#### CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

## Review Petition No. 17/RP/2021 in Petition No. 85/TT/2020

Coram:

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

Date of Order: 20.05.2022

#### In the Matter of:

Review under Section 94(1)(f) read with Regulation 103 (1) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 of order dated 8.2.2021 of the Central Electricity Regulatory Commission in Petition No. 85/TT/2020 for true up of transmission tariff of2014-19 tariff period and determination of transmission tariff of 2019-24 tariff period of transmission assets under "System Strengthening-XXIV in the Southern Region"

#### And in the Matter of:

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

.....Petitioner

#### Versus

- Karnataka Power Transmission Corporation Limited, Kaveri Bhavan, Bangalore-560009.
- Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Hyderabad-500082.
- Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695004.
- Tamil Nadu Generation and Distribution Corporation Limited, (Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai-600002.



- 5. Electricity Department, Government of Pondicherry, Pondicherry-605001.
- 6. Eastern Power Distribution Company of Andhra Pradesh Limited, APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
- 7. Southern Power Distribution Company of Andhra Pradesh Limited, Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati-517501, Chittoor District, Andhra Pradesh.
- Central Power Distribution Company of Andhra Pradesh limited, Corporate Office, Mint Compound, Hyderabad-500063, Telangana.
- Northern Power Distribution Company of Andhra Pradesh Limited, Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal-506004, Telangana.
- Bangalore Electricity Supply Company Limited, Corporate Office, K.R. Circle, Bangalore-560001, Karnataka.
- 11. Gulbarga Electricity Supply Company Limited, Station Main Road, Gulbarga, Karnataka.
- 12. Hubli Electricity Supply Company Limited, Navanagar, PB Road, Hubli, Karnataka.
- 13. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore-575001, Karnataka.
- 14. Chamundeswari Electricity Supply Corporation Limited, 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 Limited, Vidhyut Sudha, Khairatabad, Hyderabad- 500082.
- 17. Tamil Nadu Transmission Corporation,



For Petitioner : Mrs. Swapna Seshadri, Advocate, PGCIL

Mr. Aditya H. Dubey, Advocate, PGCIL

Shri S.S. Raju, PGCIL Shri D.K. Biswal, PGCIL Shri V.P. Rastogi, PGCIL Shri A.K. Verma, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO

Dr. R. Kathiravan, TANGEDCO Ms. R. Ramalakshmi, TANGEDCO Mr. R. Srinivasan, TANGEDCO

#### **ORDER**

Power Grid Corporation of India Limited (hereinafter referred to as the "PGCIL/Review Petitioner) has filed the present Review Petition No. 17/RP/2021 seeking review and modification of the order dated 8.2.2021 in Petition No. 85/TT/2020 under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 103 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 wherein the tariff of the 2014-19 tariff period was trued up and tariff for the 2019-24 tariff period was approved for the following assets under "System Strengthening-XXIV in the Southern Region" (hereinafter referred to as the "transmission project"):

**Asset-A:** (i) LILO of Kurnool-Thiruvalam 765 kV D/C line at Cuddapah and (ii) Establishment of 765/400 kV Sub-station at Cuddapah along with 2x1500 MVA Transformer (GIS) along with associated bays and 2x240 MVAr Bus Reactors at Cuddapah GIS Sub-station;

**Asset-B:** 400 kV D/C line from Cuddapah GIS to LILO point of NP Kunta portion of Cuddapah-Hindupur 400 kV D/C line along with the bays and equipment at Cuddapah GIS; and

**Asset-C:** (i) 400 kV D/C line from LILO point of NP Kunta portion to Hindupur Sub-station along with 2 numbers of 400 kV bays and (ii) 2x80 MVAR switchable line reactor & 2 numbers 400 kV line bays at Hindupur Sub-station (hereinafter referred to as "transmission assets").

2. The Review Petitioner filed Petition No. 85/TT/2020 for true up of transmission tariff of 2014-19 tariff period and determination of transmission tariff of 2019-24 tariff period for the transmission assets. The Review Petitioner for the purpose of tariff had claimed the debt-equity ratio of 70:30 for the transmission assets. However, the Commission had considered the amount of loan claimed for computing Interest During Construction by the Petitioner as an amount of debt for determining debt-equity ratio. Accordingly, the Commission vide order dated 8.2.2021 in Petition No. 85/TT/2020 had considered debt-equity ratio for the capital cost as on date of commercial operation (COD) as 71.06:28.94, 70.69:29.31 and 72.59:27.41 in case of Asset-A, Asset-B and Asset-C respectively. The relevant portion of the order dated 8.2.2021 is as follows:

