CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 268/GT/2014

Coram:
Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Dr. M.K. Iyer, Member

Date of Order: 8th November, 2016

In the matter of

Determination of tariff for Ramagundam Super Thermal Power Station Stage-III (500 MW) for the period 2014-19

And

In the matter of

NTPC Ltd
NTPC Bhawan,
Core-7, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003 ….**Petitioner**

Vs

1. Andhra Pradesh Eastern Power Distribution Company Ltd.
Corporate Office, P&T Colony, Seethammadhara,
Visakhapatnam -530013 (AP)

2. Andhra Pradesh Southern Power Distribution Company Ltd.
Corporate Office, Backside Srinivasa Kalyana Mandapam
Tiruchhanur Road, Kesavayana Gunta,
Tirupathi-517503 (AP)

3. Telengana State Northern Power Distribution Company Ltd,
H.No. 2-5-31/2, Vidyut Bhavan,
Nakkalagutta, Hanamkonda,
Warangal-506 001(AP)

4. Telengana State Southern Power Distribution Company Ltd,
Mint Compound Corporate Office,
Hyderabad (AP) – 500063

5. Tamil Nadu Generation & Distribution Corporation Ltd
144, Anna Salai
Chennai-600002

6. Bangalore Electricity Supply Company Ltd.
Krishna Rajendra Circle
Bangalore-560009

7. Mangalore Electricity Supply Company Ltd.
Paradigm plaza, A.B. Shetty Circle
Mangalore-575001

8. Chamundeshwari Electricity Supply Corp. Ltd.
Corporate office, 927, L.J. Avenue,
New Kantharajaurs Road, Saraswati Puram
Mysore-570009

9. Gulbarga Electricity Supply Company Ltd.
Main road, Gulbarga, Karnataka,
Gulbarga-585102

10. Hubli Electricity Supply Company Ltd,
Corporate Office, P.B.Road,
Navanagar,
Hubli – 580025

11. Kerala State Electricity Board,
Vaidyuthi Bhavanam, Pattom
Thiruvananthapuram- 695004

12. Electricity Department,
Govt. of Puducherry,
137, NSC Bose Salai,
Puducherry-605001 **....Respondents**

Parties Present:

For Petitioner: Shri Ajay Dua, NTPC
Shri Nishant Gupta, NTPC
Shri Bhupinder Kumar, NTPC
Shri Rajeev Choudhary, NTPC
Shri V.K.Garg, NTPC
Shri Rohit Chhabra, NTPC

For Respondent: Shri S.Vallinayagam, Advocate, TANGEDCO

ORDER

This petition has been filed by the petitioner, NTPC for approval of tariff of Ramagundam Super Thermal Power Station, Stage-III (500 MW) ('the generating station') for the period from 1.4.2014 to 31.3.2019 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 ("the 2014 Tariff Regulations").

2. The Commission by order dated 8.8.2016 in Petition No. 219/GT/2014 had revised the annual fixed charges of the generating station after truing-up of the additional capital expenditure for 2009-14 in terms of Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, the capital cost and the annual fixed charges approved by order dated 8.8.2016 are as under:

Capital Cost

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	156151.12	156354.08	156449.00	157026.86	156833.45
Add: Additional Capital Expenditure	202.96	94.92	577.86	(-)193.41	29.84
Closing Capital Cost	**156354.08**	**156449.00**	**157026.86**	**156833.45**	**156863.30**
Average Capital Cost	**156252.60**	**156401.54**	**156737.93**	**156930.16**	**156848.38**

Annual Fixed Charges

(₹in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8246.16	8258.01	8286.89	8307.20	8300.59
Interest on Loan	5152.54	4542.23	4164.64	3506.78	2861.12
Return on Equity	11006.90	10890.24	10788.59	10801.82	11048.87
Interest on Working Capital	2485.10	2491.01	2508.27	2514.20	2530.51
O&M Expenses	6500.00	6870.00	7265.00	7680.00	8120.00
Cost of Secondary Fuel Oil	761.89	761.89	763.98	761.89	761.89
Total	**34152.59**	**33813.38**	**33777.36**	**33571.88**	**33622.97**

3. The petitioner vide affidavit dated 11.8.2014 has filed this petition and has sought approval of tariff in accordance with the provisions of the 2014 Tariff Regulations. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner for the period 2014-19 are as under:

