

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 576/GT/2020

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 20th March, 2023

In the matter of:

Petition for truing-up of tariff of Vallur Thermal Power Station (1500 MW) for the period 2014-19.

And

In the matter of:

NTPC Tamil Nadu Energy Company Limited
No. 123, G- Block, Anna Nagar (East)
Chennai- 600102

.....Petitioner

Vs

1. A. P Transmission Corporation Limited,
Vidyut Soudha, Khairatabad,
Hyderabad - 500 082.
2. A. P. Eastern Power Distribution Company Limited,
P&T Colony, Seethammadhara,
Vishakapatnam - 503 013
3. A. P. Southern Power Distribution Company Limited,
Beside Srinivassakalyana Mandapam,
Tiruchanur Road, Kesavayana Gunta,
Tirupati- 517501
4. Transmission Corporation of Telangana Limited
Vidyut Soudha Khairatabad,
Hyderabad - 500 082
5. Telangana State Southern Power Distribution Company Limited,
Mint Compound, Corporate Office
Hyderabad-500 063
6. Telangana Northern Power Distribution Company Limited,
H.No. 2-5-31/2, Vidyut Bhavan, Nakkalagutta,
Hanmkonda, Warangal - 506 001



7. Power Company of Karnataka Limited,
KPTCL Complex, Kaveri Bhawan,
Bangalore - 560 009
8. Bangalore Electricity Supply Company Limited,
Krishna Rajendra Circle, Bangalore-506001
9. Mangalore Electricity Supply Company Limited,
MESCOM Bhavna, Corporate Office,
Bejai Kevai Cross Road
Mangalore-575 004
10. Chamundeshwari Electricity Supply Company Limited,
Corporate Office No. 29, Ground Floor,
Kaveri Grameena Bank Road,
Vijayanagar 2nd Stage,
Mysore - 570 017
11. Gulbarga Electricity Supply Company Limited,
Main Road, Gulbarga, 585102
12. Hubli Electricity Supply Company Limited,
Navanagar , P.B. Road,
Hubli - 580 025
13. Kerela State Electricity Board Limited,
Vaidyuthi Bhavanam, Pattom
Thiruvananthapuram - 695 004
14. Tamil Nadu Generation & Distribution Corporation Limited,
NPKRR Maaligai, 144, Anna Salai
Chennai - 600 002
15. Electricity Department,
Government of Puducherry,
137, NSC Bose Salai,
Puducherry-605 001

....Respondents

Parties Present:

Ms. Swapna Seshadri, Advocate, NTECL
Shri Anand K. Ganesan, Advocate, NTECL
Ms. Ritu Apurva, Advocate, NTECL
Ms. Ashabari Thakur, NTECL
Shri Deepak Thakur, NTECL
Shri S. Vallinayagam, Advocate, TANGEDCO
Shri B. Rajeswari, TANGEDCO
Shri R. Ramalakshmi, TANGEDCO
Ms. R. Alamelu, TANGEDCO



ORDER

This Petition has been filed by the Petitioner, NTPC Tamil Nadu Energy Company Limited for true-up of tariff of Vallur Thermal Power Station (3 x 500 MW) (in short “the generating station”) for the period 2014-19 in terms of Regulation 8 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

Background

2. The investment approval of the project was accorded on 14.7.2007 by the Board of the Petitioner Company, for Stage-I, Phase-I comprising of two units of 500 MW at a cost of Rs.5552.78 crore and Phase-II comprising of one unit of 500 MW, at a cost of Rs.3086.78 crore, on 19.5.2009. The Petitioner has entered into Power Purchase Agreement (PPA) with the Respondents, for supply of the power generated from the project in terms of the allocation made by the Ministry of Power, Government of India vide its letter dated 28.9.2010. The dates of commercial operation of the units of the generating station are as under:

| | |
|----------|------------|
| Unit-I | 29.11.2012 |
| Unit-II | 25.8.2013 |
| Unit-III | 26.2.2015 |

