CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 401/GT/2014

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

Date of Order: 18.8.2016

IN THE MATTER OF

Approval of tariff of UNOSUGEN Power Plant (382.5 MW) of Torrent Power Limited for the period from 1.4.2014 upto 31.3.2019

AND

IN THE MATTER OF

Torrent Power Ltd
Torrent House, Off Ashram Road,
Near Income Tax Circle,
Ahmedabad - 380009 …**Petitioner**

Vs

1. Torrent Power Ltd
(Ahmedabad Distribution) Electricity House,
Lal Darwaja, Ahmedabad – 380001

2. Torrent Power Ltd (Surat Distribution)
Torrent House, Station Road,
Surat – 395003

3. PTC India Ltd.
2nd floor, NBCC Tower,
Bhikhaji Cama Place,
New Delhi – 110066

4. Madhya Pradesh Power Management Co. Ltd.
Shakti Bhavan,
Vidyut Nagar, Jabalpur – 482008 **…Respondents**

Parties present:

Shri A.K. Ghosh, TPL
Shri Naresh K. Joshi, TPL
Shri R.S. Negi, TPL

ORDER

This petition has been filed by petitioner, Torrent Power Ltd (TPL) for approval of tariff of UNOSUGEN Power Plant (382.5 MW) (the generating station) for the period 2014-19, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 ('the 2014 Tariff Regulations').

2. TPL is a public limited company incorporated under Companies Act, 1956 and is carrying on the business of generation and distribution of electricity in the cities of Ahmedabad, Surat, Gandhinagar, Bhiwandi and Agra. The petitioner has set up the generating station at the premises where the SUGEN power plant (1147.5 MW) of the petitioner is located. The present generation capacity of the petitioner is around 2079.6 MW and one more project of 1200 MW is at an advanced stage of implementation. The petitioner has submitted that the project has been awarded Mega Power status by the Government of India vide its letter dated 29.7.2010.

3. The petitioner has entered into long term Power Purchase Agreement (PPA) with PTC India Ltd for sale of 35 MW of power from the generating station and PTC will sell the power on back-to-back basis to the respondent, MPPMCL, the beneficiary herein. Also, the petitioner will supply 278 MW of power to its licensed distribution divisions located in Ahmedabad, Gandhinagar and Surat under the long term PPAs to be approved by the Gujarat Electricity Regulatory Commission and the residual power is being sold by the petitioner through short term bilateral contract/or through Power Exchange. The main fuel of the project comprises of a mix of domestic natural gas and Re-gasified Liquefied Natural Gas (R-LNG).

4. The Commission by order dated 6.12.2013 in Petition No. 175/GT/2013 had approved the annual fixed charges of the generating station for the period from 4.4.2013 to 31.3.2014, considering the capital cost of ₹160855.09 lakh as on 4.4.2013. Thereafter, the Commission vide order dated 30.10.2015 in Petition No.121/GT/2014 approved the annual fixed charges of the generating station for the period 4.4.2013 to 31.3.2014 after considering the capital cost of

₹173442.58 lakh as on 31.3.2014. The capital cost and annual fixed charges approved by the said order dated 31.10.2015 is as under:

Capital cost

(₹ in lakh)

	2013-14 (4.4.2013 to 31.3.2014)
Opening Capital Cost	158961.14
Add: Additional Capital Expenditure	14481.44
Closing Capital Cost	**173442.58**
Average Capital Cost	**166201.86**

Annual Fixed Cost

(₹ in lakh)

	2013-14
Return on Equity	9777.66
Interest on Loan	11155.78
Depreciation	8472.97
Interest on Working Capital	5231.29
O&M Expenses	11466.55
Total	**46104.25**

5. The petitioner has filed the additional information in compliance with the directions of the Commission. None of the respondents have filed reply in the matter. We now proceed to examine the claim of the petitioner, on prudence check, based on the submissions and the documents available on records as stated in the subsequent paragraphs.

Capital Cost as on 1.4.2014

6. Clause 3 of Regulation 9 of the 2014 Tariff Regulations provides as under:

"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 tured 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 modernisation as admitted by this Commission in accordance with Regulation 15."

