



महाराष्ट्र विद्युत नियामक आयोग
Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2020-21/ WFH/SBR/40

Date: 8 December, 2020

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 July 2020, August 2020 and September 2020.

Reference: 1. MBPPL's FAC submission for the months of July 2020, August 2020 and September 2020 vide email dated 15 November, 2020.

Sir,

Upon vetting the FAC calculations for the months of July to September, 2020 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	July 2020	August 2020	Sept 2020
Z _{FAC} allowed for recovery (Rs. Crore)	0.31	0.30	0.30

The Commission allows the carry forward FAC of Rs. 0.99 Crore for the month of July 2020, Rs. 1.27 Crore for the month of August 2020 and Rs. 1.60 Crore for the month of September 2020, respectively to be recovered during 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,

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

Encl: Annexure A: Detailed Vetting Report for the period of July to September, 2020.

ANNEXURE
Detailed Vetting Report
Date: 8 December, 2020

**POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JULY 2020,
AUGUST 2020 AND SEPTEMBER 2020.**

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL for the months of July 2020, August 2020 and September 2020

Reference: 1. MBPPL's FAC submission for the months of July, 2020, August, 2020 and September, 2020 vide email dated 15 November, 2020.

1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of July 2020, August 2020 and September 2020 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 September 2020, October 2020 and November 2020.

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 25 September, 2020 the Commission accorded Post-facto approval to the FAC for the month of May and June, 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 17 November, 2020 MBPPL has filed FAC submissions for the months of July 2020, August 2020 and September 2020 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:

Table 1: Energy Sales approved and Actual in MUs

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (MU)		
			July 2020	August 2020	September 2020
	(I)	(II=I/12)	(III)	(IV)	(V)
HT Category					
HT- I Industrial	68.87	5.74	2.92	2.83	2.88
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	0.51	0.49	0.48
Total	78.18	6.52	3.50	3.39	3.43

3.3. It can be observed from the above Table 1 that the actual sales during the months of July, August and September 2020 are 3.50 MUs, 3.39 MUs and 3.43 MUs respectively, which is **46.26%, 47.97% and 47.42%** less than the monthly approved energy sales of 6.52 MUs by the Commission for the FY 2020-21. The variation in the energy sales was primarily observed in all categories except LT III A – Industry (0 - 20 kW). However, the major variation was observed in the HT-I Industrial, LT II A – Commercial (0-20 kW) and LT-III

(B) Industrial categories as shown in the Table 1 above. As submitted by MBPPL, this variation was on account of continuation of the widespread pandemic 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. No.	Particular	Compliance
1	Purchase from Approved Sources	No. In addition to approved source of power purchase (M/s. Jindal Power Limited) for the months of July 2020, August 2020 and September 2020, MBPPL has purchased 0.01 MU from IEX for the month of July 2020 which is not an approved source. This is due to the contingency requirement arising out of technical outage (tripping of the Unit due to main steam strainer leakage) of Tamnar Unit of Jindal Power Limited for the period 1830-2400 Hrs on 18 July, 2020.
2	Merit Order Dispatch	YES. MBPPL has scheduled its entire power requirement from Jindal Power Limited in line with MOD principles. Only in July 2020, Marginal Load was met from the Power procured from Power Exchange in Real Time Market to meet contingency requirement.
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.

