

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION,  
BHOPAL**

**Sub : In the matter of petition u/s. 86 (1) (b) of the Electricity Act, 2003 for approval of purchase of power from PTC India Limited by the Petitioner under the PSA dated 30<sup>th</sup> May, 2005 signed between the erstwhile MPSEB & PTC, which has been sourced from 300 MW Unit I of Lanco Amarkantak Power Ltd. under the PPA dated 11<sup>th</sup> May, 2005 signed between PTC & Lanco pursuant to the Settlement Agreement dated 16<sup>th</sup> October, 2012 signed amongst the Petitioner and Respondents.**

---

**ORDER**

**(Date of hearing : 26.11.2012)**

**Date of order : 01<sup>st</sup> December, 2012**

**M.P. Power Management Co. Ltd.**

**V/s**

**M/s PTC India Ltd.**

**M/s Lanco Amarkantak Power Ltd.**

**Petitioner**

**Respondent No.1**

**Respondent No.2**

Shri Pramod Choudhary, AGM and Shri Manoj Dubey, Adviser (Law) appeared on behalf of the petitioner. Shri S.S. Sharma, EVP, Shri Pankaj Goel, VP and Shri Varun Pathak, Advocate appeared on behalf of Respondent No.1 .

2. The subject petition has been filed by the petitioner M.P. Power Management Co. Ltd. for approval of the electricity purchase and procurement process of power by the petitioner through M/s. PTC India Ltd., (Respondent No.1) and to fix the price thereof under Section 86 (1) (b) of the Electricity Act, 2003. The said power shall be procured by M/s PTC (Respondent No.1) from M/s Lanco Amarkantak Power Ltd, (Respondent No.2) for delivery to the petitioner.

3. Brief facts of the case are as follows:

- a) M/s. Lanco Amarkantak Power Ltd. (LANCO or LAPL) (Respondent No.2) and M/s. PTC India Ltd. (Respondent No.1) entered into a PPA on 11<sup>th</sup> May, 2005 for supply/purchase of power from LAPL unit No.1 having capacity of 300 MW at Village Pathadi, District Korba, Chattisgarh.

- b) M/s. PTC India Ltd. (Respondent No.1) and MPSEB (now MP Power Management Co. ltd.) who had been assigned the job of procurement of power on behalf of the Discoms of the state entered into a PSA on 30<sup>th</sup> May, 2005 for supply of power from Unit No.1 of 300 MW of LAPL.
- c) The Commission was approached by the MPSEB for approval of the PSA between MPSEB and Respondent No.1. The Commission vide order dated 07.03.2008 granted in principle approval to the PSA between PTC and MPSEB with the condition that the developer LANCO should submit to the jurisdiction of the Commission for determination of generation tariff.
- d) On 14.03.2008, LANCO served termination notice to PTC in respect of PPA signed with PTC. On 31.03.2008 the Hon'ble High Court of MP restrained LANCO from giving effect to the termination notice in W.P. 4103/08 filed by the M.P. Power Trading Company.
- e) On 06.05.2008, the Commission passed another order allowing provisional tariff of 220 paise per unit (leveled), which was 95% of the tariff as indicated in the agreement. At the same time the Commission observed that irrespective of LANCO's refusal to submit to MPERC jurisdiction, MPERC has jurisdiction to determine their tariff and approve the PSA in this case.
- f) On 16.06.2008, the Hon'ble High Court of MP dismissed IA filed by LANCO seeking vacation of the interim stay granted on 31.03.2008 in W.P. 4103/08.
- g) On 21.10.2008, the Hon'ble APTEL on the Appeal of LANCO (No.71/2008) set aside MPERC order dated 06.05.2008 deciding that this Commission has no jurisdiction to determine the generation tariff of M/s. Lanco in this case. Subsequently, APTEL order was challenged before the Hon'ble Supreme Court by:
  - i. M.P. Power Trading Company vide Civil appeal No. 6676/2008
  - ii. MPERC vide Civil Appeal No. 1335/2009
  - iii. PTC vide Civil Appeal No. 7379/2009

