

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 109 of 2008

In the matter of
Petition filed by M/s The Tata Power Company Limited-Distribution business for approval of power purchase for Quarter-2 and Quarter-3 of FY 2008-09 under Regulation 25 of the MERC (Terms and Conditions of Tariff) Regulations, 2005

Shri. V.P Raja, Chairman
Shri. A. Velayutham, Member
Shri. S. B. Kulkarni, Member

ORDER

Dated: April 08, 2009

The Tata Power Company Limited - Distribution business (TPC-D) submitted a Petition under affidavit before the Maharashtra Electricity Regulatory Commission (hereinafter referred as MERC or the Commission) on November 26, 2008, under Regulation 25 of the MERC (Terms and Conditions of Tariff) Regulations, 2005 (hereinafter referred as the Tariff Regulations) seeking approval of power purchase for Quarter-2 (Q2) and Quarter-3 (Q3) of FY 2008-09.

2. The prayers made by TPC-D in the Petition are as under :

1. *“Grant post facto approval for the cost of purchase of power for Q2 (July, August and September, 2008) and;*
2. *Condone the delay in filing the Petition for Q3 of FY09;*
3. *Grant prior approval for the cost of purchase of power for Q3 (October, November and December, 2008) since the cost has exceeded the target set by the Hon’ble Commission*
4. *Condone any inadvertent omission/errors/short comings and permit Tata Power-D to add/modify this filing and make further submissions as may be required”*



3. TPC-D submitted that the Commission while approving the Aggregate Revenue Requirement (ARR) also approves the power procurement plan of the Distribution Licensee for a particular financial year. Based on the approved power procurement plan for any quarter of a financial year, in case the Distribution Licensee exceeds the approved power procurement plan in terms of cost or quantum by 5%, it is required to seek prior approval of the Commission in accordance with Regulation 25.2 of the Tariff Regulations, which stipulates as follows:

“Subject to the exceptions contained in this Regulation 25, any variation, during any quarter of a financial year, in the quantum or cost of power procured and any procurement from a source other than a previously approved source, in excess of five (5) per cent of the quantum or cost, as the case may be, of power procurement for such quarter, as approved by the Commission in the power procurement plan of the Distribution Licensee, shall be only with the prior approval of the Commission.”

4. TPC-D submitted that it has an agreement with The Tata Power Company Limited - Generation business (TPC-G) to purchase 477 MW from the thermal and hydro generating stations located in the State of Maharashtra. Further, Distribution Licensees of Mumbai region have a standby agreement with the erstwhile Maharashtra State Electricity Board (MSEB) [now Maharashtra State Electricity Distribution Company Limited (MSEDCL)] wherein, MSEDCL supplies power to TPC-D and other Distribution Licensees of Mumbai region during the period of forced and planned outages of TPC-G’s generating stations and Reliance Infrastructure Limited-Generation business’s (RInfra-G) generating station.

5. TPC-D submitted that the Commission in its Tariff Order dated June 4, 2008 for TPC-D in Case No. 69 of 2007 has allocated capacity of 477 MW to TPC-D from TPC-G generating stations as per the approved Power Purchase Arrangement (PPA). TPC-D cited Para 4.6.1 of the above said Order as under:

“Considering the fact that the ATE Judgment dated May 6, 2008 on appeals filed against the Commission’s Order on approval of PPA between TPC-G and BEST and internal arrangement between TPC-G and TPC-D, has been stayed by the Hon’ble Supreme Court, the Commission has considered the allocation of power for FY 2008-09 with effect from April 1, 2008 from the existing capacity and Unit-8 of TPC-G based on the approved PPA between TPC-G and BEST and the internal capacity allocation from the generation division of TPC to its own distribution division. Accordingly, from the existing capacity of TPC-G, the



Commission for FY 2008-09 with effect from April 1, 2008 has considered the power availability of 477 MW for TPC-D from existing TPC-G Stations for FY 2008-09 and 50 MW from Unit 8.”

