



## ASSAM ELECTRICITY REGULATORY COMMISSION

FILE NO. AERC. 316/2008/Pt-III

PETITION NO. 14/2008

### ORDER SHEET

20.10.2011

Before the Assam Electricity Regulatory Commission

ASEB Campus, Dwarandhar,  
G. S. Road, Sixth Mile, Guwahati – 781 022

Petition No. 14/2008

M/s. Eastern India Powertech Limited (EIPL)  
(the then DLF Power Limited)

— Petitioner

M/s. Assam Power Distribution Co. Ltd. (APDCL)

— Respondent

In the matter of

Petition filed by the petitioner for determination of tariffs for their Adamtilla and Banskandi power plants for the year 2008-09

AND

In the matter of

Determination of final tariffs for Adamtilla and Banskandi power plants of EIPL consequent to passing of an order dated 20<sup>th</sup> January 2011 by the Hon'ble APTEL and Hon'ble APTEL's subsequent order of 03.08.2011

### ORDER

1. **BACKGROUND**

A petition was filed by M/s EIPL (the then DLF Power limited) on 03.12.2008 seeking approval for determination of tariffs for the year 2008-09 for their power plants at Adamtilla and Banskandi in Barak Valley. The Commission admitted the petition on 31.12.2008 and registered it as Petition No. 14/2008.

A Power Purchase Agreement was executed between DLF Power Company limited, New Delhi and Assam State Electricity Board (ASEB) on 09.02.1995 to develop, finance, construct, own and operate the plants and sell the power to the Board. Consequent to this, M/s. DLF had set up 9 MW and 15.5 MW CCGT plants in 1997-98 at Adamtilla and Banskandi respectively.

ASEB was purchasing power from these two power plants of M/s EIPL at a tariff based on terms and provisions of the PPA signed between EIPL and ASEB from the commercial operation of the plant till filing of EIPL's petition. Consequent upon formation of the Assam Electricity

Regulatory Commission (AERC) in the year 2001, the power purchased quantum and cost from the EIPL plants were first approved by the AERC in the total power purchased cost schedule specified in the Tariff Order for the financial year 2002-03. Subsequent to first Tariff Order of the Commission, the total volume of power purchased and cost thereof was approved in respective Tariff Orders issued by the Commission till 2007-08 based on the power purchase estimate submitted by the ASEB.

In December, 2008, EIPL (the then DLF Power Ltd.) filed the tariff petition as mentioned above before the Commission at the request of ASEB. ASEB requested the Commission to determine electricity tariff for EIPL plants as per the provisions of PPA read with Govt. of India notification dated 30<sup>th</sup> March, 1992 as well as tariff Regulations of AERC/CERC.

On the other hand, ASEB also filed a tariff petition before the Commission for the year 2008-09 and 2009-10 which was registered as Petition No. 8/2008.

As the subject matter of both the petitions was analogous, the petitions were considered together. The Commission took hearing of the said petition on 27.03.2009 and accordingly based on the materials submitted by both the parties before the Commission, a provisional tariff order was passed on 12.05.2009 comprising of fixed and variable charges for Adamtilla and Banskandi power plants for the year 2008-09.

The provisional order was issued, in the interest of continuity of operation of the Adamtilla and Banskandi power plants and also with an intention to disposing of the petition No. 8/2008 filed by the ASEB for determination of tariff for 2008-09 and 2009-10.

In Appeal No. 136 of 2009, the Appellant challenged the order of the State Commission dated 12th May 2009 determining tariffs for 2008-09 for the two power plants of M/s EIPL for supply of power by the appellant to ASEB (now APDCL). After hearing all the parties, the Hon'ble APTEL passed an order on 20th January, 2011 remanding the matter to this Commission for final determination of tariff within 3 months from the Order.

A miscellaneous petition was filed by the Commission before the Hon'ble APTEL to extend the time limit for final determination of tariff by another 4(four) months as both APDCL and M/s EIPL were requesting for extension of time for their submissions. The Hon'ble APTEL while disposing of the Commission's petition IA No. 173 of 2011 in Appeal No. 136 of 2009 vide its order dated 03.08.2011 granted further period of 3(three) months from the date of its order.

## **2. LEGAL FRAMEWORK & REFERENCE DOCUMENTS:**

- 2.1** Electricity Supply Act 1948, India Electricity Act, 1910, ERC Act 1998 have been consolidated into the E.A., 2003. The powers and functions which were exercised by the GOI/CEA in regard to tariff determination including determination of norms and parameters are now exercised by the CERC/SERC
- 2.2** The Electricity Act 2003 : In compliance with section 3 of the Electricity Act 2003, the Central Government notified the Tariff policy in continuation of the National Electricity Policy (NEP) notified on 12<sup>th</sup> February, 2005 vide Resolution No.23/2/2005-R&R(Vol.III) dated January 6<sup>th</sup>, 2006.

- 2.3** The Act also requires that the Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations under section 61 of the Act.
- 2.4** Section 61 of the Act provides that State Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.
- 2.5** The Commission already notified Terms & Conditions for determination of Tariff Regulation, 2006 for generating stations of tariff in the state sector which are in line with the terms and conditions for determination of tariff Regulation of CERC.

**3. Hearing on the Petition:**

In the process of determination of final tariffs for EIPL plants at Adamtilla and Banskandi for FY 2008-09, the Commission took hearings on the said petition on 24.03.2011 and 31.05.2011 with the Petitioners and Respondents, APDCL. As directed by the Commission, both EIPL and ASEB submitted some of the relevant information and documents required towards final determination of tariff for 2008-09 for EIPL plants.

