**CENTRAL ELECTRICITY REGULATORY COMMISSION**
**NEW DELHI**

**Petition No.258/TT/2018**

**Coram :**
**Shri P.K. Pujari, Chairperson**
**Dr. M. K. Iyer, Member**
**Shri I. S. Jha, Member**

**Date of Order: 21st May, 2019**

**IN THE MATTER OF**

Approval of transmission tariff for 2 Nos. Of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line under "Sub-station works associated with strengthening of Transmission System beyond Vemagiri" in Southern Region under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

**And in the matter of:**

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

**Vs**

1. Karnataka Power Transmission Corporation Limited,
(KPTCL), Kaveri Bhawan,
Bangalore – 560009

2. Transmission Corporation of Andhra Pradesh Limited,
(APTRANSCO), Vidyut Soudha,
Hyderabad- 500082

3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapurarn-695 004

4. Tamil Nadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai,
Chennai - 600 002

5. Electricity Department
Government of Goa, Vidyuti Bhawan,
3rd Floor, Panaji, Goa-403001

6. Electricity Department,
Government of Pondicherry,
Pondicherry - 605001

7. Eastern Power Distribution Company of Andhra Pradesh Limited,
(APEPDCL) P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh

8. Southern Power Distribution Company of Andhra Pradesh Limited,
(APSPDCL), Srinivasasa Kalyana Mandapam Backside
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517 501, Chitoor District, Andhra Pradesh

9. Central Power Distribution Company of Andhra Pradesh Limited,
(APCPDCL), Corporate Office, Mint Compound,
Hyderabad - 500 063, Andhra Pradesh

10. Northern Power Distribution Company of Andhra Pradesh Limited,
(APNPDCL), Opp. NIT Petrol Pump,
Chaitanyapuri, Kazipet, Warangal - 506 004, Andhra Pradesh

11. Bangalore Electricity Supply Company Ltd. (BESCOM),
Corporate Office, K. R. Circle
Bangalore - 560001, Karnataka

12. Gulbarga Electricity Supply Company Ltd (GESCOM)
Station Main Road, Gulburga, Karnataka

13. Hubli Electricity Supply Company Ltd, (HESCOM)
Navanagar, PB Road, Hubli,
Karnataka

14. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575001, Karnataka

15. Chamundeswari Electricity Supply Corporation Ltd.,
(CESC), # 927,L J Avenue, Ground Floor,
New KantharajUrs Road, Saraswatipuram,
Mysore - 570 009, Karnataka

16. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082

17. POWERGRID Southern Interconnector Transmission System Limited
B-9, Qutab institutional Area,
Katwaria Sarai
New Delhi-110016 **…Respondents**

**Parties present :** Shri S.S. Raju, PGCIL
Shri S.K. Venketsan, PGCIL
Shri B. Dash, PGCIL
Shri Ansul Garg, PGCIL
Shri Zafrul Hasan, PGCIL
Shri S. Vallinayagam, Advocate, TANGEDCO
Ms. Amali, Advocate, TANGEDCO
Shri R. Kathiravan, TANGEDCO

## ORDER

The petitioner, Power Grid Corporation of India Limited (PGCIL), has filed the instant petition for determination of transmission tariff from anticipated COD to 31.3.2019 for 2 Nos. of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line under "Sub-station Works associated with strengthening of Transmission System beyond Vemagiri" in Southern Region in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations”). The petitioner had also prayed for grant of 90% of the Annual Fixed Charges (AFC) claimed, in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for inclusion in PoC mechanism.

2. The two bays at Srikakulam are executed by the petitioner on cost plus basis while the associated transmission line is being implemented by the petitioner under the TBCB route. As per the Investment Approval dated 22.10.2016, the instant asset was scheduled to be put into commercial operation on 21.4.2019. The petitioner filed the petition on the basis of anticipated date of commercial operation of 1.7.2018.

Later, vide affidavit dated 6.12.2018, the petitioner has submitted that the actual COD of the assets was 7.8.2018 and the revised tariff forms have been submitted as per the actual COD. The assets were put into commercial operation alongwith the associated transmission line.