6. TPC-D submitted that the Commission in its above-said Tariff Order in Case No. 69 of 2007 approved the monthly power purchase quantum and annual power purchase cost and cited the relevant paragraphs of the Order as under:

“4.6.6 Month-wise Power Purchase Quantum for FY 2008-09: The summary of month wise power purchase quantum approved by the Commission based on trends of month-wise energy input requirement in previous is given in Table below:

Table: Month-wise Power Purchase Quantum (MU) for FY 2008-09

TPC-D	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Power Purchase (MU)	268.99	265.52	271.45	266.25	275.24	280.80	273.24	273.33	251.97	246.44	249.19	262.95	3,185.38

4.6.11 Summary of Power Purchase Related Cost

The summary of the total power purchase cost considered by the Commission during FY 2008-09 is shown in the Table below:

Table: Approved Power Purchase cost for FY 2008-09

Source	APR Petition		Approved	
	Quantum	Cost	Quantum	Cost
	MU	Rs Crore	MU	Rs Crore
TPC-G: Thermal excl. Unit 4	2091.0	892.0	2356.5	939.7
TPC-G : Unit 4	126.0	94.0	141.5	100.7
TPC-G : Unit 8	155.0	53.0	179.8	50.9
TPC-G Hydel	367.0		367.2	67.0
RPS	146.0	54.0	159.3	55.7
Additional PP/Sale	36.0	25.0	-19.2	-10.6
Standby Charges		62.0		64.8
Less Hydel Rebate				26.7
Sub-total (Power Purchase)	2921.0	1180.0	3185.0	1241.5
Transmission Charges		57.0		64.60
SLDC Charges				0.4
Reduction of Cost (DSM)				2.0
Total	2921.0	1237.0	3185.0	1304.6

”



TPC-D submitted that the total power purchase quantum at Intra-State Transmission System (InSTS) boundary as approved by the Commission for FY 2008-09 is 3185 MU at a total cost of Rs. 1176 crore excluding the standby charges. TPC-D further submitted that based on the above, the power procurement plan for four Quarters (Q1, Q2, Q3 and Q4) of FY 2008-09 works out to 806 MU, 822 MU, 799 MU and 759 MU (total is 3185 MU), respectively, at a cost of Rs. 294 crore (i.e., 25% of Rs. 1176 crore).

7. TPC-D submitted the details of the actual power purchase quantum and cost for Q-1 and Q-2 of FY 2008-09 as shown in the Table below:

“Table: Power purchase quantum and cost during Q1 and Q2 of FY 2008-09

Month	Quantum of Power Purchase (MUs)					Cost of Power Purchase (Rs Cr)					Total	
	TPC -G Share	Wind	Outside Power	OLA SALE	UI	TPC -G Share	Wind	Outside Power	OLA SALE	UI	(MUs)	(Rs Cr)
Apr-08	265.32	10.76	32.02	-6.05	-83.30	117.87	3.93	27.71	-0.78	-68.16	218.75	80.57
May-08	279.91	20.79	36.37	-6.30	-92.34	129.70	7.60	29.84	-4.81	-78.59	238.44	83.73
Jun-08	232.41	25.15	48.74	-1.36	-76.93	120.54	9.19	37.42	0.00	-70.55	228.00	96.60
										Q1	685.19	260.90
Jul-08	229.85	26.09	22.39	-1.28	-53.27	129.96	9.53	23.95	-0.51	-56.30	223.79	106.63
Aug-08	211.77	18.71	23.67	-3.17	-32.34	118.82	6.84	20.57	-2.73	-32.14	218.63	111.36
Sep-08	216.96	12.58	16.41	-1.66	-26.74	125.10	4.60	14.72	-0.11	-27.06	217.55	117.24
										Q2	659.97	335.23

Note: 1) Actual incentive for thermal generation for H1 is Rs.4.3033 Crore, which is billed in September 2008, however, for calculating the quarterly power purchase target, the incentive of Rs.0.717 Crore is distributed for all the six months.

2) Similarly, the annual hydro incentive for TPC-G is assumed to be as Rs. 18 Crore (based on last year). TPC-D share @ 26.84% will be Rs. 4.8312 Crore. For calculating the quarterly power purchase target, hydro incentive of Rs. 0.4026 Crore is distributed for all the twelve months.