**4. Public Hearing:**

A public hearing was fixed on 12.08.2011 at AERC office, Guwahati. Prior to the hearing, a notice was published in daily newspapers inviting suggestions/comments on the petition of M/s EIPL, (14/2008) from stakeholders within 21 (twenty one) days from publication of notice upto 04.07.2011. As there was only one respondent to this notice, the Commission further extended the time for submission of comments upto 20.07.2011. This notice was also published in the same newspapers as in earlier case. But there was no response to this notice. The Commission had forwarded copies of the petition from the respondent Shri J. N. Khataniar, a practicing and consulting Engineer from Guwahati to M/s EIPL and APDCL for comments on the same and the replies received from both the parties were forwarded to Shri Khataniar. The Commission then fixed a public hearing on 12<sup>th</sup> August, 2011 in AERC office, Guwahati and notices were issued accordingly to the parties concerned.

Shri G Sivasankar, GM (Operations), EIPL appeared for the petitioner before the Commission.

Shri J.N. Khataniar and Shri P.K. Sarma attended as respondents.

Shri P.K. Dutta, CGM (Com), APDCL, Shri S. Baruah, General Manager (Com-T), APDCL, Shri M.K. Adhikary, DGM (Com), APDCL, Shri J. P. Choudhury, AGM (Com), APDCL Shri B.M. Saikia AGM (Com-T), APDCL and learned counsel Swapna Seshadri appeared on behalf of APDCL.

The Commission heard counsels appearing for the parties and considered the pleadings and documents placed before the Commission on behalf of the parties.

Shri Khataniar was then asked to make his submissions before the Commission. Shri P. K. Sarma spoke and put forward his arguments on behalf of Shri Khataniar. Shri Khataniar contended that although M/s EIPL and APDCL have a bipartite agreement (PPA), a consumer is the one who pays for the power and is affected by any raise in tariff. He contended that it is imperative that tariff fixation is made in a

transparent manner as envisaged in the Electricity Act 2003. He also stated that the replies provided by both parties – EIPL and APDCL were inadequate and not convincing. He requested the Commission that an order be passed by AERC directing both to furnish all documents sought by him from the past.

The representative from EIPL during their submissions stated that EIPL stands by the earlier submissions made to the Commission during the hearings held and he made specific reference to Clause No. 3.7 and Clause No. 12.2 of the PPA.

As the entire case of the petitioner revolves around understanding of various clauses of the PPA, EIPL have been contending that provisional tariff was not determined as per provisions of their PPA.

The petitioner in their submissions has strenuously argued and placed before the Commission the Judgement and order passed by the learned APTEL in the case of Sai Renewable Power Pvt. Ltd. and others v/s Transmission Corporation of Andhra Pradesh Ltd. passed on 2<sup>nd</sup> of June, 2006. The petitioner tried to convince the Commission that the relief/reliefs granted by the said order of the learned APTEL is binding on the Commission and they are entitled to the similar type of relief/reliefs.

No doubt the above case referred by the petitioner has some relevant factors to the present petition, but at the same time it is to be pointed out that feeling seriously aggrieved from the order of the learned Tribunal, the Transmission Corporation of Andhra Pradesh Ltd. as well as Eastern Power Distribution Company of Andhra Pradesh Ltd. have filed appeals before the Hon'ble Supreme Court under Section 125 of the Electricity Act, 2003 and the said appeals have been decided by the Hon'ble Supreme Court on 08.07.2010. While deciding the appeals the Hon'ble Supreme Court has set aside the order of the Tribunal dated 2<sup>nd</sup> of June, 2006 referred to above and remanded the entire matter to the Andhra Pradesh Electricity Regulatory Commission with certain observations. In the said Judgement the Hon'ble Supreme Court observed, inter alia, that Regulatory Commission is vested with the power to revise tariff and conditions in relation to procurement of power from Generating Companies. The case so decided by the Hon'ble Supreme Court has been reported in 2010 ELR(SC) 0697.

In view of the above facts and circumstances, it can be safely concluded that the above case cited by the petitioner has no binding force on the Commission.

Regarding status of the Gas Supply Agreement (GSA) the petitioner informed that the matter had been discussed with Assam Gas Co Ltd (AGCL) and ASEB and the GSA is likely to be concluded within the next couple of months. It was further stated that payments for gas supply were being made regularly and only signing of the GSA was pending.

The representative from APDCL stated that the Government/CEA Guidelines referred to in Clause 3.7 of the PPA dated 09.02.1995 is required to be read with the AERC Tariff Regulations 2006. The inconsistencies in clauses of the PPA need to be substituted by provisions in the Tariff Regulations of the Commission. APDCL stated that they had already submitted to the Commission similar cases of the Hon'ble Appellate Tribunal for Electricity and the Hon'ble Supreme Court of India to substantiate their claims. It is worthwhile to mention here that while disposing of the present petition the Commission has taken into account a few judicial observations of the cited cases which are found to be relevant to the case in hand.

It was also contended that gas supply agreement is required to be signed between EIPL and the gas supplier (in this case Assam Gas Company Limited, AGCL) and APDCL has no responsibility in regard to adequate supply of gas to the Independent Power Producer (IPP) EIPL. The learned counsel reiterated that the distribution company is in no way responsible for gas supply availability or any such matter between AGCL and EIPL. The learned counsel requested the Commission to determine tariff of Adamtilla and Banskandi power plants as per the Tariff Regulations 2006 read with the PPA of 09.02.1995.

After hearing both the Petitioner and Respondents, the Commission stated that tariff determination is a transparent process as mandated in the Electricity Act 2003 and the Commission is guided by the National Electricity Policy, National Tariff Policy and the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.