#### "Debt-Equity ratio

34. The Petitioner has claimed the debt-equity ratio of 70:30 as on COD. The loan amount claimed by the Petitioner for calculation of debt-equity ratio in Form-6 and for calculation of IDC in the Statement of IDC discharged up to COD is not matching. The details of the same are as under

| Assets  | Loan considered in Form-6 | Loan considered for<br>IDC calculation | Difference |  |
|---------|---------------------------|--|------------|--|
|         | (A)                       | (B)                                    | (C)=(B-A)  |  |
| Asset-A | 50577.31                  | 51339.76                               | 762.45     |  |
| Asset-B | 12934.28                  | 13061.66                               | 127.38     |  |
| Asset-C | 15931.74                  | 16520.61                               | 588.87     |  |

<sup>35.</sup> We have considered the loan used for calculation of IDC for working out the debt-equity ratio. Hence, the debt-equity ratio as on COD works out as 71.06:28.94, 70.69:29.31 and 72.59:27.41 for Assets-A, B and C respectively. Further, for the purpose of ACE, debt-equity ratio of 70:30 has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations....."

- 3. Aggrieved with the order dated 8.2.2021, the Review Petitioner has filed the present review petition contending that the Commission has erred by considering the debt-equity ratio of 71.06:28.94 for Asset-A, 70.69:29.31 for Asset-B and 72.59:27.41 for Asset-C instead of debt-equity ratio of 70:30 as claimed by the Petitioner.
- 4. The Petitioner has made the following prayers in the Review Petition:

- "(a) Allow the Review Petition and modify the Order dated 08.02.2021 passed in Petition No. in 85/TT/2020 to the extent stated in the present Review Petition;
- (b) Consider the debt:equity ratio as 70:30 for the capital cost as on DOCO as claimed by the Review Petitioner in Petition No. 85/TT/2020 and the consequent changes to calculation of tariff; and
- (c) pass any such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case."

#### **Submissions of the Review Petitioner**

- 5. The gist of the submissions made by the Review Petitioner in the Review Petition is as follows:
  - a) The Commission has considered the loan used for calculation of IDC in the "Statement of IDC discharged up to Commercial Operation Date" for working out the debt-equity ratio. Accordingly, debt-equity ratio as on the COD considered by the Commission is 71.06:28.94, 70.69:29.31 and 72.59:27.41 in case of Asset-A, Asset-B and Asset-C respectively. However, the actual debt:equity ratio is 70:30 for the transmission assets.
  - b) The Commission in a similar matter in order dated 29.7.2019 in Petition No. 257/TT/2018 had proceeded on the basis that there was a mismatch and variance in the amount of loan/ IDC. However, the Commission also mentioned that the same will be reviewed at the time of true up. The relevant portions of the order dated 29.7.2019 in Petition No. 257/TT/2018 are as follows:
    - "60. ....The amount of loan claimed by the Petitioner for calculation of Debt Equity ratio in Form-6 and for calculation of IDC in "Statement showing IDC discharged up to DOCO" do not match with each other...........
    - 61. We have considered the loan used for IDC calculation for working out Debt Equity ratio. Hence, the Debt-Equity ratio as on COD works out to 71.06:28.94, 70.69:29.31 and 72,62:27.38 in respect of Asset-A, Asset-B and Asset-C respectively, the same is allowed. Further, for the purpose of ACE, Debt-Equity ratio of 70:30 has been considered. These computations of Debt Equity ratio are subject to truing up....
    - 71. IOL has been worked out as under:-

. . . . . .

(iii) The gross opening loan as on COD as stated at Form-9C is at variance with the amount of loan used for computing the IDC as shown at "Statement showing IDC Discharged up to DOCO".......

- ...... However, this will be reviewed at the time of true up based on the clarification/documents submitted by the Petitioner"
- c) However, in order dated 8.2.2021, the Commission has proceeded on the basis that there is a mismatch:

"Debt-Equity ratio

34. The Petitioner has claimed the debt-equity ratio of 70:30 as on COD. The loan amount claimed by the Petitioner for calculation of debt-equity ratio in Form-6 and for calculation of IDC in the Statement of IDC discharged up to COD is not matching. The details of the same are as under

| Assets  | Loan considered<br>in Form-6 | Loan considered for<br>IDC calculation | Difference     |
|---------|------------------------------|--|----------------|
|         | (A)                          | (B)                                    | (C)=(B-A)      |
| Asset-A | 50577.31                     | 51339.76                               | <i>762.4</i> 5 |
| Asset-B | 12934.28                     | 13061.66                               | 127.38         |
| Asset-C | 15931.74                     | 16520.61                               | 588.87         |