- h) Meanwhile, LANCO filed a Writ Appeal No. 687/2008 before the Hon'ble High Court of MP challenging the earlier order of the Hon'ble High Court of MP. On 29.06.2009 the Hon'ble High Court ordered that the petition of the M.P. Power Tradeco (W.P. 4103/08) in the subject matter was not maintainable. M.P. Power Trading Company challenged the Hon'ble M.P. High Court's order through SLP 16101/2009 before the Hon'ble Supreme Court. On 08.04.2010 the Hon'ble Supreme Court dismissed this SLP.
- i) PTC had approached this Commission vide petition no. 55/2008 to adjudicate the dispute between PTC and LANCO. MPERC adopted the Hon'ble High Court's stay and passed an order on 25.08.2008 stating that the MPERC has jurisdiction to adjudicate the dispute. MPERC order dated 25.08.2008 was challenged by LANCO before the Hon'ble APTEL vide Appeal No.7/2009. The Hon'ble APTEL on 06.08.2009 set aside MPERC order dated 25.08.2008.
- j) Cases before various fora are not yet finally decided.
4. In the instant petition, it has been stated by the petitioner that there has been a Settlement Agreement between the petitioner, respondent No.1 and respondent No.2 whereby certain amendments in the earlier PPA between the respondent No.1 & 2 and consequently in the PSA between the petitioner and the respondent No.1, have been agreed. The parties in the matter i.e. the petitioner, Respondent No.1 and Respondent No.2 have agreed in the settlement agreement to resolve the dispute. The petitioner and the respondents have resolved to withdraw all disputes raised through petitions at various fora. The appeal against the order of the Hon'ble APTEL is pending before the Hon'ble Supreme Court of India. They have submitted the Settlement Agreement to the Hon'ble Supreme Court of India.
5. The Commission heard the matter on 6<sup>th</sup> November, 2012. After perusal of the submissions made by the petitioner and the respondents in their written and oral submissions during the course of hearing, the Commission directed the petitioner and the respondents to submit detailed replies along with relevant documents on the following issues by 20<sup>th</sup> November, 2012 :
- i. Reasons for change in methodology of tariff setting in the Settlement Agreement as compared to that of PPA signed in 2005.
  - ii. M.P. Power Management Co. Ltd. to establish requirement of power to justify purchase of 300 MW power from PTC.

- iii. The details of the Implementation Mechanism, as referred to in the Settlement Agreement.
- iv. In view of Hon'ble APTEL's Order in Appeal No.71 of 2008, the determination of tariff for supply of power from Lanco Gen station is not under the jurisdiction of this Commission. This Order is not yet set aside by the Apex court. What are the implications of this order on the present petition? The Settlement Agreement indicates that M/s. Lanco will provide necessary documents/details to the PTC for further submission to the Commission for fixing of price, which indicates that M/s. Lanco have not submitted themselves directly to the Commission for determination of tariff. Unless the Commission carries out the checks, how the Commission would fix the price for purchase of power is not clear. The legal position in this regard be clarified.
- v. M/s. Lanco have more than one generating unit and has total generating capacity of more than 300 MW. The Settlement Agreement indicates that the variable cost would depend on the cost of coal and GCV for the coal supplied through coal linkage from SECL or purchase through e-auction from the open market or through import. The variable charges are likely to go up if there is a shortage of supply of coal through the coal linkage from SECL. How it would be ensured that the coal supplied through the coal linkage meant from SECL for generating unit I of 300 MW is exclusively and adequately used for generation/ export of power from this unit which is meant to supply power to MPPMC. The Settlement Agreement is silent on this issue while there is a mention of this issue in the note on Unit-1 PPA Settlement process.
- vi. What are the prevalent taxes/ duties on power generation in Chhatisgarh?
- vii. Whether the provisions given in PPA of 2005 between Lanco and PTC for working out tariff and related charges would prevail or they would all get substituted by the provisions of the settlement agreement?
- viii. While going through the Schedule E – Tariff in PPA signed between PTC and LAPL, following issues emerge which should be clarified and substantiated with relevant data/ documents :
  - a. It is mentioned in clause 1.1.4 that the payment of fuel corresponding to the average of station heat rate specified in Para 4.2 of Schedule F for coal and specific fuel oil consumption specified in Para 4 shall be made from the date of synchronization of the project to the CoD. This provision is

not in accordance with the UI linked charges for infirm power, as prescribed in the CERC Regulations.

- b. Various formulae prescribed in clause 3.5, 4, 5, 6 and Schedule F are not found as per CERC Tariff Regulations. Moreover, the CERC Tariff Regulations do not provide for net station heat rate, as provided in clause 4.2 in Schedule 'F' of the PPA.
- c. CERC norms/Tariff Regulations, as referred to in the PPA seem to be for the period FY 2004 to FY 2009. It may also be clarified whether the old norms/Regulations would continue in this case or the CERC norms/Regulations in-force would be applicable.

- ix. In the PSA between PTC and MPSEB, the provision regarding PTC's trading margin is also not in line with the CERC Regulations for trading margin. This may be clarified.