The Commission directed both M/s. EIPL and ASEB to furnish some operational and financial data and information including copy of Gas Supply Agreement etc. to the respondent Sri Khataniar, as requested by him in his earlier submissions and in the Public Hearing.

The Commission further directed EIPL to expedite the renewal of Gas Supply Agreement between Assam Gas Company Ltd. and ONGCL to ensure commitment of regular and adequate gas supply to EIPL plants to sustain power generation.

As directed by the Commission in its Public Hearing order dated 01.09.2011, M/s EIPL submitted the required documents/ clarifications to Shri Khataniar. Commission also forwarded the documents/ clarifications submitted by APDCL to Shri. Khataniar.

Shri. Khataniar submitted a reply on the documents to the Commission vide letter dated 12.10.2011. The Commission has carefully perused the reply of Shri. Khataniar along with the annexures appended thereto and noted the fair submission with regard to the Commission's endeavour to determine tariff in respect to M/s EIPL in a transparent and reasonable manner. The Commission has taken into account the following submissions made by Shri Khataniar while determining tariff and passing the final order:

- “
- *Due to non-determination of tariff according to the provision of law, if any excess payment has already been made to EIPL by APDCL may kindly be recovered by the Hon'ble Commission immediately, for the interest of the consumers of the State of Assam.*
  - *Finally, as AERC is vested with Power to determine tariff as per the Electricity Act 2003, it is prayed that, the final tariff may kindly be fixed based on the AERC/CERC regulations and orders in line with National Tariff Policy and Electricity Policy.”*

## **5. Operational and financial norms and parameters:**

In the matter of final determination of tariff for Adamtilla and Banskandi plants of EIPL for the FY 2008-09, the Commission decided to determine the final tariff as per norms and some of the provisions of the PPA read with Govt. of India notification dated 30<sup>th</sup> March 1992 and mostly as per provisions of Tariff Regulations, 2006 of AERC as the Commission is under an obligation to frame regulations to implement the provisions of the Act including interalia those setting out the terms and conditions for determination of rates, charges and tariff

and wherein the provisions of the PPA are found to be inconsistent. It would be pertinent to mention here that there is no provision in the Electricity Act, granting deemed approval for past PPA's. Moreover, PPA's entered into before enactment of the Electricity Act, 2003 have not been explicitly saved or granted a protection from regulatory intervention.

Further according to the provisions of Regulation 61(a) of Electricity Act, 2003, the Commission has also followed the principles and methodologies specified in the CERC Tariff Regulations, 2001 and 2004 wherever it deemed appropriate while determining final tariff for EIPL plants for 2008-09.

Based on the above, the Commission has fixed the following norms and parameters:

## 5.1 Operating norms:

**5.1.1 Plant load factor (PLF):** The AERC (Terms & conditions for determination of Tariff) Regulations 2006 stipulate norms of operation in respect of Target Availability for recovery of full fixed charges for Namrup and Lakwa Thermal Power Stations as 50%. The target PLF for incentive for the above two stations is also 50%. For stations commissioned on or after these regulations come into force the target availability for recovery of full fixed charges for such stations is 80% and PLF for claiming incentive is 80% also.

As the Power Stations at Adamtilla & Banskandi were commissioned in the FY 1997-98, their performance cannot be compared with the PLF achieved by the new generating stations. Therefore the normative PLFs of Adamtilla and Banskandi have been considered from the PPA of February, 1995. In view of the above, the Commission has allowed the normative PLF of Adamtilla and Banskandi plant as 66.46% and 68.49% respectively. However, the petitioner has claimed the committed PLF of 80% for both of their plants. From the submissions of Plant Performance data of both the Power Stations it is seen that average PLF of Adamtilla and Banskandi power stations are 36.92% and 55.19% respectively.

The Commission, therefore, after careful examination of the matter, considered PLF as under:

	<u>Normative</u>
1. Adamtilla	66.46
2. Banskandi	68.49

**5.1.2 Auxiliary Energy Consumption (AEC):** Even though the aux. energy consumption was clearly defined in Clause 1.2 of the PPA, the level of AEC in percentage was not specified.

While EIPL is seeking the generation of the electricity at the generator's terminal as energy sent out which is however technically not feasible, APDCL appealed to the Commission to apply relevant regulations of the Commission for determining Auxiliary energy consumption.

The Regulation 39.5 of Tariff Regulations, 2006 of AERC allows 3% AEC for combined cycle gas plant. However, the Commission may allow higher rate of AEC where gas Booster compressor is utilised.

As per the DPR submitted by EIPL the auxiliary energy consumption norms for both Adamtilla and Banskandi plants are as under:

1. Without Gas Booster compressor = 3%
2. With Gas Booster Compressor = 6%

Since, EIPL plants are provided with gas booster compressor with electric prime mover, the Commission has allowed AEC @ 5.5% for both Adamtilla and Banskandi plant as per the recommendations of CEA's Technical Standard on operation norms for combined cycle gas plant.

**5.1.3 Gross Station Heat Rate (SHR):** The petitioner is claiming SHR for their plants as stipulated in Clause 3.11.2 of the PPA as under:

Adamtilla	2500 Kcal/Kwh
Banskandi	2110 Kcal/Kwh

After scrutiny of the relevant documents like SHR curve etc. supplied by the manufacturer Allison Engine Co USA and as per the DPR submitted by EIPL, the designed SHR of the EIPL plants are noted to be same as above.

APDCL apprised that the SHR for both the plants was 2000 Kcal/Kwh as per DPR based on GOI guidelines and after due consideration in line with CERC regulations, APDCL agreed and approved enhanced rate of 2240 kcal/Kwh for Adamtilla and 2110 Kcal/Kwh for Banskandi.

