

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 144 of 2008

In the matter of
Petition filed by Maharashtra State Electricity Distribution Company Limited
(MSEDCL) for approval of methodology for refund of Additional Supply Charges
(ASC) to consumers on a one-to-one basis

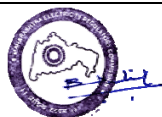
Shri V. P. Raja, Chairman
Shri S. B. Kulkarni, Member
Shri V. L. Sonavane, Member

Dated: November 09, 2009

The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration the submissions made by MSEDCL, suggestions and objections of the public, responses of MSEDCL, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2007-08, determined the Aggregate Revenue Requirement (ARR) and Tariff for MSEDCL for FY 2008-09, vide its Order dated June 20, 2008 in Case No. 72 of 2007. Subsequently, MSEDCL filed a Review Petition on the above APR Order, numbered as Case No. 42 of 2008. In the Order dated December 10, 2008 in Case No. 42 of 2008, in the context of ASC refund, the Commission observed as under:

“ii) *Refund of excess ASC recovered from selected consumer categories*

MSEDCL submitted that the ASC refund, as directed by the Commission in the APR Order, has already been passed on to all consumers in the form of reduction in ARR and tariff for FY 2008-09, and hence, if over-recovery of ASC needs to be refunded back to the consumers after setting off part ASC over-recovery against non-costly power, then provision for such refund needs to be incorporated in the



tariff. MSEDCL requested the Commission to review the issue of refund of ASC over-recovery as detailed above under the heads of “error apparent” and “for any other sufficient reasons”.

...

However, even for FY 2006-07, the approach of giving ASC refund through the ARR is incorrect, as the refund of excess ASC has to be undertaken on a one-to-one basis in the manner prescribed by the Commission, after adjusting for the respective quantum of non-costly power consumed by the ASC paying consumer, and the exact quantum of total ASC refund has to be computed by MSEDCL by using its billing software, and details of the past bills in this regard.

Given the complicated nature of this issue and the exact quantum of ASC refund not being known exactly, the Commission defers the refund of surplus ASC for the time being. The direction to MSEDCL to compute the total ASC refund payable by MSEDCL for FY 2006-07 and FY 2007-08 by summing up the refund payable to individual consumers on a one-to-one basis, after setting off the base energy charges as applicable for the respective category for the entire consumption, has been in place since the issue of the APR Order. MSEDCL is hereby directed to submit a Petition for the Commission’s approval indicating the category-wise refund, the total amount required to be refunded, and the amount required to be added to the ARR of the subsequent year for effecting the refund to specific consumers and consumer categories.” (emphasis added)

2. In accordance with the above direction, MSEDCL submitted its Petition for approval of the methodology for refund of Additional Supply Charges (ASC) and Incremental Additional Supply Charges (IASC) to consumers after considering the base energy charges, on February 24, 2009. In its Petition, MSEDCL made the following prayers:



“9.1 Vet the ASC/ InASC calculations for the period from October 2006 to April 2007 after considering Base Tariff Energy Charges as presented in **Table 6 and Table 7.**

9.2 Vet the ASC/ InASC calculations for the period from May 2007 to May 2008 after considering Base Tariff Energy Charges as presented in **Table 7 and Table 8.**

9.3 Provide an amount of Rs. 658.52 Crores as ASC/InASC refund in the subsequent ARR to enable MSEDCL to pass on the refund to the consumers (as defined in the T.O. 20th Oct 2006 and MYT order 18th May 2007) on one-to-one basis and based on the consumption period. (**Refer Table 10, Table 11, Table 12**)

FY 2006-07 -Rs. 488.35 Crores

FY 2007-08 -Rs. 154.96 Crores

FY 2008-09 -Rs. 15.21 Crores

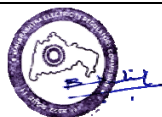
Total ASC/InASC Refund -Rs. 658.52 Crores

9.4 Allow the refund of ASC/InASC for the period from October 2006 to May 2008 to be carried out in the same manner as provided by the Honourable Commission in the subsequent APR i.e. in phased manner.”

