



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/ MBPPL/ WFH/ SBR/ 24

Date: 27 July, 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 month of January, 2020 to March, 2020.

Reference: MBBPL's FAC submission for the month of January, 2020 to March, 2020 vide e-mail dated 18 May, 2020.

Sir,

Upon vetting the FAC calculations for the months of January, 2020 to March, 2020 as mentioned in the above reference, the Commission has accorded post facto approval for charging FAC to its consumers as shown in the Table below:

Month	FAC Amount (Rs. Crore)
January, 2020	0.26
February, 2020	0.49
March, 2020	0.43

The Commission allows MBPPL to recover standalone FAC of Rs. 1.04 Crore (Rs. 0.43 Crore + Rs. 0.60 Crore carry forward) pertaining to the month of March, 2020 as explained in para 10.5 of this vetting report.

As FY 2019-20 is over and the Commission has also carried over provisional Truing up of the same, any adjustment of FAC revenue and cost allowed under Q1 to Q4 post facto FAC approval of FY 2019-20 will be reconciled and trued up at the time of final truing of FY 2019-20 under the MERC (Multi Year Tariff) Regulations, 2015.

(Dr. Rajendra Ambekar)
Executive Director

Encl: Annexure A: Detailed Vetting Report for the period of January, 2020 to March, 2020.

ANNEXURE
Detailed Vetting Report

Date: 27 July, 2020

**POST FACTO APPROVAL OF FAC CHARGES FOR THE MONTHS OF JANUARY,
2020 TO MARCH, 2020**

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL for the month of January, 2020 to March, 2020.

Reference: MBPPL's FAC submission for the month of January, 2020 to March, 2020 vide e mail dated 18 May, 2020.

1. FAC submission by MBPPL Undertaking:

1.1 MBPPL has made FAC submissions for the months of January, 2020 to March, 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 for the month of January, 2020 to March, 2020.

2. Background

2.1 On 26 October, 2016 the Commission has issued Tariff Order in respect of MBPPL, (Case No. 149 of 2016) for provisional True-up for FY 2015- 16 and Aggregate Revenue Requirement and Tariff for FY 2016-17 to FY 2019-20. Revised Tariff has been made applicable from 1 October, 2016.

2.2 On 12 September, 2018, the Commission has issued Tariff Order in respect of MBPPL (Case No. 194 of 2017) for the Truing up of FY 2017-18 and revised estimates of Aggregate Revenue Requirement in Mid-Term Review (MTR) Order No. 194 of 2017 for FY 2018-19 and FY 2019-20.

2.3 On 30 March, 2020 the Commission has issued Tariff Order for MBPPL, (Case No.328 of 2019) for True-up of FY 2017-18 and FY 2018-19, provisional True-up for FY 2019-20 and Aggregate Revenue Requirement and Multi-Year Tariff for 4th Control Period from FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2020

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

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

2.6 In terms of MERC Multi Year Tariff (MYT) Regulations, 2015 a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for FAC charges. Accordingly, vide its email dated 18 May, 2020, MBPPL has made FAC submissions for the months of January, 2020 to March, 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 Licensee

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

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales		
			(Jan-20) (MU)	(Feb-20) (MU)	(Mar-20) (MU)
	(I)	(II=I/12)	(III)	(IV)	(V)
HT Category					
HT- I Industrial	80.41	6.70	5.31	5.16	4.49
HT-II Commercial	6.00	0.50	-	-	-
LT Category					
LT-I General Purpose	-	-	-	-	-
LT-II(A) Commercial (0-20 kW)	0.64	0.05	0.06	0.06	0.06
LT-II (B) Commercial (above 20 kW)	0.38	0.03	0.06	0.05	0.03
LT-III (A) Industrial (0-20 kW)	0.01	0.00	0.00	0.00	0.00
LT-III (B) Industrial (above 20 kW)	7.27	0.61	0.83	0.79	0.71
Total	94.72	7.89	6.27	6.06	5.30

3.2 It can be observed from above Table that the actual sales during the months of January, 2020 to March, 2020 is 6.27 MUs, 6.06 MUs and 5.30 MUs respectively, which is lower than the monthly approved energy sales. The major variation in actual sales was observed under HT categories where the sales are lower than the monthly approved sales. Further, sales in the month of February and March, 2020 were observed significantly lower in comparison to the Actual sales in month of January, 2020. In reply to the query raised by the Commission for such lower sales MBPPL has replied that, the IT and ITeS companies operating in MBPPL SEZ are having their presence at global level and their offices are spread across the world. In view of worldwide presence of these companies, they immediately recognized the adverse effect of COVID-19 pandemic, companies in MBPPL SEZ area had opted to work from home in the mid of the February 2020 itself proactively, before announcement of actual lockdown by Central Government of India. Thus, resulting in lower sales in month of February and March, 2020

