Ref. No. MERC/FAC/2020-21/ WFH/ SBR/ 08

To,

Mindspace Business Parks Private Limited,

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 MBPPL

for the months of January 2021, February 2021 and March 2021.

**Reference:** 1. MBPPL's FAC submission for the months of January 2021, February 2021 and

March 2021 vide email dated 18 May, 2021.

Sir,

Upon vetting the FAC calculations for the months of January to March, 2021 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	January 2021	February 2021	March 2021
Z <sub>FAC</sub> allowed for recovery (Rs. Crore)	0.30	0.28	0.34

The Commission allows the carry forward FAC of Rs. 1.01 Crore for the month of January 2021, Rs. 0.84 Crore for the month of February 2021 and Rs. 0.15 Crore for the month of March 2021. Accordingly, the Commission allows the recovery of Rs. 0.15 Crore as carried forward FAC to be recovered in future period. This is on account of 20% limit set under the MYT Regulation, 2019 and reasons as mentioned in this vetting report.

Yours faithfully,

Date: 10 June, 2021

(Dr. Rajendra G. Ambekar) Executive Director, MERC

**Encl:** Annexure A: Detailed Vetting Report for the period of January to March, 2021.

## **ANNEXURE**

Detailed Vetting Report Date: 10 June, 2021

# POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JANUARY 2021, FEBRUARY 2021 AND MARCH 2021.

**Subject:** Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL

for the months of January 2021, February 2021 and March 2021

**Reference:** 1. MBPPL's FAC submission for the months of January 2021, February 2021 and

March 2021 vide email dated 18 May, 2021.

# 1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of January, 2021, February, 2021 and March, 2021 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MBPPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of March 2021, April 2021 and May 2021.

# 2. Background

- 2.1. On 30 March, 2020 the Commission has issued Tariff Order in respect of MBPPL, (Case No. 328 of 2019) for approval of Aggregate Revenue Requirement and Multi Year Tariff for the Control Period from FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2020.
- 2.2. Vide its letter dated 20 April, 2020, the Commission communicated the excel formats and guiding principles for filing of FAC submissions to all Distribution Licensees including SEZs. 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 31 May, 2020 the Commission accorded prior approval to the FAC for the month of April, 2020. Further, vide FAC Vetting Report dated 9 October, 2020 the Commission accorded Post-facto approval to the FAC for the month of May and June, 2020. Vide FAC vetting Report dated 8 December, 2020 the Commission accorded Post-facto approval to the FAC for the months of July 2020, August 2020 and September 2020. Further, vide FAC vetting Report dated 25 March, 2021 the Commission accorded

- Post-facto approval to the FAC for the months of October 2020, November 2020 and December 2020.
- 2.4. As per provisions of MYT Regulations, 2019 a Distribution Licensee (SEZ) is required to obtain post-facto approval of the Commission on a quarterly basis for FAC charges within 60 days of close of each quarter. Accordingly, vide its letter dated 18 May, 2021 MBPPL has filed FAC submissions for the months of January 2021, February 2021 and March 2021 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 Licence

- 3.1. In the MYT Order passed by the Commission in Case No. 328 of 2019, the Commission has approved revised Tariffs so as to maintain zero cross subsidy across tariff categories.
- 3.2. 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 1 below:

<b>Consumer Category</b>	Approved by the Commission (MU)	Monthly Approved (MU)	Actua	al Sales	(MU)
	<b>(I)</b>	(II=I/12)	Jan- 21	Feb- 21	Mar- 21
HT Category					
HT- I Industrial	68.87	5.74	2.94	2.71	3.27
HT-II Commercial	-	-	-	-	-
LT Category					
LT-II(A) Commercial (0-20 kW)	0.77	0.06	0.01	0.01	0.01
LT-II (B) Commercial (above 20 kW)	0.38	0.03	0.02	0.02	0.02
LT-III (A) Industrial (0-20 kW)	0.01	0.00	0.04	0.04	0.04
LT-III (B) Industrial (above 20 kW)	8.15	0.68	0.46	0.44	0.53
Total	78.18	6.52	3.47	3.22	3.86

Table 1: Energy Sales approved and Actual in MUs

3.3. It can be observed from the above Table 1 that the actual sales during the months of January, February and March 2021 are 3.47 MUs, 3.22 MUs and 3.86 MUs respectively, which is 46.76%, 50.63% and 40.70% less than the monthly approved energy sales of 6.52 MUs by the Commission for the FY 2020-21. The major variation was observed in the

HT-I Industrial, LT II A – Commercial (0-20 kW) and LT-III (B) Industrial categories, which is due to the continuation of impact of COVID-19.

