

Detailed Vetting Report

Additional Supply Charge (ASC) and Incremental Additional Supply Charge (IASC) Amount for the period January 2007 to April 2007

1. The Commission issued the Tariff Order in Case No.54 of 2006 in the matter of MSEDCL's ARR and Determination of Tariff for FY 2006-07 on October 20, 2006. The Tariff Order was valid for the period 1st October 2006 to 31st March 2007. Subsequently on MSEDCL's request, the Commission extended the validity of said Tariff Order till **30th April 2007** vide Order in the matter of Case No. 2 of 2007 dated 23rd April 2007.
2. The Commission has considered that benefit of reduction in load shedding hours is only possible by MSEDCL making purchases from costly sources to supply to such consumers. The Commission has considered power costing more than Rs. 4 per kWh as costly power against the sources identified in the Order, and has determined the ARR by excluding the costly sources and the corresponding sales quantum, which have been considered for determination of the Additional Supply Charges (ASC) charges.
3. Depending on the geographical location and the consumer category, the consumers are being subjected to differential load shedding hours. The additional costly power would be supplied to the selected consumer categories to reduce the load shedding hours. In cases, where the consumers are receiving the benefit of reduced load shedding hours, the Commission has considered that they have to pay for this separately through Additional Supply Charge. The cost of this additional supply is to be recovered in the ratio of contribution of costly power to the consumption mix of a particular region. This charge has been termed as '**Additional Supply Charge**'.
4. The percentage of costly power consumption has been estimated for various categories under various regions. A representative matrix (given below) of percentage of costly power consumed by various categories of consumers after adjustment for distribution losses has been considered for reducing the load shedding hours.

Category	Industrial & Urban Agglomeration	Other Regions	Agriculture Dominated Regions
HT Category			
HT-I Industry			
Express feeders (Continuous or non-continuous)	42%	42%	42%
Non express feeders (Continuous or non-continuous)	28%	9%	0%
MIDC	28%	28%	28%
HT-II Railway Traction	42%	42%	42%
HT - III PWW			
Express Feeders	42%	42%	42%
Non- Express Feeders	28%	9%	0%
HT-V Residential	19%	9%	0%
HT-V Commercial	19%	9%	0%
HT VI- Seasonal Industry	19%	9%	0%
LT Category			
LT-I Domestic	19%	9%	0%
LT-II Commercial	19%	9%	0%
LT-V General Motive Power	28%	9%	0%
MIDC	28%	28%	28%
LT - VI Street lighting	19%	9%	0%

5. In the Tariff Order, the Commission considered RGPPL and Other Traders as costly sources based on MSEDCL's submissions in its ARR and Tariff Petition for FY 2006-07. The Commission approved the rates and the cost of costly power purchase for FY 2006-07, as provided in the table below:

Source	Power Purchase (MU)	Power Purchase Expense (Rs Crore.)	Approved Rate for Purchase (Rs/kWh)
RGPPL	1614	747	4.63
Other Traders	3804	1522	4.00
Total	5418	2269	4.19

6. The Commission considered the following principles for determination of Additional Supply Charge:

- a) The power purchase requirement approved in the Tariff Order amounts to approval of power procurement plan for FY 2006-07.
 - b) Against this power procurement plan (quantum of power), fuel cost variations for non-costly power would be included in the FAC Formula approved by the Commission while variation in expenditure on costly power w.e.f 1st October 2006 till validity of the Tariff Order, would be included in the Incremental Additional Supply Charge (IASC).
 - c) For the costly power purchase made from April-2006 to September-06, the corresponding cost implications would be included in the FAC formula only instead of incremental additional supply charges as the principles of costly and non-costly power became effective only from October-2006.
 - d) There is no cap on the Incremental Additional Supply Charge (IASC), since costly power procurement is triggered only by rising demand thereby increasing sales.
 - e) In case MSEDCL has to purchase more energy from costly sources on account of less availability of power from non-costly sources considered in the Tariff Order, MSEDCL shall include such cost implications in FAC formula, as it would form part of the approved quantum of non-costly sources as per the Tariff Order.
 - f) The cost implications of above costly power purchases should be borne by all the consumers as in FAC.
- ii. The Commission considered the effective T & D loss levels of 13.53% submitted by MSEDCL for estimating the sales to such categories from the costly sources of power in FY 2006-07. After accounting for T&D losses, the costly power sales and approved rate is given in the table below:

Source	Costly Power Sales (MU)	Approved Rate for Sale (Rs/kWh)	Power Purchase Expense (Rs. Crore)
RGPPPL	1395.63	5.35	747
Other Traders	3289.32	4.62	1522
Total	4684.94	4.84	2269

7. The Commission, in its Tariff Order for FY 2006-07, ruled that the Additional Supply Charge will not be applicable for the BPL consumers. Further, the Commission ruled that the domestic consumers consuming less than 300 units per month shall only pay 10% of the purchase cost of costly power for the respective consumption, which worked out to **48 paise/kWh** in addition to the base retail tariffs.
8. The Commission ruled that the balance cost should be recovered from the consumers other than the BPL and domestic consumers consuming less than 300 units per month. Accordingly, the Commission determined the Additional Supply Charge as **Rs. 5.15** per unit for this set of consumers for FY 2006-07.
9. The Commission directed MSEDCL to show the Additional Supply Charge separately in the consumer bills and any over or under recovery has to be adjusted against the same set of consumers or category of consumers.
10. The Commission further directed MSEDCL to maintain details of the expenditure on power purchase from costly sources separately. Also, MSEDCL was directed to separately maintain the details of the revenue earned through levy of Additional Supply Charges to different consumer categories, along with the actual Additional Supply Charge levied to different regions and consumer categories.
11. The Commission has considered that in case of any variation in the cost of power purchase from costly sources, MSEDCL shall bill the consumers as **Incremental Additional Supply Charge (IASC)** to the consumers, on similar principles, i.e., 10% of the revised cost would be billed to domestic consumers consuming less than 300 units per month and balance cost would be recovered from other consumers. The Incremental Additional Supply Charge can be positive as well as negative, depending on whether the actual power cost is higher or lower than the rate considered [ref para 5 & 6 above] by the Commission for the purpose of determining the Additional Supply Charge. The Commission did not put any cap on the Incremental Additional Supply Charge.
12. MSEDCL has submitted details of Additional Supply Charge billed and computation of **Incremental Additional Supply Charge (IASC)** for the months of January 07 and February 07 vide letter SE/TRC/ 23410 dated May 25, 2007, for the month of March 07 vide CAS/FAC-InIASC/259 dated June 20, 2007, and for the month of April 07 vide MSEDCL/CAS/FAC-InIASC/259 dated July 11, 2007. MSEDCL has also submitted audited details of Power Purchase from costly sources for these months for the purpose of computation of IASC.
13. The salient features of the submissions made by MSEDCL and the Commission's analysis are as follows:

- a. The Incremental ASC cost based on per unit difference of weighted average power purchase cost for the month of January 2007 has been estimated as Rs.48.04 Crore.
 - b. The Incremental ASC cost based on per unit difference of weighted average power purchase cost for the month of February 2007 has been estimated as Rs.54.95 Crore.
 - c. The Incremental ASC cost based on per unit difference of weighted average power purchase cost for the month of March 2007 has been estimated as Rs.49.24 Crore.
 - d. The Incremental ASC cost based on per unit difference of weighted average power purchase cost for the month of April 2007 has been estimated as negative Rs.26.39 Crore.
14. The Commission has carried out vetting of Additional Supply Charge (ASC) and Incremental Additional Supply Charge (IASC) on the basis of
- i. Tariff Order dated 20th October 2006.
 - ii. MERC (Terms and Conditions of Tariff) Regulations, 2005.
15. Analysis of ASC and Incremental Additional Supply Charge submitted by MSEDCL for the months of January-07, February-07, March-07 and April-07 is as follows:
- a. While computing **Incremental Additional Supply Charge (IASC)** the Commission has considered the costly power purchase from RGPPL and Other Traders. The sources considered under other Traders for computation are RETL, ADANI, JSW, PTC, KAWAS-Liquid, NVVNL and TATA POWER Trading Co. Ltd.
 - b. The Commission has considered power procurement from The Tata Power Company Ltd. and purchase under UI as non-costly source of power in line with the principles of Tariff Order for FY 2006-07. These are not considered in the computation of IASC. The variation in cost for these stations and power purchase from these sources needs to be considered in FAC. In this context, MSEDCL has submitted that all power procurement from sources costing above Rs. 4 per kWh should be considered as costly power and power procurement from sources costing below Rs. 4 per kWh should be considered as non-costly power. However, this approach would not be consistent with the philosophy followed by the Commission in the Tariff Order, which has identified certain sources as costly and non-costly, and the ARR, sales and revenue have also been computed accordingly. If the rate of Rs. 4 per kWh is considered to identify the sources as costly or non-costly on a monthly basis, then it may so happen that a particular source may be treated as costly in a particular month, while the same source may have to be treated as non-costly source in a different month, which will complicate the computation of FAC

and IASC. Further, this will defeat the very purpose of having a mechanism of FAC and IASC, which are intended to pass through the variation in the per unit rates to the consumers for the respective sources of power, to the respective consumer categories benefiting from the power procurement.