4. Cost of Power Purchase

- 4.1 MBPPL is a deemed Distribution Licensee and doesn't 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 The power purchase cost of MBPPL includes the purchase from conventional sources for meeting its Base Load and Peak Load requirement, RPO, purchase from Imbalance Pool, and sale of surplus power if available during the period.
- 4.3 MBPPL purchases power as per Medium-Term Power Purchase Agreement (PPA) for base load of 10 MW from M/s. Jindal Power Limited (JPL) and for peak load requirement of 10 MW from M/s. GMR Energy Trading Limited (GMRETL). The Commission has approved both the PPAs in Case No. 115 and 116 of 2016 for a period of 5 years from 1 July, 2016 to 30 June, 2021 and adopted the lowest tariff discovered as a result of the competitive bidding process followed by MBPPL.
- 4.4 The following Tables show the variation in Average Power Purchase Cost (APPC) (Rs/kWh) for the months of January, 2020 to March, 2020 vis-à-vis the APPC approved in Mid-Term Review (MTR) Order dated 12 September, 2018:

Particulars	Tariff Order Dated 12 September, 2018			Actual for January, 2020		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Medium Term PPA (Base Load)	74.66	29.74	3.98	5.77	2.31	4.00
Medium Term PPA (Peak Load)	34.43	14.29	4.15	1.58	0.79	5.03
Sale of Surplus Power	(10.24)	(4.13)	4.04	(0.61)	(0.26)	4.35
Solar REC	-	0.35	NA	-	0.03	-
Non Solar REC	-	1.14	NA	-	0.19	-
Total	98.85	41.38	4.19	6.74	3.07	4.55

Particulars	Actual for February, 2020			Actual for March, 2020		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Medium Term PPA (Base Load)	5.24	2.18	4.16	4.08	2.18	5.33
Medium Term PPA (Peak Load)	1.53	0.76	4.96	1.83	0.87	4.73

Particulars	Actual for February, 2020			Actual for March, 2020		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Sale of Surplus Power	(0.40)	(0.17)	4.32	(0.51)	(0.22)	4.34
Purchase of Additional Power	-	-	-	0.45	0.17	3.86
Solar REC	-	0.41	-	-	0.04	-
Non-Solar REC	-	0.37	-	-	0.05	-
Total	6.38	3.56	5.58	5.85	3.10	5.29

4.5 MBPPL has submitted the invoices related to power purchase during the month of January, 2020 to March, 2020. The Commission has scrutinized the same for the Net Purchase (MUs), Fixed Cost, Variable Cost (Rs/kWh) and Power Purchase Cost of the respective period.

Base Load:

4.6 To meet its base load requirement MBPPL has procured 5.77 MUs, 5.24 MUs and 4.08 MUs of power from JPL in the month of January, February and March, 2020, respectively. The quantum of power during Q4 period of FY 2019-20 was observed lower as compared to previous Quarter, i.e., Q3 of FY 2019-20. The main reason for such reduction is attributable to the lower demand in MBPPL premises on account of COVID-19 pandemic as explained in para 3.2 above.

4.7 The above power has been procured at a base price of Rs 3.92/kWh (i.e., fixed charge Rs.1.40/kWh and variable charge Rs.2.52/kWh) at MBPPL periphery which has been derived based on approved PPA after applicable price escalation. As per PPA this approved rate also includes the transmission charges (STU charges) for State Transmission network. However, the STU charges are paid directly by MBPPL to STU in accordance with the InSTS Tariff Order. Therefore, in line with the clause 12.2 of the PPA, the power purchase bills were raised by JPL after deducting the STU charges from the total power purchase cost, as the quoted tariff was inclusive of the STU charges.

4.8 Further, as explained in previous post facto approval of FAC, MBPPL has entered into Medium Term Open Access (MTOA) with JPL from December, 2018 onwards. Therefore, in accordance with the clause 5.5 of PPA approved by the Commission, in Case No. 115 of 2016; MBPPL has to pay the differential of transmission charges (MTOA charges) over and above the rate applicable in the quoted tariff at bid due date. Accordingly, MBPPL has considered MTOA charges in its FAC computation during the respective period. The Commission has verified the MTOA charges from the invoices submitted by MBPPL raised by PGCIL and JPL.

