CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 299/2009

Coram: Shri S. Jayaraman, Member Shri M.Deena Dayalan, Member

DATE OF HEARING: 28.10.2010 DATE OF ORDER: 11.3.2011

IN THE MATTER OF

Fixation of tariff in respect of sale of power from Agartala Gas Turbine Power Project (84 MW) of North Eastern Electric Power Corporation Ltd, Shillong for the period from 1.4.2009 to 31.3.2014.

AND IN THE MATTER OF

North Eastern Electric Power Corporation Ltd, Shillong Petitioner
Vs

- 1. Assam State Electricity Board, Guwahati
- 2. Meghalaya State Electricity Board, Shillong
- 3. Department of Power, Govt. of Tripura, Agartala
- 4. Power and Electricity Department, Govt. of Mizoram, Aizawl
- 5. Electricity Deptt, Govt. of Manipur, Imphal
- 6. Department of Power, Govt. of Arunachal Pradesh, Itanagar
- 7. Department of Power, Govt. of Nagaland, Kohima
- 8. North Eastern Regional Electricity Board, Shillong
- 9. North Eastern Regional Load Despatch Centre, ShillongRespondents

The following were present:

- 1. Shri P. K. Borah, NEEPCO
- 2. Shri Rana Bose, NEEPCO
- 3. Ms. Debjani Dey, NEEPCO
- 4. Shri A.C.Sarmoh, NEEPCO
- 5. Shri H.M.Sharma, ASEB
- 6. Shri R. Kapoor, ASEB
- 7. Shri A.Kharpan, MeECL
- 8. Shri T.Passah, MeECL
- 9. Ms. M.S.Bezbaruah, Consumer
- 10. Shri A.K.Dutta, Consumer

ORDER

The petitioner has filed this petition for fixation of tariff in respect of Agartala Gas Turbine Power Project (84 MW) (hereinafter referred to as "the generating station") of North Eastern Electric Power Corporation Ltd, Shillong for the period

from 1.4.2009 to 31.3.2014 in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations").

2. The date of commercial operation of the generating station as a whole is 1.8.1998. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 along with additional capitalization/de-capitalization during the years 2004-05 and 2005-06, was determined by the Commission vide its order dated 20.2.2008 in Petition No.135/2005. Subsequently, the annual fixed charges for the period 2006-09 were revised by Commission's order dated 11.5.2010 in Petition No.212/2009 after considering the impact of additional capital expenditure for the period 2006-09 and based on the capital cost of ₹33037.19 lakh as on 1.4.2006, as under:

			(₹ in lakh)
Particulars	2006-07	2007-08	2008-09
Depreciation	1829	1845	1860
Interest on Loan	205	110	34
Return on Equity	2289	2300	2312
Advance Against Depreciation	0	0	0
Interest on Working Capital	200	203	206
O & M Expenses	860	895	930
TOTAL	5383	5354	5342

3. The annual fixed charges claimed by the petitioner for the period 2009-14 is as under:

				(* ti	n lakh)
Annual Fixed Charges	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	3083.77	3083.77	3086.38	3089.54	3090.94
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	1714.87	1714.87	470.32	477.71	479.46
Interest on Working	464.16	474.67	459.88	471.83	484.26
Capital					
O & M Expenses	2667.00	2819.88	2981.16	3151.68	3331.44
Total	7929.80	8093.19	6997.74	7190.76	7386.10

4. Reply to the petition has been filed by the respondent No.1, ASEB and Ms. Mallika Bezbaruah, the Consumer respondent.

- 5. During the hearing on 28.10.2010, the respondent No.1, ASEB raised preliminary issue and submitted that revision of tariff of the generating station for 2009-14 by the petitioner after considering the approved additional capital expenditure for the year 2006-09 cannot be considered since the petitioner has not effected the publication of the amended application in terms of Clause (2) of Section 64 of the Electricity Act, 2003. Similar arguments have been put forth by the representative of the Consumer.
- 6. Clause (2) of Section 64 of the Electricity Act, 2003 provides as under:

 "Every applicant shall publish the application, in such abridged form and manner, as may be specified by the appropriate Commission"
- 7. In line with the above provision, the Commission has notified the Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004, wherein Clause (6) of Regulation 3 provides as under:

"The applicant shall, within 7 days after making the application, publish a notice of his application in at least two daily newspapers, one in English language and one in vernacular language, having circulation in each of the State/Union Territory where the beneficiaries are situate in the same language as of the daily newspaper in which the notice of the application is published, as per the specimen given in the schedule to these regulations"

8. It is clear from the above that the notice of the application for determination of tariff needs to be published by the petitioner as per specimen provided in the schedule to the said regulations. The petitioner, in compliance with the above had effected publication of notice of the application for determination of tariff for 2009-14 after posting the same in its web-site and after service of copy of the complete application on each of the beneficiaries.

