

A7: TARIFF PETITION FY 2009-10: TRUE UP FOR FY 2007-08

- 7.1 The Commission has scrutinized the petition filed by TPCL for FY 2009-10 for the trueing up exercise of cost & operational parameter for FY 2007-08, as per actual audited data available for FY 2007-08.
- 7.2 The component-wise description of the petitioner's submission and the Commission's analysis on the same is given below.

Basis of Fuel Cost & Fixed cost Determination

Petitioner's submission

- 7.3 The petitioner has submitted its proposal of energy and fixed charges as per the terms and conditions of the PPA signed between the petitioner and TSL in 1997 and the actual data for parameters not specified in the PPA.

Commission's analysis

- 7.4 Since the PPA is legally binding on the petitioner and the effective tariff period is already over, the Commission has decided to determine the tariff for FY 2007-08 in accordance with the provisions of the PPA. For parameters involved in tariff determination that have not been specified in the PPA, the Commission has adhered to the 'Generation Tariff Regulations, 2004'. For parameters where the actual figures show improvement in the efficiency of the Generation company or are more cost-effective vis-a-vis the PPA terms and conditions, the Commission has accepted the actual figures for tariff determination.

Plant Load Factor (PLF)

Petitioner's submission

- 7.5 For the true-up of costs for FY 2007-08, the petitioner has submitted that the actual PLF in FY 2007-08 was 78% for Unit II and 74% for Unit III.

Commission's analysis

- 7.6 The Commission approves the PLF at 78% for Unit II and 74% for Unit III for FY 2007-08, since the submission of the petitioner is based on actual figures.

Gross Generation

Petitioner's submission

- 7.7 The petitioner has submitted 822 MUs as the gross generation of Unit II and 780 MUs as that of Unit III for FY 2007-08 on the basis of the actual PLF for the two Units.

Commission's analysis

7.8 Since the submission of the petitioner is based on actual figures, the Commission approves the same for true-up of ARR for FY 2007-08.

Auxiliary Consumption

Petitioner's submission

7.9 The petitioner has submitted that the actual auxiliary consumption during FY 2007-08 was 10.40% for Unit II and 10.39% for Unit III.

Commission's analysis

7.10 Since the submission of the petitioner is based on actual figures, the Commission approves the same for true-up of ARR for FY 2007-08.

Net Generation

Petitioner's submission

7.11 The Net Generation has been submitted at 736 MUs and 699 MUs for Unit II and Unit III respectively.

Commission's analysis

7.12 The Commission approves the net Generation of 736 MUs and 699 MUs for the two Units of Jojobera plant.

Station Heat Rate

Petitioner's submission

7.13 The petitioner has submitted 2645 kcal/kWh and 2676 kcal/kWh as the actual SHR for Unit II and III respectively for FY 2007-08.

Commission's analysis

7.14 Since the submission of the petitioner is based on actual figures, the Commission approves the same for true-up of FY 2007-08 costs.

Specific oil consumption

Petitioner's submission

7.15 The petitioner has submitted 0.85 ml/kWh and 0.93 ml/kWh as the actual specific oil consumption for Unit II and III respectively for FY 2007-08.

Commission's analysis

7.16 Since the submission of the petitioner is based on actual figures, the Commission approves the same for true-up of ARR for FY 2007-08

Gross Calorific Value (GCV) of primary and secondary fuel

Petitioner's submission

7.17 For the purpose of truing up, the petitioner has submitted the GCV of MCL coal as 2809 kcal/kg and that of West Bokaro coal as 4347 kcal/kg for FY 2007-08. It has submitted the GCV of secondary fuel at 9100 kcal/kl.

Commission's analysis

7.18 The Commission considered the actual monthly information given with the additional data solicited from the petitioner for calculating the actual GCV of fuel. As per the actual figures of FY 2007-08, the annual average GCV of MCL coal comes to be 3129 kcal/kg while that of West Bokaro coal comes to be 4546 kcal/kg. Hence, the Commission has approved these figures as the respective GCV of coal for FY 2007-08 true-up.

7.19 However, the Commission approves the proposed GCV of secondary fuel of 9100 kcal/kl.

Price of primary and secondary fuel

Petitioner's submission

7.20 For the purpose of truing up, the petitioner has submitted the revised price of MCL coal as Rs. 951/MT, West Bokaro coal as Rs. 1624/MT and that of secondary fuel as Rs. 28608/MT for FY 2007-08.