- 4.9 Considering the above mentioned adjustments, the effective landed APPC of JPL works out to be Rs. 4.00/kWh, Rs. 4.16/kWh and Rs. 5.33/kWh for the month of January, February, March, 2020, respectively, which is higher as compared to MTR approved price of Rs. 3.98/kWh.
- 4.10 Also, within the quarter 4 months, the APPC mainly in the month of March, 2020 is seen higher as compared to APPC of other month (i.e. January and February, 2020). This is mainly on account of lower energy drawl during the month of March, 2020. On response to clarification sought, MBPPL stated that power from JPL was unavailable for the period 26 March, 2020 to 31 March, 2020, due to force majeure conditions on account of fuel shortage due to lockdown imposed by Central Government. Hence, the energy drawl in the month of March, 2020 is comparatively lower than other months. MBPPL further clarified that although the power was un-available during foresaid period, the cumulative normative availability was above 85% of the contracted capacity on annual basis. Thus, full monthly fixed cost was payable to JPL.
- 4.11 In view of above the Commission has analysed the relevant clause of medium term PPA with JPL. The extract of the same is as reproduced below:

“17.1 Force Majeure

As used in this Agreement, the expression “Force Majeure” or “Force Majeure Event” shall, save and except as expressly provided otherwise, mean occurrence in India of any or all of Non-Political Event, Indirect Political Event and Political Event, as defined in Clauses 17.2, 17.3 and 17.4 respectively, if it affects the performance by the Utility(s) or the Supplier, if Supplier is NOT a Trading Licensee, or and/or the Developer, if Supplier is a Trading Licensee, claiming the benefit of Force Majeure (the “Affected Party”) of its obligations under this Agreement and which act or event (a) is beyond the reasonable control of the Affected Party, and (b) the Affected Party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice, and (c) has Material Adverse Effect on the Affected Party.

17.2 Non-Political Event

A Non-Political Event shall mean one or more of the following acts or events: act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire or explosion (to the extent of contamination or radiation or fire or explosion originating from a source external to the Station Premises); ...”(emphasis added)

- 4.12 From the above, it is clear that Force Majeure Event include epidemic and COVID-19 being a Pandemic declared by the World Health Organisation (WHO) thus, falls under Force Majeure Event. With regard to payment of fixed charge under Force Majeure Event, the Commission analysed the relevant clause of PPA as reproduced below:

“11.4.5 In the event that any shortfall in supply of electricity to the Utility occurs on account of shortage of Fuel or water in case of hydro generating stations, Availability shall be deemed to be reduced in accordance with the provisions of Clause 11.5.3. Provided, however, that the Non-Availability arising as a consequence of shortage of Fuel or water in case of hydro generating stations, caused by any event of Force Majeure shall for the purpose of payment of Fixed Charge, to be deemed to be availability to the extent of 30% (thirty per cent) of the Non-Availability hereunder.” (emphasis added)

4.13 As per above, Non-Availability arising as a consequence of shortage of fuel caused by any event of Force Majeure shall for the purpose of payment of Fixed Charge, to be deemed to be availability to the extent of 30% of the Non-Availability. During the month of March, 2020, JPL was unavailable for 6 days, i.e., 26 March, 2020 to 31 March, 2020. Hence, its actual Availability works out as 80.65% and Non-Availability as 19.35%. Accordingly, the availability for the purpose of payment of fixed charge works out as 86.45%, i.e., Actual availability (80.65%) plus 30% of Non-Availability (30% of 19.35%). As the availability is more than the normative availability of 85%, hence, full monthly fixed cost was payable to JPL.

4.14 Accordingly, the spread normative fixed charge over the lowest energy drawl mainly in the month of March has resulted into highest APPC during the aforesaid period. {APPC = Quantum of Power Purchase/ (Fixed Cost (as per normative availability) + Energy Charge)}. Apart from this, the variation within the months and also when compared to MTR approved price is on account adjustment for incentives, rebate and STU/MTOA charges adjustment etc., as per approved PPA. The Table below shows the sample computation of landed cost of base power for the month of January to March, 2020.