- 9. During the proceedings held on 17.8.2010, the Commission directed the petitioner to file the adjustment statement of the capital cost, as admitted by the Commission as on 31.3.2009 for the generating stations after taking into consideration the tariff orders of the Commission for the period 2004-09 with copy to the respondents, including the consumer respondent.
- 10. The petitioner, in terms of the above directions had amended its tariff application by revising the tariff forms of the generating station after taking into consideration the tariff orders of the Commission for the period 2004-09 and after serving copies of the same to all the respondents including the consumer respondent. Since compliance made by the petitioner was as per directions of the Commission, we are of the view that there is no need for the petitioner to again publish notice of the amended application. Moreover, the expense involved in publication of notice of application is required to borne by the respondents. In view of these, the submission of the respondents is liable to be rejected. Accordingly, we now proceed with the determination of tariff of the generating station for 2009-14.

CAPITAL COST

(A) Capital Cost as on 1.4.2009

11. The last proviso of Clause 2 of Regulation 7 of the 2009 Regulations, provides as under:

"Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff."

12. The Commission vide its order dated 11.5.2010 in Petition No. 212/2009 had approved the capital cost of ₹33607.86 lakh as on 31.3.2009, after taking into

account the additional capital expenditure for the period 2006-09. Accordingly, in terms of the above proviso, the capital cost of ₹33607.86 lakh has been considered as the opening capital cost as on 1.4.2009.

Additional Capital Expenditure for 2009-14 (projected)

- 13. Regulation 9 of the 2009 regulations provides as under:
 - "9. Additional Capitalization. (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Undischarged liabilities;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (v) Change in law:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

- (2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, 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;
- (ii) Change in law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (iv) 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) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and
- (v) 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 of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, 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. 1.4.2009.

14. The petitioner has claimed the following projected additional capital expenditure in terms of Regulation 9 (1) of the 2009 regulations for 2009-14 as under:

					(₹in lakh)
Head or works/ equipments	2009-10	2010-11	2011-12	2012-13	2013-14
Raising the height of	-	-	-	-	30.00
boundary wall in & around					
Power House including					
Administrative Building etc.					
Extension of administrative	-	-	-	20.00	-
building					
Construction of periphery	-	-	23.00	-	-
road around plant complex,					
along with the boundary wall					
Completion of balance works	-	-	70.00	-	-
of fire fighting system of the					
plant					
Additional capitalization	0.00	0.00	93.00	20.00	30.00
Claimed					

- 15. After examining the asset-wise details and justification for additional capitalization claimed by the petitioner under various categories and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.
- 16. The date of commercial operation of the generating station is 1.8.1998 and hence the cut-off date of the generating station is 31.3.2000. Hence, the claim for additional capital expenditure has been considered in terms of the provisions of Regulation 9 (2) in place of Regulation 9(1) of the 2009 regulations as stated overleaf:

Year	Asset/Work	Amount (in lakh)	Findings
2011-12	Construction of	23.00	Allowed in terms of Regulation 9
2011 12	periphery road	20.00	(2) (ii) of the 2009 regulation
	around plant		since the expenditure is based on
	complex, along with		the report of the Ministry of
	the boundary wall		Home Affairs (MHA) dated
	the boundary wan		4.5.2009 wherein its is observed
			that fresh security measures
			have been recommended which
			include the repair of patrolling
			tracks for security personnel to
			carry out regular patrolling for
			adequate security arrangements
			and protection of generating
			station.
	Completion of	70.00	Not allowed in view of the
	balance works of fire		submissions of petitioner. The
	fighting system of the		petitioner was directed to furnish
	plant		the reasons for non-completion
			of the balance work in respect of
			fire fighting system even after 10
			years of commercial operation of
			the generating station with
			chronological events. The
			petitioner vide its letter dated
			27.1.2011 has furnished in detail
			the status of the fire fighting
			system as on 19.6.2010. It has
			been submitted that the work
			could not be completed since the
			contractor had left the job mid-
			way and both parties have raised
			certain issues before the Hon'ble
			High Court of Guwahati and as
			per the directions of the Hon'ble
			Court, the matter is under
			'arbitration'. It was only under
			these circumstances, the fire
			fighting system could be partially
			completed. It has also been
			submitted that in order to make
			the system fully operational the
			petitioner would invite tender
			after completion of 'arbitration'.
			In consideration of the time
			taken for the completion of
			arbitration and the nature of
			balance work left, it has been
			submitted that the actual
			expenditure could be higher than
			the projected claim of ₹70.00
			lakh. However, the petitioner is
			at liberty to claim the above
			expenditure at the time of truing
			up, if so advised, which will be
			considered in accordance with
			law.