Sr. No.	Particular	Compliance																																																															
4	Pool Imbalance	MBPPL has not drawn any power from the imbalance pool to meet its power purchase requirement in the period from July to September, 2020. It has supplied 0.11 MU to the imbalance pool in the month of July, 2020, 0.05 MU in the month of August, 2020 and 0.01 MU in the month of September, 2020 respectively, due to additional power procurement.																																																															
5	Sale of Surplus Power	There was no sale of surplus of power during the period from July to September, 2020.																																																															
6	Power Purchase	Actual Power Purchase is 3.78 MU , 3.60 MU and 3.60 MU in July, August and September, 2020 respectively, as against approved 6.82 MU due to lower sales.																																																															
7	Source wise Power Purchase	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual – July 2020 (MU)</th> <th>Proportion</th> </tr> </thead> <tbody> <tr> <td>GMRETL</td> <td>2.38</td> <td>0.00</td> <td>0.00%</td> </tr> <tr> <td>JPL</td> <td>5.53</td> <td>3.76</td> <td>99.61%</td> </tr> <tr> <td>Exchange/Imbalance Pool and Other Sources</td> <td>-1.09</td> <td>0.01</td> <td>0.39%</td> </tr> <tr> <td>Total</td> <td>6.82</td> <td>3.78</td> <td>100.00%</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual – August 2020 (MU)</th> <th>Proportion</th> </tr> </thead> <tbody> <tr> <td>GMRETL</td> <td>2.38</td> <td>0.00</td> <td>0%</td> </tr> <tr> <td>JPL</td> <td>5.53</td> <td>3.60</td> <td>100%</td> </tr> <tr> <td>Exchange Imbalance Pool and Other Sources</td> <td>-1.09</td> <td>0.00</td> <td>0%</td> </tr> <tr> <td>Total</td> <td>6.82</td> <td>3.60</td> <td>100%</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual – September 2020 (MU)</th> <th>Proportion</th> </tr> </thead> <tbody> <tr> <td>GMRETL</td> <td>2.38</td> <td>0.00</td> <td>0%</td> </tr> <tr> <td>JPL</td> <td>5.53</td> <td>3.60</td> <td>100%</td> </tr> <tr> <td>Exchange Imbalance Pool and Other Sources</td> <td>-1.09</td> <td>0.00</td> <td>0%</td> </tr> <tr> <td>Total</td> <td>6.82</td> <td>3.60</td> <td>100%</td> </tr> </tbody> </table>				Source Name	Approved (MU)	Actual – July 2020 (MU)	Proportion	GMRETL	2.38	0.00	0.00%	JPL	5.53	3.76	99.61%	Exchange/Imbalance Pool and Other Sources	-1.09	0.01	0.39%	Total	6.82	3.78	100.00%	Source Name	Approved (MU)	Actual – August 2020 (MU)	Proportion	GMRETL	2.38	0.00	0%	JPL	5.53	3.60	100%	Exchange Imbalance Pool and Other Sources	-1.09	0.00	0%	Total	6.82	3.60	100%	Source Name	Approved (MU)	Actual – September 2020 (MU)	Proportion	GMRETL	2.38	0.00	0%	JPL	5.53	3.60	100%	Exchange Imbalance Pool and Other Sources	-1.09	0.00	0%	Total	6.82	3.60	100%
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8	Power Purchase under Section	Monthly power purchase invoices are submitted by MBPPL. Power Purchase rates are verified from the PPA signed by MBPPL with each source of power. Monthly power purchase quantum and rate are verified																																																															

Sr. No.	Particular	Compliance
	63 of Electricity Act, 2003	from the invoices and it is ensured that same has been considered in the FAC calculation.
9	Short Term Power Purchase	Short-term power purchase invoices are submitted by MBPPL. All the power purchase quantum and rate are verified from the invoices and it is ensured that same has been considered in the FAC calculation.

5. Power Purchase Cost:

5.1. The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of July to September, 2020, 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 July to September, 2020 is Rs. **2.38 Crore, Rs. 2.32 Crore** and **Rs. 2.39 Crore**, respectively which is lower than the approved Power Purchase cost of **Rs. 3.35 Crore** by the Commission for the months of July to September, 2020. 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 **3.76 MU** from JPL during the month of July 2020 which is **1.77 MU** lower than the approved purchase for the month of July 2020. MBPPL has purchased **3.60 MU** from JPL during the month of August 2020 which is **1.93 MU** lower than the approved purchase for the month of August 2020. Similarly, MBPPL has purchased **3.60 MU** from JPL during the month of September 2020 which is **1.93 MU** lower than the approved purchase for the month of September 2020.
- Impact of Fixed Cost and Variable Cost on overall Power Purchase Cost:** The Commission has noted that MBPPL could not schedule its approved sources to the full entitlement and could not fully utilise the available capacity of the contracted source. Due to the lower power purchase quantum, fixed cost per kWh has increased from approved level of Rs. **1.55 / kWh to Rs. 2.88 / kWh** in July, 2020, **Rs. 3.05 / kWh** in August, 2020 and **Rs. 3.21 / kWh** in September, 2020 on account of adjustments due to POC charges. As against the approved variable charge was **Rs. 2.55 / kWh**, the actual variable charge for the power purchase is **Rs. 2.47 / kWh in July 2020, August 2020 and September**

2020. Due to increased burden of per unit fixed cost, overall power purchase cost has increased from approved level of **Rs. 4.10 / kWh to Rs. 5.34 / kWh, Rs. 5.52 / kWh and Rs. 5.68 / kWh** in the month of July, August and September, 2020 respectively.