- 35. We have considered the loan used for calculation of IDC for working out the debt-equity ratio. Hence, the debt-equity ratio as on COD works out as 71.06:28.94, 70.69:29.31 and 72.59:27.41 for Assets-A, B and C respectively. Further, for the purpose of ACE, debt-equity ratio of 70:30 has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations....."
- d) In this case no query was raised by the Commission on this issue and none of the Respondents raised the issue. The Commission exercises regulatory functions which are inquisitorial in nature while dealing with tariff determination for information clarification and calls or if there was anv further information/clarification required. However, no opportunity was given for the Review Petitioner to clarify the above issue in the proceedings.
- e) The total IDC shown in the Auditor certificate has been bifurcated into two parts i.e. IDC discharged up to COD and IDC discharged subsequently. Further, the statement showing IDC discharged up to COD consists of loans deployed for funding the expenditure up to COD as well as loans deployed for funding the IDC capitalized up to COD but discharged during subsequent years, which have been considered in tariff Form 9C as part of additional capital loans.
- f) The cost as on COD shown in Form-6 is actual cash expense up to COD i.e. expenditure up to COD excluding IDC discharged after COD (i.e. ₹722.53

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crore for Asset-A, ₹184.77 crore for Asset-B and ₹227.59 crore for Asset-C) and the additional capital expenditure as shown in Form-6 consists of additional capital expenditure as per Auditor Certificate as well as the IDC discharged after COD as and when the liability gets discharged. Further, with regard to Form-9C, the loans deployed for funding IDC discharged after COD are shown as additional capital loans in the respective year of discharge. The loans deployed up to COD as shown in Form-9C, consists of actual loans deployed up to COD (i.e. ₹505.77 crore for Asset-A, ₹129.34 crore for Asset-B and ₹159.32 crore for Asset-C) and does not include the loans deployed for funding the IDC discharged after COD. Thus, the total loans as per Form-9C (including additional capital loans for IDC discharged after COD) duly matches with total of loans shown in Statement showing IDC discharged up to COD. Considering the above facts and Form-6 and Form-9C, Debt Equity ratio as on COD works out to 70:30 only for all the assets.

- g) However, the Commission in order dated 8.2.2021 in Petition No. 85/TT/2020 has considered the loan used for calculation of IDC for working out the debt-equity ratio and has considered the debt-equity ratio of 71.06:28.94 for Asset-A, 70.69:29.31 for Asset-B and 72.59:27.41 for Asset-C. The equity has been considered at lower than 30% even though the actual equity is at 30% and is required to be considered as 30% in terms of the 2014 Tariff Regulations.
- h) This erroneous consideration in order dated 8.2.2021 has led to a permanent loss of equity amounting to ₹14.79 crore for all the assets together and loss of Return on Equity amounting to ₹69.44 crore during the entire life of assets (with grossed up ROE rate as 18.782%) and net loss of ₹40 crore.
- i) Accordingly, there are errors apparent on the face of the record in order dated 8.2.2021 which require to be reviewed and modified.

6. The Review Petitioner has prayed for allowing debt-equity ratio as 70:30 in respect of the transmission assets with consequential changes in calculation of capital cost and tariff.

### Hearing dated 29.3.2022

- 7. During hearing held on 29.3.2022, learned counsel for the Review Petitioner reiterated the submissions made in the petition and requested to consider the same, and allow debt-equity ratio as 70:30 in respect of the transmission assets. She further submitted that the Commission has revised the debt:equity ratio at the stage of truing up in similarly placed matters on the basis of the submissions made by the Review Petitioner in those cases.
- 8. The Review Petitioner has filed Note for Arguments dated 29.3.2022 giving the details of the petitions wherein a different debt:equity ratio was adopted initially in the original tariff orders and at the time of truing up has revised the same to 70:30 appreciating the same submissions made by the Review Petitioner as in the present case. The list of such petitions submitted by the Review Petitioner is as follows:

| Original<br>Petition | Date of<br>Original Tariff Order | True up<br>Petition | Date of<br>Truing Up Order |
|----------------------|----------------------------------|---------------------|----------------------------|
| 111/TT/2018          | 1.11.2019                        | 481/TT/2020         | 18.1.2022                  |
| 198/TT/2017          | 15.10.2019                       | 358/TT/2020         | 29.6.2021                  |
| 171/TT/2018          | 30.9.2019                        | 250/TT/2020         | 8.3.2021                   |
| 360/TT/2018          | 30.9.2019                        | 375/TT/2020         | 2.7.2021                   |
| 174/TT/2018          | 28.6.2019                        | 172/TT/2020         | 15.9.2021                  |
| 170/TT/2018          | 7.5.2019                         | 461/TT/2020         | 1.7.2021                   |
| 163/TT/2018          | 29.5.2019                        | 37/TT/2020          | 17.8.2020                  |

9. TANGEDCO, Respondent No. 4, in its reply dated 6.4.2022 has submitted that the order dated 8.2.2021 in Petition No 85/TT/2020 has no error apparent on the face of the record w.r.t. debt-equity ratio. Therefore, TANGEDCO has submitted that the review petition is not maintainable and a review petition cannot be an appeal in disguise as held by the Hon'ble Supreme Court.