After careful consideration, the Commission approves the following gross SHR values for Adamtilla and Banskandi plants for computation of fuel cost on normative basis.

Adamtilla	2500 Kcal/Kwh
Banskandi	2110 Kcal/Kwh

**5.1.4 Gross Calorific Value:** In the tariff petition, EIPL filed the following GCV values in Kcal/scm.

Adamtilla	8000-8150
Banskandi	8000-8310

Later on while submitting updated information vide their petition dated 12<sup>th</sup> July, 2011, EIPL furnished the weighted average GCV values for 2008-09 as under:

Adamtilla	8147 Kcal/scm
Banskandi	8324 Kcal/scm

The Commission has accepted these GCV values for calculation of final tariff.

**5.2 Financial norms**

**5.2.1 Additional Capital cost**

The present petition is for approval of tariff for the year 2008-09 for which the capital cost as on 31.03.2008 needs to be ascertained. Therefore, in order to arrive at a capital cost as on 31.03.2008, we need to arrive at the reasonable capital cost of the generating stations on the date of commercial operation i.e. 04.07.1997 and 05.09.1997 for Adamtilla and Banskandi plants respectively and also to consider additional capitalisation.

From the submissions of EIPL and APDCL, it has been noted that the APDCL approved the total capital cost of Rs. 125.637 Cr. (Adamtilla = Rs. 45.533 Cr., Banskandi = Rs. 80.104 Cr.) However, EIPL is praying approval of the total capital cost of Rs. 136.23 Cr. (Adamtilla = Rs. 49.24 Cr., Banskandi = Rs. 86.99 Cr.) which inter alia also includes additional capital cost of Rs. 10.59 Cr. against purchase of

initial spares, development exp., lab equipment, communication equipment and metering equipment upto 2000-01.

The admissibility of the additional expenditure claimed by EIPL is analysed as under:

The Commission thoroughly examined item wise details of statement of these spares indicating Part No. and date of expenditure etc. as well as the physical utilisation certificate submitted by EIPL as directed by the Commission. The Commission noted that almost 93% of the additional capital spares were utilised by 2002-03. Thus, the additional capital cost of spares physically utilised so far by EIPL for Adamtilla and Banskandi plant are as under:

Adamtilla	Banskandi	Total
2.423 Cr.	7.398 Cr.	9.821 Cr.

This is as per revised certificate submitted by EIPL on 13<sup>th</sup> September, 2011 regarding plant wise additional capital cost incurred towards spares.

Details of plant wise additional capital cost of Rs. 10.59 Cr. incurred by EIPL are as under:

**A) Utilised spares:**

**(Rs. In lakh)**

<b><u>Item</u></b>	<b><u>Adamtilla</u></b>	<b><u>Banskandi</u></b>	<b><u>Total</u></b>
Initial spares	215.62	674.71	<b>890.33</b>
Dev. Expenditure	11.02	17.44	<b>28.46</b>
Communication equipment	13.93	13.93	<b>27.86</b>
Lab. Equipment	0.64	32.53	<b>33.17</b>
Metering equipment	1.10	1.16	<b>2.26</b>
<b>Total</b>	<b>242.31</b>	<b>739.77</b>	<b>982.08</b>

**B) Unutilised spares:**

(plantwise break-up was not submitted by EIPL)

<b>Total</b>	<b>76.81</b>
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**Say  $\simeq$  Rs. 10.59 Cr.**

As per Clause 1.7 of the PPA, the project capital cost will cover all actual project expenditure till the C.O.D. plus anticipated costs towards final completion which inter alia includes cost of initial spares for five years of operation, metering equipment, communication equipment etc. APDCL in its submission stated that mere submission of proof of incurring expenditure does not mean that it can be added to capital cost. However, they submitted that the Commission may review the total capital cost after prudence check as per the provisions of CERC/AERC Regulations.

The Commission has notified the terms & conditions for determination of tariff regulations only in 2006. Regulation 35 of this AERC regulation has specified inclusion of capitalized initial spares upto 4% of original approved cost for gas plant in case of new investment. Since EIPL plants were commissioned in 1997-98, the Commission has considered it prudent to follow the relevant provisions of PPA and CERC tariff regulation, 2001 in regards to arriving at a reasonable capital cost.



The regulation 2.5 of CERC tariff regulation, 2001 stipulates that the project cost shall include reasonable amount of capitalized initial spares. Where the actual expenditure exceeds the approved project cost, the excess expenditure as allowed by a competent authority shall be considered for the purpose of fixation of tariff.

Considering all the aspects carefully as mentioned above, the Commission has approved the total capital cost (plant wise) as on 31.03.2008 as under:

	<b>(Rs. In crores)</b>		
	<b><u>Adamtilla</u></b>	<b><u>Banskandi</u></b>	<b><u>Total</u></b>
1. Approved capital cost as on 31.03.1998	45.533	80.104	125.637
2. Additional capital cost approved	2.423	7.398	9.821
3. Approved capital cost as on 31.03.2008	<b>47.956</b>	<b>87.502</b>	<b>135.458</b>

**5.2.2 Debt : equity ratio:** While the provisions of the PPA is silent on the approved financial structuring in terms of debt : equity ratio, the same has been shown as 70:30 in the DPR.

The regulation 32 of AERC tariff regulation 2006 specified Debt: Equity ratio of 70:30 for a new generating station. However, no debt: equity ratio has been notified for the existing plants of EIPL. The debt:equity ratio agreed and prescribed in the PPA is different from the normative debt:equity ratio of AERC 2006 Tariff Regulation. As at the time of conclusion of the PPA no normative debt:equity ratio was in place, the actual infusion of equity by the IPP was therefore considered for the financial closure. In view of the above, the Commission has approved the final debt:equity ratio of the plants based on equity infusion by the Developer upto the FY 2000-01 after prudence check.