3) Negative value indicates sale to State UI pool and OLA sales and amount received by TPC-D.”

8. TPC-D submitted that it purchased a quantum of 685 MU at a cost of Rs. 261 crore during the first quarter of FY 2008-09 and did not exceed 5 % limit on the quantum as well as cost of power purchase. Hence, in accordance with the Tariff Regulations, for first quarter of FY 2008-09, prior approval of the Commission was not required.

9. TPC-D further submitted that during second quarter of FY 2008-09, it purchased power of 659 MU at a cost of Rs. 335 crore. TPC-D submitted that it has not exceeded the target (i.e., 822 MU) in terms of quantum, however, it has exceeded the cost target of



Rs.309 crore [i.e., Rs. 294 crore + Rs. 15 crore (5 % of Rs. 294 crore)] by about Rs. 26 crore in the second quarter of FY 2008-09. TPC-D submitted that the cost target has been exceeded mainly on account of the significant variation in the fuel cost (i.e., coal and oil) fired at Trombay thermal generating stations. The prices of coal and oil have increased significantly on account of revision in coal contracts and steep rise in international crude oil prices. TPC-D submitted the details of a comparative price of fuel fired at Trombay generating stations and the cost of power purchase for first half of FY 2008-09 as shown in the Table below:

Table: Actual Cost of fuel of Tata Power-G Thermal generating stations

Particular	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Coal Price (Rs/MT)	2750	2778	3872	4505	3985	4318
Oil Price (Rs/MT)	32388	34165	37598	37598	40735	41427
Gas (Rs/MT)	4577	4562	4424	4596	4541	4454
Average cost of power purchase (Rs./kWh)	4.02	4.24	4.71	4.72	5.09	5.25

TPC-D submitted that the average cost (including fixed charge, energy charge and Incentive) of power purchase by TPC-D from TPC-G generating stations has steadily increased in the second quarter of FY 2008-09.

10. On the basis of sales projection, TPC-D projected the energy requirement at InSTS for the third and fourth quarter of FY 2008-09 as shown in the Table below:

Table: Monthly sales forecast for H2 of FY 2008-09

		Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Total
Total Requirement at T<> D	Mus	211.7	207.0	208.8	207.9	200.8	212.0	1248
Transmission Loss @ 4.85 %	Mus	10.8	10.6	10.6	10.6	10.2	10.8	64
Total Requirement at InSTS	Mus	222.5	217.6	219.4	218.5	211.0	222.8	1312

11. TPC-D submitted the details of the projected power purchase quantum for third and fourth quarter of FY 2008-09 as shown in the Table below:

Table: Projected power purchase quantum for Q3 and Q4 of FY 2008-09

		Oct-08	Nov-08	Dec-08	Q3	Jan-09	Feb-09	Mar-09	Q4
Total Requirement at InSTS	Mus	222.5	217.6	219.4	659.5	218.5	211.0	222.8	652.2
Met Through									
TPC- G	Mus	247.7	231.8	251.4	730.9	195.7	203.3	245.0	644.0
RPO	Mus	7.4	5.8	4.9	18.1	6.2	6.5	11.6	24.2
Power Procured/(Sold)	Mus	-32.6	-20.1	-36.8	-89.5	16.6	1.3	-33.8	-16.0



12. TPC-D in its Petition submitted that it purchases power mainly from TPC-G and through the Renewable Purchase Specification (RPS) mechanism from its wind projects located in the State of Maharashtra. Further, the Mumbai Power Management Group (MPMG) procures power for the three Mumbai Distribution Licensees under this mechanism, and as mutually agreed by all the three Mumbai Distribution Licensees, TPC-D gets a share of 10% from the total power procured by MPMG. Most of the energy procured through the MPMG is sold in the State UI Pool based on the merit order dispatch principle as per the Interim Balancing and Settlement Mechanism. Hence, the impact of power purchase from external sources may not significantly impact the power purchase cost of TPC-D. Accordingly, TPC-D submitted that the projected total quantum of power required for third and fourth quarter of FY 2008-09, i.e., 659.2 MU and 652.2 MU, respectively, is expected to be within the target of 799 MU and 759 MU, respectively, as approved by the Commission. However, the cost of generation at Trombay is expected to increase due to increase in the cost of coal and oil.

