.00	141.97	50.00*	377.05	70.00	182.35	50.
Equity	0.00	0.00	0.00	200.51	30.00	141.97	50.00*	161.59	30.00	182.35	50.
Total	0.00	0.00	0.00	668.36	100.00	283.94	100.00	538.64	100.00	364.70	100

*as per the Form 10B submitted by the petitioner



Debt-Equity for Capital Cost as on 31.3.2019

Particulars	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	20724.07*	50.59
Equity	20241.28**	49.41
Total	40965.35	100.00

^{*}Debt as on 1.4.2014 plus debt considered for ACE minus adjustment made in debt on decapitalisation.

Depreciation

50. The transmission system has already completed 12 years before 1.4.2014. Accordingly, depreciation has been calculated based on the remaining depreciable value to be recovered over the balance useful life. Thus, the depreciation allowed during the 2014-19 period is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	40407	40407	40407	40407	40791.4
ACE	0	0	0	668.35	538.64
De-capitalization	0	0	0	283.94	364.7
Closing Gross Block	40407	40407	40407	40791.4	40965.4
Average Gross Block	40407	40407	40407	40599.2	40878.4
Freehold Land	83	83	83	83	83
Weighted Average Rate of Depreciation (WAROD) (%)	1.78%	1.78%	1.78%	1.89%	2.08%
Balance useful life of the asset (years)	11	10	9	8	7
Elapsed Life of the asset (years)	22	23	24	25	26
Depreciable Value	36291.6	36291.6	36291.6	36464.6	36715.8
Depreciation during the year	718.09	718.09	718.09	767.10	849.58
Cumulative depreciation	29110.7	29828.8	30546.9	31094.9	31618.4
Remaining Depreciable Value	7180.9	6462.81	5744.72	5369.68	5097.48

51. The details of depreciation approved vide order dated 22.2.2016 in Petition No. 539/TT/2014, depreciation claimed in the instant petition and trued up depreciation allowed in respect of transmission asset is shown in the table below:-

^{**} Equity as on 1.4.2014 plus equity considered for ACE minus adjustment made in equity on decapitalisation.

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 22.2.2016 in Petition No. 539/TT/2014	718.09	718.09	796.52	984.69	923.00
Claimed by the Petitioner in the instant petition	718.09	718.10	718.08	803.59	851.68
Allowed after true-up in this order	718.09	718.09	718.09	767.10	849.58

Interest on Loan (IoL)

52. The Petitioner has repaid the loan availed for the purpose of the transmission asset before 1.4.2014. Therefore, no loL is allowed for the transmission asset for the 2014-19 tariff period.

Return on Equity (RoE)

53. The Petitioner has claimed Return on Equity for the transmission asset 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 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

- 54. We have considered the submissions of the Petitioner. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has 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 under:-
 - "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	21.3 4 2
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

55. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations which is as under:

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

The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 56. 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 for the transmission asset as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	20203.50	20203.50	20203.50	20203.50	20262.04
Additions	0.00	0.00	0.00	200.51	161.59

Order in Petition No.155/TT/2020

De-capitalization	0.00	0.00	0.00	141.97	182.35
Closing Equity	20203.50	20203.50	20203.50	20262.04	20241.28
Average Equity	20203.50	20203.50	20203.50	20232.77	20251.66
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	3961.91	3981.10	3981.10	3986.87	4001.32

57. The details of RoE approved vide order 22.2.2016 in Petition No. 539/TT/2014, RoE claimed in the instant petition and trued up RoE allowed in respect of the transmission asset are shown in the following table:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 22.2.2016 in Petition No. 539/TT/2014	3961.91	3961.91	3983.07	4004.23	4053.24
Claimed by the Petitioner in the instant petition	3964.94	3983.12	3981.10	3986.87	4001.32
Allowed after true-up in this order	3961.91	3981.10	3981.10	3986.87	4001.32

Interest on Working Capital (IWC)

58. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed for the transmission asset as under:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for 1 month)**	150.93	155.97	161.15	166.49	172.01
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses)**	271.67	280.75	290.07	299.68	309.63
Receivables (Receivables equivalent to 2 months of fixed cost)**	1116.48	1130.41	1141.33	1161.94	1190.13
Total Working Capital	1539.07	1567.14	1592.55	1628.12	1671.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	207.77	211.56	214.99	219.80	225.69

^{**}As per the 2014 Tariff Regulations

59. The details of IWC approved vide order 22.2.2016 in Petition No. 539/TT/2014, IWC claimed in the instant petition and trued up IWC in respect of transmission asset are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 22.2.2016 in Petition No. 539/TT/2014	207.77	211.12	216.85	225.20	228.81
Claimed by the Petitioner in the instant petition	207.85	211.61	214.99	219.80	225.69
Allowed after true-up in this order	207.77	211.56	214.99	219.80	225.69

Operation & Maintenance Expenses (O&M Expenses)

