



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/20172018/1276

Date: 30 Oct, 2018

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: Post facto approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the month of April, 2018 to June, 2018.

Reference: 1. GEPL's FAC submission for the month of April, 2018 to June, 2018 vide letter no. G600 dated 22 August, 2018.
2. Replies to Data Gaps received vide email dated 11 and 23 October, 2018

Sir,

Upon vetting the FAC calculations for the months of April, 2018 to June, 2018 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)
April, 2018	0.03
May, 2018	(0.03)
June, 2018	(0.02)

GEPL is directed to refund excess recovered Rs. 0.22 Crore to the consumers for the period of April, 2018 to June, 2018 along with interest in next FAC billing cycle. This is on account of error as explained in para 4.4 and 9.5 of this vetting report.

The above approval of FAC is subject to final True up of FY 2018-19 under the MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

(Dr. Rajendra Ambekar)
Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of April, 2018 to June, 2018.

**POST FACTO APPROVAL FOR FACCHARGES FOR THE MONTHS OF APRIL,
2018 TO JUNE, 2018**

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the month of April, 2018 to June, 2018.

Reference: GEPL's FAC submission for the month of April, 2018 to June, 2018 vide letter no. G600 dated 22 August, 2018.

1. FAC submission by GEPL Undertaking:

1.1 GEPL has made FAC submissions for the months of April, 2018 to June, 2018 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by GEPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of July, 2018.

2. Background

2.1 On 12 March, 2018 the Commission has issued Tariff Order in respect of GEPL. (Case No.149 of 2016) for approval of Aggregate Revenue Requirement and Tariff for FY 2016-17 to FY 2019-20. Revised Tariff has been made applicable from 1 April, 2018.

2.2 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.

2.3 Vide FAC vetting Report dated 2 July, 2018 the Commission accorded prior approval to the FAC for the month of April, 2018.

2.4 In terms of MERC (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 letter dated 22 August, 2018, GEPL has filed FAC submissions for the months of April, 2018 to June, 2018 for post facto approval. The Commission has scrutinized the submissions provided by GEPL 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 GEPL 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		
			(Apr-18) (MU)	(May-18) (MU)	(Jun-18) (MU)
	(I)	(II=I/4)	(III)	(IV)	(V)
HT Category					
HT- I Industrial	43.43	3.62	1.80	2.01	1.89
HT-II Commercial	1.96	0.16	0.08	0.10	0.09
LT Category					
LT-I General Purpose	-	-	-	-	-
LT-II(A) Commercial (0-20 kW)	0.04	0.00	0.05	0.06	0.05
LT-II (B) Commercial (above 20 kW)	0.16	0.01	0.01	0.01	0.01
LT-III (A) Industrial (0-20 kW)	0.31	0.03	0.00	0.00	0.00
LT-III (B) Industrial (above 20 kW)	5.36	0.45	0.19	0.20	0.20
Total	51.25	4.27	2.14	2.38	2.25

3.2 It can be observed from above Table that the actual sales during the months of April, May and June, 2018 is 2.14 MUs, 2.38 MUs and 2.25 MUs respectively, which is around 45% to 50% lower than the approved energy sales per month, i.e., 4.27 MUs. The major variation was observed in the HT-I Industrial and LT-III (B) Industrial categories as shown in the Table above.

4. Cost of Power Purchase

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 demand of its consumers.

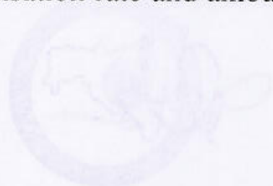
4.2 GEPL has so far been procuring Power through Competitive Bidding on Short-term basis, and has received the Commission's approval for such procurement. The Short-term Power Purchase Agreement (APP) was with GMR Energy Trading Limited (GMRETL) which is valid for the period from 1 April, 2018 to 30 September, 2018. The following Tables show the variation in average power purchase cost (Rs/kWh) for the months of April, 2018 to June, 2018 as compared to average power purchase cost approved in Tariff Order dated 12 March, 2018:



Particulars	Tariff Order Dated 12 March, 2018			Actual for April, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Short Term PPA	54.08	23.69	4.38	2.21	0.97	4.38
FBSM	-	-	-	0	0	0
Solar REC	-	0.15	NA	0.57	0.06	1.00
Non Solar REC	-	0.59	NA	0	0	0
Total	54.08	24.43	4.52	2.21	1.03	4.64

Particulars	Actual for May, 2018			Actual for June, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Short Term PPA	2.32	1.02	4.38	1.71	0.74	4.32
Solar REC	0	0	0	0.18	0.02	1.00
Non Solar REC	0	0	0	0	0	0
Total	2.32	1.02	4.38	1.71	0.76	4.43