#### **Analysis and Decision**

- 10. We have considered the submissions of the Review Petitioner and TANGEDCO. The Review Petitioner has submitted that based on the Form-6 and Form-9C furnished in the Petition No. 85/TT/2020, debt:equity ratio as on COD works out to 70:30 for all the assets and has prayed for allowing the same debt:equity ratio for the transmission assets. The Review Petitioner has further submitted that in similar petitions wherein debt:equity ratio was considered based on the amount of loan claimed for computing Interest During Construction in place of Form-6 and Form-9C, the Commission has considered the revised debt:equity of 70:30 based on the submission made by the Review Petitioner at the stage of truing up of tariff for 2014-19. As pointed out by the Review Petitioner, the Commission has been consistently considering the debt:equity ratio in these type of petitions as 70:30 based on the amount of loan claimed by the Review Petitioner vide Form-6 and Form-9c. However, in the instant case, debt:equity ratio of 71.06:28.94 for Asset-A, 70.69:29.31 for Asset-B and 72.59:27.41 for Asset-C was considered which is an apparent error and it needs to be corrected. We are of the view that the approach adopted by the Commission in such similarly petitions should be applied in the instant case as well. Accordingly, we allow the debt:equity of 70:30 on the basis of amount of loan as claimed in Form-6 and Form-9c in the instant case.
- 11. The revision of the debt:equity as on COD in respect of the transmission assets considered for the purpose of truing up of tariff for the 2014-19 tariff period will have consequential impact on the loan amount subsequently on the IDC computation and capital cost, depreciation, Interest on Loan, Return on Equity and Interest on Working Capital. Accordingly, the trued-up tariff of the 2014-19 tariff period and tariff approved for the 2019-24 tariff period for the transmission assets in order dated 8.2.2021 in

Petition No.85/TT/2020 requires to be revised and the same is allowed in the following paragraphs.

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

## **Capital Cost**

12. The Commission vide order dated 8.2.2021 in Petition No. 85/TT/2020 has approved the following capital cost:

(₹ in lakh)

| Assets  | Capital Cost | ACE     | Total Capital Cost |
|---------|--------------|---------|--------------------|
| 7.000.0 | as on COD    | 2018-19 | as on 31.3.2019    |
| Asset-A | 72253.29     | 6352.02 | 78605.31           |
| Asset-B | 18477.54     | 1912.77 | 20390.31           |
| Asset-C | 22759.63     | 807.26  | 23566.89           |

13. Based on the above decision, there is an impact on the IDC allowed in respect of Asset-C and the same is revised as under:

(₹ in lakh)

|         |                                      |  |  |   |  |  | (*   |
|---------|--------------------------------------|--|--|---|--|--|--|
| Asset   | IDC as per<br>Auditor<br>Certificate | IDC<br>disallowed<br>due to<br>computational<br>difference | IDC<br>allowed<br>on<br>accrual<br>basis | IDC<br>allowed<br>on cash<br>basis as<br>on COD | Undischarged<br>IDC liability<br>as on COD | IDC<br>liability<br>allowed<br>as ACE<br>during<br>2018-19 | IDC<br>liability<br>allowed<br>as ACE<br>during<br>2019-20 |
| Asset-C | 1080.91                              | 3.36   | 1077.55                                  | 237.14  | 840.41                                     | 807.26   | 33.15  |

14. In view of the above, there is no change in capital cost allowed vide order dated 8.2.2021 in respect of the Asset-A and Asset-B. However, capital cost in respect of Asset-C is revised. The same has been summarised as follows:

(₹ in lakh)

| Capital Cost allowed as per order dated 8.2.2021 in Petition No. 85/TT/2020 |          |                                       |          |  |  |
|---|----------|---------------------------------------|----------|--|--|
| Assets Capital Cost ACE as on COD   |          | Total Capital Cost<br>as on 31.3.2019 |          |  |  |
|   |          | 2018-19                               |          |  |  |
| Asset-A   | 72253.29 | 6352.02                               | 78605.31 |  |  |
| Asset-B   | 18477.54 | 1912.77                               | 20390.31 |  |  |

| Asset   | Capital Cost<br>claimed<br>as on COD<br>(Auditor<br>Certificate)<br>(A) | IDC<br>undischarged<br>as on COD<br>(B) | IDC disallowed due to computational difference (C) | Capital Cost<br>allowed<br>as on COD<br>(D)=(A-B-C) | ACE allowed<br>during<br>2018-19<br>(E) | Capital Cost<br>allowed<br>as on<br>31.3.2019<br>(F)=(D+E) |
|---------|---|---|--|---|---|--|
| Asset-C | 23600.87  | 840.41                                  | 3.36   | 22757.10  | 807.26                                  | 23564.36   |