60. The O&M Expenses claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
22 Number 400 kV Sub-station Bays (at Udumalpet, Madurai, Trichy and Salem)									
Claimed by the Petitioner	707.30	732.16	757.90	784.52	812.02				
6 Number 4	00 kV Sub-stat	ion ICT Bays (at I	Udumalpet, Madu	rai and Trichy)					
Claimed by the Petitioner	676.62	701.19	752.76	752.22	776.79				
456.495 km Sin	gle Circuit (Tw	in Circuit) (Neyvo	eli- Salem II, Sale	m-Udumalpet and	d Udumalpet-				
Madurai)									
Claimed by the Petitioner	229.62	237.83	246.05	254.73	263.85				
424.454 km Do	uble Circuit (T	win Circuit) (Ney	veli- Trichy 1 and	2, Trichy-Madura	ai 1 and 2 and				
Udumalpet-Tri	chy 1 and 2)								
Claimed by the Petitioner	373.95	387.10	400.68	414.69	429.12				
Total	1811.10	1871.69	1933.80	1997.90	2064.17				

61. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission asset are as under:

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
S/C (Bundle Conductor- 6 or	₹0.707	₹0.731	₹0.755	₹0.78	₹0.806
more sub-c)	lakh/km	lakh/km	lakh/km	lakh/km	lakh/km
S/C (Twin/Triple Conductor)	₹0.404	₹0.418	₹0.432	₹0.446	₹0.461
3/C (1 wirl/11)pie Coriductor)	lakh/km	lakh/km	lakh/km	lakh/km	lakh/km
400 ld/ Cub station	₹60.30 lakh/	₹62.30 lakh/	₹64.37 lakh/	₹66.51 lakh/	₹68.71 lakh/
400 kV Sub-station	bay	bay	bay	bay	bay

62. We have considered the submissions of the Petitioner. The O&M Expenses allowed under Regulation 29(3) of the 2014 Tariff Regulations are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
28 Number 400 kV	1326.60	1370.60	1416.14	1463.22	
Conventional Bays					1511.62
424.454 km S/C (Bundle	300.09	310.28	320.46	331.07	
Conductor- 6 or more sub-c)					342.11
456.495 km S/C (Twin/Triple	184.42	190.81	197.21	203.60	
Conductor)					210.44
Total	1811.11	1871.69	1933.81	1997.89	2064.17

63. The details of O&M Expenses approved vide order dated 22.2.2016 in Petition No. 539/TT/2014, O&M Expenses claimed in the instant petition and trued up O&M Expenses in the instant order are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 22.2.2016 in Petition No. 539/TT/2014	1811.11	1871.69	1933.81	1997.89	2064.17
Claimed by the Petitioner in the instant petition	1811.10	1871.69	1933.80	1997.90	2064.17
Allowed after true-up in this order	1811.11	1871.69	1933.81	1997.89	2064.17

Approved Annual Fixed Charges for the 2014-19 Tariff Period

64. Accordingly, the trued up annual fixed charges for the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Depreciation	718.09	718.09	718.09	767.10	849.58
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	3961.91	3981.10	3981.10	3986.87	4001.32
Interest on Working Capital	207.77	211.56	214.99	219.80	225.69
O & M Expenses	1811.11	1871.69	1933.81	1997.89	2064.17
Total	6698.88	6782.44	6847.99	6971.65	7140.76

65. The Annual Transmission Charges approved vide dated 22.2.2016 in Petition No. 539/TT/2014, claimed by the Petitioner in the instant petition and trued up Annual Transmission Charges allowed in respect of the transmission asset is shown in the table below:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 22.2.2016 in Petition No. 539/TT/2014	6698.89	6762.81	6930.25	7212.02	7279.44
Claimed by the Petitioner in the instant petition	6701.98	6784.52	6847.97	7008.16	7142.86
Allowed after true-up in this order	6698.88	6782.44	6847.99	6971.65	7140.76

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

66. The Petitioner has claimed the following transmission charges for the transmission asset for the 2019-24 tariff period:

(₹ in lakh)

					(
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1248.53	1532.91	1788.59	2690.50	3831.01
Interest on Loan	52.03	74.98	22.95	0.00	0.00
Return on Equity	3837.96	3900.11	3961.48	4016.05	4054.92
Interest on Working Capital	163.92	173.06	180.22	197.49	218.26
O&M Expenses	1992.89	2063.68	2135.79	2211.56	2287.18
Total	7295.33	7744.74	8089.03	9115.60	10391.37

67. The details of IWC claimed by the Petitioner for the 2019-24 period are as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	166.07	171.97	177.98	184.30	190.60
Maintenance Spares	298.93	309.55	320.37	331.73	343.08
Receivables	895.37	954.63	997.28	1122.90	1277.63
Total Working Capital	1360.37	1436.15	1495.63	1638.93	1811.31
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	163.92	173.06	180.22	197.49	218.26

Capital Cost as on 1.4.2019

- 68. Regulation 19 of the 2019 Tariff Regulations provide as under:
 - "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;
- (I) 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."
- 69. The Petitioner has claimed capital cost of ₹40965.35 lakh as on 31.3.2019 for the transmission asset. The same capital cost has been worked out by the Commission as on 31.3.2019 and is being considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

70. Regulations 24 and 25 of the 2019 Tariff Regulations provides as under:

"24. Additional Capitalisation within the original scope and upto the cut-off date

- (1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Undischarged liabilities recognized to be payable at a future date;
 - (b) Works deferred for execution;
 - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
 - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
 - (e) Change in law or compliance of any existing law; and
 - (f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.

25. Additional Capitalisation within the original scope and after the cut-off date:

- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - (b) Change in law or compliance of any existing law;
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work:
 - (d) Liability for works executed prior to the cut-off date;
 - (e) Force Majeure events;
 - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

Raising of ash dyke as a part of ash disposal system.

- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
 - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
 - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
 - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 71. The Petitioner has claimed net ACE of ₹7583.29 lakh during 2019-24 for the transmission asset under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner has claimed the following capital cost as on 31.3.2024:

Particulars	Amount	
Total Capital Cost as on 1.4.2019	40965.35	
ACE in 2019-20	3715.70	
ACE in 2020-21	1097.38	
ACE in 2021-22	1281.93	
ACE in 2022-23	3198.81	
ACE in 2023-24	2397.98	
De-Capitalization in 2019-20	1457.51	
De-Capitalization in 2020-21	106.73	
De-Capitalization in 2021-22	13.94	
De-Capitalization in 2022-23	1512.15	

Particulars	Amount	
Total Capital Cost as on 1.4.2019	40965.35	
De-Capitalization in 2023-24	1018.18	
Total Capital Cost as on 31.3.2024	48548.64	

- 72. The Petitioner has submitted that the sub-station equipment proposed to be replaced under the transmission asset covered under the instant petition were put into commercial operation in 1991 and 1992. Some of the equipment are going to complete their useful life during 2019-24. These equipment are in use from the CoD. During various routine/alter tests, critical conditions have been observed and the equipment are giving operational problems and are threat to the reliability and security to the grid. The Petitioner has submitted that the designs have undergone substantial changes over the period and manufacturers have discontinued the product models. The suppliers are unable to replenish parts required for quick restoration and hence repairs turned out to be unviable.
- 73. Further, buildings and other civil structures like overhead tanks etc. which have been constructed in the sub-stations have completed the useful life of 30 years in accordance with Schedule-II, Company Act 2013 Part-C (1b). The Petitioner has stated that these buildings and civil structures have been constructed in 1987-88 and have been in service for more than 30 years and do not comply with the earthquake resistant provisions of latest IS codes. The Petitioner has submitted that it is mandatory for all Government owned buildings and structures to be seismic resistant (Clause 3.2.6.1 of National Disaster Management Authority Guidelines). Some of these buildings and civil structures are in dilapidated and unsafe condition and need urgent reconstruction to avoid any damage/threat to human life or property. Accordingly, the Petitioner has proposed to demolish these dilapidated and unsafe buildings and structures and construct new buildings and structures during 2019-24 tariff period. Thus, ACE/de-capitalization proposed under the head building and civil structures corresponds to demolition of such old buildings and construction of new buildings & civil structures. The Petitioner has submitted that the test reports in respect of healthiness of

buildings and civil structures shall be submitted shortly. The Petitioner has also submitted the following relevant provisions of authenticated documents which recommend for seismic retrofitting, demolishing and reconstruction.

- a) Note of Appendix I, page 135 of 2019 Tariff Regulations
- b) Schedule -II, Company Act, 2013 Part-C-I (b)
- c) Clause 3.2.6.1 and Table 5 of National Disaster Management Guideline for Seismic retrofitting of Deficient Buildings and structures
- d) Clause 13.1.4 of National Building code 2016 Volume-II Part 7
- e) Clause 13.1.5.1 of National Building code 2016 Volume-II Part 7
- f) Clause 7.4 of National Building Code 2016 Volume I Part 0
- g) Clause 1.2.2 and 1.2.4 of National Disaster Management Guidelines for Seismic retrofitting of Deficient Buildings and structures.
- h) Clause 4.5.1, 4.5.2, A 7.1 of IS 13935 : 2009 : Seismic Evaluation, Repair and Strengthening of Masonry buildings
- 74. The Petitioner has submitted that the projected ACE has become necessary for efficient and secure operation of the transmission system as covered under Regulation 25(2)(c) of the 2019 Tariff Regulations.
- 75. TANGEDCO vide affidavit dated 9.9.2020 has submitted that the Petitioner has claimed ACE towards replacement of problematic/defective equipment that are going to complete their useful life of 25 years and ACE on account of reconstruction of old/ dilapidated building that have completed 30 years of useful life. The total ACE claimed by the Petitioner is ₹11691.80 lakh. TANGEDCO has further submitted that the Petitioner's claim is not covered under Regulation 26 of the 2019 Tariff Regulations. The Regulation 27 of the Tariff Regulations provides for ACE for Renovation and Modernization as extracted below:
 - "27. Additional Capitalisation on account of Renovation and Modernisation
 - (1) The generating company or the transmission licensee, as the case may be intending to undertake renovation and modernization (R&M) of the generating station or unit thereof or transmission system or element thereof for the purpose of extension of life beyond the originally recognised useful life for the purpose of tariff, shall file a petition before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from

