# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 109/TT/2018

Coram: Shri P.K. Pujari, Chairperson Dr. M. K. Iyer, Member

Date of Hearing: 23.10.2018 Date of Order: 31.12.2018

#### In the matter of:

Approval under Regulation-86 of CERC (Conduct of Business) Regulations'1999 and Regulation-6 of CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of (i) Truing up Transmission tariff for 2009-14 tariff block and (ii) Transmission tariff for 2014-19 tariff block for the asset: Two nos. 63 MVAR 400kV line reactor at 400kV Balia (PG) sub-station (extension) (actual COD: 1.2.2014), under Northern region system strengthening scheme-XXIV in northern region.

#### And in the matter of

Power Grid Corporation of India Limited, "Saudamani", Plot No.2, Sector-29, Gurgaon -122 001

#### **Versus**

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
   Kv, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan)
- Ajmer Vidyut Vitran Nigam Ltd.
   132 Kv, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)



- Jaipur Vidyut Vitran Nigam Ltd.
   132 Kv, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- Jodhpur Vidyut Vitran Nigam Ltd.
   132 Kv, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- Himachal Pradesh State Electricity Board Vidyut Bhawan Kumar House Complex Building II Shimla-171 004
- Punjab State Electricity Board
   Thermal Shed Tia
   Near 22 Phatak
   Patiala-147001
- 7. Haryana Power Purchase Centre Shakti Bhawan, Sector-6 Panchkula (Haryana) 134 109
- Power Development Deptt.
   Govt. Of Jammu & Kashmir
   Mini Secretariat, Jammu
- Uttar Pradesh Power Corporation Ltd.
   (Formerly Uttar Pradesh State Electricity Board)
   Shakti Bhawan, 14, Ashok Marg
   Lucknow 226 001
- 10. Delhi Transco Ltd Shakti Sadan, Kotla Road, New Delhi-110 002
- 11. BSES Yamuna Power Ltd, BSES Bhawan, Nehru Plakhe,



New Delhi.

- 12. BSES Rajdhani Power Ltd, BSES Bhawan, Nehru Plakhe, New Delhi
- 13. North Delhi Power Ltd, Power Trading & Load Dispatch Group Cennet Building, Adjacent to 66/11 Kv Pitampura-3 Grid Building, Near PP Jewellers Pitampura, New Delhi - 110034
- 14. Chandigarh Administration Sector -9, Chandigarh
- 15. Uttarakhand Power Corporation Ltd.Urja BhawanKanwali RoadDehradun
- 16. North Central Railway Allahabad.
- 17. New Delhi Municipal CouncilPalika Kendra, Sansad Marg,New Delhi-110002......Respondents

For Petitioner: Shri S. K. Venkatesan, PGCIL

Shri S. S. Raju, PGCIL Shri V. P. Rastogi, PGCIL Shri S. K. Niranjan, PGCIL

For Respondents Shri R. B. Sharma, Advocate, BRPL

Shri Mohit Mudgal, Advocate, BRPL

#### <u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd.



("the petitioner") for truing up of capital expenditure for the 2009-14 tariff period for Two nos. 63 MVAR 400kV line reactor at 400kV Balia (PG) sub-station (extension) (actual COD: 1.2.2014), under Northern region system strengthening scheme-XXIV in northern region (hereinafter referred as "transmission asset") under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the asset.

- 2. The petitioner has made the following prayer:-
- a) Approve the trued up Transmission Tariff for the tariff block 2009-14 for the assets covered under this petition. The adjustment billing shall be raised.
- b) Admit the capital cost as on 31.03.2014 as claimed in the petition and approve the additional capitalization incurred during 2009-14 period and projected to be incurred during the tariff block 2014-19 as claimed in the petition.
- c) Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.
- d) 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.
- e) Allow the petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
- f) Admit the capital cost as claimed in the petition and approve the additional capitalization incurred / projected to be incurred.
- g) 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.
- h) 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.
- i) 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.
- j) Allow the petitioner to bill and recover GST/Service Tax on Transmission charges separately from the respondents, if GST/Service Tax 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.
- k) Pass such other relief as the Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.
- 3. The Investment Approval (IA) of the project was accorded by the Board of Directors of PGCIL vide memorandum ref. C/CP/NRSS-XXIV dated 21.11.2011 at an estimated cost of ₹72363 lakh including IDC of ₹4269 lakh (based on 2nd quarter, 2011 price level). Further, the petitioner in affidavit dated 1.1.2018 has submitted Revised Cost Estimate (RCE). As per RCE dated 31.3.2017, the Revised Cost Estimate (RCE) for whole project is approved for ₹88213 lakh including IDC of ₹12091 lakh at October, 2016 price level.
- 4. The scope of project broadly includes:-