7. The annual fixed charges claimed by the petitioner is based on opening capital cost of ₹173442.58 lakh as on 31.3.2014 as admitted by the Commission in order dated 30.10.2015 in Petition No. 121/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	Difference
Capital cost as on 1.4.2014 as per books	182681.27	182681.27	0.00
Liabilities included in the above	3856.19	9726.46	(-) 3543.88

8. The difference as computed above is after considering FERV liability of ₹2326.39 lakh, which appears to have not been included by the petitioner in the liability of ₹3856.19 lakh as shown above. We direct the petitioner to submit clarification on the differential liability of ₹3543.88 lakh at the time of revision of tariff based on truing-up exercise in terms of Regulation 8 of the 2014 Tariff Regulations. Moreover, this difference being negative, for the present, the same has been ignored for the purpose of tariff. Accordingly, the closing capital cost of ₹173442.58 lakh as on 31.3.2014 as considered by the Commission in order dated 30.10.2015 in Petition No. 121/GT/2014 has been considered as the opening capital cost as on 1.4.2014 for the purpose of determination of tariff of the generating station for the period 2014-19.

Actual/ Projected Additional Capital Expenditure

9. Regulation 14 (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 of 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.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the

documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and

(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation."

10. The petitioner vide affidavit dated 16.5.2016 has claimed the projected additional capital expenditure for the period 2014-19 as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Net discharge of liability	2155.88	1700.31	0.00	0.00	0.00	3856.19
Payment of FERV (incurred up to COD)	334.04	1992.35	0.00	0.00	0.00	2326.39
Additional Capital Expenditure	573.58	103.16	0.00	0.00	0.00	676.74
Routine Capital Expenditure	0.00	0.00	50.00	50.00	50.00	150.00
Total	**3063.50**	**3795.82**	**50.00**	**50.00**	**50.00**	**7009.32**

11. The petitioner vide ROP of hearing dated 29.2.2016 was directed to furnish the details of the projected additional capital expenditure for the period 2014-19 along with the relevant provision of the Regulations under which such claims have been made. In response, the petitioner has

submitted that the expenditure claimed are in order to meet the routine capital expenditure, but has not furnished any details of the works which are claimed for capitalisation along with justification. In the absence of any detailed break-up and justification for the additional capital expenditure claimed, no prudence check of the claim is possible. In view of this, we do not allow the total additional capital expenditure of ₹826.74 lakh claimed for the period 2014-19. However, the petitioner is granted liberty to submit the details of the claim for additional capital expenditure with proper justification, at the time of truing-up of tariff and the same will be considered in accordance with law.

12. The discharge of liabilities of ₹3856.19 lakh during the years 2014-15 and 2015-16 and the payment of FERV of ₹2326.39 lakh (incurred up to the COD) which form part of the original scope of work of the project is allowed under Regulation 14 (1) (i) of the 2014 Tariff Regulations.

13. Based on the above, the additional capital expenditure claimed by the petitioner is allowed as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Net discharge of liability	2155.88	1700.31	0.00	0.00	0.00	3856.19
Payment of FERV (incurred up to COD)	334.04	1992.35	0.00	0.00	0.00	2326.39
Total	**2489.92**	**3692.66**	**0.00**	**0.00**	**0.00**	**6182.58**

14. Accordingly, the capital cost of the generating station for the period 2014-19 is allowed as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening capital cost	173442.58	175932.50	179625.16	179625.16	179625.16
Projected additional capital expenditure admitted	2489.92	3692.66	0.00	0.00	0.00
Closing capital cost	**175932.50**	**179625.16**	**179625.16**	**179625.16**	**179625.16**
Average capital cost	**174687.54**	**177778.83**	**179625.16**	**179625.16**	**179625.16**

Debt–Equity Ratio

15. 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-equtiy 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.*

(2) 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.

(3) 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.

(4) 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.

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

16. Accordingly, the gross normative loan and equity amounting to ₹121409.80 lakh and ₹52032.77 lakh respectively as on 31.3.2014 as considered in order dated 30.10.2015 has been considered as the gross normative loan and equity as on 1.4.2014. The normative debt equity ratio of 70:30 has been considered on the admitted additional capital expenditure. This is subject to truing-up in terms of the 2014 Tariff Regulations.

Return on Equity

17. 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% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

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.

18. 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.