15. Debt-equity allowed in paragraph 35 of the order dated 8.2.2021 is revised as follows:

| Asset   | Particulars | Capital Cost<br>as on COD<br>(₹ in lakh) | (in %) | Capital Cost<br>as on 31.3.2019<br>(₹ in lakh) | (in %) |
|---------|-------------|--|--------|--|--------|
|         | Debt        | 50577.31                                 | 70.00  | 55023.72                                       | 70.00  |
| Asset-A | Equity      | 21675.98                                 | 30.00  | 23581.59                                       | 30.00  |
|         | Total       | 72253.29                                 | 100.00 | 78605.31                                       | 100.00 |
|         | Debt        | 12934.27                                 | 70.00  | 14273.21                                       | 70.00  |
| Asset-B | Equity      | 5543.27                                  | 30.00  | 6117.10  | 30.00  |
|         | Total       | 18477.54                                 | 100.00 | 20390.31                                       | 100.00 |
| Asset-C | Debt        | 15929.97                                 | 70.00  | 16495.05                                       | 70.00  |
|         | Equity      | 6827.13                                  | 30.00  | 7069.31  | 30.00  |
|         | Total       | 22757.10                                 | 100.00 | 23564.36                                       | 100.00 |

## **Interest on Loan (IoL)**

16. IoL allowed in paragraph 36 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

|   | Asset-A   | Asset-B   | Asset-C   |
|---|-----------|-----------|-----------|
| Particulars                               | 2018-19   | 2018-19   | 2018-19   |
| i ai ticulai s                            | (pro-rata | (pro-rata | (pro-rata |
|   | 158 days) | 240 days) | 171 days) |
| Gross Normative Loan                      | 50577.31  | 12934.27  | 15929.97  |
| Cumulative Repayments up to Previous Year | 0.00      | 0.00      | 1         |
| Net Loan-Opening                          | 50577.31  | 12934.27  | 15929.97  |
| Additions                                 | 4446.41   | 1338.94   | 565.08    |
| Repayment during the year                 | 1712.40   | 661.81    | 572.91    |
| Net Loan-Closing                          | 53311.32  | 13611.40  | 15922.14  |
| Average Loan                              | 51944.31  | 13272.84  | 15926.06  |
| Weighted Average Rate of Interest on Loan | 7.9390    | 8.0227    | 7.7556    |
| (%)                                       | 7.9390    | 0.0221    | 7.7550    |
| Interest on Loan                          | 1785.13   | 700.17    | 578.66    |

## Return on Equity (RoE)

17. RoE allowed in paragraph 40 of the order dated 8.2.2021 is revised as follows:

|                                  | Asset-A   | Asset-B   | Asset-C   |
|----------------------------------|-----------|-----------|-----------|
| Particulars                      | 2018-19   | 2018-19   | 2018-19   |
| i articulars                     | (pro-rata | (pro-rata | (pro-rata |
|                                  | 158 days) | 240 days) | 171 days) |
| Opening Equity                   | 21675.98  | 5543.27   | 6827.13   |
| Additions                        | 1905.61   | 573.83    | 242.18    |
| Closing Equity                   | 23581.59  | 6117.10   | 7069.31   |
| Average Equity                   | 22628.78  | 5830.19   | 6948.22   |
| Return on Equity (Base Rate) (%) | 16.000    | 16.00     | 16.000    |
| MAT Rate for respective year (%) | 21.549    | 21.55     | 21.549    |
| Rate of Return on Equity (%)     | 20.395    | 20.39     | 20.395    |
| Return on Equity                 | 1997.77   | 781.85    | 663.89    |

#### **Depreciation**

18. There is no change in depreciation allowed vide order dated 8.2.2021 in respect of Asset-A and Asset-B. However, depreciation in respect of Asset-C is revised. Weighted Average Rate of Depreciation (WAROD) is placed at Annexure-1. Accordingly, depreciation allowed for Asset-C in paragraph 42 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

|  | Asset-C             |
|--|---------------------|
| Particulars  | 2018-19             |
|  | (pro-rata 171 days) |
| Opening Gross Block                                | 22757.10            |
| Additional Capitalisation                          | 807.26              |
| Closing Gross Block                                | 23564.36            |
| Average Gross Block                                | 23160.73            |
| Weighted Average Rate of Depreciation (WAROD) (%)  | 5.28%               |
| Balance useful life of the asset (Year)            | 34.00               |
| Elapsed life (Year)                                | 0.00                |
| Aggregate Depreciable Value                        | 20844.66            |
| Combined Depreciation during the year              | 572.91              |
| Cumulative Depreciation at the end of the year     | 572.91              |
| Remaining Depreciable Value at the end of the year | 20271.75            |