#### **Transmission Lines:**

- a) Dehradun-Abdullapur 400 kV D/C Quad Line
- b) Dulhasti-Kishenpur 400 kV D/C Quad Line-single circuit strung Sub-stations:
- a) Extension of 400/220 kV Sub-station at Dehradun, Abdullapur and Kishenpur
- b) Extension of Balia 400/220 kV Sub-station-2x63 MVAR, 400 kV line reactors on Barh-Balia 400 kV D/C line (one on each circuit)

Note: One spare 400 kV Bay at Dulhasti HEP switchyard of NHPC to be used for termination of the line at Dulhasti end.



5. Details of the assets covered in the project and the petitions under which the assets are covered, are summarized below:-

| SI. No. | Scope as approved in Investment Approval  | Schedule of<br>Commissioning<br>as per<br>Investment<br>Approval | COD                        | Petition no.     |
|---------|---|--|----------------------------|------------------|
| 1       | Two nos. of 63 MVAR 400kV Line Reactor Balia (PG) Sub-station (Extn)  | 1.12.2014  | 1.2.2014                   | Present petition |
| 2       | Asset-I:400 kV D/C (Quad) Dehradun- Abdullahpur transmission line along with associated bays at Dehradun and Abdullahpur Substation | 20.11.2014   | 31.8.2017<br>(anticipated) | 56/TT/2017       |
| 3       | Asset-II:400kV D/C(Quad) Dulhasti-Kishenpur – single circuit strung along with associated bays at kishenpur end                     |  | 1.11.2017<br>(anticipated) |                  |

6. The details of admitted cost vide order dated 15.10.2015 in petition no. 31/TT/2014 are as under:

(₹ in lakh)

|       | Approved<br>Cost | Admitted Cost as on COD | Total  |
|-------|------------------|-------------------------|--------|
| Asset | 962.29           | 962.29*                 | 962.29 |

<sup>\*</sup>Cost restricted to approved cost of ₹962.29 lakh

# Truing up of Annual Fixed Charges for Tariff Period 2009-14

- 7. The truing up of tariff for the 2009-14 tariff period for the asset has been determined as discussed below.
- 8. The details of apportioned approved cost and actual additional capitalization claimed up to 31.3.2014 at the time up true-up by the petitioner vide affidavit dated



1.1.2018 and auditor's certificate dated 17.6.2016 for asset are as follows:

(₹ in lakh)

| Name of<br>Asset | Apportioned<br>Approved<br>Cost (FR) | Apportioned<br>Approved<br>Cost (RCE) | Capital<br>Cost as on<br>COD | Add Cap<br>for<br>2013-14 | Total cost<br>as on<br>31.3.2014 |
|------------------|--------------------------------------|---------------------------------------|------------------------------|---------------------------|----------------------------------|
| Asset            | 1036.07                              | 1436.49                               | 994.82                       | 62.38                     | 1057.20                          |

#### **Cost overrun:**

- 9. The Commission vide order dated 15.10.2015 in petition no. 31/TT/2014 observed as under:
  - "17......However, the capital cost in case of the instant asset shall be reviewed at the time of truing-up, subject to the petitioner filing the RCE and justification for cost over-run....."
- 10. Accordingly, petitioner at the time of truing up has submitted the details of Revised Cost Estimate (RCE) and in affidavit dated 5.11.2018 has further made methodology and basis for arriving at the FR cost and justifications made by petitioner in affidavit dated 5.11.2018 for cost variation are as under:

(₹ in lakh)

| SI. No. | Item                             | FR     | Total estimate d cost | Variatio<br>n | Cost variation justification  |
|---------|----------------------------------|--------|-----------------------|---------------|---|
| 1       | Switchgear                       | 97.90  | 105.77                | -7.87         | Variation is due to higher actual awarded rate as received through open competitive bidding.  |
| 2       | Compensating<br>Equipment        | 708.03 | 837.21                | -129.18       | Variation is due to higher actual awarded rate as received through open competitive bidding.  a. Variation of FR to LOA (including taxes) = (-) 34.17 lakh.  b. Variation due to PV (Supply and Erection) = (-) 95.01 lakh. |
| 3       | Control Relay & Protection Panel | 36.32  | 10.31                 | 26.01         | Variation is due to lower actual awarded rate as received through open competitive bidding.   |
| 4       | Power & Control<br>Cable         | 30.00  | 22.05                 | 7.95          | Variation is due to lower actual awarded rate as received through open competitive bidding.   |



| 5 | IEDC | 65.06 | 36.34 | 28.72 | As on actual                      |
|---|------|-------|-------|-------|-----------------------------------|
| 6 | IDC  | 56.76 | 60.51 | -3.75 | As on actual based on actual loan |
|   |      |       |       |       | deployment                        |

- 11. We have considered the submissions made by the petitioner. Against the revised apportioned approved cost/RCE of ₹88213 lakh for whole project, the petitioner for subject petition has claimed RCE cost of ₹1436.49 lakh. Against RCE cost of ₹1436.49 lakh for subject assets, the total capital cost including additional capital expenditure as on 31.3.2014 is ₹1057.20 lakh. Therefore, there is no cost overrun under subject petition as per RCE as on 31.3.2014. Further, the completion cost as per Auditor's certificate dated 17.6.2016 is within the allocated apportioned RCE cost for asset and price variation is mainly due to inflationary trend prevailing during execution of the project and market forces prevailing at the time of bidding process of various packages which result in increase/decrease in FR cost which was beyond the control of the petitioner and accordingly, cost variation and RCE is considered for tariff purpose.
- 12. The details of initial spares claimed by the petitioner are as under:

Asset Original project Initial cost as per spares auditor certificate dated 17.6.2016

Asset 1165.01 45.60 2.5%

13. The petitioner in affidavit dated 1.1.2018 has submitted break-up of initial spares incurred during various periods and same is as follows:

(₹ in lakh)



| SI. No. | Particulars  | Initial<br>Spares |
|---------|--|-------------------|
| 1       | Expenditure Upto COD and Included in the auditor certificate upto COD                      | 42.08             |
| 2       | Expenditure from 1.2.2014 to 31.3.2014(Included in auditor certificate as add-cap 2013-14) | 3.52              |
| 3       | Expenditure in 2014-15(Included in auditor certificate as add-<br>cap 2014-15)             | 0.00              |
| 4       | Expenditure in FY 2015-16(Included in auditor certificate as add-cap 2015-16)              | 0.00              |
| 5       | Expected Expenditure in FY 2016-17(Included in auditor certificate as add-cap 2016-17)     | 0.00              |
|         | Total  | 45.60             |

14. We have considered the submissions made by the petitioner. The petitioner has claimed initial spares of ₹45.60 lakh i.e. 3.91% of original project cost ₹1165.01 lakh. The details of initial spares allowed upto the ceiling limit of 2.5% of the capital cost for sub-station as specified in the 2009 tariff regulations are given below:

(₹ in lakh)

| Asset | Particulars | Original project cost as per auditor certificate dated 17.6.2016 | Initial<br>spares<br>claimed | Ceiling limit (%) as per Regulation 8 of the 2009 Tariff Regulation | Initial<br>Spares<br>calculated | Excess initial Spares | Initial<br>Spares<br>Allowed |
|-------|-------------|--|------------------------------|---|---------------------------------|-----------------------|------------------------------|
| Asset | Substation  | 1165.01  | 45.60                        | 2.5%  | 28.70                           | 16.90                 | 28.70                        |

15. The Commission vide order dated 15.10.2015 in petition no. 31/TT/2014 observed as under:

"26.......... The projected additional capital expenditure for the year 2013-14 shall be reviewed at the time of truing up on the submission of the actual additional capital expenditure along with RCE, if any......."