CERC under their order of 9<sup>th</sup> September, 2005 (Section 37) while approving the tariff of Agartala Gas based Thermal Power Plant (AGTPP) of NEEPCO against the Petition No. 32/2003 considered debt:equity ratio as 50:50 based on the petitioner's claim of equity infusion. This is as per CERC's notification dated 26<sup>th</sup> March, 2001, wherein debt:equity ratio was computed as per financial package approved by CEA or Appropriate Independent Agency as the case may be. In the instant case, the debt:equity ratio as prescribed in the PPA approved by ASEB with concurrence of Government of Assam has also been referred by the Commission for determining debt:equity ratio based on submissions by the petitioner at actuals after prudence check. The debt:equity ratio @ 70:30 is applicable from 2004-05 with the notification of CERC Tariff Regulations, 2004 for central sector and from 2006-07 for state sector as per AERC Tariff Regulations, 2006.

The additional capital cost allowed by the Commission is treated as equity in addition as the expenditure has been met by EIPL from the internal accruals of the company.

As per the approved cost above, the debt: equity ratio approved by the AERC as under.

	<b><u>Debt</u></b>	<b><u>Equity</u></b>			<b><u>Ratio</u></b>
		Original	Additional	Total	
<b>Adamtilla</b>	31.04	14.493	2.423	16.916	65:35
<b>Banskandi</b>	53.42	26.684	7.398	34.082	61:39

**5.2.3 Return on equity:** EIPL has claimed 16% return on equity on attaining a PLF of 68.49% (actual and deemed generation) as per the provisions of PPA [Clause 3.3(b)]

However, the return on equity is payable @ 14% (max.) as per tariff regulation, 2006 (33) of AERC w.e.f. 24<sup>th</sup> May, 2006. The Commission has therefore allowed return on equity @ 14% for computation of tariff.

**5.2.4 Depreciation:** As per Clause 3.3(d) of the PPA, the depreciation rate is pursuant to GOI guidelines as notified from time to time. While depreciation rate for gas plant as per GOI notification dated 30.03.1992 was 8.24%, subsequently it was revised which has been at 6% as per tariff regulation, 2006 (14) of AERC w.e.f. 24<sup>th</sup> May, 2006. The regulation 14(c) has also stipulated that the total depreciation during the life of the asset (i.e. 15 years in the case) shall not exceed 90% of the original cost.

Hence, the Commission has considered depreciation rate @ 6% for computation of depreciation charges while calculating fixed charge.

The Commission noted that depreciation charges were paid @ 8.05% to EIPL prior to 2008-09 and the depreciation charges for 2008-09 is now payable @ 6% as per AERC Regulation. The balance depreciation charges including on additional capital cost approved by the Commission will only be payable now in the remaining period which shall not however exceed 90% of the total project cost.

**5.2.5 Interest on Working Capital (W.C.):** The Commission has considered 9.5% as rate of interest (which is the SBI PLR rate as on 01.04.2008) to work-out the interest on working capital as stipulated in the tariff regulation, 2006 (42) of AERC.

The various elements of the working capital are:

- i) One month fuel cost corresponding to target availability i.e. targeted PLF in this case.
- ii) O&M expenses for one month.
- iii) Maintenance spares @ 1% of the historical cost escalated @ 6% per annum.
- iv) Receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on target availability.

**5.2.6 Operation and maintenance (O&M) expenditures:** As per tariff Regulation, 2006 (41) of AERC, the base O&M expenses shall be derived by averaging the actual O&M expenditure for five years for EIPL plants prior to 2008-09 i.e. 2003-04 to 2007-08 as per audited balance sheets. The year 2005-06 shall be taken as the base year.

EIPL was accordingly directed to submit the actual O&M expenditures for 5 years preceding to the period 2008-09. However, EIPL in their submission dated 12th July, 2011 expressed inability to submit the actual O&M expenditure figures and appealed to the Commission to only go by the norms of 2.5% on project cost plus escalation as per the RBI norms.

In absence of the required information, the Commission has considered it prudent to compute O&M expenses for the year 2008-09 @ 2.5% on the original project cost with annual escalation as per norms of CERC/AERC regulations.

**5.2.7 Escalation on O&M expenditure:** Both EIPL and ASEB submitted annual escalation rate in % for computing O&M expenditure for 2008-09 as under:

	<u>ASEB</u>	<u>EIPL</u>	<u>Remark</u>
1998-2002	9	9	—
2002-2004	6	9	—
2004-2009	6	9	EIPL has quoted 6% escalation for 2008-09

The Clause 3.5 of the PPA stipulates that the base O&M expenditure rate of 2.5% for 2008-09 capital cost shall be escalated at the rate per annum based on the weighted average of various expenditure to arrive at the O&M expenditure for a particular year.

The Commission has decided to consider the annual escalation rate since 1998-99 as per the relevant provisions of CERC/AERC regulations as under:

- |              |     |
|--------------|-----|
| 1. 1998-2000 | 10% |
| 2. 2000-2001 | 6%  |
| 3. 2001-2009 | 4%  |

**5.2.8 Fuel cost:** EIPL in their tariff petition dated 28.11.2008 submitted the fuel price including transportation cost for determining fuel charges for 2008-09 as under:

Adamtilla	= Rs. 2520/1000 scm
Banskandi	= Rs. 2565/1000scm

However, the average landed fuel price as per the statement of actual fuel bill for 2008-09 submitted by EIPL are as under:

Adamtilla	= Rs. 2518/1000 scm
Banskandi	= Rs. 2560/1000scm

The Commission has accepted the gas price for calculation of fuel charges for 2008-09 as under:

Adamtilla	= Rs. 2518/1000 scm
Banskandi	= Rs. 2560/1000scm

The fuel cost is computed by the Commission on normative basis with the gross SHR and GCV and the fuel price as approved above.