Particular	Units	Basis	Jan	Feb	Mar
Variable Cost Computation:					
Quantum injection WR	MUs	x	5.77	5.24	4.08
Quantum at MBPPL Periphery	MUs	a	5.57	5.01	3.95
Approved variable charge	Rs./kWh	b	2.52	2.52	2.52
Variable Cost	Rs. Crore	$c=b*a/10$	1.41	1.27	0.99
Fixed Charge Computation:					
Contracted Capacity	MW	d	10	10	10
Days	Nos	e	31	29	31
Hours	Hr	f	24	24	24
Normative availability	MUs	$g=0.85*d*e*f/1000$	6.32	5.92	6.32
Approved Fixed charge	Rs./kWh	h	1.40	1.40	1.40
Fixed cost	Rs. Crore	$i=h*g/10$	0.89	0.83	0.89
Total Cost of purchase (fixed+variable)	Rs. Crore	$j=i+c$	2.30	2.10	1.88
Other Charges:					

Particular	Units	Basis	Jan	Feb	Mar
Incentives/(Rebate)	Rs. Crore	k	0.00	0.00	0.00
Variable charge revision	Rs. Crore	l	(0.04)	(0.04)	(0.03)
STU charge adjustment	Rs. Crore	m	(0.16)	(0.14)	(0.11)
CTU charge adjustment	Rs. Crore	n	(0.30)	(0.27)	(0.21)
Grand Total	Rs. Crore	o=j+k+l+m+n	1.80	1.65	1.53
Transmission charges against MTOA	Rs. Crore	p	0.52	0.52	0.64
Landed cost payable by MBPPL	Rs. Crore	q=o+p	2.31	2.18	2.17
APPC for Base load	Rs./kWh	r=q/x*10	4.00	4.16	5.33

Peak Load:

4.15 For its Peak load requirement, MBPPL has purchased 1.58 MUs, 1.53 MUs, 1.83 MUs during the month of January, February and March, 2020, respectively from GMRETL. This power has been procured by MBPPL at STU periphery at a price of Rs.4.07 Rs/kWh (i.e., Fixed Charge Rs. 1.63/kWh and Variable Charge Rs. 2.44/kWh) based on the approved PPA with applicable price escalation. The landed power purchase cost of peak load power considering variable cost, fixed cost, rebate, incentives and other adjustments as per approved PPA during the months of January to March, 2020 is Rs. 5.03/kWh, Rs. 4.96/kWh and Rs. 4.73 /kWh respectively, as compared to MTR approved rate of Rs. 4.15/kWh. The variation in average power purchase cost is mainly on account of variation in actual peak power purchase quantum during the respective period. MBPPL vide its data gap reply confirmed that the GMRETL was available up to normative level during the respective period, hence, full monthly normative fixed charge was payable to GMRETL based on normative availability (i.e., 85% of contracted capacity in MW*No. of Days*No of Hours) as per approved PPA. However, the spread of monthly fixed charge over actual peak power drawl during respective period resulted into variation in average power purchase cost. The Table below shows the sample computation of landed cost of base power for the month of January to March, 2020:

Particular	Units	Basis	January	February	March
Variable Cost Computation:					
Quantum purchase	MUs	A	1.58	1.53	1.83
Approved variable charge	Rs./kWh	B	2.44	2.44	2.44
Variable Cost	Rs. Crore	c=b*a/10	0.38	0.37	0.45
Fixed Charge Computation:					
Contracted Capacity	MW	D	10	10	10
Days	Nos	E	22	20	21

Particular	Units	Basis	January	February	March
Hours	Hr	F	15	15	15
Normative availability	MUs	$g=0.85*d*e*f/1000$	2.81	2.55	2.68
Approved Fixed charge	Rs./kWh	H	1.63	1.63	1.63
Fixed cost	Rs. Crore	$i=h*g/10$	0.46	0.42	0.44
Total Cost of purchase (fixed+variable)	Rs. Crore	$j=i+c$	0.84	0.79	0.88
Other Charges:					
Incentives/(Rebate)	Rs. Crore	K	(0.05)	(0.04)	(0.03)
Adjustment due to difference in Transmission charges and losses	Rs. Crore	l	0.01	0.01	0.02
Grand Total Payable by GEPL	Rs. Crore	$m=j+k+l$	0.79	0.75	0.86
APPC for Base load	Rs./kWh	$n=m/a*10$	5.03	4.96	4.73

4.16 Out of the total power purchased from GMRETL, i.e., 4.94 MUs (1.58 MUs + 1.53 MUs + 1.83 MUs), MBPPL has consumed total quantum of 3.42 MUs, i.e., 0.97 MUs, 1.13 MUs and 1.32 MUs during the month of January, February and March, 2020, respectively. The remaining power, i.e., surplus power of 1.52 MUs (i.e., 4.94 MUs – 3.42 MUs) has been sold through bilateral contract. The rate at which this surplus power was sold was Rs. 4.35/kWh, Rs. 4.32/kWh, and Rs. 4.34/kWh in month of January, February and March, 2020, respectively. The revenue earned from sale of surplus power has been deducted from the power purchase cost of respective months.