- a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company or the transmission licensee:
- (2) Provided further that the generating company or the transmission licensee intending to undertake renovation and modernization (R&M) shall be required to obtain the consent of the beneficiaries or the long term customers, as the case may be, for such renovation and modernization (R&M) and submit the same along with the petition."
- 76. As regards replacement of sub-station equipment, TANGEDCO has submitted that the Petitioner has stated that the sub-station equipment covered under the instant petition were put into commercial operation during 1991 and 1992. In this context, TANGEDCO has submitted that the Petitioner has not furnished the following:
 - a) Test reports showing critical values with regard to the equipment proposed to be replaced.
 - b) Incidents of tripping due to the equipment fault and events recorded by SRLDC.
 - c) Details of discussion held during the operation coordination committee meetings and the minutes of the meeting.
 - d) Reports of OEM with regard to non-availability of spares.
- 77. TANGEDCO has submitted that the replacement of old equipment on expiry of the useful life should come through the R&M route in compliance with the provisions of the 2019 Tariff Regulations. TANGEDCO has submitted that the Commission vide RoP of hearing dated 10.8.2020 had also observed that the Petitioner has claimed the ACE at the fag end of the useful life of the project without getting concurrence of the beneficiaries. TANGEDCO has submitted that it is essential to discuss and decide among the LTTCs the necessity of life extension of the old assets on expiry of the useful life, since the entire cost is to be borne by the LTTCs. TANGEDCO has further submitted that the Petitioner should not be allowed to claim any ACE without discussing the issues with the beneficiaries and getting their consent.
- 78. TANGEDCO has submitted that with regard to ACE on account of demolition and reconstruction of the buildings that have served the useful life of 30 years, the Petitioner has stated that the buildings constructed in 1988-89 are in dilapidated and unsafe condition. But,

to this effect the Petitioner has not furnished any detailed report (with photographs) along with test certificates revealing the status and life expectancy and serviceability of the building. Further, TANGEDCO has submitted that the Petitioner has failed to discuss these issues in the RPC forums among the beneficiaries/ LTTCs and get their consent duly considering the useful life of the whole project. It is also evident from the statement of the Petitioner that the Petitioner has failed to maintain the buildings even though they are claiming huge O&M charges.

- 79. TANGEDCO has further submitted that just because the project elements/ assets have served their useful life, the Petitioner should not be allowed to replace everything when the assets are in serviceable condition and spend public money without any justification, in particular when the Discoms are struggling to survive due to dearth of funds. TANGEDCO has requested that the Commission may direct the Petitioner to discuss the proposal of R&M of the plant and machinery and also the buildings and structures with the beneficiaries and get their consent apart from compliance of the mandatory requirements under the 2019 Tariff Regulations.
- 80. In response, the Petitioner vide affidavit dated 30.9.2020 has submitted that it has not made any imprudent projection and the claim made is as per the 2019 Tariff Regulations. The Petitioner has submitted that ACE has been claimed under Regulation 25(2) of the 2019 Tariff Regulations and not Regulation 26 as referred by TANGEDCO. Regulation 25(2) of the 2019 Tariff Regulations specifically recognizes the replacement of assets. It is not open to TANGEDCO or any other procurer to deny such claim on the ground that it should be under some other Regulation. Such insistence would render the Regulation 25(2) of the 2019 Tariff Regulations redundant and meaningless.

- 81. The Petitioner has further submitted that with regard to building and civil works, the Petitioner had already made submissions in reply to ROP of hearing dated 11.9.2020. The building and civil works form part of the transmission asset and are not an asset in itself. Further, though the useful life of these old and dilapidated buildings has been completed, useful life of the transmission asset is getting completed only in 2024-25 i.e. after the 2019-24 tariff period. Regulation 25(2)(a) of the 2019 Tariff Regulations specifically recognizes replacement of assets when the useful life of assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of this Regulation, which is extracted as under:
 - "(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;"
- 82. The Petitioner has submitted that the contention of TANGEDCO appears to be that all assets to be replaced after useful life should be under provisions of renovation and modernisation. If this contention of TANGEDCO is accepted, Regulation 25(2)(a) would be rendered meaningless. The said Regulation specifically deals with the situation of replacement of assets under the original scope and being replaced due to useful life not being commensurate with the useful life of the project. All conditions of the same are satisfied in the case of buildings as under:
 - a) The buildings etc. were part of the original scope of work;
 - b) The useful life is not commensurate with the project as the useful life of building is 30 years and is over while the useful life of the project is still continuing. Thus, useful life of buildings and civil work is not commensurate with the useful life of project; and
 - c) It is fully depreciated.
- 83. The Petitioner has further submitted that in this case, the buildings etc. cannot be considered under renovation and modernisation. The Renovation and Modernisation with

requirements of Detailed Project Report, analysis etc. or consent of beneficiaries would not be appropriate for the building project as it is not an independent transmission system or element. The building is a necessary part of the transmission asset and is essential for the continuous and stable functioning of the transmission asset. Therefore, the building and civil works should not be subject to consent of the beneficiaries.

- 84. The Petitioner has further submitted that there cannot be any dispute on the necessity of the building. Further, the Petitioner has submitted that it is seeking cost of construction of buildings only to the extent necessary. The decision for replacement was taken based on internal assessment and the Petitioner has enclosed the details. The Petitioner submitted that it is only seeking construction of 18 + 18 quarters as against the original 35 + 40 quarters. Therefore, the Petitioner submitted that it has sought to minimise the expenditure.
- 85. The Petitioner with regard to defective equipment has submitted that though equipment has completed its useful life, the transmission asset has not yet completed its useful life. Therefore, the same cannot be claimed under renovation and modernisation. Further, the above replacement is under Regulation 25(2)(c) of the 2019 Tariff Regulations and the replacement is necessitated as recommended by CPRI. The Petitioner has submitted details of the sub-stations wherein equipment getting replaced have already been specified in ACE details submitted along with reply to queries raised in ROP of hearing dated 11.9.2020. The Petitioner also enclosed the details stating the condition of the equipment and reports of OEM with regard to non-availability of spares.
- 86. The Petitioner has submitted that the alleged difficulties of distribution companies/
 TANGEDCO due to dearth of funds is not acceptable and the same cannot be a reason to
 stop the maintenance of the transmission system. Absence of efficient transmission system
 would only cause loss to the distribution companies as well as other entities in the State. The

Petitioner has submitted that it is necessary to anticipate and ensure reliable and continuous transmission of electricity and it is the distribution companies which would raise objections for any fault which may occur in transmission.