19. The petitioner has claimed return on equity considering the base rate of 15.5% and the effective tax rate of 20.9605% (MAT rate for the year 2014-15) for the period 2014-19. Though the

2014 Tariff Regulations specify the computation of effective tax rate on the basis of tax paid, we deem it proper to allow the grossing up on MAT rate considering the fact that the matter is being decided and disposed of during 2016-17. Accordingly, for the present, 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 till 2018-19 for grossing up of base rate of 15.5%. Based on the above, the rate of ROE works out to 19.610% for 2014-15 and 19.705% for 2015-16 onwards. This is subject to truing-up in terms of the 2014 Tariff Regulations. Accordingly, the Return on equity has been worked out as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Normative Equity	52032.77	52779.75	53887.55	53887.55	53887.55
Addition due to Additional capital expenditure	746.98	1107.80	0.00	0.00	0.00
Closing Equity	52779.75	53887.55	53887.55	53887.55	53887.55
Average Equity	52406.26	53333.65	53887.55	53887.55	53887.55
Rate of Return on Equity	15.500%	15.500%	15.500%	15.500%	15.500%
Effective tax rate	20.961%	21.342%	21.342%	21.342%	21.342%
Return on Equity (Pre-tax)	19.610%	19.705%	19.705%	19.705%	19.705%
Return on Equity (Pre-tax) – (annualized)	**10276.87**	**10509.40**	**10618.54**	**10618.54**	**10618.54**

Interest on Loan

20. 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 de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset.

(4) Notwithstanding any moratorium period availed by the generating company orthe 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."

21. Interest on loan has been worked out as under**:**

(a) The gross normative loan of ₹121409.80 lakh as on 1.4.2014 has been considered.

(b) Cumulative repayment of loan of ₹8403.33 lakh as on 31.3.2014 as considered in order dated 30.10.2015 in Petition No. 121/GT/2014 has been considered as on 1.4.2014.

(c) Accordingly, the net normative opening loan as on 1.4.2014 works out to ₹ 113006.48 lakh.

(d) Addition to normative loan on account of the admitted additional capital expenditure has been considered on year to year basis.

(e) Depreciation allowed for the period has been considered as repayment of normative loan during the respective year for the period 2009-14.

(f) Differences in the actual loan portfolio as submitted in the petition as against those available on record have been observed. However, considering the fact that the tariff of the generating station is subject to revision based on truing-up exercise, the weighted average rate of interest on loan as claimed by the petitioner has been considered for the purpose of tariff and is subject to truing-up exercise in terms of Regulation 8 of the 2014 Tariff Regulations.

22. Necessary calculation for interest on loan is as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Notional Loan	121409.80	123152.75	125737.61	125737.61	125737.61
Cumulative Repayment of Loan up to previous year	8403.33	16988.13	25735.23	34573.17	43411.11
Net Opening Loan	113006.48	106164.61	100002.38	91164.44	82326.51
Addition due to additional capitalisation	1742.94	2584.86	0.00	0.00	0.00
Repayment of Loan during the period	8584.80	8747.09	8837.94	8837.94	8837.94
Net Closing Loan	**106164.61**	**100002.38**	**91164.44**	**82326.51**	**73488.57**
Average Loan	109585.54	103083.50	95583.41	86745.47	77907.54
Weighted Average Rate of Interest on loan	10.122%	11.338%	11.560%	11.560%	11.560%
Interest on loan	**11092.25**	**11687.61**	**11049.44**	**10027.78**	**9006.11**

Depreciation

23. Regulation 27of 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 upto 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."

24. The cumulative depreciation amounting to ₹8403.33 lakh as on 31.3.2014 as considered in order dated 30.10.2015 has been considered for the purpose of tariff. Further, the value of freehold land if any, 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 ₹155189.90 lakh. Since as on 1.4.2014, the used life of the generating station is 0.99 years which is less than 12 years from the effective station COD of 4.4.2013, depreciation has shall be calculated by applying weighted average rate of depreciation. However, the petitioner has claimed the depreciation considering the weighted average rate of depreciation of 5.098% for the period 2014-19. It is noticed that in the instant petition the petitioner has not submitted Form-11 showing gross block position as on 31.3.2014. Also, the asset-wise break-up of the gross block as on 31.3.2015 (as submitted at Form-11) does not match with that of the audited fixed asset schedule as on 31.3.2015. As such, the weighted average rate of depreciation has been computed by applying the depreciation rates as per Appendix-II of the 2014 Tariff Regulations, on the value of assets as per audited fixed asset schedule as on 1.4.2014 and 31.3.2015. Accordingly, the weighted average rate of depreciation works out to 4.914% for the year 2014-15 and 4.920% for the year 2015-16. Since the audited fixed asset schedule for the period 2016-19 is not available, the weighted average rate of depreciation of 4.920% has been considered for the period 2016-19. This is subject to truing-up in terms of the 2014 Tariff Regulations. Accordingly, depreciation has been computed as follows:

(₹ In lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Average Capital Cost	174687.54	177778.83	179625.16	179625.16	179625.16
Freehold land included above	0.00	0.00	0.00	0.00	0.00
Depreciable value @ 90%	157218.78	160000.95	161662.64	161662.64	161662.64
Remaining useful life at the beginning of the year	24.01	23.01	22.01	21.01	20.01
Balance depreciable value	148815.45	143012.81	135927.41	127089.48	118251.54
Depreciation (annualized)	**8584.80**	**8747.09**	**8837.94**	**8837.94**	**8837.94**
Cumulative depreciation at the end	16988.13	25735.23	34573.17	43411.11	52249.04

O&M Expenses

25. Regulation 29 (1) (c) of the 2014 Tariff Regulations provides the year-wise O&M expense norms claimed for the generating station of the petitioner as under:

(₹ in lakh/MW)

2014-15	2015-16	2016-17	2017-18	2018-19
26.55	28.36	30.29	32.35	34.56

26. Accordingly, the year-wise O&M expenses claimed by the petitioner in terms of the above said norms are allowed as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
10155.38	10847.70	11585.93	12373.88	13219.20

Water Charges

27. Regulation 29(2) of the 2014 Tariff 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 capitalisation or consumption of stores and spares and renovation and modernization*

28. 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.

29. The petitioner has claimed water charges based on the expected water consumption of the generating station and the type of cooling water system has also been furnished. The water charges claimed by the petitioner are as follows:

(₹in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
712.49	785.89	862.12	948.33	1043.16

30. In order to examine the trend of the actual water consumption and rate of water charges, the petitioner was directed vide ROP of the hearing dated 16.2.2015 to furnish the details of the actual water consumption along with the rate of water charges for the last five years (i.e 2009-10 to 2013-14) along with relevant notification in support of the same. The details in respect of water

charges such as type of cooling water system, water consumption, rate of water charges as applicable for 2013-14 have been furnished by the petitioner as under:

	Water Consumption [Cu. M.]	Rate (₹/Cu.M)	Water Charges [₹]
Actual			
COD to 31.3.2014	0	16.10	0
2014-15	0	17.72	0
2015-16			
1.4.2015 to 31.5.2015	0	19.49	0
1.6.2015 to 31.12.2015	687673	19.49	13402747
Projected			
2015-16 (1.1.2016 to 31.3.2016)	1002456	19.49	19537867
2016-17	4020840	21.44	86210830
2017-18	4020840	23.59	94831511
2018-19	4020840	25.94	10436673

31. The petitioner has furnished statement of water charges paid duly certified by Auditor on 18.3.2016 which indicate that the unit was not in operation after COD (4.4.2013) till 31.5.2015 due to non-allocation of domestic gas by the Govt. of India under the Gas utilisation scheme. It is observed that the unit was under commercial operation during the period from 1.6.2015 to 31.12.2015 under the e-bid RLNG scheme of the Govt. of India. Therefore, the actual water consumption data is only for a period of 7 months since the COD of generating station on 4.4.2013 and operated at a low PLF. Accordingly, it would not be prudent to consider the actual water consumption for 7 months at a low PLF in order to work out the water consumption on projection basis for the period from 2015-16 to 2018-19. Since this generating station which has one block of 382.5 MW capacity is located in the same premises of Sugen CC Power Project (1147.5 MW) (3 blocks of 382.5 MW each) of the petitioner, the likely water consumption of one block of this generating station would be 1/3rd of the water consumption projected for Sugen CCPP in Commission's order dated 6.10.2015 in Petition No. 186/GT/2014. It is observed that in the said order dated 6.10.2015, the Commission had allowed water consumption of 8226229 m^3 for 3 blocks of Sugen CCPP in a year during the tariff period 2014-19. Accordingly, 1/3rd water consumption of this generating station works out to 2675410 m^3 (8026229/3) and the same is considered for

allowing water charges on projection basis during each year for the period from 2015-16 to 2018-19.