- 4.3 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the respective months of April to June, 2018, in order to verify the claim of MBPPL regarding Average Power Purchase Cost (APPC). The Commission has verified the Net Purchase (MUs), Variable Cost (Rs./kWh) and Power Purchase Cost.
- 4.4 During the scrutiny it was observed that, the power purchase cost of June, 2018 from GMRETL were erroneously taken as power purchase cost of May, 2018. Further, the Power Purchase cost for Solar REC for the month of April, 2018 was considered as Rs. 0.0537 Cr whereas as per the obligation report submitted the same is found to be as Rs. 0.0574 Cr. On seeking clarification, GEPL responded that aforesaid errors have been done inadvertently. Accordingly, GEPL has submitted the revised FAC formats by rectifying the power purchase costs for the respective months from April to June, 2018 and the same has been considered by the Commission.
- 4.5 The average power purchase cost from GMRETL during the months of April to May, 2018 is Rs. 4.38/kWh which is same as that of MYT approved rate as shown in Table above. However, the average power purchase cost for the month of June, 2018 is Rs. 4.32/kWh which is lower than the MYT approved rate. The reduction is due to compensation amount being received by GEPL on account of short fall in energy quantum scheduled by GMRETL. The Commission has sought the corresponding PPA for verifying the compensation rate and amount. On scrutiny, it was observed that Clause 9 of the PPA



provides for the compensation rate and is 20% of the applicable Tariff payable by the seller for the energy quantum in excess of 15% permitted deviation against the monthly contracted energy. The Commission verified the quantum of shortfall as well as compensation amount from the credit note submitted by GEPL and found to be in order. Accordingly, the Commission has considered the rate as shown in Table above.

- 4.6 The Commission verified the solar REC certificates as purchased by GEPL. It was observed that the GEPL has purchased 547 and 180 solar RECs in the months of April and June, 2018 respectively.
- 4.7 The APPC for the months of April is Rs. 4.64/kWh which is higher against the MYT approved rate of Rs. 4.52/kWh as shown in Table above. The quantum of power purchase is around 49% (2.21 MUs) of the monthly quantum approved by the Commission in the MYT Order. However, the expenditure (Rs. 5.74 Lakh) on REC purchase is marginally lower than approved expenditure (Rs 6.17 lakh taken together for Solar & Non-solar REC). This expenditure has spread over a lower power purchase quantum resulting into an increase in the APPC. The APPC for the month of May is Rs. 4.38/kWh which is lower than the MYT approved rate of Rs. 4.52/kWh as no REC has been procured in this month, therefore the APPC is equal to the variable cost of short-term power purchase as approved by the Commission. Further, the APPC for the month of June, 2018 is 4.43/kWh is lower than the MYT approved mainly due to GEPL not purchasing any Non-Solar REC.
- 4.8 After complete scrutiny of documents submitted, the Commission allows the average power purchase cost of Rs.4.64/kWh for the month of April, 2018, Rs. 4.38/kWh for the month of May, 2018 and Rs. 4.43/kWh for the month of June, 2018 as shown in Table above.

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 average power purchase cost approved by the Commission in Tariff Order dated 12 March, 2018 and arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.
- 5.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the months of April, 2018 to June, 2018.

S. No.	Particulars	Units	Apr 2018	May 2018	Jun 2018
1	Average power purchase cost approved by the Commission	Rs./kWh	4.52	4.52	4.52
2	Actual average power purchase cost	Rs./kWh	4.64	4.38	4.43
3	Change in average power purchase cost (=2 - 1)	Rs./kWh	0.12	(0.14)	(0.09)



S. No.	Particulars	Units	Apr 2018	May 2018	Jun 2018
4	Net Power Purchase	MU	2.21	2.32	1.71
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	0.03	(0.03)	(0.02)

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

- 6.1 GEPL has computed the adjustment factor considering FAC computed for the months of April and May 2018 as the incremental cost allowed to be recovered in the months of May and June 2018, respectively.
- 6.2 However, such computation cannot be allowed as levy of FAC by GEPL has first time started in July 2018 based on Commission's prior approval dated 2 July, 2018. Therefore, the FAC computed for the month of April, 2018 is allowed to be recovered only in the billing month of July 2018 and accordingly the adjustment factor needs to be computed. Similarly, FAC computed for the month of May 2018 also needs to be considered as allowed to be recovered only in the 2nd quarter of FY 2018-19.
- 6.3 In case, GEPL adopts a monthly cycle for levy of FAC, the same may be regularised from 2nd Quarter onwards. Accordingly, the adjustment factor may be computed on an n-1 basis from the month from which the FAC levy is done in subsequent month from which the FAC amount occurs.

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

- 7.1 GEPL has not levied any carrying cost for the months of April, 2018 to June, 2018 as there is no under/over recovery of FAC amounts becomes due as per the above para.