## 4. Power Purchase Details

- 4.1. MBPPL is a deemed Distribution Licensee notified by the Commission for IT& ITES SEZ located at Airoli, Thane. MBPPL does not own or operate any generating stations. Accordingly, MBPPL is required to procure power from outside sources in order to fulfil the demand of its consumers.
- 4.2. **Power Purchase Agreement:** MBPPL purchases power from (i) M/s. Jindal Power Limited (JPL) as per Medium-Term PPA for 10 MW for meeting the Base Load demand of 10 MW; and (ii) M/s. GMR Energy Trading Limited (GMRETL) to meet the Peak load demand (weekdays and 8.00 AM to 11 PM) for a period of 5 years from 1 July 2016 to 30 June 2021. The Commission has approved both PPAs and adopted the lowest tariff as a result of the process of competitive bidding followed by MBPPL.
- 4.3. The Commission in its MYT Order dated 30 March, 2020 in Case No. 328 of 2019 had approved the Power Purchase expenses for FY 2020-21 from both the sources i.e. M/s. Jindal Power Limited and M/s. GMR Energy Trading Limited. The Commission has also approved Sale of Surplus Power for FY 2020-21. The Commission has also approved purchase of Solar REC and Non- Solar REC for FY 2020-21.

4.4. Summary of power purchase of MBPPL is as under:

Sr.	Particular	Compliance
No.		
1	Purchase from	Yes. MBPPL has procured power (Base Load) from approved source i.e.
	Approved	M/s. Jindal Power Limited.
	Sources	
2	Merit Order	YES. MBPPL has scheduled its entire base power requirement from
	Dispatch	Jindal Power Limited and peak power from GMRETL, in line with MOD
		principles.
3	Fuel	Not applicable. All the sources of power procurement fall under Section
	Utilization	63 of EA, 2003.
	Plan	
4	Pool	MBPPL has injected 0.03 MU and 0.03 MU to the imbalance pool for
	Imbalance	the month of January 2021 and February 2021 respectively, by higher
		scheduling of power. MBPPL has drawn 0.10 MU power from the
		imbalance pool to meet its power purchase requirement for the month of
		March 2021.

Sr.	Particular	Compliance						
No.								
5	Sale of Surplus Power	MBPPL has scheduled the total power requirement from Jindal Power Limited (Base Contract) and peak power from GMRETL. MBPPL has sold <b>2.70 MU, 2.19 MU</b> and <b>4.49 MU</b> surplus power for the month of January 2021, February 2021 and March 2021 respectively. Surplus power available from JPL was sold to GEPL and surplus power available from GMRETL was sold on IEX.  Actual Power Purchase is <b>3.70 MU, 3.42 MU and 4.07 MU</b> in January,						
	Purchase	February and March, 2021	*		•			
		to lower sales.		, as against approved	. 0.02 1/10 0.00			
7	Source wise Power	Source Name	Approved (MU)	Actual – January 2021	Proportion (%)			
	Purchase		(MC)	(MU)	(70)			
		JPL	5.53	5.30	143.33			
		GMRETL	2.38	1.10	29.77			
		Sale of Surplus Power	(1.09)	(2.70)	(73.11)			
		Total	6.82	3.70	100.00			
		Source Name Approved Actual – Pr (MU) February 2021 (MII)						
				(MU)				
		JPL	5.53	( <b>MU</b> ) 4.85	141.79			
		JPL GMRETL	5.53 2.38	` ,	141.79 22.36			
				4.85				
		GMRETL	2.38	4.85 0.77	22.36			
		GMRETL Sale of Surplus Power	2.38 (1.09)	4.85 0.77 (2.19)	22.36 (64.15)			
		GMRETL Sale of Surplus Power Total	2.38 (1.09) <b>6.82</b> Approved	4.85 0.77 (2.19) 3.42 Actual – March	22.36 (64.15) <b>100.00</b>			
		GMRETL Sale of Surplus Power Total Source Name	2.38 (1.09) <b>6.82</b> Approved (MU)	4.85 0.77 (2.19) 3.42 Actual – March 2021 (MU)	22.36 (64.15) 100.00 Proportion			
		GMRETL Sale of Surplus Power Total Source Name	2.38 (1.09) <b>6.82</b> Approved (MU) 5.53	4.85 0.77 (2.19) 3.42 Actual – March 2021 (MU) 5.66	22.36 (64.15) 100.00 Proportion			
		GMRETL Sale of Surplus Power Total  Source Name  JPL GMRETL Sale of Surplus Power Imbalance Pool	2.38 (1.09) 6.82 Approved (MU) 5.53 2.38 (1.09)	4.85 0.77 (2.19) 3.42 Actual – March 2021 (MU) 5.66 2.81 (4.49) 0.10	22.36 (64.15) 100.00 Proportion 138.93 68.87 (110.14) 2.33			
		GMRETL Sale of Surplus Power Total  Source Name  JPL GMRETL Sale of Surplus Power Imbalance Pool Total	2.38 (1.09) 6.82 Approved (MU) 5.53 2.38 (1.09)	4.85 0.77 (2.19) 3.42 Actual – March 2021 (MU) 5.66 2.81 (4.49) 0.10 4.07	22.36 (64.15) 100.00 Proportion 138.93 68.87 (110.14) 2.33 100.00			
8	Power Purchase under Section 63 of Electricity Act, 2003	GMRETL Sale of Surplus Power Total  Source Name  JPL GMRETL Sale of Surplus Power Imbalance Pool	2.38 (1.09) 6.82  Approved (MU) 5.53 2.38 (1.09) 6.82 invoices and erates are very of power. Men the invoices and the invoices are also and the invoices and the invoices and the invoices and the invoices are also also also also also also also also	4.85 0.77 (2.19) 3.42  Actual – March 2021 (MU)  5.66 2.81 (4.49) 0.10 4.07 sale of invoices are erified from the Pl Monthly power purchs and it is ensured	22.36 (64.15) 100.00  Proportion  138.93 68.87 (110.14) 2.33 100.00 e submitted by PA signed by hase quantum			