Rate of water Charges during the period COD to 31.3.2019

32. The petitioner has submitted that the water supply agreement was executed on 20.4.2005 between the petitioner and the State of Government of Gujarat. It has also submitted that the said water supply agreement is to be read with Notification dated 3.2.2007 issued by the Narmada Water Resources & Water Supply Department of the State of Gujarat. It has also submitted that the said notification deals with:

(a) the rate of water charges per M^3 with declaration of water charges for 2008-09 @ ₹10/M^3

(b) yearly upward revision of water charges @10% p.a on and from 2008-09 and

(c) clause for imposition of penalty for under drawl. As per Clause B(2) of the notification penalty is to be imposed if the actual water consumption is less than 75% of permitted water consumption.

33. It is observed from the water agreement dated 20.4.2005 and 27.3.2015 that the permitted quantum of water that can be drawn by TPL for 1050 MW combined cycle power plant at Akhakol, District Surat is 15 M.G.D i.e. 68190 m^3/day which converts to 24.89 million m^3/year and 75% of this works out to 18.67 m^3/year. The projected consumption of water in case of Sugen CCPP as submitted by the petitioner in Petition No. 186/GT/2014 was 11.86 million m^3/year and in case of Uno-Sugen projected quantum as per the petitioner is 4.0 million m^3 /year. Thus, the total projected consumption works out to 15.86 million m^3/year which is much below than 75% (18.67 million) of permitted quantity of 24.89 million m^3. As per the submission of petitioner, the combined station has to pay penalty in each year of the tariff period. However, as per the auditor certificate for actual water consumption, the penalty appears to have not been paid by the petitioner. The non levy of penalty on consumption of water less than 75% of permitted quantity shall be clarified by the petitioner at the time of truing-up of tariff.

34. The petitioner has clarified that the contents in the notification are applicable to all types of consumers including Private Industries, Central and State Public Undertaking, Gujarat Industrial Development Nigam, Gujarat State Electric Corporation Limited and all other Non-agricultural

water users. Based on the above principles, the projection for water charges rate for the period 2014-19 as submitted by the petitioner is as under:

Rates for supply of water for Industrial use

	Water rates per 1000 ltr
2006-07	₹ 8.00
2007-08	₹ 9.00
2008-09	₹ 10.00 will be applicable

Thereafter, there shall be an increase of 10% in each financial year in the rate of water supply.

35. The petitioner has submitted the water charges rate for the period 2014-15 to 2018-19 as under:

	Rate / Cu. M.	**Basis(as per water charges agreements dated 20.4.2005 and dated 27.3.2015**
2014-15	17.72	10% hike over actual rate of ₹16.10/- for 2013-14
2015-16	19.49	10% hike over actual rate of ₹17.72/- for 2014-15
2016-17	21.441	10% hike over actual rate of ₹19.492/- for 2015-16
2017-18	23.585	10% hike over actual rate of ₹21.441/- for 2016-17
2018-19	25.944	10% hike over actual rate of ₹23.585/- for 2017-18

36. Having considered the projected quantum of water to be considered in the power plant from 2015-16 to 2018-19 and the rate of water/m^3 as per the notification dated 3.2.2007 furnished by the petitioner, the water charges allowed are as under:

	Projected Quantity (M^3)	**Rate (₹/M^3)**	**Water Charges [in lakh]**
2014-15 (actual)	0.00	17.72	0.00
2015-16 (From1.6.2015 to 1.12.2015) (actual) (From1.1.2016 to 1.3.2016) (projected) **Total**	2675410	19.49	**521.44**
2016-17 (projected)	2675410	21.441	573.63
2017-18 (projected)	2675410	23.585	631.00
2018-19 (projected)	2675410	25.944	694.00

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

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
O&M Expenses as claimed	10155.38	10847.70	11585.93	12373.88	13219.20	58182.09
O&M Expenses as allowed	10155.38	10847.70	11585.93	12373.88	13219.20	58182.09
Water Charges as claimed	712.49	785.89	862.12	948.32	1043.16	4351.99

Water Charges as allowed	**0.00**	**521.44**	**573.63**	**631.00**	**694.11**	**2420.18**
Total O&M Expenses as claimed (including Water charges)	10867.87	11633.59	12448.05	13322.21	14262.36	62534.08
O&M Expenses allowed (including water charges)	**0.00**	**11369.14**	**12159.56**	**13004.88**	**13913.31**	**60602.23**

Operational Norms

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

Target Availability for recovery of fixed charges (%)	85.00
Gross Station Heat Rate (kcal/kwh) Combined cycle	1850.00
Auxiliary Energy Consumption (%)	2.5

39. The operational norms claimed by the petitioner are in accordance with Regulation 36 of the 2014 Tariff Regulations and is allowed.