Commission's analysis

7.21 To determine the actual rate and quantity consumed of the primary and secondary fuel, the Commission asked the petitioner to furnish monthly bills from its fuel suppliers for FY 2007-08. After averaging out the rate of each fuel over the entire year, the Commission arrived at Rs. 952/MT as the price of MCL coal, Rs. 1614/MT as the price of West Bokaro coal and Rs. 28640/kilolitre as the rate of secondary oil for FY 2007-08. The Commission has made use of these actual figures for computing and approving the price of primary and secondary fuel for the true up of FY 2007-08.

Transit Loss

Petitioner's submission

7.22 As per the petitioner, the PPA with TSL specifies that fuel costs shall mean the actual landed cost of primary and secondary fuel consumed by the power station, including all agreed transport losses.

Commission's analysis

7.23 Since the fuel price submitted by the petitioner is the actual landed cost of fuel, this implies that all calculations involving the given fuel price are already grossed up. Hence the Commission has not considered transit loss separately.

Summary of Plant parameters & fuel cost determinants

7.24 The summary of Plant parameters and fuel cost determinants for the two Units of Jojobera plant of TPCL submitted by the petitioner and approved by the Commission for the true up of FY 2007-08 is given below.

Table 16 Plant parameters & Fuel cost determinants (True up for FY 2007-08)

Parameters	Unit	Unit II		Unit III	
		Submitted by TPCL	Approved by JSERC	Submitted by TPCL	Approved by JSERC
Capacity	MW	120	120	120	120
Plant Load Factor	%	78%	78%	74%	74%
Auxiliary Consumption	%	10.40%	10.40%	10.39%	10.39%
Station Heat Rate	Kcal/Kwh	2645	2645	2676	2676
GCV of Coal (IB Valley/West Bokaro)	Kcal/Kg	2809/ 4347	3129/ 4346	2809/ 4347	3129/ 4346
GCV of oil	Kcal/Kg	9100	9100	9100	9100
Specific oil consumption	ml/Kwh	0.85	0.85	0.93	0.93

Coal consumption	Kwh	562275	537546	539552	515709
Oil consumption	Kwh	699	699	725	725
Price of Coal (IB Valley/West Bokaro)	Rs/MT	951/ 1624	952/ 1614	951/ 1624	952/ 1614
Price of Oil	Rs/KL	28608	28640	28608	28640
Total Coal Cost	Rs. Cr	79.20	73.84	76.00	70.86
Total Oil cost	Rs. Cr	2.00	2.00	2.07	2.08
Net Fuel Cost	Rs. Cr	81.2	75.8	78.08	72.9
Energy Charges	Rs/Unit	1.10	1.03	1.12	1.04

True up exercise for fixed cost determinants

- 7.25 Apart from RoE and Interest on working capital, the Commission finds no need for any change in any other component of fixed cost since there have been no changes in the factors & norms that forms the basis of computation for these components.
- 7.26 The Commission has recalculated the RoE component of fixed costs for FY 2007-08 as the rate of return on RoE is linked with the PLF of the unit for which the actual figures are different from the FY 2007-08 submissions by the petitioner.
- 7.27 The interest on working capital has been computed on the basis of the actual figures for cost coal & oil and receivables as also on account of the interest on working capital which was earlier taken at a lower rate and now has been considered at the short-term Prime Lending Rate of State Bank of India as on 1st April 2007.
- 7.28 The Income Tax payable has been computed on the basis of the RoE computed for FY 2007-08 for the two Units of the Jojobera Plant.

Summary of Fixed Cost determinants and Generation Tariff

- 7.29 The table below shows the trued-up fixed cost determinants and Generation tariff for FY 2007-08, in terms of the petitioner's revised submission and the Commission's approved costs.

Table 17 Fixed cost determinants and Generation Tariff (Rs. Cr) (True up for FY 2007-08)

Parameters	Unit	Unit II		Unit III	
		Submitted by TPCL	Approved by JSERC	Submitted by TPCL	Approved by JSERC
O&M charges	Rs. Cr	19.65	19.42	17.80	17.59
Depreciation	Rs. Cr	32.91	32.91	32.55	32.59

Interest on Loan	Rs. Cr	10.77	10.39	14.81	13.90
Return on Equity	Rs. Cr	27.73	27.56	23.56	23.49
Interest on Working Capital	Rs. Cr	4.76	4.69	4.59	4.82
Income Tax	Rs. Cr	3.54	3.52	3.01	3.00
Total Fixed cost	Rs. Cr	99.36	98.49	96.31	95.38
Energy Cost	Rs. Cr	81.2	75.84	78.08	72.94
Total Cost	Rs. Cr	180.56	174.34	174.4	168.32
Net generation	MUs	736	736	699	699
Generation Tariff	Rs./Unit	2.45	2.37	2.50	2.41