16. We have considered the submissions made by petitioner. The date of



commercial operation (COD) for asset is 1.2.2014. Accordingly, the cut-off date for the asset comes was 31.3.2017. The petitioner has claimed additional capital expenditure of ₹62.38 lakh for period 2013-14 on account of balance retention payment under Regulation 9(1)(i) of 2009 Tariff Regulations and has also submitted Revised Cost Estimate. We have considered the Revised Cost Estimate (RCE) approved by the Board of Directors of PGCIL dated 31.3.2017 submitted vide affidavit dated 1.1.2018 and accordingly, we are of the view that the additional capital expenditure claimed by petitioner for asset of ₹62.38 lakh for period 2013-14 are within the cut-off date under Regulation 9(1)(i)) of 2009 Tariff Regulations and are within the RCE of ₹1436.49 lakh with total completion cost at ₹1057.20 lakh. Further, the petitioner vide affidavit dated 1.1.2018 has submitted the statement of IDC upto COD and additional capital expenditure discharged during various periods. The additional capital expenditure after adjustment of excess initial spares and IDC discharged during 2013-14, is as follows:

|                     |   | (₹ in lakh)   |
|---------------------|---|---|
| Name<br>of<br>Asset | Additional capital expenditure claimed vide auditor's certificate 17.6.2016 | Additional capital expenditure allowed for period 2013-14 |
| Asset               | 62.38   | 62.38+2.31*-3.52**=61.17                                  |

<sup>\*₹ 2.31</sup> lakh IDC on cash basis

## Capital cost allowed as on COD:

17. The petitioner in affidavit dated 1.1.2018 has submitted the statement of IDC discharged upto COD. Considering the statement of IDC discharged upto COD and Capital Cost claimed as on COD vide auditor certificate 17.6.2016 and adjustment



<sup>\*\*</sup>Excess initial spares adjustment of ₹ 3.52 lakh for period 2013-14

of excess initial spares. The capital cost allowed as on COD is as follows:

(₹ in lakh)

| Name of<br>Asset | Capital Cost claimed as on COD vide auditor certificate 17.6.2016 | Capital Cost allowed as on COD            |
|------------------|---|---|
| Asset            | 994.82  | 994.82-60.51*+30.45**-<br>13.38***=951.38 |

<sup>\*₹ 60.51</sup> lakh IDC as per Auditor's certificate

# **Debt-Equity Ratio**

- 18. Debt-equity ratio is allowed for the instant asset in terms of Regulation 12 of the 2009 Tariff Regulations.
- 19. The debt-equity ratio of 70:30 as on COD and as on 31.3.2014, for the asset is in accordance with the 2009 Tariff Regulations and is considered for the purpose of truing up for tariff period 2009-14, as given under:-

(₹ in lakh)

| Particulars | (%)    | As on COD<br>(1.2.2014) | As on 31.3.2014 |
|-------------|--------|-------------------------|-----------------|
| Debt        | 70.00  | 665.97                  | 708.79          |
| Equity      | 30.00  | 285.41                  | 303.77          |
| Total       | 100.00 | 951.38                  | 1012.55         |

## **Interest on Loan (IOL)**

- 20. Interest on Loan is allowed for the instant asset in terms of Regulation 16 of the 2009 Tariff Regulations.
- 21. The petitioner has claimed the IOL based on actual interest rates for each year during the 2009-14 tariff period. We have considered the submissions of the



<sup>\*\* ₹30.45</sup> lakh IDC on cash basis

<sup>\*\*\*</sup> Excess initial spares adjustment of ₹13.38 lakh for period 2013-14.

petitioner and accordingly calculated the IOL based on gross amount of normative loan and normative repayment of installments and rate of interest submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The IOL has been worked out and allowed as provided under Regulation 16 of the 2009 Tariff Regulations as under:-

(₹ in lakh)

|   | ( α     |
|---|---------|
| Particulars                               | 2013-14 |
| Gross Normative Loan                      | 665.97  |
| Cumulative Repayment up to Previous Year  | 0.00    |
| Net Loan-Opening                          | 665.97  |
| Addition due to Additional Capitalization | 42.82   |
| Repayment during the year                 | 8.64    |
| Net Loan-Closing                          | 700.15  |
| Average Loan                              | 683.06  |
| Weighted Average Rate of Interest on Loan | 8.434%  |
| Interest                                  | 9.60    |
|   |         |