## 5. Power Purchase Cost:

- 5.1. The Commission has scrutinised the detailed bills/invoices submitted for power purchase and sale of surplus power during the month of January to March, 2021, in order to verify the claim of MBPPL regarding Average Power Purchase Cost (APPC). The Commission has verified the actual as well as approved Net Purchase (MUs), Variable Cost (Rs./kWh) and Power Purchase Cost considered in FAC computation from the invoices and applicable MYT Order respectively.
- 5.2. The total Power Purchase Cost incurred in January, February and March, 2021 is Rs. 2.01 Crore, Rs. 1.80 Crore and Rs. 1.62 Crore, respectively which is lower than the monthly approved Power Purchase cost of Rs. 3.35 Crore by the Commission. This is on account of lower procurement of power due to lower sales in MBPPL area.

## 5.3. Jindal Power Limited:

- Power Procurement from JPL: MBPPL procures its base load requirement of power from JPL. MBPPL has purchased **5.30 MU** and **4.85 MU** from JPL during the month of January 2021 and February, 2021 respectively which is **0.23 MU** and **0.67 MU** lower than the approved purchase for the month of January 2021 and February, 2021 respectively. Similarly, MBPPL has purchased **5.66 MU** from JPL during the month of March 2021 which is **0.13 MU** higher than the approved purchase for the month of March 2021. While approving FAC Vetting Report for April 2020, the Commission has disallowed Rs. 0.0169 Crore due to lower availability. Now as the financial year has completed and JPL has achieved 85% of normative availability and hence JPL has raised supplementary bill for Rs. 0.0169 Crore for recovery of full fixed charges. The commission has verified the bill and has approved the same.
- 5.4. Impact of Fixed Cost and Variable Cost on overall Power Purchase Cost: Fixed cost per kWh has increased from approved level of Rs. 1.55 / kWh to Rs. 1.80 / kWh and Rs. 1.67 / kWh for the month of January 2021 and February 2021 respectively due to the lower power purchase quantum and also on account of adjustments of POC charges of 0.39 Crore in the month of January 2021. Fixed cost per kWh has decreased from approved level of Rs. 1.55 / kWh to Rs. 1.46 / kWh in March 2021 due to higher quantum of power purchase. As against the approved variable charge was Rs. 2.55 / kWh, the actual variable charge for the power purchase is Rs. 2.42 / kWh in January 2021 and February 2021 and Rs. 2.41 / kWh in March 2021. Due to increased burden of per unit fixed cost and reduction in variable cost, overall power purchase cost has increased from approved level of Rs. 4.10 / kWh to Rs. 4.22 / kWh for the month of January 2021. Power purchase cost has decreased from approved level of Rs. 4.10 / kWh to Rs. 4.09/ kWh and Rs. 3.88/ kWh in the month of February 2021 and March 2021.