Capital Cost

(₹in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	157089.40	157832.10	157832.10	157832.10	157832.10
Add: Additional capital expenditure	742.70	0.00	0.00	0.00	1600.00
Closing capital cost	157832.10	157832.10	157832.10	157832.10	159432.10
Average capital cost	157460.75	157832.10	157832.10	157832.10	158632.10

Annual Fixed Charges

(₹in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8344.95	8364.63	8364.63	2911.30	2971.41
Interest on Loan	2208.20	1533.17	850.60	394.71	203.90
Return on Equity	9626.44	9649.14	9649.14	9649.14	9698.05
Interest on Working Capital	4728.66	4757.04	4765.68	4666.54	4703.81
O&M Expenses	8326.73	8852.48	9409.54	10003.01	10632.96
Compensation Allowance	0.00	100.00	100.00	100.00	100.00
Special allowance	0.00	0.00	0.00	0.00	0.00
Total	**33234.97**	**33256.44**	**33139.59**	**27724.71**	**28310.13**

4. The petitioner has filed the additional information in compliance with the directions of the Commission and has served copies on the respondent. Replies have been filed by the respondents, KSEB and TANGEDCO. In response, the petitioner has filed its rejoinder to the said

replies. We now proceed to examine the claim of the petitioner on prudence check, based on the submissions and the documents available on record, as stated in the subsequent paragraphs.

Capital Cost as on 1.4.2014

5. 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 (3) of Regulation 9 of the 2014 Tariff Regulations provides as under:

> *"9(3) The Capital cost of an existing project shall include the following: (a)the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;*
>
> *(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and*
>
> *(c) expenditure on account of renovation and modernization as admitted by this Commission in accordance with Regulation 15.*

6. The annual fixed charges claimed by the petitioner is based on opening capital cost of ₹157089.40 lakh as on 31.3.2014 as against ₹156863.30 lakh admitted by the Commission in order dated 8.8.2016 in Petition No. 219/GT/2014. The petitioner has also furnished the value of capital cost and liabilities as on 1.4.2014 as per books of accounts in Form-9E. The details of liabilities and capital cost have been reconciled with the information available on record with the Commission as under:

(₹ in lakh)

	As per Form-9E	**As per records of Commission**
Capital cost as on 1.4.2014 as per books	165673.01	165673.01
Liabilities included in the above	2407.96	2407.96

7. It is evident from the above that there is no variation in the capital cost and liabilities position as on 1.4.2014 as per the books and details available with the Commission. Further, out of the total liabilities amounting to ₹2407.96 lakh only liabilities amounting to ₹2338.58 lakh corresponds to approved capital cost of ₹156863.30 lakh (on cash basis) as on 31.3.2014. Accordingly, the opening capital cost to be considered as on 1.4.2014, after removal of un-discharged liabilities works out to ₹156863.30 lakh (on cash basis).

Additional Capital Expenditure

8. Regulation14 (3) of the 2014 Tariff Regulations provides as under:

"14.(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;

(ii) Change in law or compliance of any existing law;

(iii)Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national security/internal security;

(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc."

9. The break-up of the projected additional capital expenditure claimed by the petitioner for the period 2014-19 is detailed as under:

(₹in lakh)

	Regulation	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Work relating to Ash Pond or Ash Handling System	14(3)(iv)	742.70	0.00	0.00	0.00	1600.00
Total		**742.70**	**0.00**	**0.00**	**0.00**	**1600.00**

10. From the table above it is observed that the petitioner has not claimed any other additional capital expenditure under Regulation 14, except for the works related to Ash Pond or Ash Handling under Regulation 14 (3) (iv) of the 2014 Tariff Regulations. The said expenditure is discussed as under:

Work relating to Ash Pond or Ash Handling System

11. The petitioner has claimed projected additional capital expenditure of ₹742.70 lakh in 2014-15 and ₹1600.00 lakh in 2018-19 under Regulation 14(3)(iv) towards works relating to Ash Pond or Ash Handling System. The petitioner in its justification has submitted that the said expenditure projected is for planned works related to ash pond/ ash handling system which is of continuous nature during the operational life of generating station. It has also submitted that works claimed are as per approved scheme and is within the original scope of work of the project.

12. In response to the direction of the Commission vide ROP of the hearing dated 19.4.2016, the petitioner vide affidavit dated 21.6.2016 has clarified that the expenditure of ₹681.48 lakh and ₹1762.08 lakh has been capitalized during the period 2004-09 and 2009-14 respectively under this head.