87. In response to the Commission's query regarding the details of ACE and decapitalization during 2019-24 tariff period which is towards the fag end of useful life of the project, the Petitioner was required to submit the details of proposed ACE along with justification and proposed life extension. The Petitioner vide affidavit dated 11.9.2020 has submitted the cost details for ACE/ de-capitalization proposed during 2019-24 under various heads as tabulated below:

(₹ in lakh)

Particulars	Land	Building & Civil Works	Sub-station
Add: Estimated expenditure during 2019-20 (towards balance payment for the works admitted in 2014-19 period)	-	-	3543.56
Less: Proposed de-capitalization during 2019- 20 (towards balance payment for works admitted in 2014-19 period)	-	1	(1457.51)
Add: Estimated ACE in 2019-20	172.14	1	-
Less: Estimated de-capitalization during 2019- 20	-	-	-
Add: Estimated Expenditure during 2020-21 (towards balance payment for the works admitted in 2014-19 period)			657.53
Less: Proposed de-capitalization during 2020- 21 (towards balance payment for works admitted in 2014-19 period)	-		-
Add: Estimated ACE in 2020-21	-	146.07	293.78
Less: Estimated de-capitalization during 2020- 21	-	(35.36)	(71.37)
Add: Estimated ACE in 2021-22	-	747.88	534.05
Less: Estimated de-capitalization during 2021- 22			(13.94)
Add: Estimated ACE in 2022-23	-	333.03	2865.77
Less: Estimated de-capitalization during 2022- 23	-	(82.52)	(1429.64)
Add: Estimated ACE in 2023-24	-		2397.98
Less: Estimated de-capitalization during 2023- 24	-		(1018.18)
Capital Cost after Capitalization & De-capitalization.	172.14	1109.10	6302.03
Total approved ACE during 2014-19	4491.73		

Total approved de-capitalization during 2014-19	(2106.15)	
Total Actual ACE during 2014-19	1206.99	
Total Actual de-capitalization during 2014-19	(648.64)	
ACE (proposed during 2014-19) during 2019- 24	4201.09	
De-capitalization (proposed during 2014-19) during 2019-24	(1457.51)	
Total Sub-station ACE proposed during 2019-24	6091.58	
Total Sub-station de-capitalization proposed during 2019-24	(2533.13)	

The Petitioner in response to queries raised vide RoP has furnished details vide its 88. affidavit dated 30.9.2020. It has further submitted that out of total proposed ACE of ₹11691.8 lakh during 2019-24 period, there is spill over of ₹4201.09 lakh for ACE that have been completed during 2014-19 period and payment is released in 2019-24 period. Further, there is an ACE of ₹172.14 lakh on account of land compensation paid for land under Salem Substation. In this regard, the Petitioner has submitted that few landowners had filed writ petitions in the court of subordinate judge, Salem for enhancement of compensation which was agreed by court of subordinate judge, Salem. Further, the Hon'ble High Court of Chennai also ordered to pay the compensation as per the order of subordinate judge, Salem. Accordingly, TANGEDCO had deposited the compensation amount in the court of subordinate judge with interest since originally the land was acquired by TNEB only and later, a portion of that land was transferred to the Petitioner for establishment of Salem sub-station. Subsequently, TANGEDCO (earlier TNEB) requested the Petitioner to pay the proportionate amount of enhanced compensation paid which amounts to ₹172.14 lakh as per the claim made by TANGEDCO. Accordingly, an amount of ₹172.14 lakh has been paid to TANGEDCO towards the amount deposited by them for enhanced compensation of land acquired for establishment of Salem sub-station. The proof of payment and payment receipt from TANGEDCO has been submitted by the Petitioner. Further, ACE of ₹1226.98 lakh and de-capitalization of ₹117.88 lakh has been proposed under the head building and civil works. In this regard, the Petitioner

has submitted that ACE/ de-capitalization proposed under the head building and civil works was on account of demolition of old and dilapidated buildings that have completed 30 years of useful life. Accordingly, total ACE proposed under the head sub-station during 2019-24 period (for works that are to executed/ replaced during 2019-24 period) amounts to ₹6091.58 lakh and de-capitalization amounts to ₹2533.13 lakh. Justification along with cost break-up was provided along with the reply. The Petitioner has further submitted that the transmission asset is completing its useful life in 2024-25 i.e. beyond the validity of the 2019 Tariff Regulations and no life extension has been proposed for the transmission asset.