5.5. Variation in power purchase expenses from JPL on account of change in quantum and per unit rate is as shown in Table 2 below:

Table 2: Power Purchase expense from JPL

Source	Approved Quantum (MU)	Approved rate (Rs./kWh)	Actual quantum (MU)	Actual rate (Rs./kWh)	Variation due to quantum (Rs. Crore)	Variation due to rate (Rs. Crore)	Total variation (Rs. Crore)
JPL (January)	5.53	4.10	5.30	4.22	(0.09)	0.07	(0.03)
JPL (February)	5.53	4.10	4.85	4.09	(0.28)	(0.00)	(0.28)
JPL (March)	5.53	4.10	5.66	3.88	0.05	(0.12)	(0.07)

- 5.6. **Power Purchase cost from GMRETL**: MBPPL has purchased **1.10 MU**, **0.77 MU** and **2.81 MU** during the month of January 2021, February 2021 and March 2021 respectively. MBPPL has purchased power at **Rs. 4.99 / kWh**, **Rs. 6.25 / kWh** and **Rs. 3.36 / kWh** for the month of January, February and March, 2021 respectively as against **Rs. 5.53 / kWh** approved by the Commission in the MYT Order. Variation in power purchase rate is due to different in quantum of power purchase which impacts the per unit fixed cost burden. Variable cost for power purchase is Rs. 1.71 / kWh for all three months.
- 5.7. Renewable Sources: MBPPL has not purchased any REC for the month of January to March, 2021. By avoiding purchase of REC, MBPPL has reduced power purchase cost for January to March, 2021 but created liability for future.
- 5.8. Sale of Surplus Power: The Commission in its MYT order approved sale of surplus power for MBPPL of 1.09 MU. MBPPL has scheduled the total power requirement from Jindal Power Limited (Base Contract) and sold the surplus power to GEPL. Also, surplus power available from GMRETL was sold on IEX. MBPPL has sold surplus power of 2.70 MU, 2.19 MU and 4.49 MU to GEPL and on IEX during the month of January 2021, February, 2021 and March 2021 respectively.

#### 5.9. Power Sale from MBPPL to GEPL:

The power from JPL was available at variable cost of **Rs 2.55/kWh**. Due to lower demand, MBPPL was required to pay fixed costs as per terms and conditions of Medium term PPA which unnecessary burdens the consumers of MBPPL with fixed cost. Therefore, to minimise the burden of fixed cost, the surplus power available from JPL was sold to GEPL at **Rs 2.65/unit**. The Commission has approved the sale of surplus power in its Order dated 23 January, 2021 in Case No 231 of 2020. The relevant extract is as given below:

"9.6 The Commission notes that Variable cost of Rs 2.65/kWh being offered by MBPPL to GEPL is in line with the market trends and is lower than existing contract of GEPL with GMR i.e. Rs. 2.83/kWh. Such savings in the power purchase cost will reduce burden on the consumers of GEPL as well as MBPPL. Therefore, the Commission allows such bilateral contract between MBPPL and GEPL to be continued till June, 2021....."

#### 5.10. Power Sale from GMRETL to IEX

MBPPL has medium term PPA with GMRETL for meeting its peak power requirement. However, due to lower demand, power was not scheduled, and fixed charge was being paid as per terms and conditions of the PPA. The said power from GMRETL is interstate power. The variable cost of said power includes three components i.e. Fuel and Generation Cost (Rs 1.71/kWh), Transmission Charges (POC Injection and Drawl charges- Rs 0.53/kWh) and Transmission Losses (Rs 0.23/kWh). The total variable cost is Rs 2.47/kWh. To optimise the power purchase cost, the power from GMRETL was sold directly on IEX whenever the price on IEX was higher than the Fuel and Generation Cost/POC injection charges as per PPA. The cut-off price for bidding on IEX was Rs 2.07/kWh so that MBPPL is cost neutral and there is no additional burden on consumers. Accordingly, the power was sold on IEX at Rs 3.20/kWh, Rs 3.73/kWh and Rs 3.91/kWh during the month of January 2021, February 2021 and March 2021, respectively.

- 5.11. MBPPL has sold power at **Rs. 2.88/kWh, Rs. 3.03/kWh** and **Rs. 3.44/kWh** for the month of January 2021, February 2021 and March 2021 respectively as against **Rs. 3.11 / kWh** approved in the Order.
- 5.12. **Imbalance Pool:** It is seen that MBPPL has not drawn any additional power from the imbalance pool for the months of January 2021 and February 2021. MBPPL has injected power to the tune of **0.03 MU** to the Pool in the months of January 2021 and February 2021, each on account of higher power procurement. The said injection into the pool may be on account of either decrease in demand of consumers than estimated by the licensee or due to higher generation than scheduled by the generator. In both the scenarios, power incremented in the imbalance pool is not supplied to its consumers.
- 5.13. However, MBPPL has drawn **0.10 MU** power from the imbalance pool to meet its power purchase requirement for the month of March 2021. The said drawl from the pool may be on account of either increase in demand of consumers than estimated by the Licensee or due to lower generation than scheduled by the generator. In both the scenarios, power has been drawn by the Licensee and supplied to its consumers. The said power supplied to the consumers is already billed as per Tariff approved by the Commission. The Energy Charge