3. The petitioner has made the following prayers :

i) Approve the Transmission Tariff for ₹ 352.56 lakhs (2018-19) for the tariff block 2014-19 for the assets covered under this petition.

ii) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.

iii) Allow the Petitioner to approach this Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.

iv) 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 under clause 25 of the Tariff regulations 2014.

v) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure ( if any) in relation to the filing of petition.

vi) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

vii) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.

viii) Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.

ix) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.

x) Allow the petitioner to bill Tariff from anticipated DOCO and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

**Background:**

4. The investment approval (I.A.) of the project was accorded by Board of Directors of petitioner in its 334th meeting held on 22.10.2016 (communicated vide Memorandum No. C/CP/PA 1617-10-0O-IA 013 dated 24.10.2016), at an estimated cost of ₹ 608.24 Crore including IDC of ₹ 36.12 Crore at price level June, 2016.

5. The scope of the scheme was discussed and agreed to in the 37th and 39th meeting of the Standing Committee on Power System Planning of Southern Region held on 31.07.2014, 28-29.12.2015 respectively. The transmission scheme was agreed to in the 26th and 29th Meeting of SRPC held on 20.12.2014 and 05.03.2016 respectively.

6. The Commission vide Order dated 31.12.2018 allowed the provisional tariff in the instant petition. The relevant extract of the order dated 31.12.2018 is as under:

> *"7.After carrying out preliminary prudence check of the AFC claimed by the petitioner, the Commission has decided to allow tariff in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations as given in paragraph 8 of this order. The issues raised by TANGEDCO in its reply and the clarifications given by the petitioner will be considered at the time of final hearing.*
>
> *8. The details of the tariff claimed by the petitioner and tariff awarded by the Commission are as under:-*

***(₹ in lakh)***

| Tariff claimed for 2018-19 as per actual COD | POC Tariff allowed for 2018-19 (Pro-rata as per Actual COD) |
|---|---|
| 296.85 | 252.32 |

> *9. The tariff allowed in this order shall be applicable from the actual CODs of instant assets and the billing, collection and disbursement of the transmission charges shall*

*be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended from time to time. Further, the transmission charges allowed in this order shall be subject to adjustment as per Regulation 7(7) of the 2014 Tariff Regulations."*

7. The scope of work covered under "Sub-station Works Associated with Strengthening of Transmission System Beyond Vemagiri" in Southern Region is as follows:

i) 2 nos. of 765 kV line bays at Vemagiri-II Pooling Station for termination of Vemagiri-II-Chilakaluripeta 765 kV D/C Line.

ii) 1 no. of 240MVAR Switchable Line Reactor on each circuit of Vemagiri-II-Chilakaluripeta 765 kV D/C Line at Vemagiri-II polling Station (2 nos. 240 MVAR reactor at Vemagiri-II)

iii) 2 nos. of 765 kV line bays at Cuddapah for terminating Chilakaluripeta-Cuddapah 765 kV D/C Line.

iv) 1 no. of 240MVAR Switchable Line Reactor on each circuit of Chilakaluripeta-Cuddapah 765 kV D/C Line at Cuddapah (2 nos 240 MVAR Switchable line reactors)

v) 2 nos. of 400 kV line bays at Cuddapah for terminating Cuddapah-Madhugiri 400 kV (quad) D/C line.

vi) 1 no. of 50MVAR Switchable Line Reactor on each circuit of Cuddapah-Madhugiri 400 kV (quad) D/C line at Cuddapah (2 nos. 50 MVAR Switchable line reactors)

vii) 2 nos. of 400 kV line bays at Madhugiri for termination of Cuddapah-Madhugiri 400 kV (quad) D/C line

viii) 1 no. of 50MVAR Switchable Line Reactor on each circuit of Cuddapah-Madhugiri 400 kV (quad) D/C line at Madhugiri (2 nos. 50 MVAR Switchable line reactors)

ix) 2 nos. 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station - Garividi 400 kV Quad D/c line

8. The scope of the instant petition is determination of transmission tariff from actual COD to 31.3.2019 in respect of 2 nos. 400 kV line bays at Srikakulam for

termination of Srikakulam Pooling Station - Garividi 400 kV Quad D/c line (herein after referred as Asset-I). The petitioner states that the balance elements under the scheme are under different stages of implementation and application for tariff determination for the same shall be submitted before the Commission subsequently.

9. Petitioner has submitted CEA energisation certificate dated 23.8.2018, RLDC charging certificate dated 22.5.2018 and CMD certificate as required under Grid Code.