6. The petitioner and the Respondent No.1 have filed their replies on the issues mentioned in the previous paragraph. On the question of change in methodology of tariff setting, the petitioner has argued as follows:

- a) PPA terms were finalized assuming entire coal supply from SECL and PPA defines coal to mean domestic coal only;
- b) Since the country is presently reeling under severe coal shortage, the coal companies are not in a position to supply linkage coal up to the normative requirement;
- c) Based on the decisions taken by the Ministry of Coal / Coal India, the assured coal supply from SECL has been reduced to 60% in the coal supply agreement and it is likely to undergo further changes depending on domestic coal production;
- d) Coal companies are also contemplating to supply imported coal, which is at a price 3 to 4 times higher than the linkage coal;
- e) Under these circumstances, the cost of generation ought to go up and the cap rate agreed to in the PPA is not sustainable;
- f) On the request of LANCO the parties agreed to remove capping for which approval from the Govt. of MP has also been obtained
- g) The CERC regulations do not provide for any capping on the tariff;
- h) Further under the provisions of the Electricity Act,2003 there is no provision for capping on tariff
- i) Thus the change in methodology of tariff setting in the settlement agreement as compared to that of PPA signed in the year 2005 was to align the power procurement process from LANCO with the Electricity Act,2003 and CERC tariff regulations.

7. The petitioner further informed the Commission that M/s Lanco Amarkantak Power Ltd. has already achieved the CoD for their Unit-I of 300 MW on 9<sup>th</sup> April, 2010 and the supply is ready to be availed. Simultaneously, they informed that presently there is a shortage of availability for supply to the consumers of the state and therefore, load shedding to various categories of consumers is being resorted to. They are therefore, in urgent need of power. Moreover, in order to bridge the power deficit to some extent, they are required to purchase short-term power from the market at rates, which are in excess of Rs.4.00 per unit. The supply of power from M/s Lanco Amarkantak Power Ltd., Unit-I of 300 MW would have a price much lower than that of the short-term purchase from the market. Thus availing LANCO supply would help in reducing the power purchase cost and consequentially would lower the tariff burden on the consumers. It is in the interest of the consumers of the state that the supply is availed from the said unit as early as possible.

8. The Commission having perused the detailed replies of the petitioner and the Respondent No.1 has observed that the instant petition has been filed by the petitioner on behalf of the Discoms with certain amendments to the PSA between the petitioner and the respondent no.1. These amendments are as envisaged in the Settlement Agreement and the Implementation Mechanisms. The Commission's approval has been sought to the process of procurement based on the PSA of the 2005 with amendments along with fixing the price under Section 86 (1) (b).

9. A reading of the foregoing narration would indicate that the Commission's own Civil Appeal No. 1335/2009 is still pending with the Hon'ble Supreme Court notwithstanding the parties' coming to an agreement to settle the dispute. However, since it has been agreed by the parties that the Commission shall be entitled to examine the generation costs, the legal issue agitated by the Commission before the Hon'ble Supreme Court is effectively taken care of.

10. The developments as stated herein before lead the Commission to the conclusion that the matter practically rests with its order dated 6<sup>th</sup> May, 2008 as on date.

11. The Commission is cognizant of the fact that fuel prices have indeed have gone up in recent years and that the CERC regulations regarding determination of generation tariff do not provide capping of tariff. Since the intention of the parties is to resolve the dispute within the overall framework of CERC regulations, the Commission decides to have no objection to this approach. This is particularly so because the Commission's own regulations relevant to the subject are totally in line with the relevant CERC regulations.

12. The Commission also appreciates the concerns of the petitioner that power purchase, if undertaken under the subject PPA will turn out to be much cheaper than medium or short term procurement both in the short and in the long term.

13. The issues at hand are now to:

- (i) Consider approval to the PSA between the petitioner and the Respondent No.1 and,
- (ii) Fix the price at which the electricity shall be procured through the agreement for purchase of power for distribution and supply, under section 86(1) (b) of the Electricity Act, 2003

14. A review of the conditions envisaged in the Settlement Agreement and the Implementation Mechanisms resulting in amendment to the PPA entered into in the year 2005 has been done and the amendments proposed are found in order.

15. In so far as the issue of fixing the price for purchase of electricity is concerned, a detailed examination of capital cost is required to be undertaken in respect of the Unit-I of 300 MW at Village Pathadi, District Korba of M/s Lanco Amarkantak Power Ltd. During the course of hearing on 26.11.2012, the Respondent No. 1 submitted the following details in respect of the capital cost of Unit No. 1 of 300 MW at Village Pathadi District Korba of M/s. Lanco Amarkantak Power Ltd.