89. The Commission vide RoP of hearing dated 10.8.2020 directed the Petitioner to submit Detailed Project Report specifying complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level and estimated completion cost as per Regulation 27(1) of the 2019 Tariff Regulations as the Petitioner is undertaking Renovation and Modernization (R&M) work. The Commission directed the Petitioner to also submit consent of the beneficiaries or the long-term customers, as the case may be, as per Regulation 27(2) of the 2019 Tariff Regulations. In response, the Petitioner vide affidavit dated 11.9.2020 has submitted that the building and civil works forms part of the transmission asset and are not an asset in itself. Further, though the useful life of these old and dilapidated buildings has been completed, useful life of the project is getting completed only in 2024-25 i.e. after the 2019-24 tariff period as per Regulation 25(2)(a) of the 2019 Tariff Regulations:

[&]quot;(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

⁽a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;"

- 90. The Petitioner has further submitted that ACE/de-capitalization under the head "building and civil works" has been claimed as per Regulation 25(2)(a) of the 2019 Tariff Regulations and not as per Regulation 27(1) of the 2019 Tariff Regulations i.e. ACE on account of Renovation and Modernisation. Accordingly, the Detailed Project Report specifying complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level and estimated completion cost as per Regulation 27(1) and consent of the beneficiaries or the long-term customers, as the case may be as per Regulation 27(2) of the 2019 Tariff Regulations is not applicable in the instant case. The Petitioner has further submitted that the Renovation and Modernisation with requirement of Detailed Project Report, analysis etc. or consent of beneficiaries would not be appropriate for the building project which is not an independent transmission system or element. The building is a necessary part of the transmission asset and is essential for the continuous and stable functioning of the transmission asset. Therefore, the building and civil works should not be subject to consent of the beneficiaries.
- 91. We have considered the submissions made by TANGEDCO and the Petitioner. It is observed that the transmission asset was put into commercial operation on 1.10.1991 and has completed more than 28 years of its useful life. The Petitioner has proposed ACE at the fag end of the useful life of the transmission asset and has not proposed any extension of life of the said transmission asset. Moreover, the Petitioner has neither submitted the consent nor has conveyed that the proposed ACE towards "building and civil works" has the consent of the beneficiaries/ Respondents. The "building and civil works" are non-critical in nature. In view of the above, we are not inclined to allow ACE claimed by the Petitioner towards "building & civil works" under Regulation 25(2)(a) of the 2019 Tariff Regulations. However, the Petitioner may obtain the approval of RPC and consent of beneficiaries and submit the same

at the time of true up for consideration in the instant case. Further, in future in all such cases where ACE is proposed at the fag end of the life of the transmission asset, the Petitioner is directed to submit the consent of the beneficiaries/Respondents, especially in case of works of non-critical nature. ACE claimed by the Petitioner on account of land compensation paid to TANGEDCO for land under Salem Sub-station is allowed. However, the Petitioner is directed to submit all the relevant petitions/writ petitions and judgements and the reasons for claiming compensation towards land at Salem Sub-station at the time of true up of 2019-24 period. The Petitioner has also not submitted the approval of competent authority for the proposed ACE for 2019-24 period. The Petitioner is directed to submit the same at the time of true-up and Petitioner is directed to submit the approval of the competent authority for the proposed ACE.

92. The remaining ACE claimed by the Petitioner is towards replacement of various substation equipment such as (1) replacement of old and obsolete 230 kV CGL make pneumatic spring type circuit breakers at Udumalpet Sub-station, (2) replacement of old and obsolete 400 kV BHEL/WSI make dead tank type Porcelain CTS at Salem, Udumalpet, Madurai, Trichy & Thrissur stations, (3) replacement of old and obsolete 230 kV AE make dead tank type Porcelain CTs at Madurai Sub-Station, (4) replacement of old and obsolete 400 kV HBB make CVTs at Salem, Madurai & Trichy Sub-Station, (5) replacement of old & obsolete 400 kV S&S and Hivelm make HCB type 400 kV Isolators at Trichy and Madurai Sub-stations (6) replacement of old and obsolete Gapped/ Porcelain type ELPRO/ WSI make 390 kV & 216 kV Surge arrestors at Salem, Udumalpet, Trichy, Madurai, Thrissur Sub-station, (7) replacement of old and obsolete high Impedance Static type 400 kV Bus bar protection relays at Sriperumbudur and Salem Sub-stations, (8) replacement of old and obsolete static/ electromechanical type protection relays in ICT/ Reactor/ feeder protection panels at Sriperumbudur

and Salem sub-stations. These are allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The detailed breakup of net ACE allowed is as follows:

(₹ in lakh)

Particulars	Land	Building & Civil Works	Sub-station
Expenditure during 2019-20	-	-	3543.56
De-Capitalization during 2019-20	-	-	(1457.51)
ACE in 2019-20	172.14	-	-
Total ACE in 2020-21			951.31
De-Capitalization during 2020-21	-	-	(71.37)
ACE in 2021-22	-	-	534.05
De-Capitalization during 2021-22	-	-	(13.94)
ACE in 2022-23	-	-	2865.77
De-Capitalization during 2022-23	-	-	(1429.64)
ACE in 2023-24	-	-	2397.98
De-Capitalization during 2023-24	-	-	(1018.18)
Net ACE	172.14	-	6302.03

93. Accordingly, ACE and de-capitalisation allowed for the 2019-24 tariff period is as under:

(₹ in lakh)

Particulars		2019-20	2020-21	2021-22	2022-23	2023-24	Total
ACE	Α	3715.70	951.31	534.05	2865.77	2397.98	10464.81
De- capitalisation	В	1457.51	71.37	13.94	1429.64	1018.18	3990.64
Net ACE	C=A-B	2258.19	879.94	520.11	1436.13	1379.80	6474.17

94. Accordingly, the capital cost considered for the 2019-24 tariff period is as under:

(₹ in lakh)

						(
Capital Cost			Net ACE			Capital Cost
as on 1.4.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.3.2024
40965.35	2258.19	879.94	520.11	1436.13	1379.80	47439.52

Debt-Equity ratio

95. Regulation 18 of the 2019 Tariff Regulations provides as under:

"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 additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."
- 96. The debt-equity ratio for the 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The decapitalisation of the transmission asset in the instant case is carried out in the debt-equity ratio as per the details claimed vide Form 10B by the Petitioner.