2012-13	Extension of administration building for record room for office.	20.00	Allowed in terms of sub-clause (ii) of clause (2) of Regulation 9 i.e change of law, in order to meet the obligations of maintaining proper record of the generating station in line with provisions of Section 4(1)(a) of Right to Information Act, 2005
2013-14	Raising the height of boundary wall in & around Power House including administrative building etc.	30.00	Not allowed as the petitioner has not submitted any justification in support of the said expenditure claimed.

17. Based on the above discussions, the additional capital expenditure approved for 2009-14 is as under:

(₹in lakh)

Head or works/ equipments	2009-10	2010-11	2011-12	2012-13	2013-14
Raising the height of boundary	-	-	-	-	00.00
wall in & around Power House					
including administrative					
building etc.					
Extension of administrative	-	-	-	20.00	-
building					
Construction of periphery road	-	-	23.00	-	-
around plant complex, along					
with the boundary wall					
Completion of balance works of	-	-	00.00	-	-
fire fighting system of the plant					
Additional capitalization	0.00	0.00	23.00	20.00	00.00
allowed					

(C) Capital cost for 2009-14

18. Based on the above, the capital cost approved for 2009-14, is as under:

(₹in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost as on 1 st April of the financial year	33607.86	33607.86	33607.86	33630.86	33650.86
Additional capital expenditure approved	0.00	0.00	23.00	20.00	0.00
Capital Cost as on 31st March of the financial year	33607.86	33607.86	33630.86	33650.86	33650.86

Debt Equity Ratio

- 19. Regulation 12 of the 2009 regulations provides that:
 - "(1) For a project declared under commercial operation on or after 1.4.2009, 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 where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

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, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.
- (3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 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.
- 20. In terms of the above said regulations, the debt-equity ratio of 70:30 has been considered on the additional capital expenditure allowed for the purpose of tariff.

Return on Equity

- 21. Regulation 15 of the 2009 regulations provides as under:
 - "(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
 - (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II.

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be.

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(4) xxxxx

- 22. The petitioner has considered the rate of Return on Equity @ 18.674%, based on prevailing MAT rate (Basic rate of 15%+10% surcharge+3% education Cess= 16.995%) for 2009-10.
- 23. In terms of the provisions of the above regulations, Return on equity has been worked out @17.481% per annum on the normative equity, after accounting for the additional capital expenditure, considering the base rate of 15.5% and MAT rate of 11.33%. Return on equity has been worked out as stated under:

(₹ in lakh) Return on Equity 2009-10 2010-11 2011-12 2012-13 2013-14 **Gross Notional Equity** 16513.72 16513.72 16513.72 16520.62 16526.62 Additions due to 6.90 6.00 additional capitalization 16520.62 Closing Equity 16513.72 16513.72 16526.62 16526.62 Average Equity 16513.72 16513.72 16517.17 16523.62 16526.62 15.500% 15.500% 15.500% 15.500% 15.500% Return on Equity (Base Rate) Min Alt. Tax rate for the 11.330% 11.330% 11.330% 11.330% 11.330% vear 2008-09 $\overline{1}7.481\%$ Rate of Return on 17.481% 17.481% 17.481% 17.481% Equity Return on Equity 2886.69 2886.69 2887.29 2888.42 2888.94

24. Any change in rate of return on equity due to changes in the tax rate would however be considered at the time of truing up

Interest on loan

- 25. Regulation 16 of the 2009 regulations provides as under:
 - "(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

- (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
- (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.
- (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 annual depreciation allowed.
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

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 beneficiary or the transmission customers 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.