4.17 It is to be noted that the Commission in its MTR Order has also considered the surplus power sale at a price of Rs. 4.04/kWh, for the determination of power purchase cost for the FY 2019-20. The surplus sale of 1.52 MUs from GMRETL was made at an average rate of Rs. 4.20/kWh, which is higher than the MTR approved price. Accordingly, the revenue of Rs. 0.64 Crore earned from such a transaction of surplus sale has been considered in reduction of power purchase cost during the respective period. Considering that the fixed charges payable by MBPPL to GMRETL for FY 2019-20 as per approved PPA is Rs. 1.63/kWh, respectively. Therefore, the sale of surplus power was not only able to recover the Fixed Charges paid to GMRETL for respective quantum, but also had additional revenue lowering the power purchase cost for the respective months. Hence, the transaction of sale of surplus power was found beneficial.

4.18 Further, the Commission has also compared the price of surplus power sold by MBPPL vis-à-vis the Average Peak Market Clearing Price (MCP) power traded at IEX. The average MCP prices prevailed at Rs. 2.97/kWh, Rs. 2.94/kWh and Rs. 2.43/kWh for the months of January, February and March, 2020, respectively. MBPPL has managed to sell the surplus power at a price higher than MCP as already mentioned above. Hence, the transaction of sale of surplus power was found beneficial. Therefore, the Commission has considered the submission made by MBPPL regarding the surplus power sales.

Additional Power Purchase

- 4.19 It was observed that MBPPL has procured 0.45 MUs of power from GMRETL during the month of March, 2020, in addition to the peak and base contracted capacity. The said power has been procured by MBPPL at variable price of Rs. 3.32/kWh through bilateral contract for the period of 26 March 2020 to 31 March 2020. The landed cost of power after adding open access charges (POC (W), RLDC/SLDC Operating Charges) worked out as Rs. 3.86/kWh.
- 4.20 The Commission has asked MBPPL to confirm if it has fully utilised all its contracted (for base & Peak load) before procuring aforesaid additional power. The Commission also asked for justification of additional power purchase inspite of having surplus power. MBPPL in its reply stated that it has purchase aforesaid power on account of unavailability of JPL (base load source). As already mentioned above, on account of fuel shortage due to lockdown imposed by Central Government, power from JPL was unavailable for the period 26 March 2020 to 31 March 2020. MBPPL further clarified that it has two contract sources one for Base power and another for Peak power. MBPPL source base power from JPL on round the clock (RTC) basis whereas, peak power has been sourced from GMRETL during 0800-2300 Hrs except weekend and holidays. The availability of surplus power from peak source during aforesaid period was limited, in addition peak source was unavailable on 28 March 2020 and 29 March 2020 (i.e., on Saturday and Sunday). MBPPL further stated that sourcing partial power from peak power source and partially from additional source would have resulted to multiple short term open access applications and burden of duplication of operating charges on its consumers. Therefore, considering the factors, i.e., unavailability of all quantum, requirement of multiple STOA applications and commercial viability, MBPPL decided to procure additional power in total against scheduling limited available surplus from GMRETL.
- 4.21 The Commission also asked MBPPL to confirm if it has explored any other option such as Exchange for procurement of additional power. In its reply, MBPPL stated that Exchange NOC has to be obtained from SLDC. MBPPL had sourced power from alternate source in the past when the main source generator was not available. Thus, the condition of obtaining the exchange NOC was unexpected. MBPPL further stated that it did not have any past experience of applying for NOC to SLDC, thus had not opted exchange NOC for the month of March 2020. Therefore, in order to meet contingency requirement due to unavailability of power from JPL on account of force majeure condition, MBPPL procured the additional power through bilateral source on short term basis. MBPPL further stated that after the particular event, it has been continuously opting for Exchange NOC/Standing clearance on monthly basis and has procured power from IEX for the period of 01 April 2020 to 07 April, 2020 to meet shortfall due to continued outage of JPL power plant. In view of above, as the price of purchase of additional power is within the approved APPC and also lower than the approved source wise (base and peak) power purchase price, the Commission has considered the additional power as submitted by MBPPL. Although, MBPPL is required to submit the cost benefit analysis of sourcing additional bilateral power instead of partial fulfilling it from surplus power and remaining with other bilateral sources or through Exchange at the time of truing up of FY 2019-20.

