



महाराष्ट्र विद्युत नियामक आयोग
Maharashtra Electricity Regulatory Commission

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

Date: 7 June, 2020

To,
The Gigaplex Estate Private Ltd.,
K Raheja Corp, Level-9, Raheja Tower
Block 'G', Plot No. C-30,
Bandra Kurla Office
Bandra (E), Mumbai – 400 051

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the month of April, 2020.

Reference: 1. GEPL's FAC submission for the month of April, 2020 vide email dated 15 May, 2020.
2. Data Gaps were communicated vide email dated 17 May, 2020.
3. GEPL's replies vide email dated 18 May, 2020.

Sir,

Upon vetting the FAC calculations for the months of April, 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	FAC Amount (Rs. Crore)
April, 2020	0.11

The Commission allows the carry forward FAC of Rs. 0.09 Crore to be recovered during future period as against a claim of Rs. 0.20 Crore by Gigaplex Estate Private Ltd. (GEPL). This is on account of 20% limit set under the MYT Regulation, 2019 and reasons as mentioned in this vetting report.

Yours faithfully,

Sd/-
(Dr. Rajendra Ambekar)
Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of April, 2020.

ANNEXURE
Detailed Vetting Report
Date: 7 June, 2020

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF APRIL, 2020

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the month April, 2020.

Reference: GEPL's FAC submission for the month of April, 2020 vide email dated 15 May, 2020.

1. FAC submission by GEPL:

1.1 GEPL has made FAC submissions for the months of April, 2020 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by GEPL, the Commission has accorded prior approval for the FAC amount to be charged in the billing month of June, 2020.

2. Background

2.1 On 30 March, 2020 the Commission has issued Tariff Order in respect of GEPL (Case No. 330 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 As per provisions of MYT Regulations, 2019, before levying FAC for the first month of the 4th Control Period, Distribution Licensee including SEZ is required to seek prior approval of the Commission. Accordingly, vide its email dated 15 May, 2020, GEPL has filed FAC submissions for the month of April, 2020 for prior approval of the Commission. The Commission has scrutinized the submissions provided by GEPL and has also verified the power purchase bills provided along with its submissions.

3. Energy Sales of the Licensee

3.1 In the MYT Order passed by the Commission in Case No. 330 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 GEPL 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 (April, 2020) (MU)
	(I)	(II=I/12)	(III)
HT Category			
HT- I Industrial	36.52	3.04	0.97
HT-II Commercial	1.42	0.12	0.05
LT Category			
LT-II(A) Commercial (0-20 kW)	0.98	0.08	0.02
LT-II (B) Commercial (above 20 kW)	0.21	0.02	0.00
LT-III (A) Industrial (0-20 kW)	0.1	0.01	0.03
LT-III (B) Industrial (above 20 kW)	4.25	0.35	0.13
Total	43.48	3.62	1.19

3.3 It can be observed from above Table 1 that the actual sales during the month April, 2020 is 1.19 MU which is 67% lower than approved energy sales of 3.62 MU per month for the FY 2020-21. The major variation was observed in the HT-I Industrial, HT-II Commercial and LT-III (B) Industrial categories as seen in the Table 1 above. As submitted by GEPL, this variation is on account of unprecedented lockdown announced in the month of April due to Covid-19 emergency.

4. Power Purchase Details

4.1 GEPL is a deemed Distribution Licensee notified by the Commission for IT& ITES SEZ located at Airoli, Thane. GEPL does not own or operate any generating stations. Accordingly, GEPL is required to procure power from outside sources in order to fulfil the electricity demand of its consumers.

4.2 **Power Procurement from GMR Energy Trading Limited:** GEPL has medium term PPA with GMR Energy Trading Limited approved by the Commission in Case No. 266 of 2018 dated 26 September, 2018 which is valid up to March, 2021.

4.3 Further, the Commission in its Order (Adoption of Tariff) dated 26 March, 2020 in Case No. 64 of 2020 has approved the Power Procurement Agreement of GEPL with GMR Energy Trading Limited (GMRETL) (Source: Birla Carbon India Pvt. Ltd.) to purchase 3 MW power (09:00 hours to 23:00 hours, Weekdays i.e. Monday to Friday and excluding Saturday, Sunday and National Holidays) through short-term competitive bidding. The

Commission had approved the Power purchase rate of Rs. 4.28/kWh for short-term power procurement valid from 1 April 2020 to 31 March 2021.