<b>S. No.</b>	<b>Description</b>
1.	Detailed Project Report
2.	Financial Closure – Letter form PFC dated 16.09.2005
3.	Actual CoD – Copy of WRPC document
4.	Lender wise Loan Sanction orders
5.	Actual date wise disbursement
6.	Actual date wise repayment
7.	Actual Loan drawn
8.	Details of invested Equity – Summary
9.	Details of invested Equity – Copies of Form 2
10.	IDC Calculations up to CoD
11.	Common Loan Agreement
12.	Actual Project cost incurred as on CoD
13.	Weighted average interest rate – Summary
14.	Applicable interest rate on each loan
15.	Cost over run approval – PFC Letter dated 28.01.2010
16.	Cost over run common loan agreement
17.	Detailed statement regarding infirm power

16. On scrutiny of the above details filed by Respondent No. 1, the petitioner, vide Commission's letter No.3286 dated 27.11.2012 was asked to clarify certain issues for prudence check on the capital cost mentioned in the petition and the settlement agreement. The petitioner through its letter no. CGM/Regulatory/268 dated 29.11.2012 filed the reply to the queries asked by the Commission in the above mentioned letter.

17. Based on the details and documents including the Chartered Accountant's certificate dated 23<sup>rd</sup> November 2012 filed by the respondents and the clarifications provided by the petitioner in its supplementary submissions, the capital cost of Rs.1236.40 Crs. in respect of 300 MW unit 1 in the subject matter as agreed between the parties is found to be in order. The break-up of the aforesaid capital cost is given below:

**Break-up of actual capital expenditure as on COD:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>Actual Cost</b>
1	Cost of land and site development	Rs. Cr.	29.04
2	Steam Generator Island	Rs. Cr.	260.10
3	Turbine Generator Island	Rs. Cr.	218.14
4	Total BOP Mechanical	Rs. Cr.	258.49
5	Total BOP Electrical	Rs. Cr.	154.07
6	C& I Package	Rs. Cr.	49.77
	<b>Sub- Total including Plant and Equipment</b>	<b>Rs. Cr.</b>	<b>969.61</b>
7	Civil works	Rs. Cr.	264.78
8	Construction and pre-commissioning expenses	Rs. Cr.	28.49
9	Overheads	Rs. Cr.	45.32
10	IDC, FC,FERV etc	Rs. Cr.	213.54
11	Additional expenses charged to P&L from 01.04.2009 to COD	Rs. Cr.	156.72
12	<b>Total Capital Cost as on COD</b>	<b>Rs. Cr.</b>	<b>1678.46</b>
13	Revenue from sale of infirm power	Rs. Cr.	629.60
14	Fuel expenses for generation of infirm power	Rs. Cr.	162.10
15	Revenue earned from sale of infirm power	Rs. Cr.	467.50
16	Capital cost considering revenue from infirm power	Rs. Cr.	1210.96
17	Margin Money	Rs. Cr.	25.44
	<b>Net Capital Cost as on COD</b>	<b>Rs. Cr.</b>	<b>1236.40</b>



18. The annual capacity (fixed) charge, based on the above mentioned net capital cost as on COD and the norms/provisions under CERC (Terms and Conditions for determination of Tariff) Regulations, 2009 is worked out as given below :

**1. Capital Cost as on CoD:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Opening Gross Block as on COD	Rs. Cr.	1236.40
2	Addition during the year	Rs. Cr.	0.00
3	Closing Gross Block	Rs. Cr.	1236.40
4	Total Loan considering as per filing	Rs. Cr.	934.49
5	Total Equity considered	Rs. Cr.	301.91
6	Debt : Equity ratio	Ratio	76 : 24

**2. Annual fixed (capacity ) charges:**

**(a) Return on equity:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Opening Equity	Rs. Cr.	301.91
2	Equity addition during the year	Rs. Cr.	0.00
3	Closing equity	Rs. Cr.	301.91
4	Average equity	Rs. Cr.	301.91
5	Base rate of Return on Equity	%	15.50
6	Rate of return on equity considering MAT	%	19.38
7	Return on equity	Rs. Cr.	<b>58.50</b>

**(b) Interest charges on loan:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Opening Loan as on COD	Rs. Cr.	934.49
2	Repayment considered equal to depreciation during FY10-11	Rs. Cr.	62.19
3	Repayment considered equal to depreciation during FY11-12	Rs. Cr.	62.19
4	Opening balance as on 1st April, 2012	Rs. Cr.	810.11
5	Loan addition during the year	Rs. Cr.	0.00
6	Repayment during the year	Rs. Cr.	62.19
7	Closing Loan	Rs. Cr.	747.92
8	Average Loan	Rs. Cr.	779.01
9	Weighted average rate of interest	%	12.67
<b>10</b>	<b>Interest amount</b>	<b>Rs. Cr.</b>	<b>98.70</b>