RPO Compliance:

4.22 MBPPL has procured 133 Nos. and 887 Nos. of Solar RECs and Non- Solar RECs respectively during the month of January, 2020. During February, 2020, it has purchased 1713 Nos. and 1775 Nos. of Solar RECs and Non- Solar RECs, respectively. During month of March, 2020, it has procured 163 Nos. and 536 Nos. of Solar RECs and Non- Solar RECs, respectively. The commission in MTR Order has approved yearly cost of 1.49 crore toward REC purchase during FY 2019-20. Accordingly, the monthly approved cost towards REC purchase worked out as Rs. 0.12 Crore including both Solar and Non-Solar RECs. As against this the monthly RECs purchase cost during the month of January, February and March, 2020 is Rs. 0.22 Crore, Rs. 0.78 Crore and Rs. 0.09 Crore, respectively. This higher cost of RECs particularly in the month of January and February has impacted the overall purchase cost during the aforesaid month and hence, resulted into higher APPC than the approved. The Commission has verified the aforesaid RECs purchased and its associated cost from obligation report issued by PXIL submitted by MBPPL and found to be in order. Further, as FY 2019-20 is over, the Commissions has sought for details of RPO compliance/Target achieved by MBPPL. MBPPL has submitted the details as shown in Table below:

Particular	Units	FY 2019-20
Annual Power Purchased during FY 2019-20	MUs	83.68
RPO Target of MBPPL for FY 2019-20	%	15%
RPO Target of MBPPL for FY 2019-20	MUs	12.55
REC Purchased		
Solar REC	No of Cert.	2963
Non- Solar REC	No of Cert	9736
REC Purchased cost		
Solar REC	Rs. Crore	0.69
Non- Solar REC	Rs. Crore	1.75
RPO Target achieved in FY 2019-20	%	101%
RPO Target achieved in FY 2019-20	MUs	12.70

4.23 From the above Table, it can be seen that MBPPL has achieved its RPO Target for FY 2019-20.

Power Purchase Summary:

4.24 Based on above, MBPPL has purchased total power (after adjustment of surplus power) of **6.74 MUs** at an APPC of **Rs. 4.55/kWh** (inclusive of REC cost) during the month of January 2020, **6.38 MUs** at an APPC of **Rs. 5.58/kWh** (inclusive of REC cost) during the month of February, 2020 and 5.58 MUs at an APPC of **Rs. 5.29/kWh** (inclusive of REC cost) during the month of March, 2020 as compared to approved APPC of **Rs. 4.19/kWh**.

4.25 On an overall basis the actual APPC is higher mainly due to variation in actual power purchase quantum from contracted sources (fixed cost spread), other adjustments as per approved PPA and impact of higher RECs purchase cost as already discussed in paras above.

4.26 Accordingly, after complete scrutiny of relevant documents submitted by MBPPL, the Commission approves the APPC of **Rs. 4.55/kWh**, **Rs. 5.58/kWh** and **Rs. 5.29/kWh** for the month of January, February and March, 2020, respectively.

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

5.1 The Commission has worked out the average power purchase costs for the months as shown in above Tables. The same has been compared with the APPC of Rs. 4.19/kWh as approved by the Commission in MTR Order (Case No. 194 of 2017) for FY 2019-20 and arrived at differential per unit rate at which ZFAC is to be passed on to the consumers.

5.2 The following Table shows the ZFAC computed by the Commission on account of difference in fuel and power purchase cost for the months of January, 2020 to March, 2020.

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
1	Average power purchase cost approved by the Commission	Rs. /kWh	4.19	4.19	4.19
2	Actual average power purchase cost	Rs. /kWh	4.55	5.58	5.29
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.37	1.39	1.11
4	Net Power Purchase	MU	6.74	6.38	5.85
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	0.25	0.89	0.65

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

6.1 The adjustment factor for over recovery/under recovery (B) is as computed as shown in Table below.

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
1.1	Incremental cost allowed to be recovered in Month n-1	Rs. Crore	0.36*	0.26	0.49
1.2	Incremental cost in Month n-1 actually recovered in month n	Rs. Crore	0.38	0.25	0.43
1.3	Already accounted for refund in future periods (as per approved vetting report of Q3 FY 2019-20)	Rs. Crore	(0.03)	-	-
1.4	Over-recovery/under-recovery (1.1-1.2-1.3)	Rs. Crore	0.02	0.01	0.06

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
2.0	Carried forward adjustment attributable to application of ceiling limit for previous month	Rs. Crore	(0.00)	(0.00)	0.33
2.1	Refund/Recovery adjustment pertaining to previous post facto FAC approval	Rs. Crore	-	(0.07) [^]	-
3.0	Net Adjustment factor for over-recovery/under-recovery (1.4+2.0+2.1)	Rs. Crore	0.02	(0.06)	0.39

**Corrected as per the Commission approved post facto FAC approval of Q3 of FY 2019-20.*

^ as per the Commission approved post facto FAC approval of Q1 of FY 2019-20

6.2 The Commission observed that the value of incremental cost allowed to be recovered for the month of January, 2020 has been taken by MBPPL as Rs. 0.39 Crore based on their computation of FAC of previous quarter, i.e., Q3 of FY 2019-20. However, the Commission in its previous post facto FAC approval, i.e., for Q3 of FY 2019-20 has approved the respective amount as Rs. 0.36 Crore. Therefore, The Commission has rectified this error and accordingly considered the approved values as per previous approved report for computing incremental adjustment of respective month as shown in Table above.