4.4 Summary of power purchase of GEPL is as under:

Sr. No.	Particular	Compliance		
1	Purchase from Approved Sources	Yes. GEPL has purchase from GMRETL and Exchange during April, 2020 which is approved source of power.		
2	Merit Order Dispatch	GEPL has followed merit order for scheduling of power and preference was given to cheapest power.		
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement falls under Section 63 of EA, 2003.		
4	Pool Imbalance	GEPL has supplied 0.06 MU to the imbalance pool by higher scheduling of power		
5	Sale of Surplus Power	No Surplus power available		
6	Power Purchase	Actual Power Purchase is 1.33 MU as against approved 3.79 MU due to lower sales		
7	Source wise Power Purchase	Source Name	Approved (MU)	Actual MU)
		GMRETL	2.17	1.18
		Exchange/ Other Peak Source	1.62	0.14
		Total	3.79	1.33

4.5 The Commission also notes that short-term power supply from GMRETL which was supposed to start from 01 April, 2020 has not started. GEPL in its submission stated that GMRETL was unable to supply power as the unit was shut down due to lockdown imposed by the Government. GEPL in its reply to data gaps submitted that owing to COVID-19 situation, the lockdown was imposed by the Government of India in the month of April, 2020. Since the Government has categorised the main manufacturing units of Birla Carbon India Pvt. Ltd. as “Non-Essential” activity, the Co-Generation plant was also non-operational in April 2020. GEPL submitted that lockdown imposed by the Government of India certainly falls under Force Majeure condition, as it fulfils the criteria – “any events or circumstances, or combination of events and circumstances causing disruption of the system”. Therefore, short-term power from GMRETL from Birla Carbon India Pvt. Ltd. was not available in April, 2020.

5. **Power Purchase Cost:**

5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of April, 2020, in order to verify the claim of GEPL 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 Power Purchase cost incurred in April, 2020 is Rs. 0.84 Crore which is significantly lower than the approved Power Purchase cost of Rs. 1.81 Crore by the Commission for the month of April, 2020.

5.3 **GMR Energy Trading Limited**

- **Impact of Fixed Cost on total Power Purchase Cost:** The Commission notes that as GEPL could not schedule its approved sources to the full entitlement and could not fully utilize the available capacity of contracted source, i.e., GMR Energy Trading Ltd. (Medium Term) as a result of lower demand due to COVID-19. Due to lower power purchase quantum, the effective per unit rate as approved by the Commission from the contracted source has increased from Rs. 4.89/kWh to Rs. 6.65/kWh on account of increase in burden of fixed cost on the lesser procured units. Due to lower power purchase, fixed cost per unit increased to Rs. 4.00/ kWh from the approved level of Rs. 2.07/ kWh. This has resulted into increase in the actual per unit rate of contracted source vis-à-vis the unit rate approved by the Commission for the month of April 2020.
- Upon scrutiny of the energy bills/invoices submitted by GEPL for power procured through GMRETL, the Commission has noted that the GEPL has received a rebate of Rs. 0.05 Crore on the energy bill thereby variable cost has reduced and effective rate works out to Rs. 2.65 / kWh against approved level of Rs. 2.82/ kWh.

5.4 **Power Procurement from Exchange:** As GMR Energy Limited was not available due to forced outage during the period from 14th to 17th April, 2020, GEPL had to procure 0.14 MU from IEX. GEPL has purchased power at Rs. 3.62/kWh which is lower than Rs. 4.28/kWh approved by the Commission in the MYT Order.

5.5 **Renewable Sources:** The Commission has also approved Rs. 0.06 Crore for April, 2020 for purchase of REC to meet Renewable Purchase Obligation. GEPL has purchase Nil REC for the month of April, 2020. By avoiding purchase of REC, GEPL has reduced power purchase cost for April, 2020 but created liability for future.

5.6 **Imbalance Pool:** It is seen that GEPL has injected 0.06 MUs to the imbalance pool. 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.

5.7 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 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.

