



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2020-21/WFH/ SBR/ 51

Date: 25 March, 2021

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 October 2020, November 2020 and December 2020.

Reference: 1. MBPPL's FAC submission for the months of October 2020, November 2020 and December 2020 vide email dated 22 February, 2021.

Sir,

Upon vetting the FAC calculations for the months of October to December, 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	October 2020	November 2020	December 2020
Z _{FAC} allowed for recovery (Rs. Crore)	0.31	0.30	0.31

The Commission allows the carry forward FAC of Rs. 1.60 Crore for the month of October 2020, Rs. 1.46 Crore for the month of November 2020 and Rs. 1.13 Crore for the month of December 2020. Accordingly, the Commission allows the recovery of Rs. 1.13 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,

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

Encl: Annexure A: Detailed Vetting Report for the period of October to December, 2020.

ANNEXURE
Detailed Vetting Report
Date: 25 March, 2021

**POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF OCTOBER
2020, NOVEMBER 2020 AND DECEMBER 2020.**

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL for the months of October 2020, November 2020 and December 2020

Reference: 1. MBPPL's FAC submission for the months of October, 2020, November, 2020 and December, 2020 vide email dated 22 February, 2021.

1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of October, 2020, November, 2020 and December, 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 December 2020, January 2021 and February 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. Further, 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.

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 22 February, 2021 MBPPL has filed FAC submissions for the months of October 2020, November 2020 and December 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)		
	(I)	(II=I/12)	Oct-20	Nov-20	Dec-20
HT Category					
HT- I Industrial	68.87	5.74	3.02	2.95	2.99
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	0.47	0.47
Total	78.18	6.52	3.59	3.48	3.53

3.3. It can be observed from the above Table 1 that the actual sales during the months of October, November and December 2020 are 3.59 MUs, 3.48 MUs and 3.53 MUs respectively, which is **44.93%**, **46.53%** and **45.75%** 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, 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. No.	Particular	Compliance
1	Purchase from Approved Sources	Yes. MBPPL has procured power (Base Load) from approved source i.e. M/s. Jindal Power Limited.
2	Merit Order Dispatch	YES. MBPPL has scheduled its entire base power requirement from Jindal Power Limited and peak power from GMRETL, in line with MOD principles.
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.
4	Pool Imbalance	MBPPL has not drawn any power from the imbalance pool to meet its power purchase requirement in the period from October to December, 2020. MBPPL has injected 0.02 MU , 0.05 MU and 0.07 MU to the imbalance pool for the month of October 2020, November 2020 and December 2020 respectively, by higher scheduling of power.