10. The petition was heard on 13.12.2018 and 19.2.2019. The Commission (vide RoP dated 13.12.2018 and 19.2.2019) also directed the petitioner to submit additional information on affidavit. The information sought for has been furnished by the petitioner vide affidavit dated 7.1.2019, 15.2.2019 and 12.3.2019.

11. The petitioner has claimed the Annual Transmission Charges (ATC) for the asset as follows:-

**(₹ In lakh)**

| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 296.85 |

12. The petitioner has claimed the Interest on Working Capital as follows:

**(₹ In lakh)**

| **Particulars** | **Asset-I** |
|---|---|
| | **2018-19** |
| Maintenance Spares | 20.61 |
| O&M expenses | 11.45 |
| Receivables | 76.05 |
| **Total** | **108.11** |
| Interest | 8.58 |
| Rate of Interest | 12.20% |

13. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Act.

14. The petitioner has submitted that the instant petition has been filed for determination of tariff of 2 Nos. 400 kV line bays at Srikakulam for termination at Srikakulam Pooling Station-Garividi 400 kV Quad D/C line which has been put into commercial operation on 7.8.2018. The petitioner further submitted that as per Investment Approval, the SCOD of the instant asset was 21.4.2019. However, the same was preponed in order to relieve load on 765/400 kV ICT at Vemagiri-II and to enhance TTC of inter-regional corridor for import of power to Southern Region. The petitioner submitted that there is no time over-run and cost over-run in the case of instant asset.

**Analysis and Decision**:

15. We have heard the learned counsels for the Petitioners and the Respondents and considered petitioner‘s petition dated 3.7.2018 and affidavits dated 10.8.2018, 4.12.2018, 6.12.2018, 17.12.2018, 7.1.2019, 15.2.2019 and 11.3.2019 and the respondent, TANGEDCO’s reply dated 6.9.2018 and petitioner’s rejoinder to the reply of TANGEDCO dated 10.12.2018. Based on the above, we proceed to decide the petition in the succeeding paragraphs.

**Date of Commercial Operation (DOCO)**

16. The petitioner has claimed the actual COD of the Asset-I as 7.8.2018. In

support of the COD of the Asset-I, the petitioner has submitted CEA energisation certificate dated 23.8.2018, RLDC charging certificate dated 22.5.2018 and CMD certificate as required under Grid Code.

17. In response to the information sought by the Commission vide RoP/Order dated 31.12.2018, the petitioner vide affidavit dated 7.1.2019 has submitted that a meeting was held on 1.11.2017 in CEA to discuss the issues relating to early commissioning of “Strengthening of Transmission System beyond Vemagiri”. In the meeting it was agreed that in order to relieve loading on 765/400 kV ICT at Vemagiri-II (PG) to some extent and to enhance TTC of inter-regional corridor for import of power to Southern Region, best efforts are to be made for early commissioning of the transmission line and associated bays and substations under the instant project. The petitioner also submitted that a letter had been received by CEA from TANGEDCO, the lead LTTC, intimating ‘no objection’ to the early commissioning of the transmission scheme. The early commissioning of the instant project was also discussed and agreed to in 41st SCM of SR held on 22.09.2017. The readiness and commissioning of the said transmission system had also been discussed and informed during 31st TCC, 32nd TCC and 33rd SRPC meeting held on 21.8.2017, 16.2.2018 and 17.2.2018 respectively. The petitioner also submitted that the associated TBCB line 400 kV D/C Srikakulam- Garividi transmission line put under commercial operation w.e.f. 7.8.2018 matching with the subject Asset.

18. We have considered the submissions of the petitioner. Taking into consideration of CEA energisation certificate, RLDC charging certificate and CMD

certificate as required under Grid Code, the COD of the Asset-I has been approved as 7.8.2018.

**Capital Cost**

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

> *"(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."*
>
> *(2) The Capital Cost of a new project shall include the following:*
>
> *(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
>
> *(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
>
> *(c) Increase in cost in contract packages as approved by the Commission;*
>
> *(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*
>
> *(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*
>
> *(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39*
>
> *(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*
>
> *(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD."*

20. The respondent, TANGEDCO, has submitted that the Completion Cost may be restricted by considering the Projected Additional Capital Expenditure for the tariff Period 2014-19 only.