5.8 **Approved Cost:** The details of the overall cost approved and actual for the month of April, 2020 as per MYT Order is as shown in the Table 2 below:

Table 2: Approved and Actual Power Purchase Cost for GEPL

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)
GMR Energy Trading Limited	Approved	2.17	0.45	2.07	0.61	2.82	1.06	4.89
	Actual	1.18	0.47	4.00	0.31	2.65	0.79	6.65
Exchange/Other Peak Source	Approved	1.62	0.00	-	0.69	4.28	0.69	4.28
	Actual	0.14	0.00	-	0.05	3.62	0.05	3.62
Solar & Non-Solar REC	Approved	-	-	-	0.06	1.00	0.72	-
	Actual	-	-	-	0.00	-	0.00	-
Total	Approved	3.79	0.45	1.19	1.36	5.36	1.81	4.79
	Actual	1.33	0.47	3.74	0.37	2.76	0.84	6.33

5.9 Source wise approved and actual quantum of power procured and APPC is shown in the graph below:

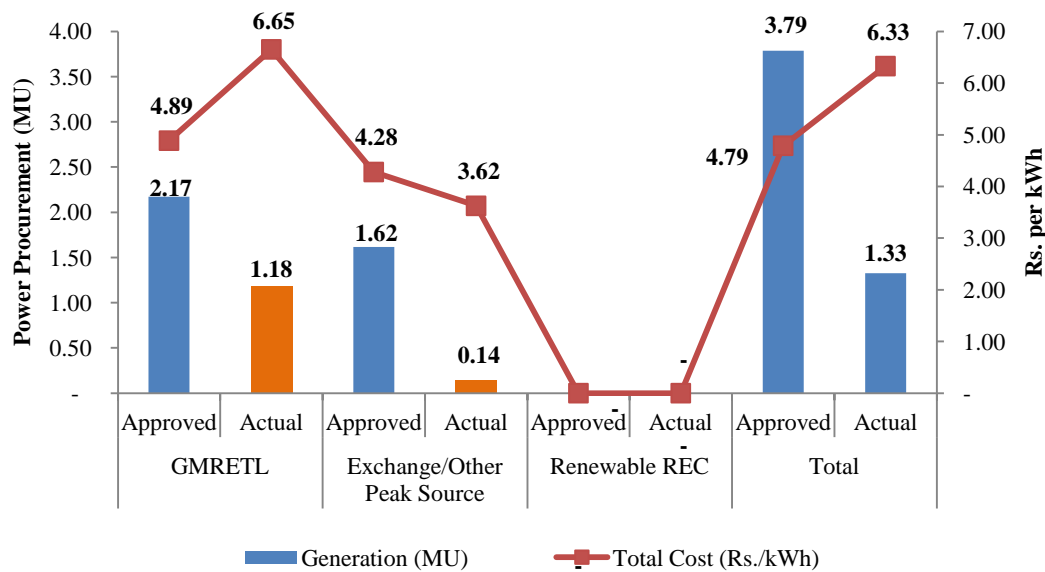


Figure 1: Variation in Power Procurement and Total per unit Cost

5.10 Considering the above, the Commission allows the average power purchase cost of Rs.6.33/kWh for the month of April, 2020 as shown in Table 2 above. The variation in power purchase cost is mainly on account of increase in burden of per unit Fixed Cost as a result of lower unit sold as already explained in earlier para.

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 April, 2020 as shown in below Table 3. The same has been compared with the average power purchase cost approved by the Commission in MYT Order dated 30 March, 2020 to arrive at the differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

6.2 Thus, the following Table 3 shows the rectified Z_{FAC} worked out by the Commission on account of difference in power purchase cost for the month of April, 2020.

Table 3: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	April, 2020
1	Average power purchase cost approved by the Commission	Rs./kWh	4.79
2	Actual average power purchase cost	Rs./kWh	6.33
3	Change in average power purchase cost (=2 -1)	Rs./kWh	1.54
4	Net Power Purchase	MU	1.33
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.20

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

7.1 As the Commissioning is determining the FAC for the first time after the adoption of Tariff from April 2020 there is no past adjustment for over recovery/under recovery.

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

8.1 As the Commissioning is determining the FAC for the first time after the adoption of Tariff from April 2020 there is no past adjustment for over recovery/under recovery and hence no carrying cost for over recovery/under recovery.

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 4 provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss:

Table 4: Disallowance of FAC due to excess Distribution Loss

Sr. No.	Particulars	Units	Approved in Tariff Order	Actual for April, 2020
1	Net Energy input at Distribution Voltages	MU	3.67	1.22
2	Energy sales at Distribution voltages	MU	3.62	1.19
3	Distribution Loss (1 - 2)	MU	0.04	0.03
4	Distribution Loss as % (3/1)	%	1.20%	2.59%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.02
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	0.003

9.3 As seen from the above Table 4, distribution loss for the month of April, 2020 is 2.59% which higher than the MYT approved distribution loss of 1.20%.