The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is as under:

Debt-Equity for Capital Cost as on 1.4.2019

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)
Debt	20724.07**	50.59%
Equity	20241.28	49.41%
Total	40965.35	100.00%

^{**}Repaid prior to 1.4.2014

Debt-Equity for ACE and De-capitalisation during 2019-24

(₹ in lakh)

	ACE		De- capitalisation		ACE		De- capitalisati		ACE		De capitali	
		(%)	2019-20	(%)	2020-	(%)	2020-21	(%)	` ,		2021-22	
Debt	20 2600.99	70.00	728.76	50.00	21 665.92	70.00	35.69	50.00	22 373.84	70.00	6.97	50.00
Equity	1114.71	30.00			285.39		ł				6.97	50.00
Total	3715.70	100.00	1457.51	100.00	951.31	100.00	71.37	100.00	534.05	100.00	13.94	100.00

(₹ in lakh)

Particulars	ACE		De-capit	alisation	AC	E	De-capita	alisation
Faiticulais	2022-23	(%)	2022-23	(%)	2023-24	(%)	2023-24	(%)
Debt	2006.04	70.00	714.82	50.00	1678.59	70.00	509.09	50.00
Equity	859.73	30.00	714.82	50.00	719.39	30.00	509.09	50.00
Total	2865.77	100.00	1429.64	100.00	2397.98	100.00	1018.18	100.00

Debt-Equity for Capital Cost as on 31.3.2024

Particulars	Capital cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	26054.12**	54.92
Equity	21385.40	45.08
Total	47439.52	100.00

^{***}Debt to the extent of ₹20724.00 has already been repaid prior to 1.4.2014 and balance on account of new additions to be serviced.

Depreciation

- 97. Regulations 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:
 - "33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:



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

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

98. 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 transmission project has already completed more than 12 years before 1.4.2019. Accordingly, depreciation has been calculated based on the remaining depreciable value (up to 90% of existing gross block of assets) to be recovered over the balance useful life. However, depreciation for ACE (new additions) allowed during fag end of the transmission system has been computed at normative rate of depreciation as specified in the 2019 Tariff Regulations:

Existing Assets:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	40965.4	39507.8	39436.5	39422.5	37992.9
ACE	0	0	0	0	0
Decapitalisation	1457.51	71.37	13.94	1429.64	1018.18
Closing Gross Block	39507.8	39436.5	39422.5	37992.9	36974.7
Average Gross Block	40236.6	39472.2	39429.5	38707.7	37483.8
Freehold Land	83	83	83	83	83
Weighted average rate of Depreciation (WAROD) (%)	2.41%	2.14%	2.13%	2.71%	2.55%
Depreciable Value	36138.2	35450.2	35411.9	34762.2	33660.7
Cumulative Depreciation at the beginning of the year	31618.4	31289.4	32068.9	32895.2	32661.9
Less: Dep adjustment on a/c of decapitalisation	1298.79	65.81	12.55	1283.44	916.36
Net Cumulative Depreciation after adjustment for de-capitalisation	30319.6	31223.5	32056.3	31611.8	31745.6

Remaining Depreciable Value	5818.66	4226.7	3355.52	3150.47	1915.15
Balance useful life of the asset (years)	6	5	4	3	2
Elapsed life (years)	27	28	29	30	31
Depreciation	969.78	845.34	838.88	1050.16	957.58
Remaining Depreciable Value at the end of the year	4848.88	3381.36	2516.64	2100.31	957.58

New Additions:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	0.00	3715.70	4667.01	5201.06	8066.83
Additional Capitalisation	3715.70	951.31	534.05	2865.77	2397.98
Closing Gross Block	3715.70	4667.01	5201.06	8066.83	10464.81
Average Gross Block	1857.85	4191.36	4934.04	6633.95	9265.82
Freehold Land	86.07	172.14	172.14	172.14	172.14
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value (Excluding Freehold Land)	1594.60	3617.29	4285.71	5815.62	8184.31
Cumulative Depreciation at the beginning of the year	0.00	93.55	305.76	557.19	898.38
Depreciation	93.55	212.21	251.43	341.18	480.15
Cumulative Depreciation at the end of the year	93.55	305.76	557.19	898.38	1378.52
Remaining Depreciation recoverable at the end of the year	1501.05	3311.53	3728.51	4917.25	6805.79

Interest on Loan (IoL)

- 99. Regulation 32 of the 2019 Tariff Regulations provides as under:
 - **"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 decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of 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."
- 100. Gross normative loan to the extent of ₹20724.07 has already been repaid prior to 1.4.2014 and therefore, IoL has been considered on ACE (new additions). 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 the 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. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL has been allowed as under:

(₹ in lakh)