# **Interest on Working Capital (IWC)**

19. IWC allowed in paragraph 45 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

|  | Asset-A                           | Asset-B                           | Asset-C                           |
|--|-----------------------------------|-----------------------------------|-----------------------------------|
| Particulars  | 2018-19<br>(pro-rata<br>158 days) | 2018-19<br>(pro-rata<br>240 days) | 2018-19<br>(pro-rata<br>171 days) |
| Working Capital for O&M Expenses (O&M Expenses for one month)  | 83.61                             | 15.12                             | 34.07                             |
| Working Capital for Maintenance Spares (15% of O&M Expenses)   | 150.49                            | 27.21                             | 61.33                             |
| Working Capital for Receivables (Equivalent to two months of annual fixed charges/annual transmission charges) | 2335.27                           | 586.42                            | 730.80                            |
| Total Working Capital  | 2569.37                           | 628.76                            | 826.20                            |
| Rate of Interest (%)   | 12.20                             | 12.20                             | 12.20                             |
| Interest on working capital  | 135.69                            | 50.44                             | 47.22                             |

## Revised Annual Fixed Charges for the 2014-19 Period

20. The trued up annual fixed charges allowed in paragraph 46 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

| Particulars                 | Asset-A<br>2018-19<br>(pro-rata<br>158 days) | Asset-B<br>2018-19<br>(pro-rata<br>240 days) | Asset-C<br>2018-19<br>(pro-rata<br>171 days) |
|-----------------------------|--|--|--|
| Depreciation                | 1712.40                                      | 661.81                                       | 572.91                                       |
| Interest on Loan            | 1785.13                                      | 700.17                                       | 578.73                                       |
| Return on Equity            | 1997.77                                      | 781.85                                       | 663.72                                       |
| O & M Expenses              | 434.30                                       | 119.30                                       | 191.55                                       |
| Interest on Working Capital | 135.69                                       | 50.44  | 47.22  |
| Total                       | 6065.30                                      | 2313.56                                      | 2054.24                                      |

### **REVISION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

21. The revision of the debt-equity as on COD and 31.3.2019 in respect of the Combined Asset will have consequential impact on the capital cost, depreciation, Interest on Loan, Return on Equity and Interest on Working Capital approved in order dated 8.2.2021 for the 2019-24 tariff period.

#### **Capital Cost**

22. In view of the above, capital cost allowed in respect of the Combined Asset as on 1.4.2019 and capital cost allowed as on 31.3.2024 stands revised and the same has been summarised as follows:

(₹ in lakh)

| Capital Cost<br>allowed<br>as on 1.4.2019<br>in the<br>instant Order<br>(A) | ACE allowed<br>during 2019-24<br>vide Order<br>dated 8.2.2021<br>(excluding IDC<br>discharged)<br>(B) | IDC discharged<br>allowed during 2019-<br>24 period for<br>transmission assets<br>in the instant Order<br>(C) | ACE allowed<br>during 2019-24<br>period in the<br>instant Order<br>(D)=(B+C) | Capital Cost<br>allowed as on<br>31.3.2024<br>(E)=(A+D) |
|---|---|---|--|---|
| 122559.98   | 11164.55  | 362.20  | 11526.75   | 134086.73   |

23. Debt-equity ratio allowed in paragraph 62 of the order dated 8.2.2021 is revised as follows:

| Particulars | Capital Cost<br>as on COD<br>(₹ in lakh) | (in %) | Capital Cost<br>as on 31.3.2019<br>(₹ in lakh) | (in %) |
|-------------|--|--------|--|--------|
| Debt        | 85791.99                                 | 70.00  | 93860.71                                       | 70.00  |
| Equity      | 36768.00                                 | 30.00  | 40226.02                                       | 30.00  |
| Total       | 122559.98                                | 100.00 | 134086.73                                      | 100.00 |

## **Return on Equity (RoE)**

24. RoE allowed in paragraph 64 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

| Particulars                         | 2019-20  | 2020-21  | 2021-22  | 2022-23  | 2023-24  |
|-------------------------------------|----------|----------|----------|----------|----------|
| Opening Equity                      | 36768.00 | 38740.75 | 40226.02 | 40226.02 | 40226.02 |
| Additions                           | 1972.75  | 1485.27  | 0.00     | 0.00     | 0.00     |
| Closing Equity                      | 38740.75 | 40226.02 | 40226.02 | 40226.02 | 40226.02 |
| Average Equity                      | 37754.37 | 39483.38 | 40226.02 | 40226.02 | 40226.02 |
| Return on Equity<br>(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                    | 7090.84  | 7415.57  | 7555.05  | 7555.05  | 7555.05  |