26. The normative loan for the generating station has already been repaid. Moreover, the normative loan on account of admitted additional capital expenditure during the respective years of the tariff period has been considered to be paid in full, as the admitted depreciation is more than the amount of normative loan for these years. As such, the interest on loan during the period 2009-14 is 'Nil'.

Depreciation

- 27. Regulation 17 of the 2009 regulations provides that:
 - "(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
 - (2) 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 stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

- (3) 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.
- (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III 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 date of commercial operation shall be spread over the balance useful life of the assets.

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation] as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.
- (6) 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".
- 28. The date of commercial operation of the generating station is 1.8.1998. Since the generating station has completed 12 years of operation as on 1.8.2010, the weighted average rate of depreciation of 5.1026% as calculated as above has been considered for the calculation of depreciation during the years 2009-10 and 2010-11. The remaining depreciable value has been spread over the balance useful life of the assets from 2011-12 onwards. Accordingly, depreciation has been worked out as stated overleaf:

				(₹in la	kh)
Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on	33607.86	33607.86	33607.86	33630.86	33650.86
31.3.2009					
Additional capital	-	-	23.00	20.00	-
expenditure approved					
Closing gross block	33607.86	33607.86	33630.86	33650.86	33650.86
Average gross block	33607.86	33607.86	33619.36	33640.86	33650.86
Rate of Depreciation	5.1026%	5.1026%	5.1026%	5.1026%	5.1026%
Depreciable value	29998.32	29998.32	30008.67	30028.02	30037.02
including amortization					
of land in 25 years					
Balance useful life of the	14.33	13.33	12.33	11.33	10.33
asset					
Remaining depreciable	9227.32	7512.44	5807.92	5356.35	4892.71
value					
Depreciation	1714.87	1714.87	470.93	472.63	473.50

Operation & Maintenance Expenses

29. In terms of Clause (c) of Regulation 19 of the 2009 regulations, the petitioner has claimed the following operation and maintenance expenses for the generating station and the same has been allowed.

	(₹in lakh)					
	Year	2009-10	2010-11	2011-12	2012-13	2013-14
0 &	M Expenses	2667.00	2819.88	2981.16	3151.68	3331.44

Interest on Working Capital

- 30. In accordance with sub-clause (b) of clause (1) of Regulation 18 of the 2009 regulations, working capital in case of Open-cycle Gas Turbine/Combined Cycle thermal generating stations shall cover:
 - (i) Fuel cost for one month 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) Liquid fuel stock for ½ month corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel;
 - (iii) Maintenance spares @ 30% of operation and maintenance expenses specified in regulation 19;
 - (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.

31. The petitioner has claimed the following fuel cost in the working capital:

					(₹in lakh)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of fuel for 1 month	488.40	488.40	489.73	488.40	488.40

32. The cost of fuel has been worked out for one month consumption on the basis of operational parameters and weighted average price of fuel as under:

 (** in lakh)

 Particulars
 2009-10
 2010-11
 2011-12
 2012-13
 2013-14

 Cost of fuel for 1 month
 481.69
 481.69
 481.69
 481.69
 481.69

- 33. The difference in fuel cost claimed by the petitioner and as worked out above is on account of the fact that the petitioner has calculated the gas requirement per month based on the targeted energy generation per month considering 30 days in a month whereas, the annual gas requirement (considering 365 days) at normative annual plant availability factor, has been considered and divided by 12 months to arrive at the gas requirement per month.
- 34. The petitioner has not used any liquid fuel in the generation of electricity. As such nothing has been allowed under this head.
- 35. The maintenance spares @ 30% of the O & M expenses as claimed by the petitioner is allowed as under:

 (r in lakh)

 2009-10
 2010-11
 2011-12
 2012-13
 2013-14

 Maintenance spares
 800.10
 845.96
 894.35
 945.50
 999.43

36. Receivables have been worked out on the basis of two months of fixed and variable charges as stated overleaf. For this purpose, the operational parameters and weighted average price of fuel as allowed has been considered.