**5.2.9 Efficiency incentive/ disincentive:** As per the Clause 3.11.1 of the PPA, in case higher generation is achieved during a year which exceeds normative/targeted PLF (actual plus deemed), additional return on equity is payable @ 0.7% for each 1% increase in PLF which is in line with GOI notifications dated 30<sup>th</sup> March, 1992.

Regarding disincentive, as per PPA Clause No. 3.11.2 normative annual fixed charges are payable on achieving targeted PLF (actual plus deemed). In case the actual PLF achieved during a year is less than this level, payment of fixed charges shall be on pro-rata basis.

Further, as per tariff regulation (47), 2006 of AERC, an efficiency incentive shall be payable w.e.f. 24.05.2006 at a flat rate of 25.00 paise per KWH for actual gross generation in excess of ex bus energy corresponding to targeted PLF. Therefore, incentive is payable only on actual generation exceeding targeted PLF and hence deemed generation is not taken into consideration.

Payment of incentive and disincentive after 24.05.2006 shall be governed by the provisions of AERC tariff regulation, 2006. While determining final tariff for EIPL plants, no incentive is considered by the Commission as the actual generation is less than the targeted generation.

**5.2.10 Tax on Income:** As per Clause 3.6 of the PPA, “All taxes, cesses and levies payable on power generation/ sale etc. by the Company shall be refunded by the Board at actuals to the Company”.

Further, tariff regulation, 2006 (20), AERC stipulates that tax on the income streams of a generating company from its core business shall be computed as an expense and shall be recovered from the beneficiaries/consumers.

Provided that the benefit of tax holiday, if any shall be passed on to the consumers.

The Clause 1.5(d) of GOI notification dated 30.03.1992 also specified that tax on the income streams of a generating company to be computed as an expense at actual.

EIPL in their tariff petition dated 28.11.2008 claimed grossed-up income tax of Rs. 339.00 lacs for 2008-09 certified by their appointed auditor which has been treated as accounted for by the company.

The Commission vide letter AERC.316/2008/Pt-II/83 dated 16.08.2011 directed EIPL to submit detailed information on actual income tax paid for their Adamtilla and Banskandi plants for 2008-09 certified by the statutory auditor including any benefit of tax holiday availed by the company under North-East Industrial Policy of 1997 and 2007 wherein 100% income tax exemption is allowed as incentive. Under incentives for Power Generating Industries (Clause XI(III) of NEIIPP 2007), the power generating plants will continue to get incentives as governed by the provisions of section 81A of the Income Tax Act.

EIPL vide their letter No. EIPL-AERC-C-2011-1820 dated 02.09.2011 expressed inability to furnish actual tax payment record for their EIPL plants on the plea that the tax is finally paid for the Company as a single entity based on the cumulative profit/ loss of various business operations belonging to the company.

The Commission vide letter No. AERC/316/Pt II/92 dated 16.09.2011 once again directed EIPL to provide detailed information of income tax paid for FY 2008-09 by the company as a whole and also gave specific directions to state if tax holiday was availed by the Company for operating the power plants in Assam. A reply was submitted by M/s EIPL vide letter No. EIPL-AERC-C-2011-3517 dated 20.09.2011. however, the reply has not been adequate and the desired information has not been made available to the satisfaction of the Commission.

Subsequently, another reply was submitted by M/s EIPL vide letter No. EIPL-AERC-C-2011-2521 dated 13.10.2011 stating that benefit of tax holiday under NEIP-2007 is not applicable for power industry as per Section 80 IE of Income Tax Act. It further stated that the Income Tax Department does not allow tax holiday beyond 10 year period to any industry located anywhere in India and as such, EIPL generating Plants which were commissioned in 1997 are not eligible for tax holidays beyond 2007. The letter also mentioned that CERC allows tax benefit, if any, to be passed on to the generator and grossing up of Income Tax in their Tariff Regulations of 2009.

The Commission notes the contentions of M/s EIPL. It may be mentioned here that the CERC Regulations of 2009 are effective from 01.04.2009 and therefore it is not applicable in the present case.

It is also noted that both the replies dated 20.09.2011 and 13.10.2011 have not provided adequate information/ documents to verify that taxes have actually been paid for the FY 2008-09. In this connection, it may also be mentioned here that while examining the Audited Financial Statements for FY 2008-09, a net loss of Rs 11.12 Cr was noted and no provision for current taxation (MAT/ Corporate Tax) was made.

In view of the above, income tax has not been considered in the tariff calculations.

6. **Deemed generation:** the petitioner stated that under Clause 2.7 of the PPA, the Board is required to pay the fixed charges on actual generation as well as the deemed generation to them. The Commission, after scrutiny and examination of various documents submitted by EIPL in regard to deemed generation, has noted that they are not jointly certified and therefore the Commission considered it as inadequate and infirm submission for evaluation of quantum of deemed generation.

While determining fixed charges for EIPL plants for the year 2008-09, the Commission as a one time measure has considered the deemed generation aspect by allowing recovery of full fixed charges even though the actual PLF for both the plants were less than the normative PLF as specified under Clause 5.1.1 of this order.