21. The petitioner vide affidavit dated 6.12.2018 and Auditor Certificate dated 4.12.2018 has claimed the expenditure incurred up to COD and additional capitalization projected to be incurred from COD to 31.03.2019 and the capital cost incurred up to COD and projected to be incurred during 2018-19 & 2019-20 as per Auditor certificate is as follows:

**(₹ in lakh)**

| Asset | Apportioned Approved Cost as per FR | Cost incurred as on COD 7.8.2018 | Projected Add-Cap | | Estimated Completion Cost | Estimated Cost upto 31.3.2019 |
|---|---|---|---|---|---|---|
| | | | 2018-19 | 2019-20 | | |
| Asset-1 | 2166.38 | 1743.39 | 265.87 | 113.95 | 2123.21 | *2009.26 |

*** Considered for the purpose of *computation* of Annual Transmission Charges.**

**Cost Over-Run/Variation**

22. The petitioner has submitted there is reduction of around ₹ 280 Lakhs on account of Overheads and IDC with respect to FR. Based on the assumption that the project is being financed from loan and equity in the ratio of 70:30 and the equity component is being released simultaneously along with the loan component, the decrease in interest during construction works out to be ₹ 172 Lakhs. The interest rate for the loan amount has been considered @ 10.5%. The interest during construction would however be based on the actual financial structure of the asset 7.76% and applicable terms of interest on loan(s), etc. on account of early commissioning, the decrease in IEDC (Overheads) is ₹ 109 Lakhs. There is increase of around ₹ 342 Lakhs on accounts of civil works for switchyard tower structure foundation. While actual execution design of tower change considering the wind zone for the coastal part. Thus, change in tower design result the increase in quantity of tower foundation.

23. We have considered the submissions of the petitioner and respondent. As against the total apportioned approved cost (FR cost) of ₹ 2166.38 Lakhs, the estimated completed cost is ₹ 2123.21 Lakhs which is within the approved cost. Therefore, there is no cost overrun.

**Time over-run**

24. As per investment approval (FR), the project was scheduled to be put under commercial operation within 30 months from the date of original Investment Approval (IA). The date of IA is 22.10.2016, accordingly the schedule COD works out to be 21.4.2019 against which the asset got commissioned and put under commercial operation as on 7.8.2018. Hence, there is no delay in commissioning of the Asset-I.

25. We have considered the submissions of the petitioner and respondent. As against the scheduled COD of 23.4.2019 the asset was put under commercial operation on 7.8.2018. The petitioner has submitted the clarifications for early commissioning the subject asset. We accede to the clarifications put forth by the petitioner.

**Interest During Construction (IDC)**

26. As per Auditor Certificates dated 4.12.2018 submitted by the petitioner IDC of ₹ 51.04 lakh has been claimed for Asset-I. Petitioner has submitted the statement showing discharged of IDC liability as on COD and thereafter. Petitioner has also submitted the drawl details along with the IDC statements for assets in its petition and additional information vide affidavit dated 12.3.2019.

**(₹ in lakh)**

| IDC claimed as per certificate | IDC considered as on COD | IDC discharged Up to COD | IDC discharged In 2018-19 |
|---|---|---|---|
| 51.04 | 51.04 | 4.75 | 46.29 |

27. The IDC on cash basis up to allowable dates has been worked out on the basis of the loan details given in Form-9C. It is submitted that Petitioner has not made any default in the payment of interest. Therefore, the IDC being considered for tariff computation is minimum of the worked out IDC and IDC claimed by the Petitioner.

**Incidental Expenditure During Construction (IEDC)**

28. The Petitioner has claimed IEDC of ₹ 26.27 lakh. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed.

**Initial spares**

29. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

> *"(d) Transmission System Transmission line: 1.00%*
> *Transmission sub-station (Green Field): 4.00%*
> *Transmission sub-station (Brown Field): 6.00%*"

30. The petitioner vide affidavit dated 6.12.2018 & Auditor Certificate dated 4.12.2018 has claimed the Initial spares with regard to subject Asset as follows:

**(₹ in lakh)**

| Components of the Asset | Cost for calculation of initial spares | Initial spares being claimed | Initial spares being claimed (%) |
|---|---|---|---|
| Sub-station (Brown Field) | 2045.90 | 64.77 | 3.16 |

31. We have considered the submissions of the petitioner. The initial spares claimed by the Petitioner for the subject Asset are within the permissible limits and the same are allowed.