Interest on Working Capital

40. 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

(b) Open-cycle Gas Turbine/Combined Cycle thermal generating stations

(i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

(ii) Maintenance spares @ 30% of operation and maintenance expense specified in regulation 29; and

(iii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel';

(iv)Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

(v) Operation and maintenance expenses for one month."

Fuel Components and Energy Charges in working capital

41. The petitioner has claimed fuel cost based on fuel for 30 days corresponding to normative annual plant availability factor, taking into account the mode of operation of generating station on

gas fuel. The petitioner vide affidavit dated 16.5.2016 has claimed the fuel cost for 30 days corresponding to NAPAF of 85 % of tariff period as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Fuel cost (30 days)	8623.42	8623.42	8623.42	8623.42	8623.42

42. It is observed that the petitioner has not used any liquid fuel during 2013-14 i.e. during the preceding three months from January, 2014 to March, 2014 and from 1.4.2014. Accordingly, the petitioner is not entitled for liquid fuel stock in the working capital.

43. The petitioner vide affidavit dated 26.8.2014 has submitted fuel details in Form-15 of the petition for the months of January 2013, February 2013 and from March 2013 till COD of the generating station. For computation of fuel components and 2 months energy charges in working capital for the period 2014-19, the fuel details of the preceding three months i.e. January, 2014 to March, 2014 is required to be submitted by the petitioner. Accordingly, the petitioner was directed vide ROP of hearing dated 16.2.2016 to furnish fuel details in Form-15 along with justification as to (i) why the unit of Uno-Sugen CCPP was not in operation after COD and (ii) whether the Unit is presently under operation and If so, the fuel details for the preceding 3 months in Form-15 in Indian Rupees.

44. In response, the petitioner vide affidavit dated 16.5.2016 has mainly submitted as under:

> (a) The fuel details of preceding 3 months covering the period January, 2013 to COD (i.e. 4th Apr, 2013) has been submitted. The domestic fuel was not available for commissioning of the Project and hence the petitioner has sourced the commissioning fuel on spot basis from the market, price of which was very high.
>
> (b) As per the tariff filing forms, the information of commissioning fuel is as shown in Form No. 15 and the details of the same are to be applicable for purpose of computation of Energy Charges (ECR). In case we consider the details of commissioning fuel for determination of ECR, the ECR shall be very high and be uneconomical. Therefore, Form No. 15 is being submitted only for purpose of compliance of Regulatory Forms and not for purpose of determination of Fuel cost /ECR.
>
> <u>Basic assumptions considered by the petitioner for purpose of determination of ECR</u>.
>
> (c) Currently, the LNG price is on falling trend trait and based on the DES $5 per mmbtu LNG price, the ECR has been determined with the broad reasons as below:
>
> (d) On consideration of landed fuel cost for tariff determination stated in para 23 of Chapter 5 under 2014 Tariff Regulations, the basis of landed fuel cost for tariff determination is the actual weighted average cost of primary fuel and secondary fuel of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel

and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account.

(e) In this context, the Petitioner would like to inform the Commission that in August 2014, the Ministry of Petroleum and Natural Gas (MOPNG) GOI had constituted a committee to undertake a comprehensive study of Gas Pricing. Currently the GOI has fixed APM gas price @ USD 4.2 MMBTU-GHV and the ceiling price of gas from PMT is USD 5.73 / MMBTU GHV.

(f) Finally the committee has issued "New Domestic Natural Gas Pricing Guidelines, 2014.

(g) In implementation to the above mentioned Gas Pricing Guideline 2014, the GOI has started allocation of RLNG through reverse auction up to 35% PLF. The pricing of such gas starts @ US $ 8.54/MMBGU-GHV.

(h) In anticipation of reduction in Gas prices, petitioner has not entered into any long term fuel supply agreement (FSA).