7. **Adoption of Tariff under Section 63 of the Electricity Act, 2003:** EIPL vide their letter dated 13.10.2011 appealed to the Commission for determining tariff for their plants as per Section 63 of the Electricity Act, 2003 on the plea that EIPL had been selected through competitive bidding route. The Commission has noted their contention and in this regard viewed that the guidelines for determination of tariff by bidding process for procurement of power by distribution licensees were notified by the Ministry of Power, Government of India on 19.01.2005, prescribing procedures for certification by the evaluation committee consequent to signing of the PPA for adoption of tariffs in terms of Section 63 of the Act. Even bid documents for tariff based bidding are required to be made in accordance with the specifications prescribed by the Government of India. EIPL's contention that both of their power plants were established based on competitive bidding, therefore the tariff should be adopted by the Commission as per Section 63.

As the current provisions under Section 63 of the Electricity Act was not in place at the time of processing the bidding of the above plants, as such the criteria of determination of tariff through transparent process of bidding in accordance with the guidelines issued by Central Government shall not be applicable. Therefore EIPL's above contention is not tenable.

On the basis of the material available on record/documents and the approved operating and financial norms and parameters above, the Commission has now passed order for final tariff comprising of fixed and variable charges for Adamtilla and Banskandi power plants for the year 2008-09. The copies of calculation sheets of final tariff for Adamtilla and Banskandi are annexed herewith as Annexure-1 and Annexure-2 respectively.

The final tariff per unit sent out for Adamtilla and Banskandi plants are as under:

	Adamtilla	Banskandi
1. Fixed cost (Rs./unit)	1.47	1.57
2. Variable cost (fuel) (Rs./unit)	0.82	0.69
3. Tariff per unit sent out (Rs./unit)	2.29	2.26

The petitioner is already billing the respondent on provisional basis in accordance with the order dated 12.05.2009 of the Commission. The provisional billing of tariff shall be adjusted in the light of the final tariff now approved as above.

In the interest of continuation of generation of the EIPL plants, the Commission hereby also orders as under:

- (i) Renewal of Gas Supply Agreement (GSA) to be made positively by 31<sup>st</sup> December, 2011. The utility (APDCL) is required to assist whenever necessary in conclusion of GSA in the greater interest of consumers.
- (ii) The gas commitment to the EIPL plants is required to be enhanced for full capacity generation of the plant. APDCL through Government is required to press ONGC for ensuring enhancement of the gas to the level of required quantity.
- (iii) The plant generation scheduling to be linked with SLDC through robust real time communication link for integrated operation of the EIPL plants with the grid.

This order disposes of Petition No. 14/2008 of M/s EIPL.

Inform all concerned accordingly.

Sd/-  
(T. Chatterjee)  
Member,  
AERC

Sd/-  
(R.K. Gogoi)  
Member,  
AERC

Sd/-  
(J. Barkakati)  
Chairperson,  
AERC

**Determination of Final Tariff for Adamtilla plant of M/S EIPL for the FY 2008-09****Operational and financial data:**

A) SL No.	Particulars	UNIT	FILED BY EIPL	Approved (Final)
1	Installed Capacity	MW	9.00	9.00
2	Annual Gross Generation	MU	52.397	52.397
3	Annual Net Generation	MU		49.52

B) Sl No.	ITEMS	UNIT	FILED BY EIPL	Approved (Final)
1	<b>Project Cost including Additional capital cost</b>			
	i) Approved capital cost as on 31.03.98	<u>lakh</u>	<b>4553.31</b>	<b>4553.31</b>
	ii) Additional capital Cost for spares	<u>lakh</u>	<b>*270.61</b>	<b>242.32</b>
	<b>TOTAL</b>	<u>lakh</u>	<b>4823.92</b>	<b>4795.63</b>
2	landed price of gas	Rs/ 1000SCM	2520.00	2518.00
3	G.C.V of Gas	Kcal/SCM.	8000-8150	8147.00

**Financial details**

C) 1	Foreign currency loan	<u>lakh</u>	2057.00	2057.00
2	Rupee term loan	<u>lakh</u>	542.00	542.00
3	Lease amount	<u>lakh</u>	505.00	505.00
4	Equity	<u>lakh</u>	1719.92	1691.63
	<b>TOTAL</b>	<u>lakh</u>	<b>4823.92</b>	<b>4795.63</b>

**NORMS**

D) 1	Interst rate on working capital	%	15.25%	9.50%
2	Depreciation Rate	%	8.045%	6.00%
3	ROE	%	16.00%	14.00%
4	Auxiliary Power Consumption	%	9.00%	5.50%
5	Normartive PLF	%	66.46%	66.46%
6	Gross station Heat Rate	Kcal/Kwh	2500.00	2500.00
7	Sp Fuel Consumption	SCM/unit		0.3069
8	<b>O &amp; M Escalation Rate</b>			
	1998-2000	%	9.00%	10.00%
	2000-2001	%	9.00%	6.00%
	2001-2002	%	9.00%	4.00%
	2002-2009	%	<b>**9.00%</b>	4.00%
9	Income Tax	%	33.99% (Grossed up)	

**Annual Charges**

E) i)	<b>Fixed charge</b>			
	ii) O&M	<u>lakh</u>	310.17	210.45
	iii) Depreciation	<u>lakh</u>	356.60	258.26
	iv) ROE	<u>lakh</u>	293.30	236.83
	v) Interest on Working Capital	<u>lakh</u>	34.60	25.09
	v) Income tax	<u>lakh</u>	240.50	
	vi) Incentive payable per annum	<u>lakh</u>	173.80	
	<b>Total</b>		<b>1408.97</b>	<b>730.63</b>
ii)	<b>Variable Charge (fuel)</b>	<u>lakh</u>		<b>404.86</b>
	Total (I+II)	<u>lakh</u>	<b>1408.97</b>	<b>1135.49</b>
	<b>Tariff (Gross)</b>	<b>Rs./Kwh</b>	<b>***2.234</b>	2.1671
	<b>Tariff (Net)</b>	<b>Rs./Kwh</b>		2.2932