- 5.4. 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 (July 2020)	5.53	4.10	3.76	5.34	(0.72)	0.47	(0.25)
JPL (August 2020)	5.53	4.10	3.60	5.52	(0.79)	0.51	(0.28)
JPL (September 2020)	5.53	4.10	3.60	5.68	(0.79)	0.57	(0.22)

- 5.5. **Power Purchase cost from GMRETL:** For the period from July to September, 2020, MBPPL has not procured any power from GMRETL. However, as availability was declared by the Plant, MBPPL had to pay fixed charges to the tune of **Rs. 0.36 Crore, Rs. 0.33 Crore and Rs. 0.35 crore** for the months of July, August and September, 2020 respectively. This has increased the overall power purchase cost for the month of July to September, 2020 and its impact can be seen in the higher total Average Power Purchase Cost for the period of July to September, 2020.
- 5.6. **Renewable Sources:** MBPPL has **not purchased any REC for the month of July to September, 2020.** By avoiding purchase of REC, MBPPL has reduced power purchase cost for July to September, 2020 but created liability for future.
- 5.7. **Power Procurement from Exchange and Other Sources:** For the month of July 2020 marginal power (**0.01 MU**) is procured from power exchange in Real Time Market (RTM) to meet contingency requirement arising out of technical outage (tripping of the Unit due to main steam strainer leakage) of Tamnar Unit of Jindal Power Limited for the period 1830-2400 Hrs on 18 July, 2020. The Commission has noted that MBPPL has not procured any power from the Exchange or other sources during the months of August and September, 2020.
- 5.8. **Sale of Surplus Power:** The Commission in its MYT order approved sale of surplus power for MBPPL. The commission has noted that MBPPL has not been able to sell surplus power and has not earned any extra revenue from the sale of surplus power.

- 5.9. **Imbalance Pool:** It is seen that MBPPL has not drawn any additional power from the imbalance pool for the months of July to September, 2020. MBPPL has injected power to the tune of **0.11 MU, 0.05 MU and 0.01 MU** to the Pool in the months of July, August and September, 2020 respectively 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.
- 5.10. 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.
- 5.11. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.12. **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 COVID-19 which has resulted in lower power purchase cost and increased Average power purchase cost. **This increase has been on account of increase in burden of fixed cost due to lower amount of units procured. Also no power has been procured from GMRETL in the month of July to September, 2020 due to lower demand but due to 100% availability declaration, fixed charges were paid to GMRETL.** This has increased the fixed cost per unit for the month of July to September, 2020. Therefore, actual APPC works out to be higher than the approved APPC in MYT order.

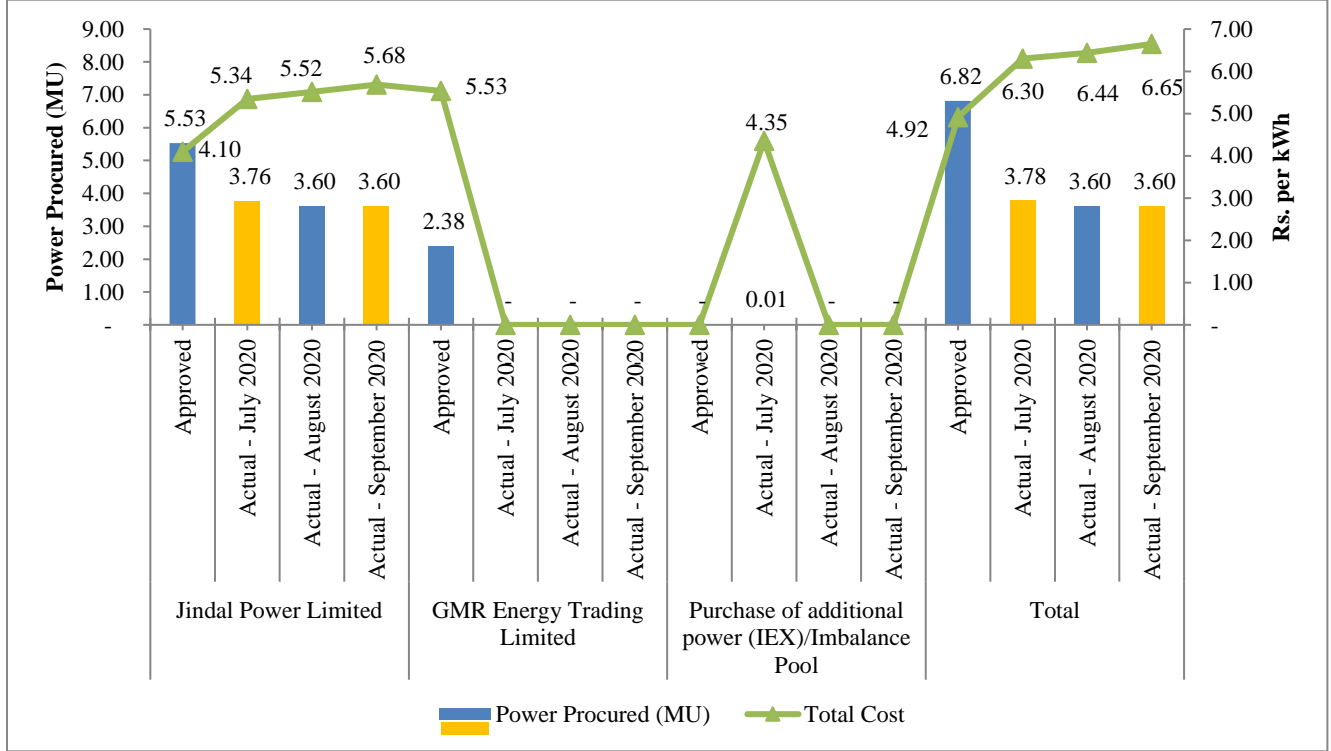
5.13. The details of the overall cost approved and actual for the month of July to September, 2020 as per MYT Order is as shown in the Table 3 **Error! Reference source not found.** below:

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)
Jindal Power Limited	Approved	5.53	0.85	1.55	1.41	2.55	2.26	4.10
	Actual - July 2020	3.76	1.08	2.88	0.93	2.47	2.01	5.34
	Actual - August 2020	3.60	1.10	3.05	0.89	2.47	1.99	5.52
	Actual - September 2020	3.60	1.16	3.21	0.89	2.47	2.05	5.68
GMR Energy Trading Limited	Approved	2.38	0.73	3.06	0.59	2.47	1.32	5.53
	Actual - July 2020	-	0.36	-	-	2.47	0.36	-
	Actual - August 2020	-	0.33	-	-	-	0.33	-
	Actual - September 2020	-	0.35	-	-	-	0.35	-
Purchase of additional power (IEX)/Imbalance Pool	Approved	-	-	-	-	-	-	-
	Actual - July 2020	0.01	-	-	-	-	0.01	4.35
	Actual - August 2020	-	-	-	-	-	-	-
	Actual - September 2020	-	-	-	-	-	-	-
Total	Approved	6.82	1.58	2.32	1.66	2.43	3.35	4.92
	Actual - July 2020	3.78	1.44	3.83	0.93	2.48	2.38	6.30
	Actual - August 2020	3.60	1.43	3.97	0.89	2.47	2.32	6.44
	Actual - September 2020	3.60	1.50	4.18	0.89	2.47	2.39	6.65

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

Figure 1: Variation in Power Procurement and Total per unit Cost



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

Table 4: Reasons for Rate Variation for various Sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	JPL	July	4.10	5.34	Due to lower power purchase, fixed cost burden has increased the actual rate as compared to approved rate
		August		5.52	
		September		5.68	
2	Exchange/ Other Peak Source	July	-	4.35	For the month of July 2020 marginal power (0.01 MU) is procured from power exchange in Real Time Market (RTM) to meet contingency requirement arising out of technical outage (tripping of the Unit due to main steam strainer leakage) of Tamnar Unit of Jindal Power Limited for the
		August		0.00	
		September		0.00	

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
					period 1830-2400 Hrs on 18 July, 2020.
3	Total	July	4.92	6.30	Due to above factors
		August		6.44	
		September		6.65	

5.16. Considering the above, the Commission allows the average power purchase cost of Rs. 6.30 / kWh, Rs. 6.44 / kWh and Rs. 6.65 / kWh for the months of July, August and September, 2020 respectively as shown in Table 4 above. The variation in power purchase cost is mainly on account of increase in burden of Fixed Cost as a result of lower unit sold.

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 July to September, 2020.

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

S. No.	Particulars	Units	July 2020	August 2020	September 2020
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	6.30	6.44	6.65
3	Change in average power purchase cost (=2 - 1)	Rs./kWh	1.38	1.52	1.73
4	Net Power Purchase	MU	3.78	3.60	3.60
5	Change in fuel and power purchase cost (= 3 × 4 / 10)	Rs. Crore	0.52	0.55	0.62

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	Jul-20	Aug-20	Sep-20
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.33	0.33	0.31
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.33	0.31	0.30
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.00)	0.02	0.01
2.0	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.78	0.99	1.27
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	0.78	1.01	1.28

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** for the month of July 2020, August 2020 and September 2020.
- 8.2. Holding cost for the month of July to September, 2020 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 July to September, 2020 which is as shown in the Table 7 below:

Table 7 Carrying/Holding Cost for over/under recovery

Particulars	Units	Jul-20	Aug-20	Sep-20
Adjustment factor for over-recovery/under-recovery	Rs. Crore	0.78	1.01	1.28
Interest rate	%	8.50%	8.50%	8.50%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.01	0.01	0.01

9. Disallowance due to excess Distribution Loss

- 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	Actual-July 2020	Actua-August 2020	Actual-September 2020
1	Net Energy input at Distribution Voltages	MU	6.60	3.55	3.44	3.48
2	Energy sales at Distribution voltages	MU	6.52	3.50	3.39	3.43
3	Distribution Loss (1 - 2)	MU	0.08	0.05	0.05	0.05
4	Distribution Loss as % (3/1)	%	1.28%	1.38%	1.52%	1.57%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.00	0.01	0.01

9.3. As seen from the above Table 8, cumulative distribution loss for the months of July to September, 2020 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 July to September, 2020. The Commission considers the same for disallowance of FAC due to excess distribution loss.

10. Summary of Allowable Z_{FAC}

10.1. The summary of the FAC amount as approved by the Commission for the month of July to September, 2020 is as shown in the Table 9 below.

Table 9: Summary of Allowable ZFAC

Sr. No.	Particulars	Units	July 2020	August 2020	September 2020
1	Calculation of ZFAC				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.52	0.55	0.62
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.01	0.01	0.01
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.78	1.01	1.28
1.4	ZFAC = F+C+B	Rs. Crore	1.31	1.57	1.91
2	Calculation of FAC Charge		0.00	0.00	0.00
2.1	Energy Sales within the License Area	MU	0.00	0.00	0.00
2.2	Excess Distribution Loss	MU	3.50	3.39	3.43
2.3	ZFAC per kWh	Rs./kWh	3.72	4.61	5.56
2.4	Cap at 20% of variable component of Tariff	Rs./kWh	0.88	0.88	0.88
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.88	0.88	0.88
3.0	Allowable FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	0.004	0.004	0.01
3.2	FAC allowable [1.4-3.1]	Rs. Crore	1.30	1.56	1.90
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	1.30	1.56	1.90
4.3	Closing Balance of FAC Fund	Rs. Crore	0.00	0.00	0.00
4.4	ZFAC leviable/refundable to consumer	Rs. Crore	1.30	1.56	1.90
5.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.31	0.30	0.30
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	0.99	1.27	1.60

10.2. It can be seen from the above Table 9 that the standalone FAC for the month of July 2020, August 2020 and September 2020 is **Rs. 1.31 Crore, Rs. 1.57 Crore and Rs. 1.91 Crore** respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as **Rs. 3.72 per kWh, Rs. 4.61 per kWh and Rs. 5.56 per kWh for the months of July 2020, August 2020 and September 2020** 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 May and June, 2020 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. 0.31 Crore, Rs. 0.30 Crore and Rs. 0.30 Crore** for the month of July to September, 2020 respectively. Thus, FAC equivalent Rs. 0.99 Crore (i.e., Rs. 1.30 Crore minus Rs. 0.31 Crore) for the month of July 2020, Rs. 1.27 Crore (i.e., Rs. 1.56 Crore minus Rs. 0.30 Crore) for the month of August 2020 and Rs. 1.60 Crore (i.e Rs. 1.90 Crore minus Rs. 0.30 Crore) for the month of September 2020 has remained unrecovered. **Accordingly, the Commission allows the recovery of Rs. 1.60 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_{FAC} per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

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

Where:

$Z_{FAC} \text{ Cat}$ = 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_{FAC} for the month of July, August and September, 2020 to be levied on consumers of MBPPL in the billing month of September, October and November, 2020.

Table 10 Category wise FAC Revenue for billing month of September, October and November, 2020

Sr. No.	Consumer Category	Slabs	Z _{FAC} computed for the month (Rs. Crore)		
			July 2020	August 2020	September 2020
	HT Category				
1	HT- I Industrial	all units	0.24	0.24	0.24
2	HT-II Commercial	all units	-	-	-
	LT Category				
3	LT-I General Purpose	all units			
4	LT-II(A) Commercial (0-20 kW)	all units	0.00	0.00	0.00
5	LT-II (B) Commercial (above 20 kW)	all units	0.00	0.00	0.00
6	LT-III (A) Industrial (0-20 kW)	all units	0.00	0.00	0.00
7	LT-III (B) Industrial (above 20 kW)	all units	0.06	0.06	0.06
	Total		0.31	0.30	0.30