Sr. No.	Particular	Compliance																																																															
5	Sale of Surplus Power	MBPPL has scheduled the total power requirement from Jindal Power Limited (Base Contract) and sold 1.64 MU surplus power to GEPL for the month of October 2020. For the month of November 2020 and December 2020, MBPPL has sold 3.75 MU and 4.28 MU surplus power. Surplus power available from JPL was sold to GEPL and surplus power available from GMRETL was sold on IEX.																																																															
6	Power Purchase	Actual Power Purchase is 3.79 MU, 3.72 MU and 3.80 MU in October, November and December, 2020 respectively, as against approved 6.82 MU due to lower sales.																																																															
7	Source wise Power Purchase	<table border="1" data-bbox="483 663 1425 968"> <thead> <tr> <th data-bbox="483 663 821 793">Source Name</th> <th data-bbox="821 663 990 793">Approved (MU)</th> <th data-bbox="990 663 1252 793">Actual – October 2020 (MU)</th> <th data-bbox="1252 663 1425 793">Proportion (%)</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 793 821 835">JPL</td> <td data-bbox="821 793 990 835">5.53</td> <td data-bbox="990 793 1252 835">5.43</td> <td data-bbox="1252 793 1425 835">143.29</td> </tr> <tr> <td data-bbox="483 835 821 877">GMRETL</td> <td data-bbox="821 835 990 877">2.38</td> <td data-bbox="990 835 1252 877">0.00</td> <td data-bbox="1252 835 1425 877">0.00</td> </tr> <tr> <td data-bbox="483 877 821 919">Sale of Surplus Power</td> <td data-bbox="821 877 990 919">(1.09)</td> <td data-bbox="990 877 1252 919">(1.64)</td> <td data-bbox="1252 877 1425 919">(43.29)</td> </tr> <tr> <td data-bbox="483 919 821 968">Total</td> <td data-bbox="821 919 990 968">6.82</td> <td data-bbox="990 919 1252 968">3.79</td> <td data-bbox="1252 919 1425 968">100.00</td> </tr> </tbody> </table> <table border="1" data-bbox="483 1014 1425 1318"> <thead> <tr> <th data-bbox="483 1014 821 1144">Source Name</th> <th data-bbox="821 1014 990 1144">Approved (MU)</th> <th data-bbox="990 1014 1252 1144">Actual – November 2020 (MU)</th> <th data-bbox="1252 1014 1425 1144">Proportion</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1144 821 1186">JPL</td> <td data-bbox="821 1144 990 1186">5.53</td> <td data-bbox="990 1144 1252 1186">5.31</td> <td data-bbox="1252 1144 1425 1186">142.75</td> </tr> <tr> <td data-bbox="483 1186 821 1228">GMRETL</td> <td data-bbox="821 1186 990 1228">2.38</td> <td data-bbox="990 1186 1252 1228">2.16</td> <td data-bbox="1252 1186 1425 1228">58.07</td> </tr> <tr> <td data-bbox="483 1228 821 1270">Sale of Surplus Power</td> <td data-bbox="821 1228 990 1270">(1.09)</td> <td data-bbox="990 1228 1252 1270">(3.75)</td> <td data-bbox="1252 1228 1425 1270">(100.82)</td> </tr> <tr> <td data-bbox="483 1270 821 1318">Total</td> <td data-bbox="821 1270 990 1318">6.82</td> <td data-bbox="990 1270 1252 1318">3.72</td> <td data-bbox="1252 1270 1425 1318">100.00</td> </tr> </tbody> </table> <table border="1" data-bbox="483 1360 1425 1661"> <thead> <tr> <th data-bbox="483 1360 821 1491">Source Name</th> <th data-bbox="821 1360 990 1491">Approved (MU)</th> <th data-bbox="990 1360 1252 1491">Actual – December 2020 (MU)</th> <th data-bbox="1252 1360 1425 1491">Proportion</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1491 821 1533">JPL</td> <td data-bbox="821 1491 990 1533">5.53</td> <td data-bbox="990 1491 1252 1533">5.41</td> <td data-bbox="1252 1491 1425 1533">142.48</td> </tr> <tr> <td data-bbox="483 1533 821 1575">GMRETL</td> <td data-bbox="821 1533 990 1575">2.38</td> <td data-bbox="990 1533 1252 1575">2.67</td> <td data-bbox="1252 1533 1425 1575">70.20</td> </tr> <tr> <td data-bbox="483 1575 821 1617">Sale of Surplus Power</td> <td data-bbox="821 1575 990 1617">(1.09)</td> <td data-bbox="990 1575 1252 1617">(4.28)</td> <td data-bbox="1252 1575 1425 1617">(112.68)</td> </tr> <tr> <td data-bbox="483 1617 821 1661">Total</td> <td data-bbox="821 1617 990 1661">6.82</td> <td data-bbox="990 1617 1252 1661">3.80</td> <td data-bbox="1252 1617 1425 1661">100.00</td> </tr> </tbody> </table>				Source Name	Approved (MU)	Actual – October 2020 (MU)	Proportion (%)	JPL	5.53	5.43	143.29	GMRETL	2.38	0.00	0.00	Sale of Surplus Power	(1.09)	(1.64)	(43.29)	Total	6.82	3.79	100.00	Source Name	Approved (MU)	Actual – November 2020 (MU)	Proportion	JPL	5.53	5.31	142.75	GMRETL	2.38	2.16	58.07	Sale of Surplus Power	(1.09)	(3.75)	(100.82)	Total	6.82	3.72	100.00	Source Name	Approved (MU)	Actual – December 2020 (MU)	Proportion	JPL	5.53	5.41	142.48	GMRETL	2.38	2.67	70.20	Sale of Surplus Power	(1.09)	(4.28)	(112.68)	Total	6.82	3.80	100.00
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8	Power Purchase under Section 63 of Electricity	Monthly power purchase invoices and sale of 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 from the invoices and it is ensured that same has been considered in the FAC calculation.																																																															