13. It is noticed that the petitioner has not submitted the total estimated expenditure envisaged for ash handling system/ ash dyke raising within the original scope of work. However, the work relating to Ash pond such as raising of ash dyke etc. are normal expenditure which are required to be undertaken during the life of the coal based plant for utilization of ash and for protection of environment. In this background, we are inclined to allow the capitalization of the expenditure on works relating to Ash Pond or Ash Handling System during 2014-19 under Regulation 14(3)(iv) of the 2014 Tariff Regulations. However, the petitioner is directed to submit the estimated expenditure envisaged for Ash Handling system/ Ash Dyke Raising in the original scope of work at the time of truing-up of tariff in terms of the Regulation 8 of the 2014 Tariff Regulations.

14. Based on the above, the projected additional capital expenditure allowed for the period 2014-19 is as under:

(₹in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
742.70	0.00	0.00	0.00	1600.00

15. Accordingly, the capital cost allowed for the period 2014-19 is as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Capital cost	156863.30	157606.00	157606.00	157606.00	157606.00
Add: Additional Capital Expenditure	742.70	0.00	0.00	0.00	1600.00
Closing Capital cost	**157606.00**	**157606.00**	**157606.00**	**157606.00**	**159206.00**
Average Capital cost	157234.65	157606.00	157606.00	157606.00	158406.00

Debt-Equity Ratio

16. Regulation 19 of the 2014 Tariff Regulations provides as under:

"(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio."

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

(1) The generating Company or the transmission licensee shall submit the resolution f the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilisation made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(2) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.

(3) In case of generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt: equity ration based on actual information provided by the generating company or the transmission licensee as the case may be.

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

17. Accordingly, gross loan and equity of ₹109804.31 lakh and ₹47058.99 lakh respectively as on 31.3.2014 as allowed in order dated 8.8.2016 in Petition No. 219/GT/2014 has been considered as on 1.4.2014. Further, the admitted actual/ projected additional expenditure has been allocated between debt and equity in the ratio of 70:30.

Return on Equity

18. Regulation 24 of the 2014 Tariff Regulations provides as under:

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

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

Provided that:

i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

iii) additional RoE of 0.50% has been allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

19. Regulation 25 of the 2014 Tariff Regulations provides as under:

Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis.

20. The petitioner has claimed return on equity considering the base rate of 15.5% and effective tax rate of 23.939%. However, in line with the directions of the Commission in order dated

27.6.2016 in Petition No. 270/GT/2014 (pertaining to Simhadri STPS, Stage-I of the petitioner company), it is noticed that the effective tax rate (MAT) of 20.961% has been considered for the year 2014-15 and 21.342% for the year 2015-16 onwards up to the year 2018-19 for the purpose of grossing up of base rate of 15.5%. Based on the above, the rate of ROE works out to 19.610% for the year 2014-15 and 19.705% for the year 2015-16 onwards. This is subject to truing up. Accordingly, Return on Equity has been computed as under:

(₹in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Notional Equity- Opening	47058.99	47281.80	47281.80	47281.80	47281.80
Addition of equity due to additional capital expenditure	222.81	0.00	0.00	0.00	480.00
Normative Equity-Closing	**47281.80**	**47281.80**	**47281.80**	**47281.80**	**47761.80**
Average Normative Equity	**47170.39**	**47281.80**	**47281.80**	**47281.80**	**47521.80**
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for respective years	20.961%	21.342%	21.342%	21.342%	21.342%
Rate of Return on Equity (Pre Tax)	19.610%	19.705%	19.705%	19.705%	19.705%
Return on Equity(Pre Tax)-Annualised	**9250.11**	**9316.88**	**9316.88**	**9316.88**	**9364.17**

Interest on loan

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

> ***"26. Interest on loan capital****: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset.*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*
>
> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*
>
> *Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.

22. Interest on loan has been worked out as mentioned below:

i) The gross normative loan amounting to ₹109804.31 lakh has been considered as on 1.4.2014.

ii) Cumulative repayment of ₹78959.41 lakh as on 31.3.2014 has been considered as on 1.4.2014.

iii) Accordingly, the net normative opening loan as on 1.4.2014 works out to ₹30844.90 lakh.

iv) Addition to normative loan on account of approved additional capital expenditure has been considered.

v) Depreciation allowed for the period has been considered as repayment of normative loan during the respective years.

vi) In line with the provisions of the regulation, the weighted average rate of interest has been calculated applying the actual loan portfolio existing as on 1.4.2014 along with subsequent additions during the period 2014-19, if any, for the generating station. In case of loans carrying floating rate of interest the rate of interest as provided by the petitioner has been considered for the purpose of tariff, subject to truing up.