## Interest on Loan (IoL)

25. loL allowed in paragraph 66 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

| Particulars                                   | 2019-20  | 2020-21  | 2021-22  | 2022-23  | 2023-24  |
|---|----------|----------|----------|----------|----------|
| Gross Normative Loan                          | 85791.99 | 90395.07 | 93860.71 | 93860.71 | 93860.71 |
| Cumulative Repayments up to Previous Year     | 2947.13  | 9553.83  | 16463.93 | 23504.74 | 30545.54 |
| Net Loan-Opening                              | 82844.86 | 80841.25 | 77396.78 | 70355.97 | 63315.17 |
| Additions                                     | 4603.09  | 3465.64  | 0.00     | 0.00     | 0.00     |
| Repayment during the year                     | 6606.70  | 6910.10  | 7040.81  | 7040.81  | 7040.81  |
| Net Loan-Closing                              | 80841.25 | 77396.78 | 70355.97 | 63315.17 | 56274.36 |
| Average Loan                                  | 81843.05 | 79119.01 | 73876.38 | 66835.57 | 59794.76 |
| Weighted Average Rate of Interest on Loan (%) | 7.9588   | 7.9567   | 7.9641   | 7.9692   | 7.9574   |
| Interest on Loan                              | 6513.71  | 6295.24  | 5883.60  | 5326.29  | 4758.08  |

## **Depreciation**

26. Weighted Average Rate of Depreciation (WAROD) is placed at Annexure-2. Depreciation allowed in paragraph 68 of the order dated 8.2.2021 is revised as follows:

| Particulars                                       | 2019-20   | 2020-21   | 2021-22   | 2022-23   | 2023-24   |
|---|-----------|-----------|-----------|-----------|-----------|
| Opening Gross Block                               | 122559.98 | 129135.82 | 134086.73 | 134086.73 | 134086.73 |
| ACE   | 6575.84   | 4950.91   | 0.00      | 0.00      | 0.00      |
| Closing Gross Block                               | 129135.82 | 134086.73 | 134086.73 | 134086.73 | 134086.73 |
| Average Gross Block                               | 125847.90 | 131611.28 | 134086.73 | 134086.73 | 134086.73 |
| Weighted Average Rate of Depreciation (WAROD) (%) | 5.25      | 5.25      | 5.25      | 5.25      | 5.25      |
| Balance useful life of the asset (Year)           | 31.00     | 30.00     | 29.00     | 28.00     | 27.00     |



| Elapsed life (Year)                            | 0.00      | 1.00      | 2.00      | 3.00      | 4.00      |
|--|-----------|-----------|-----------|-----------|-----------|
| Aggregate Depreciable Value                    | 113273.07 | 118460.12 | 120688.03 | 120688.03 | 120688.03 |
| Combined Depreciation during the year          | 6606.70   | 6910.10   | 7040.81   | 7040.81   | 7040.81   |
| Cumulative Depreciation at the end of the year | 9553.83   | 16463.93  | 23504.74  | 30545.54  | 37586.35  |
| Remaining Depreciable Value at the of the year | 103719.24 | 101996.19 | 97183.30  | 90142.49  | 83101.68  |

# **Interest on Working Capital (IWC)**

27. IWC allowed in paragraph 75 of the order dated 8.2.2021 is revised as follows:

(₹ in lakh)

| (Circulation)   |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|
| Particulars   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Working Capital for O&M Expenses (O&M Expenses for one month)   | 190.58  | 197.21  | 204.17  | 211.48  | 218.86  |
| Working Capital for Maintenance<br>Spares (15% of O&M Expenses)   | 343.05  | 354.98  | 367.51  | 380.67  | 393.95  |
| Working Capital for Receivables (Equivalent to 45 days of annual fixed charges/annual transmission charges) | 2815.80 | 2881.70 | 2874.73 | 2816.31 | 2748.99 |
| Total Working Capital   | 3349.43 | 3433.88 | 3446.41 | 3408.46 | 3361.81 |
| Rate of Interest (%)  | 12.05   | 11.25   | 11.25   | 11.25   | 11.25   |
| Interest on working capital   | 403.61  | 386.31  | 387.72  | 383.45  | 378.20  |

## Revised Annual Fixed Charges for the 2019-24 Period

28. The annual fixed charges allowed in paragraph 76 of the order dated 8.2.2021 are revised as follows:

(₹ in lakh)

| Particulars                 | 2019-20  | 2020-21  | 2021-22  | 2022-23  | 2023-24  |
|-----------------------------|----------|----------|----------|----------|----------|
| Depreciation                | 6606.70  | 6910.10  | 7040.81  | 7040.81  | 7040.81  |
| Interest on Loan            | 6513.71  | 6295.24  | 5883.60  | 5326.29  | 4758.08  |
| Return on Equity            | 7090.84  | 7415.57  | 7555.05  | 7555.05  | 7555.05  |
| O&M Expenses                | 2286.99  | 2366.52  | 2450.07  | 2537.80  | 2626.35  |
| Interest on Working Capital | 403.61   | 386.31   | 387.72   | 383.45   | 378.20   |
| Total                       | 22901.84 | 23373.75 | 23317.25 | 22843.40 | 22358.49 |