Sr. No.	Particular	Compliance
	Act, 2003	

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 October to December, 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 October, November and December, 2020 is Rs. **2.17 Crore, Rs. 2.00 Crore and Rs. 1.84 Crore**, respectively which is lower than the approved Power Purchase cost of **Rs. 3.35 Crore** by the Commission for the months of October to December, 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 **5.43 MU** from JPL during the month of October 2020 which is **0.10 MU** lower than the approved purchase for the month of October 2020. MBPPL has purchased **5.31 MU** from JPL during the month of November 2020 which is **0.22 MU** lower than the approved purchase for the month of November 2020. Similarly, MBPPL has purchased **5.41 MU** from JPL during the month of December 2020 which is **0.12 MU** lower than the approved purchase for the month of December 2020.
- 5.4. **Impact of Fixed Cost and Variable Cost on overall Power Purchase Cost:** Due to the lower power purchase quantum, fixed cost per kWh has increased from approved level of **Rs. 1.55 / kWh to Rs. 1.79 / kWh and Rs. 1.80 / kWh** for the month of October, 2020 and November, 2020 on account of adjustments due to POC charges of 0.50 Crore in the month of October 2020 and 0.51 Crore in the month of November 2020. Fixed cost per kWh has decreased from approved level of **Rs. 1.55 / kWh to Rs. 1.53 / kWh** in December, 2020 after the adjustments of POC Charges of 0.36 Crore. As against the approved variable charge was **Rs. 2.55 / kWh**, the actual variable charge for the power purchase is **Rs. 2.41 / kWh in October 2020, Rs. 2.42 / kWh in November 2020 and December 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. 4.19 / kWh and Rs. 4.22 / kWh** for the month of

October 2020 and November 2020 and power purchase has decreased from approved level of **Rs. 4.10 / kWh to Rs. 3.95/ kWh** in the month of December 2020.

- 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 (October)	5.53	4.10	5.43	4.19	(0.04)	0.05	0.01
JPL (November)	5.53	4.10	5.31	4.22	(0.09)	0.07	(0.02)
JPL (December)	5.53	4.10	5.41	3.95	(0.05)	(0.08)	(0.12)

- 5.6. **Power Purchase cost from GMRETL:** For the month of October, 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. 0.33 Crore**. As no power was scheduled the variable cost is nil for the month of October 2020. MBPPL has purchased **2.16 MU** and **2.67 MU** during the month of November 2020 and December 2020. MBPPL has purchased power at **Rs. 3.58 / kWh** and **Rs. 3.42 / kWh** for the month of November 2020 and December 2020 which is lower than **Rs. 5.53 / kWh** approved by the Commission in the MYT Order.
- 5.7. **Renewable Sources:** MBPPL has **not purchased any REC for the month of October to December, 2020**. By avoiding purchase of REC, MBPPL has reduced power purchase cost for October to December, 2020 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 from JPL of **1.64 MU** to GEPL in the month of October 2020, surplus power of **3.75 MU** and **4.28 MU** to GEPL and on IEX during the month of November 2020 and December 2020.
- 5.9. **Power Sale from MBPPL to GEPL:**
The power from JPL was available at variable cost of **Rs 2.42/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. Also MBPPL having opted for MTOA, also need to pay fixed cost towards blocked transmission corridor.

Therefore, to minimise the burden of the above foresaid fixed costs, 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 2.72/kWh** and **Rs 2.95/kWh** during the month of November 2020 and December 2020, respectively.

5.11. MBPPL has sold power at **Rs. 2.65/kWh, Rs. 2.69/kWh** and **Rs. 2.84/ kWh** for the month of October 2020, November 2020 and December 2020 which is lower than **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 October to December, 2020. MBPPL has injected power to the tune of **0.02 MU, 0.05 MU and 0.07 MU** to the Pool in the months of October, November and December, 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.