23. Necessary calculations for the interest on loan are as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross opening loan	109804.31	110324.20	110324.20	110324.20	110324.20
Cumulative repayment of loan up to previous year	78959.41	87292.37	95645.01	103997.66	106901.49
Net Loan Opening	**30844.90**	**23031.82**	**14679.18**	**6326.54**	**3422.71**
Addition due to Additional capitalisation	519.89	0.00	0.00	0.00	1120.00
Repayment of loan during the year	8332.96	8352.64	8352.64	2903.84	2963.92
Net Loan Closing	**23031.82**	**14679.18**	**6326.54**	**3422.71**	**1578.79**
Average Loan	26938.36	18855.50	10502.86	4874.62	2500.75
Weighted Average Rate of Interest on Loan	8.2046%	8.1459%	8.1345%	8.1912%	8.3656%
Interest on Loan	**2210.19**	**1535.94**	**854.35**	**399.29**	**209.20**

Depreciation

24. Regulation 27 of the 2014 Tariff Regulations provides as under:

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

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

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

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset: Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff: Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking

into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

25. The cumulative depreciation as on 31.3.2014 allowed vide order dated 8.8.2016 in Petition No. 219/GT/2014 is ₹79105.69 lakh. Further, the value of freehold land included in the average capital cost has been adjusted while calculating depreciable value for the purpose of tariff. Accordingly, the balance depreciable value (before providing depreciation) for the year 2014-15 works out to ₹62405.50 lakh. The used life of the generating station as on 1.4.2014 is less than 12 years from the effective station COD of 25.3.2005. Accordingly, for the period 2014-17 depreciation shall be calculated by applying weighted average rate of depreciation and for the period 2017-19 depreciation shall be calculated by spreading over of the remaining depreciable value over the balance useful life for the respective years. The petitioner has claimed depreciation considering the weighted average rate of depreciation of 5.29% for the period 2014-17 and the same is found to be in order and accordingly considered. This is subject to truing-up. Necessary calculations in support of depreciation are as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Average Capital Cost	157234.65	157606.00	157606.00	157606.00	158406.00
Freehold land included above	0.00	0.00	0.00	0.00	0.00
Depreciable value @ 90%	141511.18	141845.40	141845.40	141845.40	142565.40
Remaining useful life at the beginning of the year	15.98	14.98	13.98	12.98	11.98
Balance depreciable value	62405.50	54406.75	46054.11	37701.47	35517.63
Depreciation (annualized)	**8332.96**	**8352.64**	**8352.64**	**2903.84**	**2963.92**
Cumulative depreciation at the end	87438.65	95791.29	104143.93	107047.77	110011.68

Compensation Allowance

26. Regulation 17(1) of the 2014 Tariff Regulations provides as under:

"17. Compensation Allowance: *In case of coal-based or lignite-fired thermal generating station or a unit thereof, a separate compensation allowance shall be admissible to meet expenses on new assets of capital nature which are not admissible under Regulation 14 of these regulations, and in such an event, revision of the capital cost shall not be allowed on account of compensation allowance but the compensation allowance shall be allowed to be recovered separately.*
(2) The Compensation Allowance shall be allowed in the following manner from the year following the year of completion of 10, 15, or 20 years of useful life."

Years of operation	*Compensation Allowance (₹ in lakh/MW/year)*
0-10	*Nil*
11-15	*0.20*
16-20	*0.50*
21-25	*1.00*

27. The petitioner has claimed compensation allowance as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
0.00	100.00	100.00	100.00	100.00

28. Accordingly, in terms of the above regulations, the compensation allowance is worked out and allowed as under:

(₹ in lakh)

	Unit – I
Capacity in MW	500
COD	25.3.2005
Useful life as on 1.4.2014	9.2
Actual useful life	
a) 10 years	25.3.2015
b) 15 years	25.3.2020
c) 20 years	25.3.2025
d) 25 years	25.3.2030
2014-15	0.00
2015-16	100.00
2016-17	100.00
2017-18	100.00
2018-19	100.00
Total	**400.00**

O&M Expenses

29. Regulation 29(1) (a) of the 2014 Tariff Regulations provides the following O&M expense norms for coal based generating stations of 500MW capacity

(₹ in lakh/MW)

2014-15	2015-16	2016-17	2017-18	2018-19
16.00	17.01	18.08	19.22	20.43

30. Accordingly, the petitioner has claimed O&M expenses for 2014-19 as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
8000.00	8505.00	9040.00	9610.00	10215.00

31. The normative O&M expenses claimed by the petitioner are in terms of the 2014 Tariff Regulations and hence allowed.

Water Charges

32. Regulation 29(2) of the 2014Tariff Regulations provide as under:

"*29 (2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:*

Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:

Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization

33. In terms of the above regulation, water charges are to be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check of the details furnished by the petitioner.