6.3 Further, MBPPL has considered the refund of 0.07 Crore in month of February, 2020, as directed by the Commission in post facto FAC approval of Q1 of FY 2019-20.

6.4 The Commission has also sought for supporting documents related to incremental cost actually recovered/refunded in the respective months. In response to this MBPPL has submitted the detailed SAP generated report for the respective month. The Commission has verified the amount and found to be in order.

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

7.1 MBPPL has not levied any carrying cost for the months of January to March, 2020 and the Commission has also not computed the same.

8. Total Fuel Cost and Power Purchase Adjustment (ZFAC)

8.1 The Total Fuel Cost and Power Purchase Adjustment (ZFAC) is as computed as shown in Table below.

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
1	Change in Fuel cost and power purchase cost attributable to Sales within the License Area (F) (Form 11)	Rs. Crore	0.25	0.89	0.65

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
2	Carrying cost for over-recovery/under-recovery (C) (Form 14)	Rs. Crore	-	-	-
3	Adjustment factor for over-recovery/under-recovery (B) (Form13)	Rs. Crore	0.02	(0.06)	0.39
4	Z_{FAC} = F+C+B	Rs. Crore	0.26	0.82	1.04

9. Disallowance due to excess Distribution Loss

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

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

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

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

9.2 The Table below shows the computation of excess distribution loss on cumulative basis for Q4 months of FY 2019-20:

S. No.	Particulars	Units	Approved in Tariff Order	Actual Cumulative up to		
				Jan, 20	Feb, 20	Mar, 20
1	Net Energy input at Distribution Voltages	MU	23.90	68.90	75.06	80.45
2	Energy sales at Distribution voltages	MU	23.68	67.83	73.89	79.19
3	Distribution Loss (1 - 2)	MU	0.22	1.07	1.17	1.26
4	Distribution Loss as % (3/1)	%	0.92%	1.55%	1.56%	1.56%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.04	0.04	0.03

9.3 As observed from the above table, cumulative distribution loss during the period of January to March 2020, has been 1.55%, 1.56% and 1.56% respectively which is higher than the MTR approved distribution loss of 0.92%. In response to clarification sought against such an increase in distribution losses MBPPL in its earlier submission has stated that three of their buildings B#2, B#10 & B#12 in its SEZ area which were supplied at HT point of supply till March, 2018. However, it has now been supplied at LT level, hence, transformer losses have increased. MBPPL further stated that it has submitted detailed submission on the losses against the data gaps on queries asked by the Commission, during the MYT Petition proceedings for the 4th control period.

10. Summary of Allowable Z_{FAC}

10.1 The summary of the FAC amount as approved by the Commission for the month of January, to March, 2020 as shown in the Table below.

S. No.	Particulars	Units	Jan, 2020	Feb, 2020	Mar, 2020
1.0	Calculation of Z_{FAC}				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.25	0.89	0.65
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.02	(0.06)	0.39
1.4	Z_{FAC} = F+C+B	Rs. Crore	0.26	0.82	1.04
2.0	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	6.27	6.06	5.30
2.2	Excess Distribution Loss	MU	0.04	0.04	0.03
2.3	Z _{FAC} per kWh	Rs./kWh	0.42	1.35	1.95
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.81	0.81	0.81
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.42	0.81	0.81
3.0	Recovery of FAC				
3.1	Allowable FAC	Rs. Crore	0.26	0.82	1.04
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore	0.00	0.00	0.00
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.26	0.49	0.43
5.0	Carried forward FAC for recovery during future period (3.1-3.2-4.0)	Rs. Crore	(0.00)	0.33	0.60

10.2 It can be seen from the above Table that standalone FAC for the individual month of January, February and March is 0.26 Crore, Rs. 0.82 Crore and Rs. 1.04 Crore, respectively. Based on monthly actual energy sales and excess distribution loss, FAC per unit worked out as Rs. 0.42 /kWh, Rs. 1.35 /kWh and Rs. 1.95 /kWh for the months of January, February and March, 2020 as shown above as compared to the ceiling of Rs. 0.81/kWh. As the FAC per unit computed mainly for the month of February and March, 2020 is higher than the 20% cap as specified in Regulation 10.9 of MYT Regulations, 2015, hence, there is restriction triggered with regards to such ceiling for the months of February and March, 2020.