**Capital Cost allowed as on COD:**

32. Based on the above, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulation is summarized as under:-

| **Capital Cost claimed as on COD (a)** | **Un-discharged IDC as on COD & IDC disallowed (b )** | **Un-discharged IEDC (c)** | **Un-discharged Initial Spare as on COD (d)** | **Capital Cost allowed as on COD [e=[a-(b+c+d)]** |
|---|---|---|---|---|
| 1743.39 | 46.29 | 0.00 | 0.00 | 1697.10 |

**Additional Capital Expenditure (ACE)**

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

*"(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
*(i) Undischarged liabilities recognised to be payable at a future date;*
*(ii) Works deferred for execution;*
*(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
*(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
*(v) Change in Law or compliance of any existing law:*
*Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."*

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

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

35. Accordingly, the cut-off date for the assets covered in the instant petition is 31.3.2022.

36. The ACE claimed by the petitioner upto 31.03.2019 is ₹ 265.87 lakhs. The petitioner has claimed ACE based on the cost certified by the auditor. The ACE claimed by the Petitioner is summarized in the table below:-

**(₹ in lakh)**

| **2018-19** | **2019-20** |
|---|---|
| 265.87 | 113.95 |

37. The additional capital expenditure claimed by the Petitioner for the instant assets for the period 2018-19 is within the cut- off date and is on account of balance and retention payments and accordingly it is allowed under Regulation 14(1) (i) of the 2014 Tariff Regulations. Since, FY 2019-20 falls beyond tariff period 2014-19 and is not covered under the 2014 Tariff Regulations, the projected ACE claimed by the petitioner for FY 2019-20 has been ignored for the purpose of tariff and will be dealt during the next tariff period, based on the then prevailing Tariff Regulations and corresponding claim by the petitioner.

38. The un-discharged IDC as on COD has been allowed as Additional Capital Expenditure during the year of discharge. Accordingly, the Additional Capital expenditure allowed has been summarized as under, which shall be reviewed at the time of true up:-

**(₹ In lakh)**

| Particulars | 2018-19 | Total Add Cap Allowed |
|---|---|---|
| Additional Capitalization Claimed | 265.87 | 265.87 |
| **Add :** IDC Discharged | 46.29 | 46.29 |
| **Total Add Cap allowed** | 312.16 | 312.16 |

39. Accordingly, the capital cost considered for the purpose of computation of tariff is as follows:-

**(₹ in lakh)**

| Asset | Capital cost allowed as on COD | Add Cap for 2018-19 | Total Estimated Cost up to 31.3.2019 |
|---|---|---|---|
| Asset-I | 1697.10 | 312.16 | 2009.26 |

**Debt-Equity Ratio**

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

*"(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*
*Provided that:*
*(i) where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
*(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
*(iii) any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.*

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

*"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."*

41. The Petitioner has claimed Debt:Equity ratio of 70:30 as on the date of commercial operation. Debt:Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt : Equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

| **Particulars** | **Capital Cost as on COD** | | **Capital Cost as on 31.3.2019** | |
|---|---|---|---|---|
| | **Amount** | **%** | **Amount** | **%** |
| **Debt** | 1187.97 | 70.00 | 1406.48 | 70.00 |
| **Equity** | 509.13 | 30.00 | 602.78 | 30.00 |
| **Total** | 1697.10 | 100.00 | 2009.26 | 100.00 |

## Return on Equity

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

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

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

*Provided that:*

*(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:***
***(ii)** the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*
***(iii)** additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:*
*the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:*

*(iv) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:*
*(v) additional RoE shall not be admissible for transmission line having length of less than 50kilometers.*

***"25. Tax on Return on Equity:***
*The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".*
*(1) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula givenbelow:*
*Rate of pre-tax return on equity = Base rate / (1-t)*
*Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess."*

43. The Petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.960% as provided under Regulation 25(2) (i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up 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 IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

44. We have considered the submissions made by the Petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with the effective tax rate for the purpose of RoE. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity,

which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as follows:-

**(₹ In lakh)**

| **Particulars** | **2018.19 Pro-Rata** |
|---|---|
| Opening Equity | 509.13 |
| Addition due to Additional Capitalization | 93.65 |
| Closing Equity | 602.78 |
| Average Equity | 555.95 |
| Return on Equity (Base Rate ) | 15.50% |
| MAT rate for the respective financial year | 20.960% |
| Rate of Return on Equity (Pre-tax) | 19.610% |
| Return on Equity (Pre-tax) | 70.79 |

**Interest on loan (IOL)**

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

*"(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan*
*(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
*(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.*
*(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
*(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*
*Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*
*Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
*(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."*