# Return on Equity ("ROE")

- 22. Return on equity is allowed for the instant asset in terms of Regulation 15 of the 2009 Tariff Regulations
- 23. The MAT rate of 20.961% applicable for 2013-14 was considered in the order dated 14.3.2016 in Petition No. 97/TT/2014 for the calculation of Return on equity.
- 24. We have considered the submissions of the petitioner and have approved ROE in accordance with the provisions of the 2009-14 Tariff Regulations. Accordingly, the ROE as trued up in accordance with the 2009 Tariff Regulations is shown in the table below:-

(₹ in lakh)

| Particulars                         | 2013-14 |
|-------------------------------------|---------|
| Opening Equity                      | 285.41  |
| Addition due to Add Cap             | 18.35   |
| Closing Equity                      | 303.77  |
| Average Equity                      | 294.59  |
| Return on Equity (Base Rate )       | 15.50%  |
| Tax rate                            | 20.96%  |
| Rate of Return on Equity (Pre Tax ) | 19.610% |
| Return on Equity (Pre Tax)          | 9.63    |

# **Depreciation**

- 25. Depreciation is allowed for the instant asset in terms of Regulation 27 of the 2014 Tariff Regulations.
- 26. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-III to the 2014 Tariff Regulations.
- 27. Based on the above, the depreciation has been considered as follows:-

(₹ in lakh)

|                             | ( \     |
|-----------------------------|---------|
| Particulars                 | 2013-14 |
| Opening Gross Block         | 951.38  |
| Addition during 2013-14     | 61.17   |
| Closing Gross Block         | 1012.55 |
| Average Gross Block         | 981.97  |
| Rate of Depreciation        | 5.280%  |
| Depreciable Value           | 883.77  |
| Remaining Depreciable Value | 883.77  |
| Depreciation                | 8.64    |

# Operation & Maintenance Expenses ("O&M Expenses")

28. The petitioner has not claimed any O&M Expenses for instant petition during period 2009-14.



#### Interest on working capital (IWC)

29. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.

# (i) Maintenance Expenses

Maintenance spares have been considered as NIL since the Operation and Maintenance expenses allowed is NIL for the period 2009-14.

# (ii) O & M expenses

O&M expenses have been considered as NIL since the Operation and Maintenance expenses allowed is NIL for the period 2009-14.

#### (iii) Receivables

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

# (iv) Rate of interest on working capital

The rate of interest on working capital has been considered as per clause (3) of Regulation 18 of the 2009 Tariff Regulations.

30. The IWC trued up is as under:-

(₹ in lakh)

| Particulars          | 2013-14 |
|----------------------|---------|
| Maintenance Spares   | 0.00    |
| O & M expenses       | 0.00    |
| Receivables          | 28.50   |
| Total                | 28.50   |
| Rate of Interest (%) | 13.20   |
| Interest             | 0.63    |



## ANNUAL TRANSMISSION CHARGES FOR 2009-14 TARIFF PERIOD

31. The detailed computation of the various components of the trued up annual transmission charges for the Asset for the tariff period 2009-14 is summarized below:-

(₹ in lakh)

| (                           |         |  |  |  |
|-----------------------------|---------|--|--|--|
| Particulars                 | 2013-14 |  |  |  |
| Depreciation                | 8.64    |  |  |  |
| Interest on Loan            | 9.60    |  |  |  |
| Return on Equity            | 9.63    |  |  |  |
| Interest on Working Capital | 0.63    |  |  |  |
| O & M Expenses              | 0.00    |  |  |  |
| Total                       | 28.50   |  |  |  |

# **DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19**

32. The petitioner has claimed the transmission charges for the instant asset for the 2014-19 tariff period as under:-

(₹ in lakh)

| Combined Asset              | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------|---------|---------|---------|---------|
| Depreciation                | 56.41   | 59.33   | 59.97   | 60.62   | 60.62   |
| Interest on Loan            | 60.21   | 58.76   | 54.38   | 49.98   | 44.87   |
| Return on equity            | 62.85   | 66.10   | 66.82   | 67.54   |         |
| Interest on Working Capital | 4.13    | 4.24    | 4.17    | 4.10    | 3.98    |
| O & M Expenses              | 0.00    | 0.00    | 0.00    | 0.00    |         |
| Total                       | 183.60  | 188.43  | 185.34  | 182.24  | 177.01  |

33. The details submitted by the petitioner in support of its claim for interest on working capital are given here under:-