(i) Based on these assumptions, the petitioner has considered average landed cost of fuel as US $ 7.02 MMBTU on GHV basis for the year 2014-15 to 2018-19 as under:

Gas Pricing USD/ MMBTU on GHV basis

Gas Source	RLNG (USD)
Gas Sale Price (MMBTU – GHV)	5.03
Marketing Margin & Re-gasification Tax (VAT)	0.74
Total Gas Supply Price	0.87
Transportation Base Cost	6.65
Service Tax	0.06
Total Gas Transportation Price	0.42
Total landed price	7.07
Exchange Rate	71.0
Weighted Average INR Rate (GHV)	501.83

45. The petitioner has proposed the claim for energy charges including variations in fuel cost, fuel transportation cost, exchange rate, etc on a monthly basis as allowed and as per Clause 30(5) of 2014 Tariff Regulations, The total energy charges for ex-bus energy scheduled to be sent out based on normative parameters as submitted by the petitioner are as under.

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Capacity in MW	382.5	382.5	382.5	382.5	382.5
Days	365	366	365	365	365
PAF (Normative)	85%	85%	85%	85%	85%
Gross Station Heat Rate (k.Cal/kWh)	1850	1850	1850	1850	1850
Gross Generation (M. Us.)	2848.10	2855.90	2848.10	2848.10	2848.10
Aux Consumption	2.50%	2.50%	2.50%	2.50%	2.50%
Net Generation (M. Us.)	2776.89	2784.50	2776.89	2776.89	2776.89
Conversion Factor	3.968	3.968	3.968	3.968	3.968
Gas Requirement (MMBTU GHV)	20907296	20964576	20907296	20907296	20907296
Gas Rate (USD/MMBTU GHV)	7.07	7.07	7.07	7.07	7.07
Exchange Rate	71	71	71	71	71
Gas Rate (INR/MMBTU GHV)	501.83	501.83	501.83	501.83	501.83
Total Gas Cost (Rs. In Lacs)	104918.29	104918.29	104918.29	104918.29	104918.29
Energy Charge Rate (ECR) (in ₹/Kwh) Ex-bus	**3.778**	**3.778**	**3.778**	**3.778**	**3.778**

Analysis

46. It is evident from the submissions of the petitioner that the generating station has not procured gas during the period from January, 2014 to March, 2014 and therefore there is no landed cost of fuel for the preceding 3 months (January, 2014 to March, 2014) as per the 2014 Tariff Regulations. Regulation 28(2) of the 2014 Tariff Regulations envisages fuel cost in Working Capital as follows:

> " (*2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this regulation shall be based on landed cost incurred (taking in to account normative transit and handling losses) by the generating company and the gross calorific value of the fuel as per actual for three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during tariff period."*

47. The petitioner has claimed fuel cost based on the total landed price of gas of US $ 7.07/MMBTU with exchange rate of ₹71.0/US$ which has been converted to ₹19.67/SMC. The basic cost of fuel considered by the petitioner is US$ 5.03 /MMBTU which is less than the ceiling price of gas from PMT of US$ 5.73/MMBTU (GHV). It is however observed that the petitioner has considered the exchange rate of ₹71/US$ for computation of Energy Charge Rate (ECR) for the period 2014-19 and accordingly ECR has been computed as ₹3.778 /kWh for the period 2014-19. For computation of fuel cost and energy charge in Working Capital, the fuel cost and exchange rate for the months of January, 201, February 2014 and March 2014 is considered. The exchange rate of ₹71/US$ considered by the petitioner is on a higher side as the average exchange rate during the months of January 2014 to March 2014 was ₹61.72/US$ (approx). In view of above, the RLNG rate in INR /MMBTU GHV works out to ₹436.36 lakh (7.07x61.72) and the Rate/CuM in ₹(@9880 kCal/SMC) works out to ₹17.107. This rate of RLNG is much lesser than the RLNG rate of ₹31.74 /SMC allowed by the Commission in tariff order dated 6.10.2015 in Petition No. 186/GT/2014 (tariff of Sugen CCPP for 2014-19). Thus, in the absence of any actual landed price incurred by the petitioner, the cost of gas for ₹17.107/SMC as worked out as above, is lower and is reasonable. Hence, the same is considered for working out the fuel cost and two(2) months energy charges in the working capital for purpose of tariff. Based on above discussions, the ECR works out to ₹3.285 with RLNG rate of ₹17.107/ SMC and the fuel cost for the period 2014-19 works out as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Fuel cost (30 days)	7498.45	7498.45	7498.45	7498.45	7498.45
Energy Charge for 2 months	15203.49	15245.14	15203.49	15203.49	15203.49
Cost of liquid for 15 days	0.00	0.00	0.00	0.00	0.00