13. TPC-D submitted that TPC-G uses coal, oil and gas as the primary fuels for its thermal generations. The imported coal and oil prices are governed by the Fuel Supply Agreements, while the gas price is under the Administered Price Mechanism of the Ministry of Petroleum & Natural Gas (MoPNG), Government of India. The prices for these fuels have been continuously increasing. TPC-D submitted the expected monthly fuel prices for FY 2008-09 for coal, oil and gas considering various factors like fuel and freight contracts. TPC-D submitted that the comparison of the expected prices vis-à-vis the fuel prices approved by the Commission for FY 2008-09 indicates that there has been an almost 100% increase in coal prices, 54% increase in oil prices and 3% in gas prices over and above the prices approved by the Commission for FY 2008-09.

14. The Commission, vide its Notice dated December 10, 2008, scheduled the hearing in the matter on January 7, 2009 and directed TPC-D to serve a copy of its Petition along with its accompaniments to the four authorized Consumer Representatives. At the hearing held in the matter on January 7, 2009, Shri. V. H. Wagle representing TPC-D reiterated the submissions made in the Petition as discussed above.

15. During the hearing, the Commission enquired of TPC-D regarding the actual power purchase quantum and cost for third quarter of FY 2008-09 (i.e., for the period from October to December 2008). Shri. Wagle submitted the details of the actual power purchase quantum and cost for third quarter of FY 2008-09. Shri. Wagle further clarified that based on actual data for third quarter of FY 2008-09; TPC-D has not exceeded the 5% limit on the power purchase quantum as well power purchase cost. The Commission observed that if such is the case for third quarter of FY 2008-09, then no approval is



required. TPC-D also agreed and submitted that in accordance with Regulation 25.2 of the Tariff Regulations, the Commission's approval is not required for the third quarter of FY 2008-09.

16. Shri. Wagle submitted that however, for the second quarter, the Commission's approval is required in accordance with Regulation 25.2 of the Tariff Regulations, as the power purchase cost has exceeded the limit of 5% of the power purchase cost. The Commission observed that TPC-D has only emphasised on the first part of Regulation 25.2 of the Tariff Regulations and directed TPC-D to read Regulation 25.2 of the Tariff Regulations along with its proviso. The proviso to Regulation 25.2 of the Tariff Regulations stipulates as under:

“ ...

Provided that a variation in the cost of power procured on account of changes in the price of fuel, calculated in accordance with Regulation 82, shall not be included in determining the need for prior approval of the Commission under this Regulation 25.2.”

17. Accordingly, the Commission observed that TPC-D has relied on only part of Regulation 25.2 of the Tariff Regulations. The proviso to Regulation 25.2 clearly provides that the increase in power purchase cost on account of change in the price of fuel shall not be considered while determining the need for prior approval of the Commission. The Commission further directed TPC-D to submit the impact of variation in power purchase cost for Q2 of FY 2008-09 under the following heads:

- i. Due to change in fuel cost;
- ii. Change in power purchase mix;
- iii. Any other reason.

18. The Commission further directed TPC-D that based on the above break up, it should clarify its position on whether it desires to seek approval for variation in cost in second quarter of FY 2008-09 under Regulation 25.2 of the Tariff Regulations considering the proviso of the said Regulation.

19. Subsequently, TPC-D vide its additional submission dated January 7, 2009 received on January 8, 2009, submitted the details of increase in fuel prices in the overall increase in power purchase cost for second quarter of FY 2008-09 as shown in the Tables below:



July'08

Rs. Crores

Generation		Tariff Order	Actual		Fuel Price Variance
		Rate (Rs./kWh)	Rate (Rs./kWh)	Share of TPC-D	
Unit	Fuel	R1	R2	G1	PV =(R2-R1)*G1/10
Unit 4	Oil	7.14	10.80	17.98	6.58
Unit 4	Gas	0.95	0.97	0.00	0.00
Unit 5	Oil	6.74	10.20	0.00	0.00
Unit 5	Gas	0.90	0.92	0.00	0.00
Unit 5	Coal	1.52	2.37	90.75	7.76
Unit 6	Oil	6.35	9.61	29.40	9.59
Unit 6	Gas	0.85	0.87	11.45	0.02
Unit 7	Gas	0.69	0.71	19.72	0.03
Others (Hydro, Wind, External Power Purchase)				54.82	
				224.12	23.99