(₹ in lakh)

| Particulars        | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--------------------|---------|---------|---------|---------|---------|
| Maintenance Spares | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| O & M expenses     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| Receivables        | 30.60   | 31.41   | 30.89   | 30.37   | 29.50   |
| Total              | 30.60   | 31.41   | 30.89   | 30.37   | 29.50   |



| Rate of Interest (%) | 13.50% | 13.50% | 13.50% | 13.50% | 13.50% |
|----------------------|--------|--------|--------|--------|--------|
| Interest             | 4.13   | 4.24   | 4.17   | 4.10   | 3.98   |

## **Capital Cost**

- 34. The Capital cost has been dealt in line with clause (2) of Regulation 9 of the 2014 Tariff Regulations.
- 35. The capital cost claimed by petitioner as on 31.3.2014 along with additional capital expenditure incurred for period 2014-19 in affidavit dated 1.1.2018 vide auditor certificate dated 17.6.2016 are as follows:

(₹ in lakh)

| Asset no. | Apportion ed Approved Cost (RCE) | Total cost claimed as on 31.3.14 | Expendit<br>ure for<br>FY 2014-<br>15 | Expenditure<br>for<br>FY 2015-16 | FY 2016-17 | Total<br>estimated<br>cost as on<br>31.3.2017 |
|-----------|----------------------------------|----------------------------------|---------------------------------------|----------------------------------|------------|---|
| Asset     | 1436.49                          | 1057.20                          | 83.37                                 | 0.00                             | 24.44      | 1165.01                                       |

#### Cost over-run:

- 36. Against the apportioned approved cost as per RCE of ₹1436.49 lakh, the total estimated cost as on 31.3.2017 including additional capital expenditure is ₹1165.01 lakh. Therefore, there is no cost overrun under subject petition as per RCE.
- 37. The trued up capital cost of ₹1012.55 lakh as on 31.3.2014 is considered to work out tariff for 2014-19 tariff period.

#### **Additional Capital Expenditure**

38. The additional capital expenditure claimed by petitioner in affidavit dated 1.1.2018 vide auditor certificate dated 17.6.2016 for periods 2014-19 are as under:



(₹ in lakh)

| Asset no. | ACE<br>claimed<br>for<br>FY 2014-<br>15 | ACE claimed<br>for<br>FY 2015-16 | ACE<br>claimed for<br>FY 2016-17 | Total ACE claimed |
|-----------|---|----------------------------------|----------------------------------|-------------------|
| Asset     | 83.37                                   | 0.00                             | 24.44                            | 107.81            |

39. The petitioner has made submissions that the admissibility of additional capital expenditure (Add Cap) incurred after COD of ₹83.37 lakh for period 2014-15 and ₹24.44 lakh for period 2016-17 has been claimed on account of balance payment under Regulation 14(1)(i) of 2014 Tariff Regulations and within the cut-off date of 31.3.2017. The petitioner further in affidavit dated 1.1.2018 in form-7 has submitted the details for statement of additional capitalization incurred after COD and same are as under:

(Rs. in lakh)

| S.no  | Year    | Work/Equipme nt proposed to be added after COD upto cutoff date/beyond cutoff date |        | Justifications                | Regulatio<br>n under<br>which<br>covered |
|-------|---------|--|--------|-------------------------------|--|
| 1     | 2014-15 | Sub-station  | 110.59 | Balance and retention payment | 14(1)(i)                                 |
| Total |         |  | 110.59 |                               |  |
| 2     | 2016-17 | Sub-station  | 24.44  | Balance and retention payment | 14(1)(i)                                 |
| Total |         |  | 24.44  |                               |  |

40. We have considered the submissions made by the petitioner. The petitioner vide auditor's certificate dated 17.6.2016 claimed additional capital expenditure of ₹83.37 lakh for period 2014-15 and ₹24.44 lakh for period 2016-17 on account of balance and retention payment under Regulation 14(1)(i) of 2014 Tariff Regulations

and are within the cut-off date of 31.3.2017. Further, the petitioner in affidavit dated 1.1.2018 has submitted the statement of IDC up to COD along with additional capital expenditure discharged during various periods. Considering the statement of IDC discharged up to COD along with additional capital expenditure discharged during various periods and additional capital expenditure claimed for period 2014-15, 2015-16 and 2016-17 vide auditor's certificate 17.6.2016, the capital expenditure allowed for period 2014-19 is as follows:

(₹ in lakh)

|           |                            |                            |                                  | ( V III IAIN      |
|-----------|----------------------------|----------------------------|----------------------------------|-------------------|
| Asset no. | ACE allowed for FY 2014-15 | ACE allowed for FY 2015-16 | ACE<br>allowed for<br>FY 2016-17 | Total ACE allowed |
| Asset     | 83.37+27.22*<br>=110.59    | 0.00                       | 24.44                            | 135.03            |

<sup>\*₹27.22</sup> lakh IDC on cash basis

#### Capital cost allowed as on 31.3.2017

41. Based on the above, the Capital cost admitted as on 1.4.2014 and allowed as on 31.3.2019 are as under:

(₹ in lakh)

| Asset<br>No. | Apportion ed              | Total admitted               | Add-cap<br>period | allowed            | for                | Total capital cost allowed as on 31.3.2017 |
|--------------|---------------------------|------------------------------|-------------------|--------------------|--------------------|--|
|              | Approved<br>Cost<br>(RCE) | cost as on<br>31.3.14<br>(A) | 2014-15<br>(B)    | 2015-<br>16<br>(C) | 2016-<br>17<br>(D) | (E) = (A) + (B) + (C) + (D)                |
| Asset        | 1436.49                   | 1012.55                      | 110.59            | 0.00               | 24.44              | 1147.58                                    |

#### **Debt-Equity Ratio**

- 42. Debt-equity ratio is allowed for the instant asset in terms of Regulation 19 of the 2014 Tariff Regulations.
- 43. The petitioner has considered debt: equity ratio as 70:30 as on 31.3.2014.



The admitted debt: equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt: equity ratio as on 1.4.2014. The details of the debt: equity as on 1.4.2014 and as on 31.3.2019 considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(₹ in lakh)

| Particulars | (%)    | 1.4.2014 | 31.3.2019 |
|-------------|--------|----------|-----------|
| Debt        | 70.00  | 708.79   | 803.31    |
| Equity      | 30.00  | 303.77   | 344.27    |
| Total       | 100.00 | 1012.55  | 1147.58   |

#### **Interest on Loan ("IOL")**

- 44. Interest on Loan is allowed for the instant asset in terms of Regulation 26 of the 2014 Tariff Regulations.
- 45. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The Interest on loan has been worked out and allowed as follows:-

(₹ in lakh)

| Particulars                              | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Gross loan opening                       | 708.79  | 786.20  | 786.20  | 803.31  | 803.31  |
| Cumulative Repayment up to previous year | 8.64    | 65.02   | 124.33  | 184.27  | 244.86  |
| Net Loan-Opening                         | 700.14  | 721.17  | 661.87  | 619.03  | 558.44  |
| Additions during the year                | 77.41   | 0.00    | 17.11   | 0.00    | 0.00    |
| Repayment during the year                | 56.38   | 59.30   | 59.95   | 60.59   | 60.59   |
| Net Loan-Closing                         | 721.17  | 661.87  | 619.03  | 558.44  | 497.85  |
| Average Loan                             | 710.66  | 691.52  | 640.45  | 588.74  | 528.15  |
| Rate of Interest (%)                     | 8.468%  | 8.493%  | 8.487%  | 8.485%  | 8.492%  |
| Interest                                 | 60.18   | 58.73   | 54.35   | 49.95   | 44.85   |

# Return on Equity ("ROE")

- 46. Return on equity is allowed for the instant asset in terms of Regulation 24 and 25 of the 2014 Tariff Regulations.
- 47. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.
- 48. We have computed ROE at the rate of 19.610% for tariff period 2014-19 after grossing up the ROE with MAT rate as per the above Regulation. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. 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 given below:-

(₹ in lakh)

| Particulars               | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------------|---------|---------|---------|---------|---------|
| Opening Equity            | 303.77  | 336.94  | 336.94  | 344.27  | 344.27  |
| Additional Capitalization | 33.18   | 0.00    | 7.33    | 0.00    | 0.00    |
| Closing Equity            | 336.94  | 336.94  | 344.27  | 344.27  | 344.27  |
| Average Equity            | 320.35  | 336.94  | 340.61  | 344.27  | 344.27  |



| Return on Equity (Base Rate) (%)       | 15.50%  | 15.50%  | 15.50%  | 15.50%  | 15.50%  |
|--|---------|---------|---------|---------|---------|
| MAT rate for the year (%)              | 20.96%  | 20.96%  | 20.96%  | 20.96%  | 20.96%  |
| Rate of Return on Equity (Pre Tax) (%) | 19.610% | 19.610% | 19.610% | 19.610% | 19.610% |
| Return on Equity (Pre Tax)             | 62.82   | 66.07   | 66.79   | 67.51   | 67.51   |

#### **Depreciation**

- 49. Depreciation is allowed for the instant asset in terms of Regulation 27 of the 2014 Tariff Regulations.
- 50. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-III to the 2014 Tariff Regulations.
- 51. Based on the above, the depreciation has been considered as follows:-

(₹ in lakh)

| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------|---------|---------|---------|---------|
| Opening Gross block         | 1012.55 | 1123.14 | 1123.14 | 1147.58 | 1147.58 |
| Additional Capitalization   | 110.59  | 0.00    | 24.44   | 0.00    | 0.00    |
| Closing Gross block         | 1123.14 | 1123.14 | 1147.58 | 1147.58 | 1147.58 |
| Average gross block         | 1067.85 | 1123.14 | 1135.36 | 1147.58 | 1147.58 |
| Rate of Depreciation (%)    | 5.28%   | 5.28%   | 5.28%   | 5.28%   | 5.28%   |
| Depreciable Value           | 961.06  | 1010.83 | 1021.82 | 1032.82 | 1032.82 |
| Remaining Depreciable Value | 952.42  | 945.80  | 897.50  | 848.55  | 787.96  |
| Depreciation                | 56.38   | 59.30   | 59.95   | 60.59   | 60.59   |

## Operation & Maintenance Expenses ("O&M Expenses")

52. Petitioner has not claimed any O&M Expenses for instant petition during period 2014-19.

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

53. Interest on working capital is allowed for the instant asset in terms of Regulation 28 of the 2014 Tariff Regulations.



- 54. The petitioner has submitted that it has computed Interest on working capital for the tariff period 2014-19 considering the SBI Base Rate as on 1.4.2014 plus 350 basis points. The rate of interest on working capital considered is 13.50%.
- 55. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital worked is shown in the table below:-

(₹ in lakh)

| Particulars          | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------|---------|---------|---------|---------|---------|
| Maintenance Spares   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| O & M Expenses       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| Receivables          | 30.59   | 31.39   | 30.88   | 30.36   | 29.49   |
| Total                | 30.59   | 31.39   | 30.88   | 30.36   | 29.49   |
| Rate of Interest (%) | 13.50%  | 13.50%  | 13.50%  | 13.50%  | 13.50%  |
| Interest             | 4.13    | 4.24    | 4.17    | 4.10    | 3.98    |

#### **Annual Transmission Charges**

56. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarized below:-

(₹ in lakh)

| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------|---------|---------|---------|---------|
| Depreciation                | 56.38   | 59.30   | 59.95   | 60.59   | 60.59   |
| Interest on Loan            | 60.18   | 58.73   | 54.35   | 49.95   | 44.85   |
| Return on Equity            | 62.82   | 66.07   | 66.79   | 67.51   | 67.51   |
| Interest on Working Capital | 4.13    | 4.24    | 4.17    | 4.10    | 3.98    |
| O & M Expenses              | 0.00    | 0.00    | 0.00    | 0.00    |         |
| Total                       | 183.51  | 188.34  | 185.26  | 182.15  | 176.93  |



#### Filing fee and the publication expenses

57. 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.

#### License fee and RLDC Fees and Charges

58. 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 licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

## Service tax

59. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. Accordingly, the transmission charges is exclusive of service tax and the same shall be borne and additionally paid by the Page 24

respondents to the petitioner, if at any time service tax on transmission is withdrawn from negative list in future. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

## **Deferred tax liability**

60. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when the same gets materialized. However, since, the COD of the asset is in 2017, the claim of the petitioner is not admissible.

#### **Sharing of Transmission Charges**

- 61. The transmission charges 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 in 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.109/TT/2018.

Sd/-(Dr. M.K.lyer) **Member**  Sd/-(P.K.Pujari) **Chairperson** 