3. The Commission vide its order dated 8.2.2016 in Petition No.198/GT/2013 had approved the tariff of the generating station from the date of COD of Unit-I (29.11.2012) to 24.8.2013 and for Units I and II (combined) from COD of Unit-II (25.8.2013) to 31.3.2014. Aggrieved by the said order dated 8.2.2016, the Petitioner had filed Review Petition (Petition No. 28/RP/2016) on various issues, and the Commission vide its order dated 18.4.2017 disposed of the same, revising the tariff of Units-I and II of the generating station. Subsequently, after the COD of Unit-III was declared on 26.2.2015, the Petitioner filed Petition No. 277/GT/2014, for approval of tariff of the generating



station, considering the COD of Unit-III, and the Commission vide its order dated 11.7.2017, approved the capital cost and annual fixed charges as under:

Capital Cost allowed

(Rs. in lakh)

| | 2014-15 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------|------------------------------|------------------|------------------|------------------|------------------|
| | 1.4.2014 to 25.2.2015 | 26.2.2015 to 31.3.2015 | | | | |
| Opening Capital Cost | 558876.17 | **827217.36 | 790341.99 | 866442.63 | 907730.04 | 933540.21 |
| Less: Unexplained gap between project funding and actual expenditure as on Unit-III COD | 0.00 | 37629.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: IDC/FC/FERV claimed as on Unit-III COD | 0.00 | 58051.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Notional IDC included in capital cost claimed | 0.00 | 1241.76 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: IDC allowed on COD of Unit-III | 0.00 | 51969.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: FC allowed on COD of Unit-III | 0.00 | 372.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: FERV allowed on COD of Unit-III | 0.00 | 235.62 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: Notional IDC allowed | 0.00 | 435.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Pro-rata reduction in IEDC | 0.00 | 1520.23 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Pro-rata reduction in two packages | 0.00 | 50.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Opening cost | 558876.17 | 781737.50 | 790577.61 | 866442.63 | 907730.04 | 933540.21 |
| Add: Additional capital expenditure | 71.03 | 1551.20 | 38587.53 | 36160.00 | 24559.00 | 0.00 |
| Add: Liabilities discharged | 8103.17 | 7288.91 | 37277.49 | 5127.41 | 1251.17 | 0.00 |
| Closing capital cost | 567050.37 | 790577.61 | 866442.63 | 907730.04 | 933540.21 | 933540.21 |

(**including 260166.99 capitalised for Unit-III on 26.2.2015)

Annual Fixed Charges allowed

(Rs. in lakh)

| | 2014-15 | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------------|------------------------------|------------------|------------------|------------------|------------------|
| | 1.4.2014 to 25.2.2015 | 26.2.2015 to 31.3.2015 | | | | |
| Return on Equity | 23010.13 | 3360.71 | 38525.72 | 41249.51 | 42809.53 | 43409.62 |
| Interest on Loan | 37183.20 | 5307.31 | 57134.24 | 56721.98 | 54225.15 | 49954.71 |
| Depreciation | 25721.16 | 3689.53 | 41870.42 | 44734.88 | 46386.20 | 47036.42 |
| Interest on Working Capital | 10939.19 | 1246.66 | 13600.42 | 13805.42 | 14140.05 | 14181.65 |
| O&M Expenses | 14909.51 | 2202.18 | 25133.34 | 26714.33 | 28398.75 | 30186.60 |
| Total | 111763.20 | 15806.39 | 176264.14 | 183226.13 | 185959.69 | 184769.00 |

Present petition

4. Regulation 8 (1) of the 2014 Tariff Regulations provides as under:

“8. Truing up (1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including



additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:

Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17.”

5. In terms of the above regulations, the Petitioner has filed the present petition for truing-up of tariff of the generating station, for the period 2014-19, and has claimed the following capital cost and annual fixed charges:

Capital Cost claimed

| | 2014-15 | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------|------------------------|------------------|------------------|------------------|------------------|
| | 1.4.2014 to 25.2.2015 | 26.2.2015 to 31.3.2015 | | | | |
| Opening Capital Cost | 558876.17 | 820608.41 | 829448.53 | 861027.00 | 893479.38 | 924508.64 |
| Add: Addition during the year / period | 71.03 | 1810.95 | 18448.79 | 24124.22 | 25889.98 | 11749.07 |
| Less: Decapitalisation during the year /period | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3036.13 |
| Less: Reversal during the year / period | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: Discharges during the year /period | 8103.17 | 7029.16 | 13129.69 | 8328.16 | 5139.29 | 5352.09 |
| Closing Capital Cost | 567050.37 | 829448.53 | 861027.00 | 893479.38 | 924508.64 | 938573.68 |
| Average Capital Cost | 562963.27 | 825028.47 | 845237.76 | 877253.19 | 908994.01 | 931541.16 |

Annual Fixed Charges claimed

| | 2014-15 | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|
| | 1.4.2014 to 25.2.2015 | 1.4.2014 to 25.2.2015 | | | | |
| Depreciation | 25798.84 | 3871.85 | 42610.48 | 44309.76 | 45807.73 | 46792.90 |
| Interest on Loan | 37179.27 | 5597.33 | 55174.48 | 47857.43 | 45588.31 | 43382.24 |
| Return on Equity | 23010.13 | 3526.88 | 39303.56 | 51860.03 | 53736.44 | 55214.79 |
| Interest on Working Capital | 9510.91 | 1453.69 | 15679.10 | 15992.91 | 16558.51 | 16870.00 |
| O&M Expenses | 14912.47 | 2202.48 | 25442.45 | 27685.02 | 30362.53 | 34805.98 |
| Additional O&M Expense | | | | | | |
| Impact of Pay revision | - | - | 35.41 | 517.64 | 1863.86 | 2233.39 |
| Impact of GST | | | | | 431.87 | 535.57 |
| Total | 110411.63 | 16652.23 | 178245.48 | 188222.80 | 194349.25 | 199834.86 |

6. The Respondent TANGEDCO vide affidavit dated 24.9.2020 and the Respondent KSEBL vide affidavit dated 20.7.2021, have filed their replies and the Petitioner vide affidavits dated 24.6.2021 and 27.08.2021, has filed its rejoinder to the said replies. The



Petitioner, vide affidavits dated 24.4.2021, 6.7.2021, 1.12.2021, 2.12.2021 and 4.8.2022, has filed certain additional information, with copy to the Respondents. Subsequently, this petition was heard on 30.11.2021, through video conferencing, and the order was reserved. However, as the order in the petition could not be passed prior to then Chairperson demitting the office, the Petition was re-listed and heard through virtual hearing, on 10.8.2022, and the Commission, after directing the Petitioner to file certain additional information, reserved its order in the petition. Also, in compliance to the directions in ROP dated 30.11.2021 and 10.8.2022, the Petitioner has submitted the additional information vide affidavits dated 16.2.2022 and 6.10.2022 respectively, with a copy to the Respondents. Accordingly, based on the submissions of the parties and documents available on record, and after prudence check, we proceed for truing up of the tariff of the generating station, for the period 2014-19, as stated in the subsequent paragraphs.

Commissioning Schedule and Time Overrun

7. The Commission vide order dated 8.2.2016 in Petition No. 198/GT/2013 had allowed the time overrun of 16 months for Unit-I and 18 months for Unit-II of the generating station. Further, the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014 had examined the issue of time over run in respect of Unit-III and allowed the time over run of 18 months (out of 25 months for the generating station) and the remaining 7 months of time over run was found attributable to the Petitioner. Accordingly, the scheduled COD and the actual COD of the three units of the generating station and the time overrun allowed are summarised below:

| Unit Nos. | Date of LOA | Schedule COD as per LOA | Actual COD | Time Overrun (in months) | Time overrun allowed (in months) |
|-----------|-------------|-------------------------|------------|--------------------------|----------------------------------|
| I | 13.8.2007 | 10.2.2011 | 29.11.2012 | 21.63 | 16 |
| II | | 10.8.2011 | 25.8.2013 | 24.53 | 18 |
| III | 28.7.2009 | 27.1.2013 | 26.2.2015 | 25.00 | 18 |



Impact of time overrun on contract price, IDC and IEDC etc.