- approved also includes the element of power purchase. It is therefore pertinent that such cost of such power drawn from the pool is considered while computing FAC.
- 5.14. The present FAC mechanism includes any variation in power purchase cost which includes both Fixed Charges and Variable Charges. The imbalance pool settlement is done considering Variable Charges on monthly basis and Fixed Cost Reconciliation on yearly basis. Accordingly, considering monthly surplus imbalance pool quantum at provisional variable cost as per FBSM mechanism will increase the overall average power purchase cost which is computed considering both Fixed and Variable Charges, thereby burdening the consumers with FAC. Further, due to historical issues of delay in computing imbalance pool quantum and cost of power, for which appropriate orders are already passed by the Commission, non-consideration of surplus imbalance pool quantum at the time of FAC computation on monthly basis will not have any adverse impact on licensee as it would have anyway paid the entire fixed cost to the generator even if lower quantum of power was supplied. Further, for FAC computation total energy purchased by the licensee is being considered for FAC Computation. In view of the aforesaid, it would not be prudent to burden the consumers by considering the impact of monthly surplus imbalance pool in FAC computation. Accordingly, to balance the overall interest of consumers and licensee, the Commission has not considered the surplus imbalance pool quantum and cost in the monthly FAC computation as it will get adjusted during truing-up of the respective year.
- 5.15. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.16. **Approved Cost**: The Commission has noted that MBPPL could not procure the approved quantum of power from its approved sources to the full capacity due to lower demand due to continuation of impact of COVID-19 which has resulted in lower power purchase cost and increased Average power purchase cost for the month of January 2021 and February 2021. **This increase has been on account of increase in burden of fixed cost due to lower amount of units procured.** Therefore, actual APPC works out to be higher than the approved APPC in MYT order for the month of January 2021 and February 2021.
- 5.17. For the month of March 2021, MBPPL has procured low quantum as against the approved quantum which has resulted in lower power purchase cost but Average power purchase cost for the month of March 2021 has also decreased. This decrease in average power purchase cost is on account of sale of surplus power at good rate. Due to lower purchase of power, fixed cost burden has increased but at the same time there is impact of sale of surplus power of Rs. 3.44/kWh per unit cost which has decreased the variable cost. Therefore, actual APPC works out to be lower than the approved APPC in MYT order in March 2021.

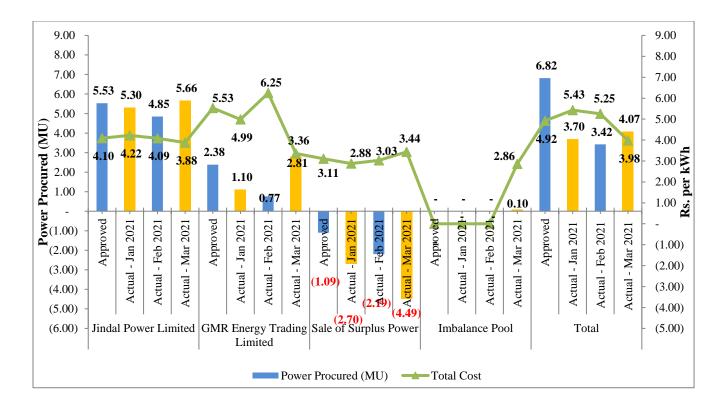
5.18. The details of the overall cost approved and actual for the month of January to March, 2021 as per MYT Order is as shown in the Table 3**Error! Reference source not found.** below:

Table 3: Approved and Actual Power Purchase Cost for MBPPL

Source		Power Procured (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./ kWh)	Total Cost (Rs. Crore)	Total Cost (Rs./ kWh)
	Approved	5.53	0.85	1.55	1.41	2.55	2.26	4.10
Jindal	Actual - Jan 2021	5.30	0.95	1.80	1.28	2.42	2.24	4.22
Power Limited	Actual - Feb 2021	4.85	0.81	1.67	1.17	2.42	1.98	4.09
	Actual - Mar 2021	5.66	0.83	1.46	1.37	2.41	2.19	3.88
CMD	Approved	2.38	0.73	3.06	0.59	2.47	1.32	5.53
GMR Energy	Actual - Jan 2021	1.10	0.36	3.28	0.19	1.71	0.55	4.99
Trading	Actual - Feb 2021	0.77	0.35	4.54	0.13	1.71	0.48	6.25
Limited	Actual - Mar 2021	2.81	0.46	1.65	0.48	1.71	0.94	3.36
	Approved	(1.09)	-	-	(0.34)	3.11	(0.34)	3.11
Sale of	Actual - Jan 2021	(2.70)	-	_	(0.78)	2.88	(0.78)	2.88
Surplus Power	Actual - Feb 2021	(2.19)	-	-	(0.66)	3.03	(0.66)	3.03
	Actual - Mar 2021	(4.49)	-		(1.54)	3.44	(1.54)	3.44
	Approved	-	-	-	-	-	0.00	-
Imbalance	Actual - Jan 2021	-	-	-	-	-	-	-
Pool	Actual - Feb 2021	-	-	-	-	-	-	-
	Actual - Mar 2021	0.10	-	-	0.03	2.86	0.03	2.86
	Approved	6.82	0.85	1.25	2.50	3.66	3.35	4.92
Total	Actual - Jan 2021	3.70	1.32	3.56	0.69	1.88	2.01	5.43
Total	Actual - Feb 2021	3.42	1.16	3.39	0.64	1.87	1.80	5.25
	Actual - Mar 2021	4.07	1.29	3.17	0.33	0.81	1.62	3.98