3. In its Petition, MSEDCL submitted as under:

- a. The concept of ASC, IASC and the ASC percentage for different consumer categories, as approved by the Commission in different Tariff Orders.
- b. MSEDCL’s submissions on IASC vetting for the period from October 2006 to April 2007, and for the period from May 2007 to February 2008
- c. The IASC approved by the Commission for the period from October 2006 to April 2007 amounted to a refund of Rs. 785.23 crore, and the IASC for the period from May 2007 to May 2008, which has not been approved by the Commission, amounts to a refund of Rs. 1325.33 crore.
- d. In the Commission’s Order dated September 17, 2008 in Case No. 45 of 2007, the Commission ruled as under:

“MSEDCL is directed to refund the Incremental ASC for the period from October 2006 to April 2007 to all the consumers who have contributed towards ASC, on a one to one basis in the next billing period (October



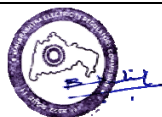
2008), in accordance with their ASC consumption in the corresponding month from October 2006 to April 2007, rather than the month of refund.”

e. MSEDCL corresponded with the Commission in July 2008 and December 2008 and communicated as under:

- There will be a delay in submission of ASC/IASC for March and April 2008 on account of adjustment of base tariff charges while computing the ASC refund
- Refund of ASC to Lloyd Steel Industries Ltd. and others will be deferred till the time the directions given in the Review Order dated December 10, 2008 are complied with and the Commission approves the methodology of ASC refund.

f. Methodology for computation of base energy charges

- The actual sales have been considered instead of normative sales.
- The ASC consumption as per billing is say 500 units. The revenue at Rs.5/- per unit will be Rs. 2500/-. The costly power purchase in that month is say 200 units at Rs.7/- per unit. The total cost of power purchase comes to Rs. 1400/-. Hence, the total excess recovery is Rs.1100/-.
- According to the Commission's Order, this refund amount needs to be reduced by the 'Base Tariff' amount for the differential units (Sales units - Costly units). The adjustments have been carried out for the category as a whole and not slab-wise. The base tariff charge for overall category has been computed as revenue from energy charge of that category divided by sales of that category.
- The Base Energy Charge will not be applicable in the month in which actual costly power purchase in MU exceeds the actual ASC units billed in MU
- Difference of 300 units (500 sale - 200 purchase) has been apportioned in the same ratio of actual ASC sales of each category to total ASC sales for that month.
- These ASC apportioned sale units have been multiplied by base tariff charge of that respective category to arrive at the amount to be reduced from ASC refund (for eg. Considering average base tariff of Rs.3 per unit, the amount so computed comes to Rs. 900/-)
- The above amount is reduced from ASC refund to arrive at net ASC refund to be passed on to consumers, which works out to Rs.200/- (Rs.1100 - Rs.900/-). While working out the net amount to be refunded, incremental ASC already refunded/ recovered will be adjusted.



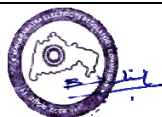
- The net ASC amount to be refunded is again allocated on the basis of sales ratio, to each category. MSEDCL has presently not considered the approach adopted by the Commission at the time of vetting, i.e., 10% of IASC for the consumers consuming less 300 units/ month. Once the Commission vets and approves all the calculations, the refund/ recovery to domestic consumers consuming less than 300 units per month will be computed and accordingly dealt with.
 - Further, the issue of recovery/refund of IASC on the basis of consumption period has also not been considered in the present calculation. MSEDCL has considered the ASC recovered/ refunded for the period October 2006 to April 2007 as per the Commission's vetting order and IASC for the month of October 2006 has been levied in the month of January 2007 (consumption month - December 2006).
- g. The summary of ASC refund is as under:

(Rs. Crore)

Period	Refund calculation		
	IASC refund	Base Tariff Amount	Net ASC amount to be refunded
Oct 2006 to March 2007	697.67	209.32	488.35
April 2007 to March 2008	1227.80	1072.84	154.96
April 2008 to May 2008	185.10	169.89	15.21
Total	2110.57	1452.05	658.52

- h. The category-wise refund is as under:

Sl	Category	ASC refund		
		FY 2007-07	FY 2007-08	FY 2008-09
1	HT Industry (Continuous)	247.84	86.78	8.42
2	HT Industry (Non-Continuous)	105.9	55.93	4.3
3	HT - Seasonal	1.03		
4	HT PWW (Express)	14.44	4.63	0.4
5	HT PWW (Non-Express)	3.93	2.56	0.19
6	HT RWW	-0.05		
7	HT Railway Traction	27.21	8.34	1.23
8	HT Residential	2.19	-0.38	

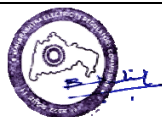


SI	Category	ASC refund		
		FY 2007-07	FY 2007-08	FY 2008-09
9	HT-Commercial	0.38	-0.05	
10	HT- Agriculture	0.18		
11	HT Total	403.05	157.81	14.54
12	LD-1 Domestic	40.62	-6.65	
13	LD-2 Commercial	10.39	-3.98	
14	LTP-G Industrial	24.04	6.76	0.61
15	LTP-G Powerloom	7.93	1.21	0.06
16	LT-PWW (R)		-0.07	
17	Streetlight	2.33	-0.13	
18	LT Total	85.3	-2.85	0.67
19	TOTAL	488.35	154.96	15.21

4. The Commission scheduled a hearing on the said Petition on March 17, 2009, at 12:00 hours, in the presence of Consumer Representatives authorised on a standing basis under Section 94 of the Electricity Act, 2003.

5. During the hearing, Smt. Deepa Chawan, Advocate, and Shri. Bhojar, represented MSEDCL, and made a presentation on the salient features of the Petition. Shri. R. B. Goenka, representing Vidarbha Industries Association, objected to MSEDCL's Petition and made the following submissions:

- a. MSEDCL is mixing the issue of ASC and Incremental ASC.
- b. The Commission, through its Order dated September 17, 2008, directed MSEDCL to refund excess IASC on one to one basis by making the necessary changes in the billing software. Though the refund was to be done in the month of October 2008, MSEDCL has not complied with the Commission's directions in this regard.
- c. MSEDCL has to refund the excess amount collected, on a one-to-one basis, after adjusting the base tariff.
- d. MSEDCL has computed the total refund of ASC and IASC as Rs. 658.82 crore, against the excess amount collected, of Rs. 2110.56 crore, and has not provided any detailed computation for the same.
- e. MSEDCL should first adjust the IASC charges as per the Commission's Order dated September 17, 2008, and then compute the refundable ASC, and submit detailed calculations in line with the Commission's Order.



6. During the hearing, the Commission directed MSEDCL to undertake the refund of ASC and IASC on a one-to-one basis and to submit a revised Petition by computing the refund accordingly, by making the required modifications to the billing software. MSEDCL was also directed to submit the time frame by which the exact amount of refund would be computed and Petition re-submitted.

7. MSEDCL, vide letter ref: SE/TRC/9364 dated March 31, 2009, submitted that the data required for re-working the refund of ASC/IASC was being consolidated and considering the huge amount of data, MSEDCL estimated that the entire exercise of computation of refund will be finalised by June 15, 2009, and the methodology would be submitted separately.

8. MSEDCL submitted its Revised Petition on July 15, 2009. MSEDCL proposed the revised methodology to achieve the objective of giving refund of ASC/IASC every month on a one-to-one basis to the consumers who have paid for the same, as under:

a. Parameters defined:

- Actual Costly Power purchased (Q_{CP}) with respect to ASC units billed on monthly basis in percentage;
- Average Rate of Costly Power (R_{CP});
- Total Quantum of Costly Power Actually Billed in the month (Q_{AB});
- ASC & Incremental ASC Actual Billed during the month (ASC_{AB});
- Actual Base Tariff as applicable in the month (BT_{AC});

b. Revised ASC amount (ASC_{REV}):

$$ASC_{REV} = (Q_{AB} * Q_{CP}) * R_{CP}$$

c. Additional base tariff (BT_{AD}), due to reduction in ASC units:

$$BT_{AD} = ((Q_{AB} - (Q_{AB} * Q_{CP})) * BT_{AC})$$

d. ASC difference to be refunded to the consumer on one to one basis:

$$ASC_{DIFF} = ASC_{AB} - (ASC_{REV} + BT_{AD})$$

e. The above formula is explained with an illustration considered for HT and LT consumers for calculation of ASC/InASC to be refunded in a particular month (i.e., month of consumption) in the following table.

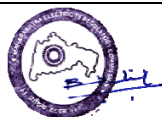


Table: Illustration of calculation of ASC refund to consumer on one to one basis

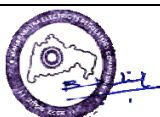
Consumer	QCP	RCP	QAB	ASCAB	BTAC	ASCREV	BTAD	ASCDIFF
	%	Rs./kWh	Rs.	Rs.	Rs./kWh	Rs.	Rs./kWh	Rs.
1	2	3	4	5	6	7 = 4*3*2	8 = ((4 - (4*2))*6	9 = 5-7-8
HT - I Cont.	28.85%	4.82	340,892.00	1,827,181.10	3.10	474,034.19	751,888.44	601,258.47
LT - II	28.85%	4.82	38.00	195.70	4.55	52.84	123.02	19.84

- f. Based on the above methodology, the ASC refund to the HT and LT consumer categories for the period from October 2006 to May 2008 on one to one basis considering Base Tariff Energy Charges is outlined in the Table below:

Table: ASC/InASC to be refunded to the consumers on a monthly basis (Rs. Crore)

BILL MONTH	H.T. Consumers	L.T. Consumers	TOTAL
OCT-2006	11.54	0.13	11.67
NOV-2006	14.02	(1.09)	12.94
DEC-2006	13.76	(0.44)	13.32
JAN-2007	87.93	4.11	92.05
FEB-2007	147.27	9.21	156.48
MAR-2007	40.72	1.65	42.37
APR-2007	48.55	1.03	49.58
MAY-2007	(18.34)	(3.22)	-21.56
JUN-2007	(5.17)	1.01	-4.16
JUL-2007	(34.43)	(0.35)	-34.78
AUG-2007	83.75	3.81	87.56
SEP-2007	81.52	3.52	85.03
OCT-2007	23.35	1.19	24.54
NOV-2007	15.65	0.94	16.59
DEC-2007	41.68	2.59	44.27
JAN-2008	30.04	1.78	31.82
FEB-2008	(14.25)	(0.39)	-14.64
MAR-2008	(41.17)	(1.37)	-42.54
APR-2008	31.53	2.53	34.05
MAY-2008	7.07	1.31	8.39
TOTAL	565.00	27.96	592.97

- g. Various Clarificatory Orders have been issued by the Commission in the context of ASC/IASC and due to differing interpretations of these Orders, ASC had to be calculated for individual cases, which has resulted into the reworking of ASC amount for the cases whereby the ASC has already been refunded to the consumers, thereby necessitating reduction in the net ASC refundable to the



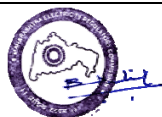
consumers. MSEDCL requested the Commission that since this is an ongoing process, the Commission may provide an additional amount of Rs. 15 crore in case of HT consumers (2.65% of total amount to be refunded to the HT Consumers) and Rs. 1 Crore in case of LT Consumers (3.58% of total amount to be refunded to the LT Consumers), which could be added to the ARR for the subsequent year to enable MSEDCL to adjust the amounts, which may have been already refunded or which may be required to be passed on the consumers on the basis of various MERC Clarificatory Orders. The same can be subject to adjustments in future years.

9. The Commission scheduled the second hearing in the matter on August 27, 2009, at 16:00 hours, in the presence of Consumer Representatives authorised on a standing basis under Section 94 of the Electricity Act, 2003. During the hearing, MSEDCL made a presentation on the revised Petition. During the hearing, MSEDCL made a specific request that since the revised tariff was being implemented from August 2009 rather than from April 2009, the refund of ASC and IASC should also be allowed to be undertaken over a 12 month period starting from August 2009 to July 2010, so that MSEDCL did not have to face any cash-flow problems on this account.

10. Having heard the Parties and after considering the material placed on record, the Commission is of the view as under:

11. The Commission has examined the methodology proposed by MSEDCL in its revised Petition for refund of ASC and IASC to consumers on a one-to-one basis, and is of the view that the proposed methodology is appropriate and ensures that the appropriate amount of refund is made to the consumers in absolute Rupee terms, which is consistent with the Commission's philosophy in this regard. Accordingly, the Commission approves the proposed methodology of refund of ASC and IASC to consumers on a one-to-one basis.

12. MSEDCL has computed the total amount of refund as Rs. 592 crore, by running the software programme for each of the consumers. In the latest APR Order dated August 17, 2009 in Case 116 of 2008, the Commission has allowed the total amount of refund amounting to Rs. 592 crore as computed by MSEDCL, as a part of the Aggregate



Revenue Requirement (ARR). Hence, the necessary funds have been made available to MSEDCL to undertake the refund of ASC to consumers on a one-to-one basis, in twelve (12) equal instalments over the twelve-month period from August 2009 to July 2010. Since the actual refund will start from the billing month of November 2009 after approval of the methodology through this Order, the ASC refund amount for the three-month period from August 2009 to October 2009 should be refunded by MSEDCL along with the refund amount of November 2009 (i.e., refund for 4 months should be given along with the bill for November 2009), since the revised tariff have been levied with effect from August 1, 2009. In case any small adjustments are required to be undertaken at a later stage for any reason, due to interpretation of any Clarificatory Order or any other Order, MSEDCL may approach the Commission at the appropriate stage for necessary relief.

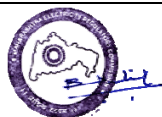
13. For easy reference and understanding, the following illustrations have been provided, so that there is ample clarity in this regard, and there is no ambiguity in the method of refund of ASC and IASC.

Table: Illustrations of method of refund of ASC and IASC to consumers on a one-to-one basis, as approved by the Commission

Sl.	Consumer Number	Consumer Category	ASC Matrix percentage	Actual ASC Percentage	Q _{CP}	R _{CP}	Q _{AB}	ASC _{AB}	BT _{AC}	ASC _{REV}	BT _{AD}	ASC _{DIFF}
1	2	3	%	%	%	Rs./kWh	kWh	Rs	Rs./kWh	Rs	Rs./kWh	Rs
			4	5	6	7	8	9	10	11 = 8 x 7 x 6	12 = (8 - (8 x 6)) x 10	13 = (9 - 11 - 12)
1	1234	LT I Residential	19%	19%	50%	4.82	20	107.2	4.00	48.2	40	19
2	5678	LT II Commercial	19%	19%	50%	4.82	200	1072	5.50	482	550	40
3	1357	LT Industrial	28%	28%	50%	4.82	1000	5360	4.50	2410	2250	700
4	2468	HT I Continuous (Express Feeder)	42%	30%	50%	4.82	100000	536000	3.10	241000	155000	140000
5	1479	HT I Continuous (Express Feeder)	42%	50%	50%	4.82	200000	1072000	3.10	482000	310000	280000
6	2589	HT II Non-continuous (Non-express Feeder)	28%	45%	50%	4.82	120000	643200	2.80	289200	168000	186000
7	1987	HT II Non-continuous (Non-express Feeder)	28%	25%	50%	4.82	75000	402000	2.80	180750	105000	116250
8	1854	HT III PWW (Express Feeder)	42%	12%	50%	4.82	10000	53600	2.50	24100	12500	17000

Note:

1. The above instances and consumers have been created only for illustration purposes, and should not be used for undertaking actual refund for any consumer
2. The above illustration is for a particular month; the same calculations will have to be done in a similar manner for all the relevant months for each consumer



As seen from the illustration above, under the approved methodology, since Q_{CP} is the ratio of Actual Costly Power purchased with respect to ASC units billed on monthly basis in percentage terms, it also addresses the issue of refund of ASC and IASC for different consumers who have been charged differential ASC, based on benchmarking their monthly consumption with the reference consumption, in an equitable manner.

With this Order, the Commission disposes of MSEDCL's Petition in Case No. 144 of 2008.

(V. L. Sonavane)
Member

(S. B. Kulkarni)
Member

(V. P. Raja)
Chairman



(P. B. Patil)
(Secretary, MERC)