34. The petitioner has claimed water charges for the period 2014-19 as under:

(₹ in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
326.73	347.48	369.54	393.01	417.96

35. The details in respect of water charges such as type of cooling water system, water consumption, rate of water charges as applicable for the year 2013-14 as submitted by the petitioner is as under:

Description	**Remarks**
Type of Plant	Coal
Type of cooling water system	Closed circuit cooling with induced draft cooling tower
Consumption of water	81542 MCF/Year
Rate of water charges	₹28029.75/MCF for water drawn from Sriram Sagar Project (SRSP), for water drawn from Yellampally Project, amount paid is for power drawn for running of pumps.
Total water charges	₹326.73 lakh. The petitioner has kept extra provision of ₹66.26 lakh for pumping charges apart from ₹326.73 lakh actually paid.

36. In response to the directions of the Commission, the petitioner vide affidavit dated 21.6.2016 has submitted the details of the actual water consumption, rate of water charges for the last 5 years i.e. 2010-11 to 2014-15 along with relevant documents in support of the claim as under:

	Quantity of sweet water (Mcft)	**Quantity of sweet water 1Mcft=28314.06 KL (KL)**	**Total Water Charges** ***(₹in lakh)***	**Rate (₹/ KL)**
2009-10	578.548	16381042.78	162.16	0.99
2010-11	797.572	22582501.46	223.55	0.99
2011-12	650.427	18416229.10	182.31	0.99
2012-13	624.733	17688727.65	Water Charges =175.12 Power Charges= 94.6	1.36
2013-14	682.370	19320665.12	Water Charges =191.28 Power Charges=170.88	1.87

37. It is observed that irrespective of the variation in water consumption during the last 5 years, the petitioner has claimed water charges of ₹326.73 lakh for the year 2014-15 based on the actual water consumption in the year 2013-14 and the water charges for the year 2014-15 has been escalated @6.35% each year by the petitioner to claim water charges for the year 2015-16 to 2018-19. Further, the petitioner has submitted that it has kept extra provision of ₹66.26 lakh for pumping charges apart from ₹326.73 lakh actually paid in 2013-14. In justification of the same, the petitioner has submitted the relevant extract from the order dated 2.4.2002 of Government of Andhra Pradesh on fixation of water rate and minutes of meeting dated 14.8.2014 held between State Government of Telangana and the petitioner for applicable rate of water charges for the generating station. Further, the petitioner has submitted that as per the minutes of meeting held on 14.8.2014 by the Principal Secretary to State Government of Telangana, it was proposed by the Irrigation Department that water charges shall comprise of two components i.e. fixed and variable charges and will be billed on monthly basis with effect from August 2012 as follows:

(i) Water Charges @ 2.803 Cr/TMC as per G.O. No.39 Dated 2.4.2002.
(ii) Variable Charges for power for lifting water from SYP to NTPC reservoir.

38. Accordingly, the petitioner has submitted that it is paying water charges as per the rate fixed by Govt. of Telangana from August 2012, and that there is increase in water charges rate from August, 2012.

39. We have examined the matter. As per provisions of Regulation 29(2) of the 2014 Tariff Regulations, water charges are to be allowed separately. It is observed that the petitioner has claimed water charges for the year 2014-15 considering the actual water charges for the year 2013-14 and escalating the same @ of 6.35% for the year 2015-16 to 2018-19. However, the petitioner has not furnished the projected quantity of consumptive water during 2014-19 period. In respect of water charges claimed by the petitioner, it is observed that an amount of ₹66 lakh has been kept as provision for pumping charges but the petitioner has not paid actual amount. However, the petitioner has not claimed the amount ₹66 lakh towards pumping charges. In this background, we have considered the water charges claimed by the petitioner in 2014-15 and allowed the same for 2014-19 without any escalation. However, the petitioner is directed to furnish the details such as the contracted quantity, allocation of water, (i.e. from SRSP & Yellampally

project separately), the rate of power for drawl of water from yellampally project and to transfer to NTPC reservoir, the actual water consumed during 2014-19, the basis of calculation of quantity of consumptive water and computation of water charges at the time of truing-up of tariff in terms of Regulations of the 2014 Tariff Regulations. In addition, the petitioner shall also confirm / clarify as to whether the water charges have been paid on the basis of contracted quantity or on the basis of allocation/actual water consumed.