**Tariff (Net)**

F) I)	Fixed Cost	Rs./Kwh		1.4756
II)	Fuel Cost	Rs./Kwh		0.8176
	<b>Total (Net)</b>	Rs./Kwh		2.2932

**Interest on Working capital**

1	One month fuel cost	<u>lakh</u>	35.25	33.74
2	One month Spares (1% GFA + 6 % escalation from COD )	<u>lakh</u>		91.04
3	One Month O & M	<u>lakh</u>	25.85	17.54
4	Two months receivables	<u>lakh</u>	165.78	121.77
	<b>Total</b>	<u>lakh</u>	226.88	264.08
5	Rate of interest on WC	%	15.25%	9.50%
6	Interest on WC	<u>lakh</u>	34.60	25.09

\*Additional unutilized spares are apportioned on plant capacity basis

\*\* 6% for 2008-09.

\*\*\*EIPL filed petition for only fixed charges

Determination of Final Tariff for Banskandi plant of M/S EIPL for the FY 2008-09**Operational and financial data:**

A)	<u>SL No.</u>	<u>Particulars</u>	<u>Unit</u>	<u>FILED BY EIPL</u>	<u>Approved (Final)</u>
	1	Installed Capacity	MW	15.50	15.50
	2	Annual Gross Generation	MU	92.996	92.996
	3	Annual Net Generation	MU		87.88

B)	<u>Sl No.</u>	<u>ITEMS</u>	<u>UNIT</u>	<u>FILED BY EIPL</u>	<u>Approved (Final)</u>
	1	<b>Project Cost including Additional capital cost</b>			
		i) Approved capital cost as on 31.03.98	<u>lakh</u>	<b>8010.40</b>	<b>8010.40</b>
		ii) Additional capital Cost for spares	<u>lakh</u>	<b>*788.49</b>	<b>739.78</b>
		<b>TOTAL</b>	<u>lakh</u>	<b>8798.89</b>	<b>8750.18</b>
	3	landed price of gas	Rs/ 1000SCM	2565.00	2560.00
	4	G.C.V of Gas	Kcal/SCM.	8000-8310	8324.00

**Financial details**

C)	1	Foreign currency loan	<u>lakh</u>	3130.00	3130.00
	2	Rupee term loan	<u>lakh</u>	1500.00	1500.00
	3	Lease amount	<u>lakh</u>	712.00	712.00
	4	Equity	<u>lakh</u>	3454.39	3408.18
		<b>TOTAL</b>		<b>8796.39</b>	<b>8750.18</b>

**NORMS**

D)	1	Interest Rate on working capital	%	15.25%	9.50%
	2	Depreciation Rate	%	8.05%	6.00%
	3	ROE	%	16.00%	14.00%
	4	Auxiliary Power Consumption	%	9.00%	5.50%
	5	Normative PLF	%	68.49%	68.49%
	6	Gross station Heat Rate	Kcal/Kwh	2110.00	2110.00
	7	Sp Fuel Consumption	SCM/unit		0.2535
		<b>O &amp; M Escalation Rate</b>			
		1998-2000	%	9.00%	10.00%
		2000-2001	%	9.00%	6.00%
		2001-2002	%	9.00%	4.00%
		2002-2009	%	<b>**9.00%</b>	4.00%
	9	Income Tax	%	33.99%	
				(Grossed up)	

**Annual Charges**

E)	i)	<b>Fixed charge</b>			
		ii) O&M	<u>lakh</u>	538.38	383.99
		iii) Depreciation	<u>lakh</u>	641.30	471.92
		iv) ROE	<u>lakh</u>	534.60	477.15
		v) Interest on Working Capital	<u>lakh</u>	60.40	45.42
		v) Income tax	<u>lakh</u>	413.90	
		vi) Incentive payable per annum	<u>lakh</u>	269.20	
		<b>Total</b>	<u>lakh</u>	<b>2457.78</b>	<b>1378.47</b>
	ii)	<b>Variable Charge (fuel)</b>	<u>lakh</u>		<b>603.47</b>
		Total (I+II)	<u>lakh</u>	<b>2457.78</b>	<b>1981.94</b>
		<b>Tariff (Gross)</b>	<b>Rs./Kwh</b>	<b>***2.263</b>	2.1312
		<b>Tariff (Net)</b>	<b>Rs./Kwh</b>		2.2553

**Tariff (Net)**

F)	I)	Fixed Cost	Rs./Kwh		1.5686
	II)	Fuel Cost	Rs./Kwh		0.6867
		<b>Total (Net)</b>	Rs./Kwh		2.2553

**Interest on Working capital**

	1	One month fuel cost	<u>lakh</u>	55.42	50.29
	2	One month Spares (1% GFA + 6 % escalation from COD )	<u>lakh</u>		166.10
	3	One Month O & M	<u>lakh</u>	44.86	32.00
	4	Two months receivables	<u>lakh</u>	295.77	229.75
		<b>Total</b>	<u>lakh</u>	396.05	478.14
	5	Rate of interest on WC	%	15.25%	9.50%
	6	Interest on WC	<u>lakh</u>	60.40	45.42

\*Additional unutilized spares are apportioned on plant capacity basis

\*\* 6% for 2008-09.

\*\*\*EIPL filed petition for only fixed charges