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables claimed	2285.02	2312.25	2129.68	2161.85	2194.40
Receivables					
considered	2265.31	2292.55	2112.49	2140.59	2172.85

37. O&M expenses for one month as claimed by the petitioner has been allowed as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O& M expenses	222.25	234.99	248.43	262.64	277.62

Rate of interest on working capital

- 38. Interest on working capital has been allowed based on SBI PLR as on 1.4.2009 (i.e. 1st April of the year in which the generating station or unit thereof is declared under commercial operation). SBI PLR of 12.25% has been considered as the rate of interest on working capital during the tariff period in accordance with provisions of 2009 regulations.
- 39. Necessary computations in support of calculation of interest on working capital is as shown below:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Fuel cost	488.40	488.40	489.73	488.40	488.40
Maintenance Spares	800.10	845.96	894.35	945.50	999.43
O & M expenses (1 month)	222.25	234.99	248.43	262.64	277.62
Receivables (2 months)	2265.31	2292.55	2112.49	2140.59	2172.85
Total	3776.06	3861.90	3745.00	3837.13	3938.29
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	462.57	473.08	458.76	470.05	482.44

Annual Fixed Charges

40. The annual fixed charges approved for the generating station for the period from 1.4.2009 to 31.3.2014 is as stated under:

(₹in lakh) 2009-10 2010-11 2011-12 2012-13 2013-14 **Particulars** Return on Equity 2888.94 2886.69 2886.69 2887.29 2888.42 Interest on Loan 0.00 0.00 0.00 0.00 0.00 1714.87 1714.87 470.93 472.63 473.50 Depreciation Interest on Working 462.57 473.08 458.76 470.05 482.44 Capital O & M Expenses 2667.00 2819.88 2981.16 3151.68 3331.44 7731.13 7894.52 6798.14 6982.78 7176.33 **Total**

41. Annual fixed charges as calculated above shall be trued up at the end of the tariff period as per the provisions of Regulation 6 of the 2009 regulations.

Normative annual plant availability factor

42. Normative Annual Plant Availability Factor of 85% as per Regulation 26 of 2009 Regulations has been considered for recovery of full fixed charges and computation of fuel element in the working capital

Energy/Variable charges

43. Energy Charge rate (ECR) in Rs/kWh on ex-power plant is calculated up to three decimal places in accordance with the formulae given in Regulation 21(6)(b) of the 2009 regulations. For calculating ECR, the following norms are approved and applied.

Description	Units	Norm
Gross Station Heat	kCal / kWh	3500.00
Auxiliary Energy Consumption	%	1.00

44. The base rate of energy charge has been computed based on the following weighted average price and GCV of gas for the preceding three months of January, February and March, 2009 as furnished by the petitioner.

Description	As furnished by the petitioner	As adopted by CERC
	pennonei	CERC
Gas price (Rs./1000 SCM)	2451.662	2451.662
OCIVI)		
Gas GCV (kcal/SCM)	9157.517	9157.517

45. The base energy charge has been worked out as under:

Gross Station Heat Rate	kCal/kWh	3500.00
Aux. Energy Consumption	%	1.00
Weighted Average GCV of gas	kCal/Kg	9157.517
Weighted Average Price of gas	Rs./1000SCM	2451.662
Rate of Energy Charge ex-bus per kWh Sent	Paise/kWh	94.649

46. The petitioner shall be entitled to compute and recover the annual fixed charges and energy charges in accordance with Regulation 21 of the 2009 Regulations.

Application fee and the publication expenses

- 47. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of tariff for the generating station. However, the details of the actual expenditure incurred for publication of notice in the newspapers, has not been submitted by the petitioner.
- 48. Regulation 42 of the 2009 regulations provides as under:

"The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be."

49. The Commission in its order dated 11.1.2010 in Petition No.109/2009 (pertaining to approval of tariff for SUGEN power plant for the period from DOCO to 31.3.2014) had decided that filing fees in respect of main petitions for determination of tariff and the expenses on publication of notices are to be reimbursed.

50. Accordingly, the expenses incurred by the petitioner on application filing fees amounting to ₹168000/-each for the years 2009-10 and 2010-11 in connection with the present petition, shall be directly recovered from the beneficiaries, on *pro rata* basis. The reimbursement of charges towards the publication of notices in newspapers shall also be recovered on *pro rata* basis on submission of documentary proof of the same.

51. Petition No.299/2009 is disposed of in terms of the above.

Sd/-[M.DEENA DAYALAN] MEMBER Sd/-[S. JAYARAMAN] MEMBER