5.19. The variation in approved and actual quantum of power procured and the APPC is shown the graph below:

Figure 1: Variation in Power Procurement Quantum and APPC



5.20. Reasons for the rate variation for various sources are as shown below:

**Table 4: Reasons for Rate Variation for various Sources** 

Sr.	Source	Month	Approved Rate	Actual Rate	Reason for rate
No.			(Rs. /kWh)	(Rs. /kWh)	variation
1	JPL	January	4.10	4.22	Due to lower power
		February		4.09	purchase, fixed cost
					burden has increased the
					actual rate as compared to
					approved rate in the
					month of January 2021
					and February 2021. In
					the month of February,
					lower variable cost has
					helped in reducing the
					rate as compared to
					approved rate.
		March		3.88	Due to higher purchase of
					power, fixed cost burden
					has reduced the actual
					rate as compared to
					approved rate in the
					month of March 2021.
2	GMRETL	January	5.53	4.99	Due to lower power

Sr.	Source	Month	Approved Rate	Actual Rate	Reason for rate
No.			(Rs./kWh)	(Rs. /kWh)	variation
					purchase, fixed cost burden has increased but at the same time there is impact of lower variable cost which has reduced the overall rate.
		February		6.25	Due to lower power purchase, fixed cost burden which has increased the overall rate.
		March		4.36	Due to higher power purchase, the fixed cost burden (Rs./kWh) has reduced and also lower variable cost has reduced which has reduced the overall rate.
4	Sale of Surplus Power	January February March	3.11	2.88 3.03 3.44	The surplus power available from JPL was sold to GEPL at Rs 2.65/kWh which was approved by the Commission.  To optimise the power purchase cost, the power from GMRETL was sold directly on IEX whenever the price on IEX was higher than the Fuel and Generation Cost/POC injection charges as per PPA. The cut-off price for bidding on IEX was Rs 2.07/kWh so that MBPPL is cost neutral and there is no additional burden on consumers. Accordingly, the power was sold on IEX at Rs 3.20/kWh, Rs 3.73/kWh and Rs 3.91/kWh during the month of January

Sr.	Source	Month	Approved Rate	Actual Rate	Reason for rate
No.			(Rs./kWh)	(Rs./kWh)	variation
					2021, February 2021 and
					March 2021, respectively.
3	Imbalance	January	-	-	MBPPL has not drawn
	Pool	February		-	any additional power
					from the imbalance
			-		pool for the months of
					January 2021 and
					February 2021
		March		2.86	MBPPL has drawn
					<b>0.10 MU</b> power from
			-		the imbalance pool at
					the rate approved by
					the Commission.
4	Total	January 2021	4.92	5.43	Due to lower sales and
		February 2021	4.74	5.25	reasons stated above
		March 2021		3.98	

5.21. Considering the above, the Commission allows the average power purchase cost of Rs. 5.43 / kWh, Rs. 5.25 / kWh and Rs. 3.98 / kWh for the months of January, February and March, 2021 respectively as shown in Table 4 above. The variation in power purchase cost is mainly on account of increase in burden of Fixed Cost and decrease in variable cost due to impact of sale of surplus power.

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

- 6.1. The Commission has worked out the average power purchase costs for the months as shown in Table 3 above. The same has been compared with the average power purchase cost approved by the Commission in MYT Order dated 30 March, 2020 and arrived at differential per unit rate at which  $Z_{FAC}$  is to be passed on to the consumers.
- 6.2. Thus, the following Table 5 shows the rectified ZFAC worked out by the Commission on account of difference in fuel and power purchase cost for the month of January to March, 2021.