8. Consequent upon time overrun involved in COD of the units and the time overrun allowed as above, the reduction in DC and IEDC is dealt with as under:

Capital Cost

9. Clause (1) of Regulation 9 of the 2014 Tariff Regulations provides that 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.

Clause (2) of Regulation 9 of the 2014 Tariff Regulations provides as under:

“(2) The Capital cost of a new project shall include the following:

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period shall form part of the capital cost.

(d) Increase in cost in contract packages as approved by the Commission;

(e) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(f) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(g) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;

(h) 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

(i) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

10. The Commission vide order dated 18.4.2017 in Petition No. 28/RP/2016 (in Petition No. 198/GT/2013) had allowed the capital cost as Rs.558876.17 lakh, including IDC of Rs.73139.32 lakh, FC of Rs.329.88 lakh, and Notional IDC of Rs.1533.54 lakh, as on 31.3.2014. The same has been considered as the closing capital cost, as on 31.3.2014. Thereafter, the Commission vide its order dated 11.7.2017 in Petition No.



277/GT/2014, had approved the capital cost upto COD of Unit-III of the generating station, for the period 2014-19, considering the opening capital cost of Rs. 827217.36 lakh (on cash basis) [including Rs.260166.99 lakh capitalized for Unit-III on 26.2.2015], as on 26.2.2015. The capital cost considered after truing up exercise are detailed below.

11. The Commission while approving the tariff of the generating station, in paragraph 54, of the order dated 11.7.2017 in Petition No. 277/GT/2014, had directed the Petitioner to furnish details as shown under at the time of truing up of tariff.

“54. xxx

The petitioner is however directed to submit the details of works asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution at the time of truing-up.”

12. However, the above said details have not been furnished by the Petitioner in the present Petition. Further, the Commission vide ROP of the hearing dated 30.11.2021 had once again directed the Petitioner to submit the following information:

- (a) “Detailed breakup of capital cost as per Form-5B (clearly stating the Plant and Machinery Cost) as on cut-off date and as on 31.3.2019;*
- (b) Details of actual additional capital expenditure claimed asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution under the same package heads as provided in Form-5B;”*

13. Thereafter, in compliance to the ROP of hearing dated 30.11.2021, the Petitioner vide affidavit dated 16.2.2022 submitted the following:

“Re. (a) Detailed breakup of capital cost as per Form-5B (clearly stating the Plant and Machinery Cost) as on cut-off date and as on 31.3.2019;

xxx

6. The cut-off date works to be 31.3.2018 and the tariff period ended on 31.3.2019. Form 5B pertains to the break-up of capital cost for coal/ lignite-based projects and is covered under part 1 of the checklist of forms and other information / documents for tariff filing for thermal stations. Form 5B is prepared on the actual COD / anticipated COD. And gives the break-up of the assets as per the original estimates in the investment approval vis a vis the actual capital expenditure as on actual COD / anticipated COD. The Form also contains liabilities / provisions, variation, specific reasons for variation and estimated capital expenditure upto cut-off date.

7. The Form 5B is prepared at the time of COD of all Units. Form 5B as on station COD i.e. 26.2.2015 has already been filed by the Petitioner as part of Petition No. 277/GT/2014 vide affidavit dtd 10.7.2015. A copy of the same is attached hereto and



marked as Annexure-1. It is respectfully stated that Form 5B is not prepared on different dates including the cut-off date and last date of the tariff period. For the purposes of trueing up separate forms are prescribed in the Tariff Regulations, 2014 such as Form 9 which deals with year wise statement of additional capitalization after COD, Form 9Bi which deals with details of assets decapitalized, Form 9C which is a statement showing reconciliation of additional capitalization claimed with the capital additions as per books, Form 9D which is a statement showing the items / assets under exclusions, Form 9E which is a statement of capital cost, Form 9F which is a statement of capital works in progress etc. All these forms have been filed by the Petitioner along with the present Petition.

8. The Petitioner is willing to clarify any other specific issues with regard to its break-up of capital cost as well as additional capitalization.

Re. (b): Details of actual additional capital expenditure claimed asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution under the same package heads as provided in Form-5B.