29. The tables under paragraph 86 of the order dated 8.2.2021 are revised as follows:

| Annual Fixed Charges                |         |  |  |
|-------------------------------------|---------|--|--|
| Assets 2018-19 ( <i>pro-rata</i> )* |         |  |  |
| Asset-A                             | 6065.30 |  |  |

| Asset-B | 2313.56 |
|---------|---------|
| Asset-C | 2054.24 |

<sup>\*</sup> pro-rata for 158, 240 and 171 days for Assets-A, B and C respectively

(₹ in lakh)

| Particulars          | 2019-20  | 2020-21  | 2021-22  | 2022-23  | 2023-24  |
|----------------------|----------|----------|----------|----------|----------|
| Annual Fixed Charges | 22901.84 | 23373.75 | 23317.25 | 22843.40 | 22358.49 |

- 30. Except for the above, all other terms contained in order dated 8.2.2021 in Petition No. 85/TT/2020 remain unchanged.
- 31. Accordingly, Review Petition No. 17/RP/2021 is disposed of in terms of the above discussions and findings.

sd/-(Arun Goyal) Member sd/-(I. S. Jha ) Member sd/-(P. K. Pujari) Chairperson

# **Annexure 1**

# WAROD (Asset-C)

| 2014-19                               | Admitted<br>Opening<br>Capital Cost | Allowed<br>ACE<br>(₹ in lakh) | Admitted Capital Cost as on 31.3.2019 | Annual Depreciation as per<br>Regulation (₹ in lakh) |         |  |
|---------------------------------------|-------------------------------------|-------------------------------|---------------------------------------|--|---------|--|
| Capital Cost<br>(₹ in lakh)           | as on COD<br>(₹ in lakh)            | 2018-19                       | (₹ in lakh)                           | Rate of Depreciation                                 | 2018-19 |  |
| Transmission<br>Line                  | 19462.58                            | 690.39                        | 20152.97                              | 5.28   | 1045.85 |  |
| Sub Station                           | 3294.53                             | 116.87                        | 3411.40                               | 5.28   | 177.04  |  |
| Total                                 | 22757.10                            | 807.26                        | 23564.36                              | Total  | 1222.89 |  |
| Average Gross Block<br>(₹ in lakh)    |                                     |                               |                                       |  |         |  |
| Weighted Average Rate of Depreciation |                                     |                               |                                       |  |         |  |

# **Annexure 2**

# WAROD (Combined Asset)

| 2019-24                               |   | Allowed ACE<br>(₹ in lakh) |         |   | Annual Depreciation as per Regulation |           |           |           |           |         |
|---------------------------------------|---|----------------------------|---------|---|---------------------------------------|-----------|-----------|-----------|-----------|---------|
| Capital Cost<br>(₹ in lakh)           | Admitted<br>Opening<br>Capital<br>Cost<br>(₹ in lakh) | 2019-20                    | 2020-21 | Admitted Capital Cost as on 31.3.2024 (₹ in lakh) | Rate of Depn.                         | 2019-20   | 2020-21   | 2021-22   | 2022-23   | 2023-24 |
| Building Civil<br>Works &<br>Colony   | 2495.37   | 95.02                      | -       | 2590.39   | 3.34                                  | 84.93     | 86.52     | 86.52     | 86.52     | 86.52   |
| Transmission Line                     | 75116.79  | 4582.93                    | -       | 79699.72  | 5.28                                  | 4087.16   | 4208.14   | 4208.14   | 4208.14   | 4208.14 |
| Sub Station                           | 44697.82  | 1897.14                    | 4950.91 | 51545.87  | 5.28                                  | 2410.13   | 2590.92   | 2721.62   | 2721.62   | 2721.62 |
| PLCC                                  | 150.56  | 0.44                       | -       | 151.00  | 6.33                                  | 9.54      | 9.56      | 9.56      | 9.56      | 9.56    |
| IT Equipment (Including Software)     | 99.45   | 0.29                       | -       | 99.75   | 15.00                                 | 14.94     | 14.96     | 14.96     | 14.96     | 14.96   |
| Total                                 | 122559.98   | 6575.84                    | 4950.91 | 134086.73   | Total                                 | 6606.70   | 6910.10   | 7040.81   | 7040.81   | 7040.81 |
| Average Gross Block<br>(₹ in lakh)    |   |                            |         |   | 125847.90                             | 131611.28 | 134086.73 | 134086.73 | 134086.73 |         |
| Weighted Average Rate of Depreciation |   |                            |         |   | 5.25%                                 | 5.25%     | 5.25%     | 5.25%     | 5.25%     |         |