Table 5: FAC on account of Fuel and Power Purchase Cost

S. No.	Particulars	Units	Jan-21	Feb-21	Mar-21
1	Average power purchase cost approved by the Commission	Rs./kWh	4.92	4.92	4.92
2	Actual average power purchase cost	Rs./kWh	5.43	5.25	3.98

S. No.	Particulars	Units	Jan-21	Feb-21	Mar-21
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.52	0.34	(0.94)
4	Net Power Purchase	MU	3.70	3.42	4.07
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	0.19	0.11	(0.38)

# 7. Adjustment for over recovery/under recovery (B)

7.1. The adjustment factor for over recovery / under recovery (B) is as shown in the Table 6 below:

Table 6 Adjustment for over recovery/under recovery

S. No.	Particulars	Units	Jan-21	Feb-21	Mar-21
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.30	0.31	0.30
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.31	0.31	0.29
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.01)	0.003	0.02
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	1.13	1.01	0.84
3.0	Adjustment factor for over- recovery/under-recovery (1.3+2.0)	Rs. Crore	1.12	1.01	0.86

# 8. Carrying Cost for over recovery/under recovery (C)

- 8.1. Carrying/Holding Cost for under recovery/over recovery has been granted at the approved interest rate for the eligible amount which works out to **Rs. 0.01 Crore** each for the month of January 2021, February 2021 and March 2021.
- 8.2. Holding cost for the month of January to March, 2021 is calculated by considering MCLR + 150 basis points which turns out to be **8.50%**.
- 8.3. The Commission has computed the holding cost towards the amount over recovered in the month of January to March, 2021 which is as shown in the Table 7 below:

Table 7 Carrying/Holding Cost for over/under recovery

Particulars	Units	Jan-21	Feb-21	Mar-21
Adjustment factor for over-recovery/under-recovery	Rs. Crore	1.12	1.01	0.86
Interest rate	%	8.50%	8.50%	8.50%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.01	0.01	0.01

## 9. <u>Disallowance due to excess Distribution Loss</u>

- 9.1. Regulation 10.8 of MYT Regulations, 2019 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  $Z_{FAC}$  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  $Z_{FAC}$  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 annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of  $Z_{FAC}$  corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total  $Z_{FAC}$  recoverable"

9.2. The following Table 8 provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss:

Table 8: Disallowance of FAC due to excess distribution loss

S. No.	Particulars	Units	Approved in Tariff Order	Jan- 21	Feb- 21	Mar- 21
1	Net Energy input at Distribution Voltages	MU	6.60	3.55	3.28	3.94
2	Energy sales at Distribution voltages	MU	6.52	3.47	3.22	3.86
3	Distribution Loss (1 - 2)	MU	0.08	0.08	0.07	0.08
4	Distribution Loss as % (3/1)	%	1.28%	2.18%	2.05%	2.03%
5	Cumulative Distribution Loss	%	1.28%	1.70%	1.73%	1.76%
6	Excess Distribution Loss = [Cumulative Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.02	0.01	0.02
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	0.01	0.01	0.002

- 9.3. As seen from the above Table 8, cumulative distribution loss for the months of January to March, 2021 is higher than the MYT approved distribution loss of 1.28%.
- 9.4. The Commission observed that MBPPL has worked out disallowance of FAC due to excess Distribution Loss based on the Distribution Loss corresponding to the standalone energy input at distribution voltage for the month of January to March, 2021. The Commission considers the same for disallowance of FAC due to excess distribution loss.

# 10. Summary of Allowable ZFAC

10.1. The summary of the FAC amount as approved by the Commission for the month of January to March, 2021 is as shown in the Table 9 below.

**Table 9: Summary of Allowable ZFAC** 

Sr. No.	Particulars	Units	Jan-21	Feb-21	Mar-21
1	Calculation of ZFAC				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)		0.19	0.11	(0.38)
1.2	Carrying cost for over-recovery/under-recovery (C)		0.01	0.01	0.01
1.3	Adjustment factor for over-recovery/under-recovery (B) Rs. Cro		1.12	1.01	0.86
1.4	ZFAC = F+C+B Rs. Crore		1.32	1.13	0.49
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	3.47	3.22	3.86
2.2	Excess Distribution Loss	MU	0.02	0.01	0.02
2.3	ZFAC per kWh	Rs./kWh	3.78	3.50	1.25
3.0	Allowable FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	0.01	0.01	0.00
3.2	FAC allowable [1.4-3.1]	Rs. Crore	1.31	1.13	0.48
4.0	Utilization of FAC Fund				
4.1	Opening Balance of FAC Fund	Rs. Crore	0.00	0.00	0.00
4.2	ZFAC for the month (Sr. N. 3.2)	Rs. Crore	1.31	1.13	0.48
4.3	Closing Balance of FAC Fund	Rs. Crore	0.00	0.00	0.00
4.4	ZFAC leviable/refundable to consumer	Rs. Crore	1.31	1.13	0.48
5.0	Total FAC based on category wise and slab wise allowed to be recovered in the billing month of Jan 2021 for Nov 2020, Feb 2021 for Dec 2020 and Marc 2021 for Jan 2021	Rs. Crore	0.30	0.28	0.34
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	1.01	0.84	0.15