5.13. 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.

- 5.14. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.15. **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 October 2020 and November 2020. **This increase has been on account of increase in burden of fixed cost due to lower amount of units procured. Further no power has been procured from GMRETL in the month of October 2020 due to lower demand but due to 100% availability declaration, fixed charges were paid to GMRETL.** This has also increased the fixed cost per unit for the month of October 2020. Therefore, actual APPC works out to be higher than the approved APPC in MYT order for the month of October 2020 and November 2020.
- 5.16. For the month of December 2020, the fixed cost for power procured from JPL has decreased as against the approved cost due to higher rebate which has resulted in lower Average power purchase cost. Therefore, actual APPC works out to be lower than the approved APPC in MYT order in December 2020.
- 5.17. The details of the overall cost approved and actual for the month of October to December, 2020 as per MYT Order is as shown in the Table 3 **Error! Reference source not found.** below:

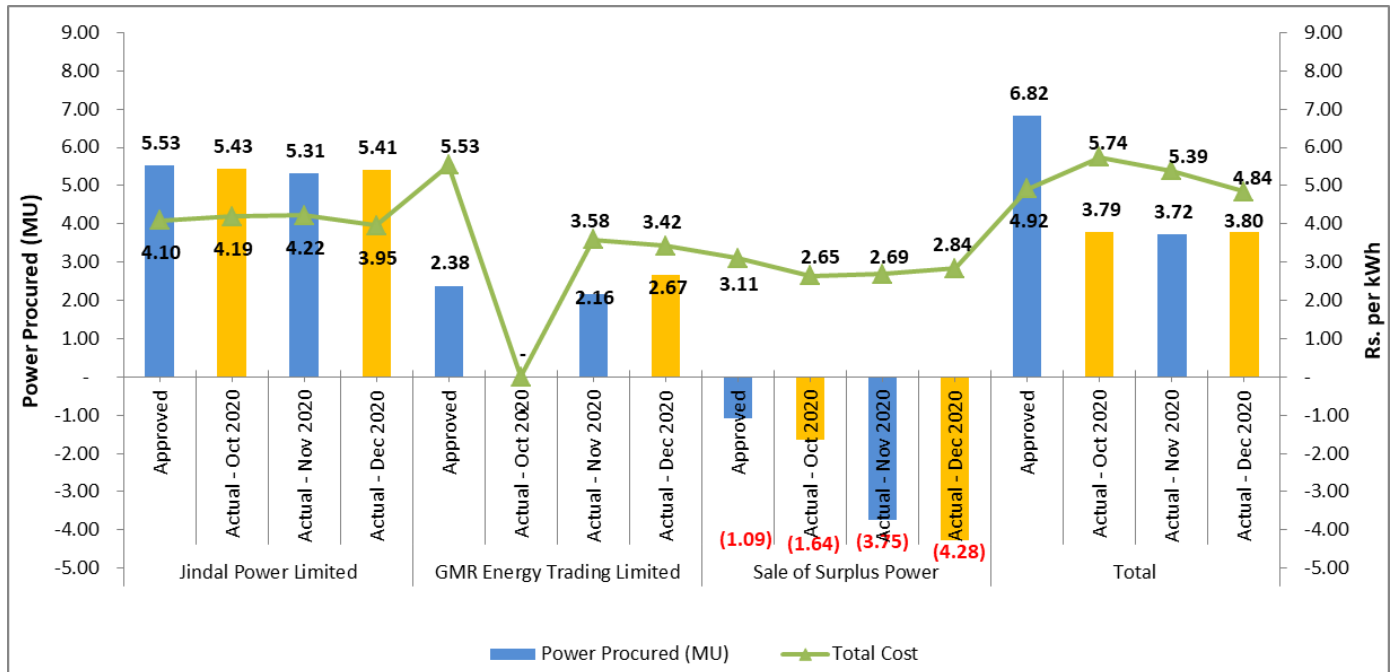
Table 3: Approved and Actual Power Purchase Cost for MBPPL