	1		1	1	(\ III lakii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	20724.07	22596.31	23226.54	23593.41	24884.62
Cumulative Repayments up to Previous Year	20724.07	21058.64	22080.51	23163.85	23840.37
Net Loan-Opening	0.00	1537.66	1146.03	429.55	1044.25
Additions	2600.99	665.92	373.84	2006.04	1678.59
De-capitalization	728.76	35.69	6.97	714.82	509.09
Repayment during the year	1063.33	1057.55	1090.31	1391.34	1437.72
Adjustment of Cumulative Repayment Pertaining to decapitalized asset	728.76	35.69	6.97	714.82	509.09
Net Loan-Closing	1537.66	1146.03	429.55	1044.25	1285.11
Average Loan	768.83	1341.84	787.79	736.90	1164.68
Weighted Average Rate of Interest on Loan (%)	7.6209	7.6209	7.6209	7.6132	7.5942
Interest on Loan	58.59**	102.26**	60.04**	56.10**	88.45**

^{**}Computed by multiplying WAROI into Average Loan raised for additions

Return on Equity (RoE)

101. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as under:

- **"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:

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



Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rate 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:

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."
- 102. 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. RoE allowed for the transmission asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	20241.28	20627.23	20876.94	21030.19	21175.10
Additions	1114.71	285.39	160.22	859.73	719.39
De-capitalization	728.76	35.69	6.97	714.82	509.09
Closing Equity	20627.23	20876.94	21030.19	21175.10	21385.40
Average Equity	20434.25	20752.09	20953.56	21102.64	21280.25
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	3837.96	3897.66	3935.50	3963.50	3996.86

Interest on Working Capital (IWC)

103. Regulation 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations specifies as under:

"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;"
- 104. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The ROI 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, ROI 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 are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses including security expenses for 1 month) **	165.62	171.52	177.53	183.85	190.15
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses including security expenses) **	298.12	308.74	319.56	330.92	342.27
Receivables (Receivables equivalent to 45 days of annual fixed cost)**	874.00	896.38	909.18	959.54	980.54
Total Working Capital	1337.75	1376.65	1406.27	1474.31	1512.95
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	161.20	154.87	158.21	165.86	170.21

^{**}As per the 2019 Tariff Regulations

Operation & Maintenance Expenses (O&M Expenses)

105. The O&M Expenses claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
22 Nos. 400 kV	707.30	732.16	757.90	784.52	812.02
Conventional Bays					
424.454 km S/C (Bundle					
Conductor- 6 or more sub-	373.95	387.10	400.68	414.69	429.12
c)					
456.495 km S/C	229.62	237.83	246.05	254.73	263.85
(Twin/Triple Conductor)	229.02	237.03	240.05	254.73	203.03
400 kV Sub-station ICT	676.62	701.19	725.76	752.22	776.79
PLCC	5.40	5.40	5.40	5.40	5.40
(2% of ₹270.00 lakh)	5.40	5.40	5.40	5.40	5.40
Total	1992.89	2063.68	2135.79	2211.56	2287.18

106. Regulation 35(3)(a) of the 2019 Tariff Regulations provides 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				
Norms for sub-station Bays (₹	Norms for sub-station Bays (₹ Lakh per bay)								
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
Norms for Transformers (₹ La		70.07	77.20	77.00	10.10
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
Norms for AC and HVDC lines		0.20	0.200	0.2.2	<u> </u>
Single Circuit (Bundled					
Conductor with six or more	0.881	0.912	0.944	0.977	1.011
sub-conductors)					
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to- Back station (₹ Lakh per 500	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947

±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942
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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 year
- (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."



107. We have considered the submission of the Petitioner. 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 Regulation 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 extracted hereunder:

"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.

108. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and are as under:

(₹ in lakh)

					· III lakiij
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
22 Number of 400 kV	bays				
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Total	707.30	732.16	757.90	784.52	812.02
424.454 km D/C (Bundle Cor	nductor- 6 or n	nore sub-c)			
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Total	373.94	387.10	400.68	414.69	429.12
456.495 km S/C (Twin/Triple	Conductor)				
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
Total	229.62	237.83	246.05	254.72	263.85
6 Number of 400 kV Sub-sta	tion ICT (315 N	/IVA)			
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
Total	676.62	701.19	725.76	752.22	776.79
Total O&M Expenses allowed (₹ in lakh)	1987.48	2058.29	2130.40	2206.16	2281.79

Annual Fixed Charges of the 2019-24 Tariff Period

109. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1063.33	1057.55	1090.31	1391.34	1437.72
Interest on Loan	58.59	102.26	60.04	56.10	88.45
Return on Equity	3837.96	3897.66	3935.50	3963.50	3996.86
Interest on Working Capital	161.20	154.87	158.21	165.86	170.21
O & M Expenses	1987.48	2058.29	2130.40	2206.16	2281.79
Total	7108.56	7270.63	7374.44	7782.96	7975.02

Filing Fee and the Publication Expenses

110. 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

111. 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. 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

- 112. 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.
- 113. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that the Petitioner's prayer is premature.

Security Expenses

114. The Petitioner has submitted that security expenses for the transmission asset 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.

115. 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

116. 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

117. 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.

118. To summarise:

(a) The revised Annual Fixed Charges allowed for the transmission asset as per the APTEL's judgements are:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
Annual Fixed Charges	5992.58	5712.95	5504.05

(b) The trued-up Annual Fixed Charges allowed for the transmission asset for the 2014-19 tariff period are:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Annual Fixed Charges	6698.88	6782.44	6847.99	6971.65	7140.76

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	7108.56	7270.63	7374.44	7782.96	7975.02

119. This order disposes of Petition No. 155/TT/2020

sd/-(Arun Goyal) Member sd/-(I. S. Jha) Member

sd/-(P. K. Pujari) Chairperson