10.2. It can be seen from the above Table 9 that the standalone FAC for the month of January 2021, February 2021 and March 2021 is **Rs. 1.31 Crore, Rs. 1.13 Crore and Rs. 0.48 Crore** respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as **Rs. 3.78 per kWh, Rs. 3.50 per kWh and Rs. 1.25 per kWh for the months of January 2021, February 2021 and March 2021 respectively as shown above.** 

10.3. Further, the Regulation 10.9 of MYT Regulations, 2019 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:

- 10.4. As the FAC per unit computed in the month of January 2021, February 2021 and March 2021 as shown in Table 8 above is higher than the 20% cap specified in MYT Regulations, 2019, hence, there is restriction triggered with regards to such ceiling.
- 10.5. Further, due to ceiling limit, the FAC recoverable has been worked out as **Rs. 0.30 Crore**, **Rs. 0.28 Crore** and **Rs. 0.34 Crore** for the month of January to March, 2021 respectively. Thus, FAC equivalent Rs. 1.01 Crore (i.e., Rs. 1.31 Crore minus Rs. 0.30 Crore) for the month of January 2021, Rs. 0.84 Crore (i.e., Rs. 1.13 Crore minus Rs. 0.28 Crore) for the month of February 2021 and Rs. 0.15 Crore (i.e Rs. 0.48 Crore minus Rs. 0.34 Crore) for the month of March 2021 has remained unrecovered. **Accordingly, the Commission allows the recovery of Rs. 0.15 Crore as carried forward FAC to be recovered in future period.**

## 11. Recovery from Consumers:

11.1. Regulation 10.9 of MERC MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

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

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

 $Z_{FAC}$  Cat =  $Z_{FAC}$  component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;

k = Average Billing Rate / 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  $Z_{FAC}$  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  $Z_{FAC}$  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...."

- 11.2. The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations.
- 11.3. The following Table 10**Error! Reference source not found.** shows per unit Z<sub>FAC</sub> for the month of January, February and March, 2021 to be levied on consumers of MBPPL in the billing month of March 2021, April 2021 and May 2021.

Table 10 Category wise FAC Revenue for billing month of March 2021, April 2021 and May 2021

Sr. No	Consumer Category	Slabs	Z <sub>FAC</sub> computed for the month of January 2021 (Rs. Crore)	Z <sub>FAC</sub> computed for the month of February 2021 (Rs. Crore)	Z <sub>FAC</sub> computed for the month of March 2021 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	2.94	2.71	3.27
2	HT-II Commercial	all units	-	=	-
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.01	0.01	0.01
4	LT-II (B) Commercial (above 20 kW)	all units	0.02	0.02	0.02
5	LT-III (A) Industrial (0-20 kW)	all units	0.04	0.04	0.04
6	LT-III (B) Industrial (above 20 kW)	all units	0.46	0.44	0.53
•	Total		3.47	3.22	3.86

11.4. It is observed that for FY 2020-21, there has been overall reduction in sales of MBPPL by 45.43% than approved by the Commission due to lower demand in view of Covid-19 pandemic. It is pertinent to note that the sales of Industrial Category and Commercial Category have significantly reduced by 43% and 73% respectively. The substantial reduction in sales will lead to lower revenue realisation whereas the fixed

costs for running the operations incurred by the Licensee are unlikely to be reduced, thereby creating a revenue gap for FY 2020-21. This revenue gap will be claimed by the Licensee at the time of MTR proceedings along with carrying cost thereby impacting the tariff of consumers. Demand is likely to get affected due to the presumably second wave of Covid-19 pandemic for which the Government has announced various restrictions. This is also likely to reduce the sales of licensee in FY 2021-22 thereby impacting the revenue and creation of revenue gap to be recovered in future along with carrying cost. In view of the likely impact on tariff due to such revenue gap being claimed by the Licensees at the time of MTR proceedings, the Commission is of the view that it is important to take necessary steps so that consumers are not subjected to tariff shock in future. Accordingly, the Commission has decided to accumulate the FAC Fund arising out of negative FAC up to March 2023 along with the holding cost. The FAC Fund so accumulated will not only help in bridging the revenue gap but also help in avoiding the variation in monthly tariff due to positive FAC. The Commission will continuously monitor the FAC Fund and pass appropriate directions in future regarding its utilisation.