10.3 As per proviso to Regulations 10.9, the monthly ZFAC shall not exceed 20% of the variable component of Tariff (20% of the variable component of Tariff, i.e., Rs. 0.81/kWh). Hence, capping is triggered mainly for the month of February and March, 2020. Therefore, as per Regulations the FAC chargeable to consumers has been considered as Rs. 0.81/kWh instead of Rs.1.35/kWh and Rs.1.95/kWh for the month of February and March, 2020, respectively. Considering this capped per unit ZFAC of Rs.0.81/kWh, actual sales and excess distribution losses during the respective months, FAC allowable is reworked for the month of February and March, 2020. The remaining ZFAC not levied by Licensee due to cap is allowed as carry forward FAC for recovery in future period as shown in Table below:

Particulars	Units	Basis	February	March
Standalone FAC (ZFAC = F+C+B)	Rs. Crore	a	0.82	1.04
Energy Sales within the License Area	MU	b	6.06	5.30
Excess Distribution losses	MUs	c	0.04	0.03
FAC Charge allowable after capping	Rs./kWh	d	0.81	0.81
Allowable ZFAC (reworked)	Rs. Crore	$e=d*(b+c)/10$	0.49	0.43
Carried forward FAC for recovery during future period	Rs. Crore	$f=a-e$	0.33	0.60

10.4 From the above Table, the carry forward FAC for the month of February and March is Rs. 0.33 Crore and Rs. 0.60 Crore, respectively. As MBPPL follows 'n+1' billing cycle, i.e., the FAC of the month of any month is billed in the immediate next month, hence, carry forward of the month of February, 2020 has been rolled over to the month of March, 2020 (in computation of adjustment factor for the month of March, 2020).

10.5 Accordingly, based on above, MBPPL is allowed to recover standalone FAC of Rs. 1.04 Crore (Rs. 0.43 Crore + Rs. 0.60 Crore carry forward) pertaining to the month of March, 2020.

11. Recovery from Consumers:

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

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

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

Where:

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

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

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

- 11.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations. The Commission observed that there is a variation of Z_{FAC} in absolute terms on considering category wise per unit FAC worked out and category wise actual sales for the months of January, 2020 to March, 2020.
- 11.3 The variation in FAC in absolute terms is due to formula error of Z_{FAC} computed on per unit basis. The variation however is taken care in the adjustment factor of subsequent months.
- 11.4 The following Table shows per unit Z_{FAC} for the months of January, February and March, 2020 to be levied on consumers of MBPPL in the corresponding billing month of February, March and April, 2020 respectively.

FAC for Billing Month in February to April, 2020

S. No	Consumer Category	Slabs	ZFAC computed for the month of		
			Feb, 2020	Mar, 2020	Apr, 2020
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
	HT Category				
1	HT- I Industrial	all units	0.42	0.81	0.81
2	HT-II Commercial	all units	0.42	0.81	0.81
	LT Category				
3	LT-I General Purpose	all units	-	-	-
4	LT-II(A) Commercial (0-20 kW)	all units	0.42	0.81	0.81
5	LT-II (B) Commercial (above 20 kW)	all units	0.50	0.96	0.96
6	LT-III (A) Industrial (0-20 kW)	all units	0.42	0.81	0.81
7	LT-III (B) Industrial (above 20 kW)	all units	0.42	0.81	0.81

12. Summary

12.1 The Table below shows the summary of FAC claimed vis-à-vis approved by the Commission for Q4 of FY 2019-20:

Particular	Units	Claimed			Approved		
		Jan	Feb	Mar	Jan	Feb	Mar
FAC	Rs. Crore	0.26	0.49	0.43	0.26	0.49	0.43
Carried forward FAC	Rs. Crore	(0.00)	0.33	0.60	(0.00)	0.33	0.60
Total FAC	Rs. Crore	0.26	0.82	1.04	0.26	0.82	1.04
FAC Rate	Rs./Unit	0.42	0.81	0.81	0.42	0.81	0.81

12.2 Further, as FY 2019-20 is over and the Commission has also carried over provisional Truing up of the same, any adjustment of FAC revenue and cost allowed under Q1 to Q4 post facto FAC approval of FY 2019-20 will be reconciled and trued up at the time of final truing of FY 2019-20 under the MERC (Multi Year Tariff) Regulations, 2015.