46. Accordingly the calculations of IOL have been worked out as under:-

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

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

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

47. Based on above, details of Interest on Loan considered and allowed for the subject Asset are as follows:-

**(₹ In lakh)**

| **Particulars** | **2018-19 Pro-Rata** |
|---|---|
| Gross Normative Loan | 1187.97 |
| Cumulative Repayment up to previous Year | 0.00 |
| Net Loan-Opening | 1187.97 |
| Addition due to Additional Capitalization | 218.51 |
| Repayment during the year | 63.75 |
| Net Loan-Closing | 1342.73 |
| Average Loan | 1265.35 |
| Weighted Average Rate of Interest on Loan | 7.7852% |
| Interest on loan | 63.96 |

**Depreciation**

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

**"27. Depreciation:**
Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission

system taking into consideration the depreciation of individual units or elements thereof.

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

The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shallbe 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 ratabasis.

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

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

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

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

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

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

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

50. In accordance with Regulation 27, the depreciation with respect to the subject Asset is as follows:

(₹ In lakh)

| Particulars | 2018-19 Pro-Rata |
|---|---|
| Opening Gross Block | 1697.10 |
| Additional Capital expenditure | 312.16 |
| Closing Gross Block | 2009.26 |
| Average Gross Block | 1853.18 |
| Rate of Depreciation | 5.2978% |
| Depreciable Value | 1667.86 |
| Remaining Depreciable Value | 1667.86 |
| Depreciation | 63.75 |

**Operation and Maintenance Expenses (O&M Expenses)**

51. The petitioner has claimed the O&M expenses as under:

(₹ In lakh)

| Asset | 2018-19 |
|---|---|
| Asset-I | 89.40 |

52. Regulation 29 (4) of the 2014 Tariff Regulations applicable for 2014-19 block specify the norms for O&M expenditure for Transmission System as follows:

| Element | 2018-19 |
|---|---|
| 400 kV Bay | 68.71 |

53. Accordingly, the O&M expenses have been calculated as given below:

| Particulars | 2018-19 (Pro rata) |
|---|---|
| Asset-I (2 No. 400 kV Bay) COD: 7.8.2018 | 89.40 |
| **Total** | **89.40** |

**Interest on Working Capital (IWC)**

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

“**28. Interest on Working Capital**
(1) The working capital shall cover:
(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:
(i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29;and
(iii) Operation and maintenance expenses for one month”
(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.
“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

55. As per 2014 Tariff Regulations the components of the working capital and the interest thereon is mentioned below:-

**Maintenance spares:**

Maintenance spares @ 15 % of Operation and Maintenance expenses as specified in Regulation 28.

**O & M expenses:**

O&M expenses have been considered for one month of the O&M expenses.

**Receivables:**

The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.

**Rate of interest on working capital:**

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate 8.70% as on 01.04.2018 Plus 350 BPS i.e. 12.20% have been considered as the rate of interest on working capital for all the assets.

56. Accordingly, the interest on working capital is summarized as under:-

**(₹ in lakh)**

| Particulars | Asset-I (Pro-Rata) |
|---|---|
| Maintenance Spares | 20.65 |
| O & M expenses | 11.47 |
| Receivables | 76.10 |
| Total | 108.23 |
| Interest | **8.57** |

**Annual Transmission Charges**

57. In view of the above, the annual transmission charges being allowed for the instant asset is summarized hereunder:-

**(₹ In lakh)**

| Particulars | 2018-19 (Pro-Rata) |
|---|---|
| Depreciation | 63.75 |
| Interest on Loan | 63.96 |
| Return on Equity | 70.79 |
| Interest on Working Capital | 8.57 |
| O & M Expenses | 89.40 |
| **Total** | **296.48** |

**Filing Fee and Publication Expenses**

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

**Licence Fee and RLDC Fees and Charges**

59. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the Respondents. We are of the

view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2) (b) and (2) (a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

**Goods and Services Tax**

60. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

**Sharing of Transmission Charges**

61. The transmission charges approved shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

62. This order disposes of Petition No. 258/TT/2018.

| | | |
|---|---|---|
| **Sd/-** | **Sd/-** | **Sd/-** |
| **(I. S. Jha)** | **(Dr. M.K. Iyer)** | **(P.K. Pujari)** |
| **Member** | **Member** | **Chairperson** |