40. Accordingly, the total O&M expenses, including water charges, as claimed by the petitioner and allowed for the purpose of tariff for 2014-19 is as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
O&M Expenses allowed	8000.00	8505.00	9040.00	9610.00	10215.00
Water Charges allowed	326.73	326.73	326.73	326.73	326.73
Total O&M Expenses allowed	**8326.73**	**8831.73**	**9366.73**	**9936.73**	**10541.73**

Capital spares

41. The petitioner has not claimed capital spares on projection basis during the period 2014-19. Accordingly, the same has not been considered in this order. The claim of the petitioner, if any, at the time of truing-up of tariff, shall be considered on merits, after prudence check.

Operational Norms

42. The operational norms in respect of the generating station considered by the petitioner are as under:

Target Availability (%)	83.0
Heat Rate (kcal/kwh)	2375.0
Auxiliary power consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50

43. The operational norms claimed by the petitioner are discussed as under.

Normative Annual Plant Availability Factor

44. Regulation 36 of the 2014 Tariff Regulations provides as under:

(a) All Thermal generating stations, except those covered under clauses (b) (c) (d) &(e)- 85%.

Provided that in view of the shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.

The above provision shall be reviewed based on actual feedback after 3 years from 01.04.2014.

45. The petitioner has considered the Target Availability of 83% for the period 2014-19. The Commission due to shortage of domestic coal supply has relaxed Target Availability norm to 83% for first 3 years from 1.4.2014 and the same shall be reviewed after 3 years. Accordingly, in terms of the Regulation 36(A) of the 2014 Tariff Regulations, the Target Availability of 83% is considered for the period 2014-17 and 85% for the period 2017-19.

Heat Rate (kcal/kwh)

46. Regulation 36(C) (a) (i) of the 2014 Tariff Regulations provides the Gross Station Heat Rate of 2375 kCal/kWh for the generating station. Accordingly, the station heat rate of 2375kCal/kWh as considered by the petitioner is in order and is allowed.

Auxiliary Power Consumption

47. Regulation 36(E)(a) of the 2014 Tariff Regulations provides Auxiliary Power Consumption of 5.25% for the coal based generating stations of 500 MW sets which is further increased by 0.5% with Induced Draft cooling tower with steam driven BFP. Accordingly, the Auxiliary Energy Consumption of 5.75% considered by the petitioner is in order and is allowed.

Specific Oil Consumption

48. Regulation 36(D)(a) of the 2014 Tariff Regulations, provides Secondary fuel oil Consumption of 0.50 ml/kWh for coal-based generating station. Accordingly, the Secondary fuel oil Consumption considered by the petitioner is in order and is allowed.

Interest on Working Capital

49. Sub-section (b) of clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:

> *"28. Interest on Working Capital:*
>
> *(1) The working capital shall cover:*
>
> *(a) Coal-based/lignite-fired thermal generating stations:*
>
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
>
> *(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;*

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 29;

(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses for one month.

Fuel Components and Energy Charges in working capital

50. The petitioner has claimed cost for fuel components in working capital based on 'as fired' GCV of coal procured and burnt for the preceding three months of January, 2014, February, 2014 and March, 2014 and secondary fuel oil for the preceding three months of January, 2014, February, 2014 and March, 2014, as under:

(₹in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of Coal for 2 months	13431.24	13468.04	13431.24	13431.24	13431.24
Cost of Secondary fuel oil 2 months	133.10	133.46	133.10	133.10	133.10

51. The Commission vide ROP of the hearing dated 27.2.2015 had directed the petitioner to submit the GCV of coal on 'as received' basis. In response, the petitioner vide affidavit dated 4.6.2015 has submitted that they did not have suitable infrastructure for measurement of representative GCV on 'as received' basis.

52. The issue of 'as received' GCV for computation of energy charges was challenged by NTPC and other generating companies through writ petition in the Hon'ble High Court of Delhi. The writ petition was heard on 7.9.2015 and Hon'ble High Court of Delhi had directed that the Commission shall decide the place from where the sample of coal should be taken for measurement of GCV of coal on as received basis within 1 month on the request of petitioners.

53. As per the directions of the Hon'ble High Court, the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014 has decided as under:

"58. In view of the above discussion, the issues referred by the Hon'ble High Court of Delhi are decided as under:

(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking

samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations.