9. Petitioner had projected total additional capital expenditure of Rs. 99306.53 lakh during 2015-18 (Rs. 38587.53 lakh in 2015-16, Rs. 36160.00 lakh in 2016-17 and Rs. 24559.00 lakh in 2017-18) under original scope of work in its petition no. 277/GT/2014. The Hon'ble Commission vide its order dtd 11.7.2017 in para-54 had allowed the same. Further, the Petitioner had filed a petition (being no. 67/MP/2018) for extension of cut-off date from 31.3.2018 to 31.3.2019 as certain works under original scope was being capitalized beyond cut-off date for reasons beyond the reasonable control of the Petitioner.

The Hon'ble Commission vide its order dtd 25.4.2019 in Petition no. 67/MP/2018 was pleased to allow capitalization of the expenditure for the works within the original scope of work during 2018-19.

10. Accordingly, Petitioner in the instant petition has claimed actual additional capital expenditure item wise in form-9 of respective years of the petition. The additional capitalization anticipated earlier in petition no 277/GT/2014 and actual in instant true up petition is summarized as below:

(Rs. in Crore)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|
| Anticipated expenditure at the time of filing petition no. 277/GT/2014 | 385.88 | 361.60 | 245.59 | 0.0 |
| Actual additional capital expenditure in instant petition | 184.49 | 241.24 | 258.90 | 117.49 |

It is evident from above that the actual capitalization is less than the projected capitalization. Further, the work wise actual capitalization against allowed works by Hon'ble Commission is indicated in respective Form-9 of the tariff periods.

Further, Petitioner had projected/anticipated liabilities discharge in form-18 of the petition no 277/GT/2014 for the period 2015-18. Actual liability discharge in the instant true up petition is as per form-18 of the respective years (refer page 77-89 of petition). The projected/anticipated liabilities discharge and actual liability discharge in the instant true up petition is summarized as below:



(Rs. in lakh)

| | From 1.4.14 to 25.2.15 | From 26.2.15 to 31.3.15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---|---|---|--|--|--|
| <i>Anticipated liability discharge at the time of filing petition no. 277/GT/2014</i> | 8103.17 | 7288.91 | 37277.49 | 5127.41 | 1251.17 | 0.00 |
| <i>Actual liability discharge in the instant petition (Total Discharge as per form-18 of instant petition)</i> | <i>Allowed by Hon'ble CERC vide para 51 of order dtd 11.7.17-</i> | 7288.91 <i>(refer page 77 of petition)</i> | 13153.89 <i>(refer page 78-79 of petition)</i> | 8460.28 <i>(refer page 80-83 of petition)</i> | 5273.83 <i>(refer page 84-86 of petition)</i> | 5497.59 <i>(refer page 87-89 of petition)</i> |

As the liabilities discharged claimed in the instant petition is against already allowed works under original scope. The liabilities recognized to be discharged at future dates is indicated at Form-18. The same shall be claimed at the time of truing up for the period 2019-24 as and when discharged."

14. Since the Petitioner has not furnished revised Form 5B, as per actuals, after the cut-off date, the Commission vide ROP of hearing dated 10.8.2022, again directed the Petitioner, to furnish the actual break up of capital cost, in Form 5B (clearly stating the Plant & Machinery cost) as on the cut-off date, and as on 31.3.2019. In response, the Petitioner vide affidavit dated 7.3.2022, has furnished revised Form 5B. Based on the information available for the respective financial years, the capital cost of the project has been dealt with in this order.

Interest during Construction (IDC)

15. The Petitioner has claimed IDC of Rs. 156473.25 lakh as on COD of Unit-III i.e. 26.2.2015, and the break-up of the same, in Form 5B is as under:

| | (Rs. in lakh) |
|--|---------------|
| Opening IDC as on 1.4.2014 | 98177.19 |
| Add: IDC in additional capitalisation during 1.4.2014 to 25.2.2015 | 480.59 |
| IDC as on 25.2.2015 pertaining to 2 units (Units I&II) | 98657.78 |
| Add: IDC capitalised as on 26.2.2015 pertaining to Unit-III | 57815.48 |
| Total IDC claimed as on 26.2.2015 (COD of Unit-III) | 156473.26 |

16. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had observed as under:

