



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/20182019/1250

Date: 19 October, 2018

To,
The Mindspace Business Parks Pvt. Ltd.,
(Formerly Serene Properties Pvt. Ltd.)
Plot No. C-30, Block 'G',
Opposite SIDBI, Bandra Kurla Complex
Bandra (E), Mumbai – 400 051

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBBPL for the month of January, 2018 to March, 2018.

Reference: 1. MBBPL's FAC submission for the month of January, 2018 to March, 2018 vide letter no. M626 dated 30 May, 2018.
2. Replies to data gaps submitted on 8 October, 2018

Sir,

Upon vetting the FAC calculations for the months of January, 2018 to March, 2018 as mentioned in the above reference, the Commission has accorded post facto approval for charging FAC to its consumers as shown in the Table below:

Month	FAC Amount (Rs. Crore)
January, 2018	(0.04)
February, 2018	(0.13)
March, 2018	(0.13)

MBPPL is allowed to recover Rs. 0.67 Crore along with interest from the consumers in next FAC billing cycle. This is on account of correction made in adjustment factor for the month of January, 2018 to March, 2018 as explained in para 9.3 of this vetting report.

The above approval of FAC is subject to final true up of FY 2017-18 under the MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

(Dr. Rajendra Ambekar)
Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of January, 2018 to March, 2018.

**POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JANUARY,
2018 TO MARCH, 2018**

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBBPL for the month of January, 2018 to March, 2018.

Reference: MBBPL's FAC submission for the month of January, 2018 to March, 2018 vide letter no. M626 dated 30 May, 2018.

1. FAC submission by MBBPL Undertaking:

1.1 MBBPL has submitted FAC submissions for the months of January, 2018 to March, 2018 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MBBPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of February, 2018 to April, 2018.

2. Background

2.1 On 26 October, 2016, the Commission has issued Multi-Year Tariff (MYT) Order in respect of MBPPL, (Case No.10 of 2016) for provisional Truing-up for FY 2015-16, and Aggregate Revenue Requirement and Tariff for FY 2016-17 to FY 2019-20. Revised Tariff has been made applicable from 1 October, 2016.

2.2 Vide its letter dated 15 November, 2016, the Commission communicated the excel formats for filing of FAC submissions to all Distribution Licensees. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission.

2.3 Vide FAC vetting Report dated 6 January, 2017, the Commission accorded prior approval to the FAC for the month of October, 2016.

2.4 In terms of MERC (MYT) Regulations, 2015 a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for FAC charges. Accordingly, vide its letter dated 30 May, 2018. MBPPL has filed FAC submissions for the months of January, 2018 to March, 2018 for post facto approval. The Commission has scrutinized the submissions provided by MBPPL and has also verified the fuel and power purchase bills provided along with its submissions.



3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by MBPPL in the FAC submission and as approved by the Commission are as shown in the Table below.

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales		
			(Jan-18) (MU)	(Feb-18) (MU)	(Mar-18) (MU)
	(I)	(II=I/12)	(III)	(IV)	(V)
HT Category					
HT- I Industrial	96.25	8.02	5.71	5.42	6.46
HT-II Commercial	3.73	0.31	-	-	-
LT Category					
LT-I General Purpose	-	-	-	-	-
LT-II(A) Commercial (0-20 kW)	0.12	0.01	0.06	0.05	0.06
LT-II (B) Commercial (above 20 kW)	0.31	0.03	0.02	0.02	0.03
LT-III (A) Industrial (0-20 kW)	0.30	0.02	0.00	0.00	0.00
LT-III (B) Industrial (above 20 kW)	6.40	0.53	0.56	0.53	0.60
Total	107.10	8.93	6.35	6.02	7.16

3.2 The Commission observed that the actual sales in each month from January to March, 2018, were lower than that of approved by the Commission. The major variation was observed in the HT-I Industrial and HT-II Commercial categories as shown in the Table above.

4. Cost of Power Purchase

4.1 MBPPL does not own or operative any generating stations. Accordingly, MBPPL is required to procure power from outside sources in order to fulfil the demand of its consumers.

4.2 MBPPL purchases power as per Medium-Term PPA for 10 MW with M/s. Jindal Power Limited (JPL) for meeting the Base Load demand and for 10 MW with M/s. GMR Energy Trading Limited (GMRETL) to meet the Peak load demand for a period of 5 years from 1 July, 2016 to 30 June, 2021. The Commission has approved both the PPAs and adopted the lowest tariff as a result of the process of competitive bidding followed by MBPPL.

4.3 The following Tables show the variation in average power purchase cost (Rs/kWh) for the months of January, 2018 to March, 2018 as compared to average power purchase cost approved in Tariff Order dated 26 October, 2016:



Particulars	Tariff Order Dated 26.10.2016			Actual for January, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Medium Term PPA (Base Load)	74.46	27.70	3.72	6.43	2.23	3.48
Medium Term PPA (Peak Load)	33.66	12.52	3.72	2.72	1.02	3.76
RE Sources		2.56		-	-	-
Surplus Sale	-	-	-	(2.02)	(0.78)	4.01
Additional Power	4.07	1.51	3.72	-	-	-
FBSM	-	-	-	-	-	-
Total	112.19	44.29	3.95	7.12	2.47	3.47

Particulars	Actual for February, 2018			Actual for March, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Medium Term PPA (Base Load)	5.60	1.97	3.52	6.45	2.24	3.47
Medium Term PPA (Peak Load)	2.55	0.96	3.78	2.80	1.03	3.67
RE Sources	-	-	-	-	0.17	-
Surplus Sale	(1.93)	(0.72)	3.87	(1.85)	(0.86)	4.79
Additional Power	-	-	-	-	-	-
FBSM	-	-	-	-	-	-
Total	6.22	2.21	3.56	7.40	2.58	3.48

4.4 The Commission has scrutinised the detailed bills/invoices submitted for the respective months of January to March, 2018, in order to verify the claim of MBPPL regarding Average Power Purchase Cost (APPC). The Commission has verified the Net Purchase (MUs), Variable Cost (Rs./kWh) and Power Purchase Cost. The Commission has also verified the payment of monthly Fixed Charge based on the availability as per the norms specified in the applicable contract.

4.5 During the scrutiny it was found that MBPPL has made adjustment with regards to FBSM settlement during the months of January to March, 2018. The Commission has sought supporting documents/bills for the same. However, the bills towards the same were not provided by MBPPL. Hence, the Commission has not considered this adjustment in the FAC computation of the respective months. Further, the power purchase cost of March, 2018 for all the sources were erroneously taken as power purchase cost of February, 2018. Hence, the Commission rectified the above error in the FAC approval.

4.6 The Commission in the MYT Order dated 26 October, 2016 had approved a power purchase rate of Rs. 3.72/ kWh based on the then existing short-term PPA. Subsequently,



the bidding was conducted and PPA along with tariff from two sellers, i.e., M/s Jindal Power Ltd. (JPL) and GMR Energy Trading Limited (GMRETL) were adopted in the Order in Case No. 115 and 116 of 2016 dated 27 February, 2017.

- 4.7 The power purchase price from JPL as per approved PPA was Rs 3.82/kWh at MBPPL periphery which included the transmission charges (STU charges) for State Transmission network. However, STU charges were paid directly by MBPPL to STU in accordance with the InSTS Tariff Order. Therefore, the power purchase bills were raised by JPL after deducting the STU charges from the total power purchase cost. Therefore, the effective power purchase price from JPL is around Rs. 3.50/kWh for the present quarter which is lesser than approved power purchase price of Rs. 3.72/kWh in the MYT Order. This has resulted into a downward variation in the power purchase cost.
- 4.8 The power purchase price from GMRETL as per approved PPA was Rs. 3.96/kWh at STU periphery. MBPPL has consumed approximately 25% of the energy generated under this contract at a variable price of Rs. 2.40/kWh at STU periphery. The balance surplus power under this contract was sold through power exchange for which MBPPL had paid a variable price of Rs 2.08/kWh (January and February 2018) and Rs 2.05/kWh (March 2018) at Western Region Periphery. Due to the significant quantum of surplus power and the lower variable price paid as specified above, the weighted average power purchase price was Rs. 3.73/kWh for Q4 FY 2017-18 being lesser than the quoted price of Rs. 3.96/kWh as per approved PPA. Further, the effective average power purchase price payable by MBPPL was Rs 3.73/kWh which is almost equal to the MYT Order approved power purchase price of Rs 3.72/kWh.
- 4.9 The Commission in the MYT Order had approved the power purchase quantum of 20 MW with an observation that the licensee is allowed to sell any surplus power till it reaches the load requirement of 20 MW, and to the extent required considering demand variations thereafter arising from the nature of operations in its License area. In line with the above, MBPPL has sale surplus power through the power exchange to reduce the burden of fixed cost on the consumers. As per the PPA, Fixed Charges for JPL and GMRETL are Rs. 1.39/kWh and Rs. 1.62/kWh, respectively, for FY 2017-18. However, the sale of 5.81 MUs of surplus power during the Q4 was made at average rate of Rs. 4.08/kWh.
- 4.10 The sale of surplus power was not only able to recover the Fixed Charges paid to GMRETL, but also had additional revenue lowering the power purchase cost for the respective months. Hence, the transaction of sale of surplus power was found beneficial. Further, the Commission has compared the rate of sale of surplus power by MBPPL vis-à-vis the Round the Clock (RTC) prices of power traded at IEX. The RTC prices prevailed at Rs. 3.20/kWh, Rs. 3.23/kWh and Rs. 4.02/kWh for the months of January, February and March, 2018 respectively. Against the above traded prices, MBPPL sold the surplus power at a rate of Rs. 3.87/kWh, 3.74/kWh and Rs. 4.62/kWh for the months of January, February and March, 2018 respectively. Considering that the price at which MBPPL sold the surplus power is higher than the RTC price at the IEX, the Commission has considered the actual quantum and revenue against the same.



4.11 Therefore, on overall basis the power purchase price has downward variation due to reduced price of power from JPL compared to MYT approved power purchase price and reduction in power purchase cost due to revenue from sale of surplus power through IEX.

4.12 After scrutiny of relevant documents submitted, the Commission allows the average power purchase cost of **Rs. 3.47/kWh** for the month of January, 2018, **Rs. 3.56/kWh** for the month of February, 2018, **Rs. 3.48/kWh** for the month of March, 2018 which are lower than the approved average power purchase cost of **Rs. 3.95/kWh** as shown in the Tables above.

5. FAC on account of fuel and power purchase cost (F)

5.1 The Commission has worked out the average power purchase costs for the months as shown in above Tables. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 26 October, 2016 and arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

5.2 The following Table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the months of January, 2018 to March, 2018.

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
1	Average power purchase cost approved by the Commission	Rs./kWh	3.95	3.95	3.95
2	Actual average power purchase cost	Rs./kWh	3.47	3.56	3.48
3	Change in average power purchase cost (=2 -1)	Rs./kWh	(0.48)	(0.39)	(0.47)
4	Net Power Purchase	MU	7.12	6.22	7.40
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	(0.34)	(0.24)	(0.35)

6. Adjustment for over recovery/under recovery (B)

6.1 After adjustment for over-recovery/under recovery (B), the adjustment factor to be added / reduced is as below:

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
1.1	Incremental cost allowed to be recovered in Month n-2	Rs. Crore	0.52*	(0.04)	(0.13)
1.2	Incremental cost in Month n-2 actually recovered in month n-1	Rs. Crore	0.32	(0.15)	(0.35)
1.3	Over-recovery/under-recovery (1.1 - 1.2)	Rs. Crore	0.20	0.11	0.21



S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
2.0	Carried forward adjustment attributable to application of ceiling limit for previous month	Rs. Crore	0.0950	-	-
3.0	Net Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	0.30	0.11	0.21

**Corrected as it was erroneously taken by MBPPL in its submission*

- 6.2 The Commission observed that the value of incremental cost allowed to be recovered for the month of January, 2018 has been taken erroneously as Rs. 0.31 Crore by MBPPL as against the approved value of Rs.0.52 Crore. On clarification sought, MBPPL has revised its submission by rectifying the aforesaid error.
- 6.3 Further, MBPPL has not included carried forward adjustment of Rs. 0.0950 Crore attributable to application of ceiling limit in December, 2018 as approved in previous vetting report. MBPPL in its revised submission has included the same. The Commission has acknowledged the revised submission and accordingly the above anomalies have been corrected.

7. Carrying Cost for over recovery/under recovery (B)

- 7.1 MBPPL has not levied any carrying cost for the months of January, 2018 to March, 2018.

8. Disallowance due to excess Distribution Loss

- 8.1 Regulation 10.8 of MYT Regulations, 2015 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

"10.8 The total ZFAC recoverable as per the formula specified above shall be recovered from the actual sales in terms of "Rupees per kilowatt-hour":

Provided that, in case of unmetered consumers, the ZFAC shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of ZFAC corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total ZFAC recoverable"

- 8.2 The following Table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.