(b) The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part1/Section1)-1964 which has been elaborated in the CPRI Report to PSERC."

54. Further, the petitioner has claimed Energy Charge Rate (ECR) of 237.529 Paise/kWh based on the weighted average price, GCV of coal (as fired basis) & oil procured and burnt for the preceding three months. It is observed that the petitioner has not placed on record the GCV of coal on 'as received' basis though the petitioner was statutorily required to furnish such information with effect from 1.4.2014. In compliance with the direction of the Hon'ble High Court of Delhi, the Commission in its order dated 25.1.2016 in Petition No. 283/GT/2014 has clarified that the measurement of GCV of coal on as received basis shall be taken from the loaded wagons at the unloading point either manually or through the Hydrolic Augur. The petitioner has not submitted the required data regarding measurement of GCV of coal in compliance with the directions contained in the said order dated 25.1.2016. The present petition cannot be kept pending till the petitioner submits the required information. Hence, the Commission has decided to compute fuel components and the energy charges in the working capital by provisionally taking the GCV of coal on as 'billed basis' and allowing an adjustment for total moisture as per the formula given as under:

$$\frac{\text{GCV X (1-TM)}}{(1 - \text{IM})}$$

Where: GCV=Gross Calorific value of coal
TM=Total moisture
IM= Inherent moisture

55. In view of the above, the cost for fuel components in working capital have been computed at 83% NAPAF for the years 2014-15, 2015-16 and 2016-17 and at 85% NAPAF for the year 2017-18 & 2018-19 and based on 'as billed' GCV of coal and price of coal procured and secondary fuel oil for the preceding three months from January 2014 to March 2014 and allowed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal for stock-30 days	5071.20	5071.20	5071.20	5193.40	5193.40
Cost of Coal for Generation-30 days	5071.20	5071.20	5071.20	5193.40	5193.40
Cost of Secondary fuel oil 2 months	133.10	133.46	133.10	136.31	136.31

56. Similarly, the ECR based on operational norms specified in 2014 Regulations and on 'as billed' GCV of coal for preceding 3 months i.e. March to January 2014 is worked out as under:

Sr. No.		**Unit**	**2014-19**
1	Capacity	MW	500
2	Gross Station Heat Rate	Kcal/kWh	2375
3	Aux. Energy Consumption	%	5.75
4	Weighted average GCV of oil (As fired)	Kcal/lit	10075
5	Weighted average GCV of Coal (As Billed)	Kcal/kg	4384.667
6	Adjustment on account of coal received at the generating station for equilibrated basis (Air dried) in the billed GCV Of Coal India		*
7	Weighted average price of oil	₹/KL	43934.481
8	Weighted average price of Coal	₹/MT	3139.97
9	**Rate of energy charge ex-bus**	**₹/kWh**	**1.824****

** To be calculated by the petitioner based on the adjustment formula*
*** To be revised as per the figures at Sr. No. 6*

57. The GCV of coal as computed above shall be adjusted in the light of the GCV of coal on 'as received basis' computed by the petitioner as per our directions in order dated 25.1.2016 in Petition No. 283/GT/2014.

58. Energy charges for 2 months on the basis of 'as billed' GCV for the purpose of interest on working capital has been worked out as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of Coal for 60 days	10142.40	10142.40	10142.40	10386.80	10386.80
Cost of Secondary fuel oil for 2 month	133.10	133.46	133.10	136.31	136.31
Energy Charges for 2 months (Coal +oil)	10416.15	10444.69	10416.15	10667.14	10667.14

Maintenance Spares

59. The petitioner has claimed maintenance spares in the working capital as under:

(₹ in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
1665.35	1770.50	1881.91	2000.60	2126.59

60. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the operation & maintenance expenses as specified in Regulation 29. As specified in Regulation 29 (2) of the 2014 Tariff Regulations, maintenance spares @ 20 % of the operation & maintenance expenses, including water charges, is allowed as under:

(₹ in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
1665.35	1766.35	1873.35	1987.35	2108.35

Receivables

61. Receivables equivalent to two months of capacity charge and energy charges has been worked out and allowed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges -2 months	10416.15	10444.69	10416.15	10667.14	10667.14
Fixed Charges – 2 months	5325.13	5314.97	5292.80	4398.55	4491.55
Total	**15741.27**	**15759.65**	**15708.94**	**15065.69**	**15158.69**

O & M Expenses (1 month)

62. O&M expenses for 1 month claimed by the petitioner for the purpose of working capital are as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
693.89	737.71	784.13	833.58	886.08

63. Regulation 28(a)(vi) of Tariff Regulations, 2014 provides Operation and maintenance expenses for one month for coal-based generating station. The O&M expenses(1 month) including water charges, as allowed for the purpose of tariff is as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
693.89	735.98	780.56	828.06	878.48

Rate of interest on working capital

64. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

"Interest on working Capital: (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."