- c. The Power Purchase Details considered by the Commission for computation of IASC is given in the table below:

Source	January -2007		February-2007		March-2007		April-2007	
	Q'tum (MU)	Amt (Rs. Cr)	Q'tum (MU)	Amt (Rs. Cr)	Q'tum (MU)	Amt (Rs. Cr)	Q'tum (MU)	Amt (Rs. Cr)
RGPPPL	288.65	149.35	201.99	102.08	199.97	102.80	210.72	123.13
TRADERS								
RETL	19.88	9.14	0.0	0.0	15.92	7.71	0.0	0.0
ADANI	0.0	0.0	13.00	7.23	41.59	22.31	6.8	4.05
NVVNL	0.0	0.0	37.74	25.75	105.56	74.13	50.82	35.17
JSWPTC	104.82	50.61	82.02	39.76	93.86	45.38	0.0	0.0
TPTCL	11.60	5.75	14	7.51	12.47	6.11	0.0	0.0
KAWAS Liquid	12.59	9.55	0.0	0.0	0.0	0.0	0.0	0.0
PTC	0.0	0.0	0.0	0.0	24.25	17.24	0.0	0.0
Total	437.54	224.40	507.75	182.32	493.61	275.68	268.33	162.35

Note:

1. For the month of January 2007, the Commission has not considered the power purchase from The Tata Power Co. Ltd (TPCL), UI and Kawas-Gas as these are to be considered under non-costly sources of supply.
2. For the month of February 2007, power purchase from UI has not been considered as this source is to be considered under non-costly sources of supply.
3. For the month of March 2007, Open Access Charges of Rs. 9,97,968/- for TPTCL pertaining to the months of November-07 and December-06 has not been considered for computation of IASC. Also, power purchase under UI has not been considered, as this source is to be considered under non-costly sources of supply.
4. For the month of April 2007, power purchase from UI and Kawas-Gas have not been considered, as these sources are to be considered under non-costly sources of supply.

- d. The Commission has computed the average rate of costly power purchase and average rate for sale of costly power as shown in the Table below:

(Rs/kWh)

Average cost	Jan 07	Feb 07	Mar 07	Apr 07
For Purchase	5.13	5.23	5.59	6.05
For Sale	5.93	6.05	6.46	7.00

Excess Recovery of ASC and IASC

16. **Over Recovery of Additional Supply Charge:** The amount recovered by MSEDCL from the consumers against Additional Supply Charges (ASC) is shown in the table below:

(Rs. Cr)

Amount Recovered	January-07	February-07	March-07	April-07
Additional Supply Charge	402.94	406.64	337.01	179.45

17. The amount of IASC collected by MSEDCL pertaining to this period has been shown separately in the statements of recovery against ASC, as given below:

(Rs.Cr)

Amount Recovered	January-07	February-07	March-07	April-07
Incremental Additional Supply Charge (IASC)	(26.39)	34.72	(58.72)	(118.27)

18. Thus, MSEDCL has recovered amounts in excess from its consumers as against the actual expense incurred on the purchase of costly power during the period January 2007 to April 2007 as given in the following Table:

(Rs. Crore)

	Jan-07	Feb-07	Mar-07	Apr-07
Amount Approved	244.42	182.32	275.68	162.35
Amount Recovered	376.55	441.46	278.55	249.92
Excess Recovery	132.13	259.14	2.87	87.57

19. The Commission while vetting the ASC and IASC for the period October 2006 to December 2006 has not considered the amount recovered by MSEDCL from IASC pertaining to these months as the details were not submitted by MSEDCL. The summary of amount approved and amount recovered for the period October 2006 to April 2007 is given in the following Table. It is observed that MSEDCL has recovered excess amount of Rs. 785.24 Crore under ASC and IASC over the period October 2006 to April 2007:

(Rs. Crore)

	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	Total
Amount Approved	204.51	297.07	318.26	244.42	182.32	275.68	162.35	1684.61
Amount Recovered	275.35	449.00	399.02	376.55	441.46	278.55	249.92	2469.85
Excess Recovery	70.84	151.93	80.76	132.13	259.14	2.87	87.57	785.24

17. Out of total excess recovery of Rs 785.24 Crore, the Commission vide its letter Ref. MERC/MON/IASC/07 dated May 3, 2007 directed MSEDCL to refund the excess recovered amount of Rs 131.9 Crore in the bill of May 2007. MSEDCL is hereby directed to refund the amount of balance excess recovery of ASC/IASC of Rs. 653.34 Crore (Rs. 785.24 crore – Rs. 131.90 crore) on a 'one to one' basis to the consumers in the bill of March 2008. The refund of excess recover of ASC and IASC should be made to consumers on one to one basis after adjusting the base energy charges applicable for the relevant consumer category; else the energy will have been consumed without any charges being levied. The amount retained against base energy charges will be considered as income under non-costly power ARR, under the truing up process for the relevant period. The details of the refund shall be submitted to the Commission by the end of the month.

Approved Power Purchase From Costly Sources for the month of January 2007

Source of Power Purchase	Power Purchase (MU)	Average cost of Power (Rs/kWh)	Power Purchase Cost (Rs Crore)	Open Access/ UI charges/Incidental Charges (Rs Crore)	Total Cost of Power Purchase including Other Charges (Rs Crore)
RGPPL	288.65	4.87	140.69	8.66	149.35
RETL	19.88	4.49	8.93	0.21	9.14
JSW PTL	104.82	4.73	49.54	1.07	50.61
Kawas – Liquid	12.59	6.44	8.60	0.95	9.57
TATA Power Trader	11.60	4.74	5.50	0.25	5.75
Sub Total	148.89	4.85	72.56	2.48	75.06
Total	437.54	4.87	213.25	11.14	224.42

Approved Power Purchase From Costly Sources for the month of February 2007

Source of Power Purchase	Power Purchase (MU)	Average cost of Power (Rs/kWh)	Power Purchase Cost (Rs Crore)	Open Access/ UI charges/Incidental Charges (Rs Crore)	Total Cost of Power Purchase including Other Charges (Rs Crore)
RGPPL	201.99	4.75	96.02	6.06	102.08
Adani	13.00	5.56	7.23	0.00	7.23
JSW PTL	82.02	4.73	38.79	0.97	39.76
TATA Power Trader	14.00	5.36	7.51	0.00	7.51
NVVN	37.74	6.76	25.52	0.23	25.75
Sub Total	146.75	5.39	79.05	1.20	80.25
Total	348.75	5.02	175.07	7.26	182.32

Approved Power Purchase From Costly Sources for the month of March 2007

Source of Power Purchase	Power Purchase (MU)	Average cost of Power (Rs/kWh)	Power Purchase Cost (Rs Crore)	Open Access/ UI charges/Incidental Charges (Rs Crore)	Total Cost of Power Purchase including Other Charges (Rs Crore)
RGPPL	199.97	4.84	96.80	6.00	102.80
RETL	15.92	4.75	7.57	0.15	7.71
Adani	41.59	5.29	21.99	0.31	22.31
JSW PTL	93.86	4.72	44.31	1.07	45.38
TATA Power Trader	12.47	4.74	5.91	0.20	6.11
PTC	24.25	6.76	16.39	0.85	17.24
NVVN	105.56	6.95	73.36	0.77	74.13
Sub Total	293.64	5.77	169.53	3.35	172.89
Total	493.61	5.40	266.33	9.35	275.68

Approved Power Purchase From Costly Sources for the month of April 2007

Source of Power Purchase	Power Purchase (MU)	Average cost of Power (Rs/kWh)	Power Purchase Cost (Rs Crore)	Open Access/ UI charges/Incidental Charges (Rs Crore)	Total Cost of Power Purchase including Other Charges (Rs Crore)
RGPPPL	210.72	5.13	108.167	14.96	123.13
AEL	6.80	5.81	3.95	0.10	4.05
NVVN	50.82	6.84	34.77	0.40	35.17
Sub Total	57.62	6.72	38.73	0.50	39.23
Total	268.33	5.47	146.89	15.46	162.35