August'08

Rs. Crores

Generation		Tariff Order	Actual		Fuel Price Variance
		Rate (Rs./kWh)	Rate (Rs./kWh)	Share of TPC-D	
Unit	Fuel	R1	R2	G1	PV =(R2-R1)*G1/10
Unit 4	Oil	7.14	10.89	14.50	5.45
Unit 4	Gas	0.95	0.9667	0.00	0.00
Unit 5	Oil	6.74	10.30	0.00	0.00
Unit 5	Gas	0.90	0.91	0.00	0.00
Unit 5	Coal	1.52	2.13	85.37	5.24
Unit 6	Oil	6.35	9.70	35.21	11.78
Unit 6	Gas	0.85	0.86	26.93	0.04
Unit 7	Gas	0.69	0.70	0.00	0.00
Others (Hydro, Wind, External Power Purchase)				56.63	
				218.64	22.51

September'08

Rs. Crores

Generation		Tariff Order	Actual (April'08)		Fuel Price Variance
		Rate (Rs./kWh)	Rate (Rs./kWh)	Share of TPC-D	
Unit	Fuel	R1	R2	G1	PV =(R2-R1)*G1/10
Unit 4	Oil	7.14	11.08	17.46	6.89
Unit 4	Gas	0.95	0.9468	0.00	0.00
Unit 5	Oil	6.74	10.47	0.00	0.00
Unit 5	Gas	0.90	0.89	0.00	0.00
Unit 5	Coal	1.52	2.27	87.48	6.59
Unit 6	Oil	6.35	9.87	49.41	17.36
Unit 6	Gas	0.85	0.84	24.65	(0.01)
Unit 7	Gas	0.69	0.69	0.00	0.00
Others (Hydro, Wind, External Power Purchase)				39.73	
				218.73	30.83

20. TPC-D submitted that the total increase in power purchase costs on account of increase in fuel prices is as under:



<i>Rs. Crores</i>	
July'08	23.99
August'08	22.51
September'08	30.83
Total:	77.33

Increase in Power Purchase Cost in Q2, FY 2008-09

<i>Rs. Crores</i>	
Power Purchase Cost approved in the Tariff Order dated 4 th June'08 for FY09 : a	1176.00
Power Purchase Cost approved for the quarter Q2, FY09 : b=(a/4)	294.00
Power Purchase cost allowed to be exceeded as per Regulations 25.1 of Terms & Conditions of Tariff : c=(105% of b)	308.70
Actual Power Purchase Cost for Q2, FY09 : d	337.71
Increase in power purchase cost for Q2, FY09 : e=(d-c)	29.01

Contribution of increase in fuel price in the total increase in Power Purchase Cost

<i>Rs. crore</i>	
Contribution on account increase in fuel prices	77.33
Contribution (Balance) in increase on account of other factors such as (i) mix variance, (ii) volume variance, (iii) price variation on account of other power sources	(48.32)
Total Increase in Power Purchase Cost for Q2, FY09	29.01

TPC-D submitted that as observed from the above Table, the increase in Power Purchase cost due to increase in factors other than rise in fuel cost is Rs. (48.32) crore, i.e., there is a decrease.

21. Subsequently, as regards the requirement of approval for variation in power purchase cost for second quarter of FY 2008-09, TPC-D submitted that if the price variance as shown in the previous paragraph is considered as the variation in the cost due to change in fuel price, the balance quantum may be attributed to other factors. TPC-D further submitted that accordingly, reading this with the proviso of Regulation 25.2 of the Tariff Regulations, it can be inferred that there may not be any need for approval of the



power purchase cost under the said Regulation. TPC-D requested the Commission to consider the above submissions before passing the order.

22. TPC-D further requested the Commission for its consent for this methodology for working out the variations (i.e., due to fuel price change and other factors) under the above Regulations as this would enable TPC-D to decide upfront whether there is a need for prior approval under Regulation 25.2.