8. Disallowance due to excess Distribution Loss

- 8.1 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”

8.2 The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

S. No.	Particulars	Units	Approved in Tariff Order	Actual up to		
				Apr-18	May-18	Jun-18
1	Net Energy input at Distribution Voltages	MU	51.96	2.18	4.60	4.52
2	Energy sales at Distribution voltages	MU	51.25	2.14	6.89	6.76
3	Distribution Loss (1 - 2)	MU	0.71	0.04	0.04	0.04
4	Distribution Loss as % (3/1)	%	1.37%	1.82%	1.82%	1.84%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.010	0.020	0.032
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	0.0001	-	-

8.3 As seen from the above Table, cumulative distribution loss for the months of April, 2018 to June, 2018 is higher than the MYT approved distribution loss of 1.37%. The Commission has sought for reasoning for the higher distribution losses. In response to this GEPL stated that, the losses approved by Commission in MYT were the average of FY 2016-17. However, since March, 2017 the occupancy of buildings B#2 & B#3 has increased thereby increasing load losses of the system. Further, these are minimal technical losses of the network.

8.4 As, the stand alone FAC for the month of May and June, 2018 is negative, disallowance on account of excess distribution loss for the month of May and June, 2018 has not been computed.

9. Summary of Allowable Z_{FAC}

9.1 The summary of the FAC amount as approved by the Commission for the month of April, 2018 to June, 2018 as shown in the Table below.

S. No.	Particulars	Units	Apr 2018	May 2018	Jun 2018
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	0.03	(0.03)	(0.02)



S. No.	Particulars	Units	Apr 2018	May 2018	Jun 2018
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-	-
1.4	ZFAC = F+C+B	Rs. Crore	0.03	(0.03)	(0.02)
2.0	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	2.14	2.38	2.25
2.2	Excess Distribution Loss	MU	0.01	-	-
2.3	ZFAC per kWh	Rs./kWh	0.13	(0.13)	(0.07)
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	0.13	(0.13)	(0.07)
3.0	Recovery of FAC				
3.1	Allowable FAC [(2.1 x 2.5)/10]	Rs. Crore	0.03	(0.03)	(0.02)
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore	0.0001	-	-
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.03	(0.03)	(0.02)
5.0	Carried forward FAC for recovery during future period (3.1-3.2-4.0)	Rs. Crore	-	-	-

9.2 It can be seen from the above Table that standalone FAC for the months of April to June, 2018 is Rs. 0.03 Crore, Rs. (0.03) Crore and Rs. (0.02) Crore respectively and accordingly, the total FAC for the Q1 of FY 2018-19 worked at Rs. 0.02 Crore. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 0.13/kWh, Rs. (0.13)/ kWh and Rs. (0.07)/ kWh for the months of April to June, 2018. Further, the Regulation 10.9 of MYT Regulations, 2015 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:

9.3 As the FAC per unit computed is already lower than the 20% cap specified in Regulation as shown in Table above, hence, there is no restriction triggered with regards to such ceiling for all the months in Q1 of FY 2018-19.

9.4 Further, it is to be noted that as per prior approval of FAC for April, 2018 accorded by the Commission, it was specified that FAC recoverable of April, 2018 to be levied in the billing month of July, 2018. Hence, there should not be any FAC leviable for the month of May as well as June, 2018. GEPL has done computation of FAC for the aforesaid months and combined FAC is levied in the month of July, 2018 only, i.e., billing done on 1st August, 2018.



9.5 However, due to the error specified in para 4.4 above, GEPL has recovered total of Rs. 0.198 Crore for Q1 of FY 2018-19 against refund of Rs. 0.020 Crore as computed by the Commission shown in Table above. Therefore, the Commission directs GEPL to refund the differential amount of Rs. 0.218 Crore along with applicable interest rate in next billing cycle.

10. Recovery from Consumers:

10.1 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;

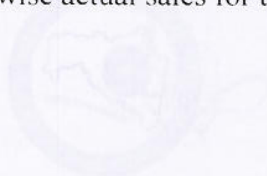
Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission;

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....”

10.2 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 April, 2018 to June, 2018.



10.3 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.

10.4 The following table shows per unit Z_{FAC} for the months of April, May and June, 2018 to be levied on consumers of GEPL for the billing month of July, 2018.

FAC for Billing Month of July, 2018

S. No	Consumer Category	Slabs	ZFAC computed for the month of			ZFAC levy in billing month of
			April, 2018	May, 2018	June, 2018	July, 2018
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
	HT Category					
1	HT- I Industrial	all units	0.11	(0.04)	0.81	0.89
2	HT-II Commercial	all units	0.11	(0.04)	0.81	0.89
	LT Category					
3	LT-I General Purpose	all units	0.11	(0.04)	0.81	0.89
4	LT-II(A) Commercial (0-20 kW)	all units	0.11	(0.04)	0.81	0.89
5	LT-II (B) Commercial (above 20 kW)	all units	0.11	(0.04)	0.81	0.89
6	LT-III (A) Industrial (0-20 kW)	all units	0.11	(0.04)	0.81	0.89
7	LT-III (B) Industrial (above 20 kW)	all units	0.11	(0.04)	0.81	0.89