Maintenance Spares

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

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3260.36	3490.08	3734.41	3996.66	4278.71

49. Regulation 28(1)(b)(iii) of the 2014 Tariff Regulations provide for maintenance spares @ 30% of the operation & maintenance expenses as specified in Regulation 29. As specified in Regulation 29 (2) of the 2014 Tariff Regulations the maintenance spares @ 30 %of the operation & maintenance expenses, allowed are as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3046.61	3410.74	3647.87	3901.46	4173.99

Receivables

50. 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	15203.49	15245.14	15203.49	15203.49	15203.49
Fixed Charges - 2 months	7450.91	7838.36	7904.43	7881.82	7870.53
	22654.40	**23083.50**	**23107.92**	**23085.31**	**23074.02**

O & M Expenses (1 month)

51. 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
905.66	969.47	1037.34	1110.18	1188.53

52. Based on the O&M expense norms specified by the Commission, the O&M expenses for 1 month are allowed as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
846.28	947.43	1013.30	1083.74	1159.44

Rate of interest on working capital

53. 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."

54. 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 fuel – 30 days	7498.45	7498.45	7498.45	7498.45	7498.45
Liquid fuel stock – 15 days	0.00	0.00	0.00	0.00	0.00
Maintenance Spares @ 30% of O&M expenses	3046.61	3410.74	3647.87	3901.46	4173.99
Receivables – Two months	22654.40	23083.50	23107.92	23085.31	23074.02
O&M expenses – One month	846.28	947.43	1013.30	1083.74	1159.44
Total Working Capital	**34045.74**	**34940.12**	**35267.53**	**35568.96**	**35905.90**
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	**4596.18**	**4716.92**	**4761.12**	**4801.81**	**4847.30**

55. Accordingly, annual fixed charges approved for the generating station for the period from 1.4.2014 to 31.3.2019 is summarized as under**:**

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Depreciation	8584.80	8747.09	8837.94	8837.94	8837.94
Interest on Loan	11092.25	11687.61	11049.44	10027.78	9006.11
Return on Equity	10276.87	10509.40	10618.54	10618.54	10618.54
Interest on Working Capital	4596.18	4716.92	4761.12	4801.81	4847.30
O&M Expenses	10155.38	11369.14	12159.56	13004.87	13913.31
Total	**44705.47**	**47030.15**	**47426.60**	**47290.94**	**47223.20**

Note: *1) All figures are on annualized basis. 2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.*

Energy Charges

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

"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:

For gas and liquid fuel based stations

ECR = GHR x LPPF x 100 / {CVPF x (100 – AUX) }

Where,

AUX = Normative auxiliary energy consumption in percentage.
CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.
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

57. The petitioner has claimed Energy Charge Rate (ECR) of ₹3.778/ kWh based on RLNG fuel for operation of the plant for 85% PLF. The fuel cost derived on cost of RLNG @ USD 7.07/MMBTU with exchange rate of ₹71.0 = 1 US$ for determination of tariff. As discussed above, we have considered the landed cost of fuel as ₹17.107/SMC during the months of January 2014 to March 2014 and accordingly, ECR has been worked out and allowed as under:

	2014-19
Capacity (MW)	382.5
Fuel	RLNG
Normative Heat-Rate (kCal/kWh)	1850
Aux. Power Consumption (%)	2.5
Weighted average price of LNG (₹/SMC)	17.107
Weighted average GCV of LNG (kCal/SCM)	9880
Rate of Energy charge (ex-bus) (₹/kWh)	**3.285**

58. The Commission in its order dated 19.2.2016 in Petition No. 33/MP/2014 has directed that generating stations shall 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 Fee and Publication Expenses

59. The petitioner has sought the 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 ₹1683000/- for the period 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 and the expenses incurred on publication of notices for the period

2014-15 directly from the respondents on submission 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.

60. 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.

61. Petition No. 401/GT/2014 is disposed of in terms of the above.

-Sd/-	***-Sd/-***	***-Sd/-***	***-Sd/-***
(Dr. M.K. Iyer)	**(A. S. Bakshi)**	**(A. K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Member**	**Chairperson**