23. Having heard TPC and after considering the material placed on record, the Commission rules as under:

24. As regards approval of short-term power purchase, Regulation 25.2 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, provides as under:

“Subject to the exceptions contained in this Regulation 25, any variation, during any quarter of a financial year, in the quantum or cost of power procured and any procurement from a source other than a previously approved source, in excess of five (5) per cent of the quantum or cost, as the case may be, of power procurement for such quarter, as approved by the Commission in the power procurement plan of the Distribution Licensee, shall be only with the prior approval of the Commission.

Provided that a variation in the cost of power procured on account of changes in the price of fuel, calculated in accordance with Regulation 82, shall not be included in determining the need for prior approval of the Commission under this Regulation 25.2.”

25. Accordingly, the Distribution Licensee has to obtain prior approval under Regulation 25.2 of the Tariff Regulations when the Licensee procures power from either a previously approved source or from any other source, in excess of 5% (five percent) of the quantum or cost, as the case may be, of power procurement as approved by the Commission in the power procurement plan of the Licensee for that quarter, excluding the variation in cost of power procurement on account of changes in fuel price.

26. As regards the prayer of TPC-D for prior approval of the cost of power purchase for third quarter of FY 2008-09, TPC-D during the hearing clarified that based on the details of actual power purchase quantum and cost, approval is not required as it has not exceeded the limit of 5% of the quantum and cost of power procurement for third quarter of FY 2008-09. Accordingly, the Commission observes that no prior approval was required for power purchase quantum and power purchase cost for third quarter of FY 2008-09.



27. As regards the other prayer of TPC-D regarding post facto approval for the cost of power purchase for the second quarter of FY 2008-09, the Commission analysed the data for variation in the power purchase cost for second quarter of FY 2008-09 as submitted by TPC-D. The Commission is of the view that the approved power purchase cost for a quarter should be computed considering the quantum of power purchase approved for the quarter and approved average per unit power purchase cost in the Order instead of considering the same as 25% of the annual total power purchase cost. With this methodology, the approved power purchase cost for second quarter of FY 2008-09 works out to Rs. 303.51 crore. The increase in power purchase cost for second quarter of FY 2008-09 is given in the Table below:

Particular	Amount (Rs. Crore)
Power Purchase cost approved for Q2 of FY 2008-09	303.51
Power purchase cost allowed in accordance with Regulation 25.2, beyond which prior approval has to be sought	318.68
Actual Power Purchase cost for Q2 of FY 2008-09	337.71
Increase in power purchase cost for Q2 of FY 2008-09	19.03

Further, the Commission agrees with the philosophy of TPC-D for working out the contribution on account of increase in fuel prices and other factors and accordingly has worked the contribution of all the factors in the increased power cost, as shown in the Table below:

Particular	Amount (Rs. Crore)
Contribution on account of increase in fuel prices	77.33
Contribution (balance) to increase on account of other factors such as (i) mix variance (ii) volume variance (iii) price variance on account of other power sources	(58.30)
Total Increase in power purchase cost for Q2 of FY 2008-09	19.03

As TPC-D has not exceeded the limit of 5% of the quantum or cost of power procurement for second quarter of FY 2008-09, after excluding the variation due to fuel prices, there is no need of approval for variation in power purchase cost in second quarter. However, the Commission directs TPC-D that in future, it should ensure that prior approval is taken if it anticipates variation of more than 5% in the power purchase quantum or cost for any quarter in accordance with the provisions of Regulation 25.2 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. As regards the methodology for computation of variation in power purchase cost on quarterly basis, the Commission would like to clarify that the approved power purchase cost for the quarter needs to be worked out by multiplying the quantum of power purchase approved for the



quarter with approved average per unit power purchase cost approved in the Order instead of considering 25% of the annual total power purchase cost.

With the above ruling, TPC-D's Petition in Case No. 109 of 2008 stands disposed of.

Sd/-
(S.B. Kulkarni)
Member

Sd/-
(A. Velayutham)
Member

Sd/-
(V.P. Raja)
Chairman



(P. B. Patil)
Secretary, MERC