**( C) Depreciation:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Opening Gross Block	Rs. Cr.	1236.4
2	Gross Block addition during the year	Rs. Cr.	0.00
3	Closing Gross Block	Rs. Cr.	1236.40
4	Average Gross Block	Rs. Cr.	1236.40
5	Weighted average rate of depreciation	%	5.03
6	Depreciation amount	Rs. Cr.	<b>62.19</b>

**(d) Operation & Maintenance expenses:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Installed Capacity	MW	300
2	Per MW O&M expenses (as per CERC reg.)	Rs. L/MW	18.91
3	Total O&M expenses	Rs. Cr.	<b>56.73</b>

**(e) Secondary fuel oil expenses:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Installed Capacity	MW	300
2	NAPAF	%	85
3	Gross Generation	MU's	2233.8
4	Normative Sp. Oil consumption	ml/kWh	1.00
5	Quantity of Sec. fuel oil	KL	2233.8
6	Rate of secondary fuel oil	Rs/KL	60248
7	Cost of secondary fuel oil	Rs. Cr.	<b>13.46</b>

**(f) Interest on working capital:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Cost of coal for 60 days	Rs Cr.	47.31
2	Cost of fuel oil for 60 days	Rs. Cr.	2.21
3	O&M Charges for one month	Rs. Cr.	4.73
4	Maint. Spares 20% of the O&M charges	Rs. Cr.	11.35
5	Receivables for two months	Rs. Cr.	100.31
6	Total working capital	Rs. Cr.	165.91
7	Applicable rate of interest	%	14.75
<b>8</b>	<b>Interest on working capital</b>	<b>Rs. Cr.</b>	<b>24.47</b>

**(4) Annual capacity (fixed) charges:**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Return on equity	Rs Cr.	58.50
2	Interest charges on loan	Rs. Cr.	98.70
3	Depreciation	Rs. Cr.	62.19
4	Operation & Maintenance expenses	Rs. Cr.	56.73
5	Secondary fuel oil expenses	Rs. Cr.	13.46
6	Interest on working capital	Rs. Cr.	24.47
7	Total annual capacity charges	Rs. Cr.	<b>314.05</b>
8	Indicative Annual fixed cost per unit at normative availability	Rs./kWh	<b>1.41</b>

Accordingly, the indicative per unit annual fixed cost is worked out at **Rs. 1.41 per kWh** for FY 2012-13.

19. The energy charges (Variable cost) of the generating unit under subject shall be calculated on the operating norms as specified in the CERC (Terms and Conditions for determination of Tariff)' Regulations 2009 and the weighted average landed price of coal, as applicable during the month and the gross calorific value of coal in accordance with the relevant provisions under CERC (Terms and Conditions for determination of Tariff)' Regulations 2009. For the year 2012-13, the indicative energy charge rate works out as follows :

**(5) Energy Charge Rate :**

<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>FY12-13</b>
1	Capacity	MW	300
2	NAPAF	%	85
3	Gross Station Heat Rate	kCal/kWh	2402
4	Sp. Fuel Oil Consumption	ml/kWh	1.00
5	Aux. Energy Consumption	%	9.00
6	Transit Loss	%	0.80
7	Weighted average GCV of Oil	kCal/ltr.	10,000
8	Weighted average GCV of Coal	kCal/kg	3030
9	Weighted Average price of Coal	Rs./MT	1619
10	Heat Contributed from HFO	kCal/kWh	10
11	Heat Contributed from Coal	kCal/kWh	2392
12	Specific Coal Consumption	kg/kWh	0.7895
13	Sp. Coal Consumption including Transit Loss	kg/kWh	0.7958
14	Rate of Energy Charge from Coal	Rs./kWh	1.29
15	<b>Rate of Energy Charge from Coal at ex bus</b>	<b>Rs./kWh</b>	<b>1.42</b>
16	Gross generation	MU's	2233.80
18	Quantity of coal	MT	1777704
19	Total coal cost	Rs. Cr.	<b>287.81</b>

20. In light of the above mentioned observations and findings, the Commission hereby accords approval to the process of the subject power procurement under the settlement agreement and implementation mechanism filed by the petitioner under section 86(1)(b) of the Electricity Act, 2003 at the annual fixed cost as determined above and the energy charges as per relevant provisions of the CERC (Terms and Conditions for determination of Tariff) Regulations, 2009.

Ordered accordingly.

Sd/-  
**(Rakesh Sahni)**  
**Chairman**