Source		Power Procured (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./k Wh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Total Cost (Rs. Crore)	APPC (Rs./k Wh)
Jindal Power Limited	Approved	5.53	0.85	1.55	1.41	2.55	2.26	4.10
	Actual - Oct 2020	5.43	0.97	1.79	1.31	2.41	2.28	4.19
	Actual - Nov 2020	5.31	0.96	1.80	1.28	2.42	2.24	4.22
	Actual - Dec 2020	5.41	0.83	1.53	1.31	2.42	2.14	3.95
GMR Energy Trading Limited	Approved	2.38	0.73	3.06	0.59	2.47	1.32	5.53
	Actual - Oct 2020	-	0.33	-	-	-	0.33	-
	Actual - Nov 2020	2.16	0.40	1.87	0.37	1.71	0.77	3.58
	Actual - Dec 2020	2.67	0.46	1.71	0.46	1.71	0.91	3.42
Sale of Surplus Power	Approved	(1.09)	-	-	(0.34)	3.11	(0.34)	3.11
	Actual - Oct 2020	(1.64)	-	-	(0.43)	2.65	(0.43)	2.65
	Actual - Nov 2020	(3.75)	-	-	(1.01)	2.69	(1.01)	2.69
	Actual - Dec 2020	(4.28)	-	-	(1.21)	2.84	(1.21)	2.84
Total	Approved	6.82	0.85	1.25	2.50	3.66	3.35	4.92
	Actual - Oct 2020	3.79	1.30	3.44	0.87	2.30	2.17	5.74
	Actual - Nov 2020	3.72	1.36	3.66	0.64	1.73	2.00	5.39
	Actual - Dec 2020	3.80	1.28	3.38	0.55	1.46	1.84	4.84

5.18. 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

Approval of FAC Charges for the months of October 2020, November 2020 and December 2020



5.19. 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	October	4.10	4.19	Due to lower power purchase, fixed cost burden has increased the actual rate as compared to approved rate in the month of October 2020 and November 2020.
		November		4.22	
		December		3.95	
2	GMRETL	October	5.53	-	For the month of October 2020 no power has been procured from GMRETL.
		November		3.58	Due to lower power purchase, fixed cost burden has increased the actual rate as compared to approved rate in the month of

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
		December		3.42	November 2020 For the month of December 2020, due to higher power purchase, the fixed cost burden (Rs./kWh) has reduced.
4	Sale of Surplus Power	October	3.11	2.65	The surplus power available from JPL was sold to GEPL at Rs 2.65/kWh which was approved by the Commission.
		November		2.69	The surplus power available from JPL was sold to GEPL at Rs 2.65/kWh which was approved by the Commission.
		December		2.84	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 average rate of Rs 2.72/kWh and Rs 2.95/kWh in November 2020 and December 2020, respectively
3	Total	October	4.92	5.74	Due to lower sales and reasons stated above
		November		5.39	
		December		4.84	

5.20. Considering the above, the Commission allows the average power purchase cost of Rs. 5.74 / kWh, Rs. 5.39 / kWh and Rs. 4.84 / kWh for the months of October, November and December, 2020 respectively as shown in Table 4 above. The variation in power purchase cost is mainly on account of increase/ decrease in burden of Fixed Cost.

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 October to December, 2020.

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

S. No.	Particulars	Units	Oct-20	Nov-20	Dec-20
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	5.74	5.39	4.84
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.82	0.48	(0.08)
4	Net Power Purchase	MU	3.79	3.72	3.80
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	0.31	0.18	(0.03)

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	Oct-20	Nov-20	Dec-20
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.30	0.30	0.31
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.30	0.32	0.31
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.01)	(0.02)	0.00
2.0	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	1.60	1.60	1.46
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	1.60	1.58	1.46

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 October 2020, November 2020 and December 2020.
- 8.2. Holding cost for the month of October to December, 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 October to December, 2020 which is as shown in the Table 7 below:

Table 7 Carrying/Holding Cost for over/under recovery

Particulars	Units	Oct-20	Nov-20	Dec-20
Adjustment factor for over-recovery/under-recovery	Rs. Crore	1.60	1.58	1.46
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-Oct 2020	Actual-Nov 2020	Actual-Dec 2020
1	Net Energy input at Distribution Voltages	MU	6.60	3.65	3.55	3.61
2	Energy sales at Distribution voltages	MU	6.52	3.59	3.48	3.53
3	Distribution Loss (1 - 2)	MU	0.08	0.06	0.07	0.07
4	Distribution Loss as % (3/1)	%	1.28%	1.57%	1.94%	2.02%
5	Cumulative Distribution Loss	%	1.28%	1.56%	1.60%	1.65%
6	Excess Distribution Loss = [Cumulative Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.010	0.012	0.013
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	0.005	0.006	0.005

9.3. As seen from the above Table 8, cumulative distribution loss for the months of October to December, 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 October to December, 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 October to December, 2020 is as shown in the Table 9 below.

Table 9: Summary of Allowable Z_{FAC}

Sr. No.	Particulars	Units	Oct-20	Nov-20	Dec-20
1	Calculation of Z_{FAC}				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.31	0.18	(0.03)
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	1.60	1.58	1.46
1.4	Z_{FAC} = F+C+B	Rs. Crore	1.92	1.77	1.44
2	Calculation of FAC Charge				

Sr. No.	Particulars	Units	Oct-20	Nov-20	Dec-20
2.1	Energy Sales within the License Area	MU	3.59	3.48	3.53
2.2	Excess Distribution Loss	MU	0.01	0.01	0.01
2.3	ZFAC per kWh	Rs./kWh	5.33	5.05	4.06
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	0.01
3.2	FAC allowable [1.4-3.1]	Rs. Crore	1.91	1.76	1.44
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	1.91	1.76	1.44
4.3	Closing Balance of FAC Fund	Rs. Crore	0.00	0.00	0.00
4.4	ZFAC leviable/refundable to consumer	Rs. Crore	1.91	1.76	1.44
5.0	Total FAC based on category wise and slab wise allowed to be recovered in the billing month of Oct 2020 for Aug 2020, Nov 2020 for Sept 2020 and Dec 2020 for Oct 2020	Rs. Crore	0.31	0.30	0.31
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	1.60	1.46	1.13

10.2. It can be seen from the above Table 9 that the standalone FAC for the month of October 2020, November 2020 and December 2020 is **Rs. 1.91 Crore, Rs. 1.76 Crore and Rs. 1.44 Crore** respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as **Rs. 5.33 per kWh, Rs. 5.05 per kWh and Rs. 4.06 per kWh for the months of October 2020, November 2020 and December 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 October 2020, November 2020 and December 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. 0.31 Crore** for the month of October to December, 2020 respectively. Thus, FAC equivalent Rs. 1.60 Crore (i.e., Rs. 1.91 Crore minus Rs. 0.31 Crore) for the month of October 2020, Rs. 1.46 Crore (i.e., Rs. 1.76 Crore minus Rs. 0.30

Crore) for the month of November 2020 and Rs. 1.13 Crore (i.e Rs. 1.44 Crore minus Rs. 0.31 Crore) for the month of December 2020 has remained unrecovered. **Accordingly, the Commission allows the recovery of Rs. 1.13 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 October, November and December, 2020 to be levied on consumers of MBPPL in the billing month of December 2020, January 2021 and February, 2021.

Table 10 Category wise FAC Revenue for billing month of December 2020, January 2021 and February, 2021

Sr. No	Consumer Category	Slabs	Z_{FAC} computed for the month of October 2020 (Rs. Crore)	Z_{FAC} computed for the month of November 2020 (Rs. Crore)	Z_{FAC} computed for the month of December 2020 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	0.25	0.25	0.25
2	HT-II Commercial	all units	-	-	-
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.00	0.00	0.00
4	LT-II (B) Commercial (above 20 kW)	all units	0.00	0.00	0.00
5	LT-III (A) Industrial (0-20 kW)	all units	0.00	0.00	0.00
6	LT-III (B) Industrial (above 20 kW)	all units	0.06	0.05	0.06
	Total		0.32	0.31	0.31