65. In terms of the above regulations, SBI PLR of 13.50% (Bank rate 10.00 + 350 bps) has been considered for the purpose of calculating interest on working capital. Interest on working capital has been computed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of coal toward stock – 30 days	5071.20	5071.20	5071.20	5193.40	5193.40
Cost of coal towards generation - 30 days	5071.20	5071.20	5071.20	5193.40	5193.40
Cost of secondary fuel oil - 2 months	133.10	133.46	133.10	136.31	136.31
Maintenance Spares - 20% of O&M	1665.35	1766.35	1873.35	1987.35	2108.35
Receivables	15741.27	15759.65	15708.94	15065.69	15158.69

O&M expenses - 1 month	693.89	735.98	780.56	828.06	878.48
Total Working Capital	**28376.02**	**28537.85**	**28638.36**	**28404.20**	**28668.62**
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	**3830.76**	**3852.61**	**3866.18**	**3834.57**	**3870.26**

66. Accordingly, the annual fixed charges approved for the generating station for the period from 2014-19 is summarized as under**:**

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Depreciation	8332.96	8352.64	8352.64	2903.84	2963.92
Interest on Loan	2210.19	1535.94	854.35	399.29	209.20
Return on Equity	9250.11	9316.88	9316.88	9316.88	9364.17
Interest on Working Capital	3830.76	3852.61	3866.18	3834.57	3870.26
O&M Expenses	8326.73	8831.73	9366.73	9936.73	10541.73
Compensation Allowance	0.00	100.00	100.00	100.00	100.00
Total	**31950.76**	**31989.80**	**31856.78**	**26491.30**	**27049.29**

Note: All figures are on annualised basis. All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column.

Month to Month Energy Charges

67. Clause 6 sub-clause (a) of Regulation 30 of the 2014 Tariff Regulations provides for computation and payment of Capacity Charge and Energy Charge for thermal generating stations:

"30(6). Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal place in accordance with the following formula:

(a) For coal based and lignite fired stations

ECR = {(GHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = (a) Gross calorific value of primary fuel as received, in kCal per kg, for coal based stations
(b) xxx
(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio

SFC = Normative Specific fuel oil consumption, in ml per kWh.

LPSFi= Weighted Average Landed Price of Secondary Fuel in Rs/ml during the month."

68. The petitioner shall compute and claim the Energy Charges on month to month basis from the beneficiaries based on the formulae given under Regulation 30(6)(a) of the 2014 Tariff Regulations read with Commission's order dated 25.1.2016 in Petition No. 283/GT/2014.

69. The petitioner has been directed by the Commission in its order dated 19.2.2016 in Petition No. 33/MP/2014 to introduce helpdesk to attend to the queries of the beneficiaries with regard to the Energy Charges. Accordingly, contentious issues if any, which arise regarding the Energy Charges, should be sorted out with the beneficiaries at the Senior Management level.

Application filing fee and Publication Expenses

70. The petitioner has sought reimbursement of filing fee and also the expenses incurred towards publication of notices for application of tariff for the period 2014-19. The petitioner has deposited the filing fees of ₹2200000/- each for the year 2014-15 in terms of the provisions of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012. Accordingly, in terms of Regulation 52 of the 2014 Tariff Regulations and in line with the decision in Commission's order dated 5.1.2016 in Petition No. 232/GT/2014, we direct that the petitioner shall be entitled to recover *pro rata,* the filing fees for the period 2014-15 and the expenses incurred on publication of notices directly from the respondents, on production of documentary proof. The filing fees for the remaining years of the tariff period 2015-19 shall be recovered *pro rata* after deposit of the same and production of documentary proof.

71. The annual fixed charges approved for the period 2014-19 as above are subject to truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.

72. Petition No. 268/GT/2014 is disposed of in terms of the above.

-Sd/-	***-Sd/-***	***-Sd/-***
[Dr. M.K.Iyer]	**[A.K.Singhal]**	**[Gireesh B.Pradhan]**
Member	**Member**	**Chairperson**