9.4 The Commission observed that GEPL 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 April, 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 April, 2020 as shown in the Table 5 below.

Table 5: Summary of Allowable Z_{FAC}

Sr. No.	Particulars	Units	April, 2020
1.0	Calculation of ZFAC		
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.20
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.00
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.00
1.4	ZFAC = F+C+B	Rs. Crore	0.20
2.0	Calculation of Per Unit FAC		
2.1	Energy Sales within the License Area	MU	1.19
2.2	Excess Distribution Loss	MU	0.02
2.3	ZFAC per kWh [(1.4/2.1)*10]	Rs./kWh	1.69
3.0	Allowable FAC		
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	0.003
3.2	FAC allowable [1.4-3.1]	Rs. Crore	0.20
4.0	Utilization of FAC Fund		
4.1	Opening Balance of FAC Fund	Rs. Crore	0.00
4.2	ZFAC for the month (Sr. N. 3.2)	Rs. Crore	-
4.3	Closing Balance of FAC Fund	Rs. Crore	-
4.4	ZFAC leviable/refundable to consumer	Rs. Crore	0.20
5.0	Total FAC based on category wise and slab wise allowed to be recovered in the billing month of June, 2020	Rs. Crore	0.11
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	0.09

10.2 It can be seen from the above Table 5 that standalone FAC for the month of April, 2020 is Rs. 0.20 Crore. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 1.69/ kWh for the month of April, 2020 as shown above.

10.3 Further, the Regulation 10.9 of MYT Regulations, 2019 specifies as:

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:

10.4 As the FAC per unit computed in the month of April, 2020 as shown in Table 5 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. 0.11 Crore. Thus, FAC equivalent 0.09 Crore (i.e., Rs. 0.20 Crore minus Rs. 0.11 Crore) has remained unrecovered. Accordingly, the Commission allows the recovery of Rs. 0.09 Crore as carried forward FAC to be recovered in future period due to application of ceiling as against the Rs. 0.20 Crore as claim by GEPL.

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: —

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

Where:

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

k = Average Billing Rate / ACOS;

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

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

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

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

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

11.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations.

11.3 The following Table 6 shows per unit Z_{FAC} for the month of April, 2020 to be levied on consumers of GEPL in the billing month of June, 2020.

Table 6: Category wise FAC for Billing Month of June, 2020

S. N.	Consumer Category	Variable Charges (Rs./kWh)	ABR (Rs/kWh)	K Factor =ABR/AC OS of Rs. 7.12	K * FAC/ unit (Rs./kWh)	20% of Variable Charge (Rs./kWh)	Category Wise FAC (Rs/kWh)	Category Wise FAC (Rs/kVAh)
	HT Category							
1	HT- I Industrial	4.51	7.13	1.00	1.69	0.90	0.90	0.87
2	HT-II Commercial	5.10	7.13	1.00	1.69	1.02	1.02	0.97
	LT Category							
3	LT-I General Purpose							
4	LT-II(A) Commercial (0-20 kW)	5.76	7.13	1.00	1.69	1.15	1.15	1.10
5	LT-II (B) Commercial (above 20 kW)	3.71	7.13	1.00	1.69	0.74	0.74	0.71
6	LT-III (A) Industrial (0-20 kW)	5.73	7.13	1.00	1.69	1.15	1.15	1.14
7	LT-III (B) Industrial (above 20 kW)	5.12	7.13	1.00	1.69	1.02	1.02	1.02

11.4 The following Table 7 shows Z_{FAC} revenue for the month of April, 2020 to be levied on consumers of GEPL in the billing month of June, 2020.

Table 7: Category wise FAC Revenue for Billing Month of June, 2020

Sr. No	Consumer Category	Slabs	Z_{FAC} computed for the month of April 2020 (Rs. Crore)
	HT Category		
1	HT- I Industrial	all units	0.0876
2	HT-II Commercial	all units	0.0048
	LT Category		
3	LT-I General Purpose	all units	-
4	LT-II(A) Commercial (0-20 kW)	all units	0.0019
5	LT-II (B) Commercial (above 20 kW)	all units	0.0003
6	LT-III (A) Industrial (0-20 kW)	all units	0.0030
7	LT-III (B) Industrial (above 20 kW)	all units	0.0130
	Total		0.11