S. No.	Particulars	Units	Approved in Tariff Order	Actual up to		
				Jan-18	Feb-18	Mar-18
1	Net Energy input at Distribution Voltages	MU	107.79	70.81	76.92	84.18
2	Energy sales at Distribution voltages	MU	107.10	70.22	76.25	83.41
3	Distribution Loss (1 - 2)	MU	0.69	0.59	0.67	0.77
4	Distribution Loss as % (3/1)	%	0.64%	0.83%	0.88%	0.91%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.14	0.18	0.23
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	-	-	-

8.3 Further, as seen from the above Table, cumulative distribution loss for the months of January, 2018 to March, 2018 is higher than the approved distribution loss of 0.64%. However, as the stand alone FAC for the month of January to March, 2018 is negative, disallowance on account of excess distribution loss has not been worked out.

9. Summary of Allowable Z_{FAC}

9.1 The summary of the FAC amount as approved by the Commission for the month of January, 2018 to March, 2018 as shown in the Table below.

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
1.0	Calculation of ZFAC				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	(0.34)	(0.24)	(0.35)
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.30	0.11	0.21
1.4	ZFAC = F+C+B	Rs. Crore	(0.04)	(0.13)	(0.13)
2.0	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	6.35	6.02	7.16
2.2	Excess Distribution Loss	MU	-	-	-
2.3	ZFAC per kWh	Rs./kWh	(0.07)	(0.22)	(0.19)
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.83	0.83	0.83



S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	(0.07)	(0.22)	(0.19)
3.0	Recovery of FAC				
3.1	Allowable FAC [(2.1 x 2.5)/10]	Rs. Crore	(0.04)	(0.13)	(0.13)
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore	-	-	-
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	(0.04)	(0.13)	(0.13)
5.0	Carried forward FAC for recovery during future period (3.1-3.2-4.0)	Rs. Crore	-	-	-

9.2 It can be seen from the above Table that standalone FAC for the months of January to March, 2018 is Rs. (0.04) Crore, Rs. (0.13) Crore and Rs. (0.13) Crore respectively. Based on energy sales, FAC per unit has been work out as Rs. (0.07)/ kWh, Rs. (0.22)/ kWh and Rs. (0.19)/ kWh for the months of January to March, 2018. Further, the Regulation 10.9 of MYT Regulations,2015 specifies as:

Provided that the monthly ZFAC shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

9.3 As the FAC per unit computed is already lower than the 20% cap specified in Regulation as shown in Table above, hence, there is no restriction triggered with regards to such ceiling for all the months in Q4 of FY 2017-18. Further, MBPPL has to refund Rs. 0.31 Crore for the months from January, 2018 to March, 2018 cumulatively against which the MBPPL has refunded Rs. 0.98 Crore due to the error specified in Para 4.4, 6.2 and 6.3 above. Therefore, MBPPL is allowed to recover excess refunded amount of Rs 0.67 Crore along with interest from consumers in next FAC billing cycle.

10. Recovery from Consumers:

10.1 Regulation 10.9 of MERC MYT Regulations, 2015 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

$$ZFAC \text{ Cat (Rs/kWh)} = [ZFAC / (\text{Metered sales} + \text{Unmetered consumption estimates} + \text{Excess distribution losses})] * k * 10,$$

Where:

ZFAC Cat = ZFAC component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;



$k = \text{Average Billing Rate} / \text{ACOS}$;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly ZFAC shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the ZFAC on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission...."

- 10.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations. The Commission observed that there is a variation of Z_{FAC} in absolute terms on considering category wise per unit FAC worked out and category wise actual sales for the months of January, 2018 to March, 2018.
- 10.3 The variation in FAC in absolute terms is due to formula error of Z_{FAC} computed on per unit basis. The variation however is taken care in the adjustment factor of subsequent months.
- 10.4 The following Table shows per unit Z_{FAC} to be charged to the consumers of MBPPL for the billing month of February, 2018 to April, 2018.

FAC for Billing Month of February, 2018 to April, 2018

S. No	Consumer Category	Slabs	ZFAC to be levied in billing month of		
			Feb'18 (Rs./kWh)	Mar'18 (Rs./kWh)	Apr'18 (Rs./kWh)
	HT Category				
1	HT- I Industrial	all units	(0.25)	(0.48)	(0.73)
2	HT-II Commercial	all units	(0.26)	(0.51)	(0.77)
	LT Category				
3	LT-I General Purpose	all units	(0.25)	(0.48)	(0.73)
4	LT-II(A) Commercial (0-20 kW)	all units	(0.26)	(0.49)	(0.75)
5	LT-II (B) Commercial (above 20 kW)	all units	(0.33)	(0.63)	(0.96)
6	LT-III (A) Industrial (0-20 kW)	all units	(0.25)	(0.48)	(0.73)
7	LT-III (B) Industrial (above 20 kW)	all units	(0.26)	(0.50)	(0.76)

