

महाराष्ट्र विद्युत नियामक आयोग Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2020-21/ WFH/SBR/ 49

Date: 16 March, 2021

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 months of October 2020, November 2020 and December 2020.
- **<u>Reference:</u>** 1. GEPL's FAC submission for the month 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 2020, November 2020 and 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. | 0.14 | 0.13 | 0.13 |
| Crore) | | | |

The Commission allows the carry forward FAC of Rs. 0.25 Crore for the month of October 2020, Rs. 0.12 Crore for the month of November 2020 and Rs. 0.01 Crore for the month of December 2020 to be recovered during future period for 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,

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

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

<u>ANNEXURE</u> Detailed Vetting Report Date: 16 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 GEPL for the months of October 2020, November 2020 and December 2020.
- **<u>Reference:</u>** 1. GEPL's FAC submission for the month of October 2020, November 2020 and December 2020 vide email dated 22 February, 2021.

1. FAC submission by GEPL:

1.1 GEPL 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 GEPL, 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. <u>Background</u>

- 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 Vide FAC Vetting Report dated 7 June, 2020 the Commission accorded prior approval to the FAC for the month of April, 2020. Vide FAC vetting Report dated 25 September, 2020 the Commission accorded Post-facto approval to the FAC for the month of May and June, 2020. Further, vide FAC vetting Report dated 30 November, 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 GEPL 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 GEPL and has also verified the fuel and 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:

| | Approved Monthly by the Approve | | А | Actual Sales (MU) | | | |
|-------------------------------------|---------------------------------|-------------------|-------------------|--------------------|--------------------|--|--|
| Consumer Category | Commissio n (MU) | Approve d (MU) | October , 2020 | November , 2020 | December , 2020 | | |
| | (I) | (II=I/12) | (III) | (IV) | (V) | | |
| HT Category | | | | | | | |
| HT- I Industrial | 36.52 | 3.04 | 1.32 | 1.24 | 1.24 | | |
| HT-II Commercial | 1.42 | 0.12 | 0.06 | 0.06 | 0.06 | | |
| LT Category | | | | | | | |
| LT-II(A) Commercial (0-20 kW) | 0.98 | 0.08 | 0.02 | 0.01 | 0.02 | | |
| LT-II (B) Commercial (above 20 kW) | 0.21 | 0.02 | 0.02 | 0.01 | 0.01 | | |
| LT-III (A) Industrial (0-20 kW) | 0.1 | 0.01 | 0.03 | 0.02 | 0.02 | | |
| LT-III (B) Industrial (above 20 kW) | 4.25 | 0.35 | 0.11 | 0.11 | 0.13 | | |
| Total | 43.48 | 3.62 | 1.55 | 1.46 | 1.48 | | |

3.3 It can be observed from above Table 1 that the actual sales during the month October 2020, November 2020 and December 2020 is 1.55 MU, 1.46 MU and 1.48 MU respectively, which is around 60% lower than monthly approved energy sales of 3.62 MU 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 continuation of impact of COVID-19.

4. <u>Power Purchase Details</u>

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 The Commission in its Order dated 23 January, 2021 in Case No 231 of 2020 has approved the purchase of power from MBPPL. 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....."

| Sr. | Particular | Compliance |
|-----|-----------------------------------|--|
| No. | | |
| 1 | Purchase from Approved Sources | Yes . GEPL has purchase from MBPPL and Exchange during October 2020, November 2020 and December 2020 which are the approved sources of power. Though, MBPPL was not approved as a source in MYT Order but the Commission in its Order in Case No 231 of 2020 dated 23 January, 2021 has approved the purchase of power from MBPPL. |
| 2 | Merit Order Dispatch | Yes. 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 fall under Section 63 of EA, 2003. |
| 4 | Pool Imbalance | GEPL has injected 0.02 MU, 0.05 MU and 0.05 MU to the imbalance pool for the month of October 2020, November 2020 and December 2020 respectively by scheduling of higher power. |
| 5 | Sale of Surplus Power | No Surplus power was available for sale. |
| 6 | Power Purchase | Actual Power Purchase is 1.64 MU, 1.59 MU and 1.61 MU for |

4.5 Summary of power purchase of GEPL is as under:

| | | October 2020, November 2020 and December 2020 respectively as against approved 3.79 MU due to lower sales. | | | | | |
|---|---|--|------------------|---------------------------------|--|--|--|
| 7 | Source wise Power Purchase | Source Name | Approved (MU) | Actual October 2020 (MU) | Proportion of each Source in Actual Purchase | | |
| | | GMRETL | 2.17 | - | 0.00% | | |
| | | Bilateral Purchase (MBPPL) | | 1.64 | 99.65 % | | |
| | | Exchange/ Other Peak Source | 1.62 | 0.01 | 0.35 % | | |
| | | Total | 100.00 % | | | | |
| | | Source Name | Approved (MU) | Actual November 2020 (MU) | Proportion of each Source in Actual Purchase | | |
| | | GMRETL | 2.17 | - | 0.00% | | |
| | | Bilateral Purchase (MBPPL) | | 1.59 | 100.00 % | | |
| | | Exchange/ Other Peak Source | 1.62 | 0.00 | 0.00 % | | |
| | | Total 3.79 1.59 | | | | | |
| | | | | | | | |
| | | Source Name | Approved | Actual | Proportion of | | |
| | | | (MU) | December 2020 (MU) | each Source in Actual Purchase | | |
| | | GMRETL | 2.17 | - | 0.00% | | |
| | | BilateralPurchase(MBPPL) | | 1.61 | 100.00 % | | |
| | | Exchange/ Other Peak Source | 1.62 | 0.00 | 0.00 % | | |
| | | Total | 3.79 | 1.61 | 100.00 % | | |
| | | The Bilateral Purchase from MBPPL is not an approved a MYT tariff order dated 30 March 2020 in Case No. 330 but the Commission has approved source in Case No 231 dated 23 January, 2021 due to lower variable cost. | | | | | |
| 8 | Power Purchase | Monthly power purch | | | - | | |
| | under Section 63 of Electricity Act, 2003 | Purchase rates are verified from the PPA signed by GEPL 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. | | | | | |
| 9 | Short Term Power Purchase | Short-term power submitted by GEPL. verified from the int | All the pow | er purchase qu | antum and rate are | | |

| | considered in the FAC calculation. |
|--|------------------------------------|

5. <u>Power Purchase Cost:</u>

- 5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of October 2020, November 2020 and December 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 October 2020, November 2020 and December 2020 is Rs. 0.80 Crore, Rs. 0.78 Crore and Rs 0.79 Crore respectively, which is significantly lower than the total approved Power Purchase cost of Rs. 1.81 Crore by the Commission for the month of October 2020, November 2020 and December 2020 respectively.
- 5.3 GMR Energy Trading Limited: GEPL has submitted that for optimization of cost it has not scheduled any power in the month of October 2020, November 2020 and December 2020 from GMRETL and has procured power at a lower variable cost from MBPPL. Since, GEPL has a PPA with GMRETL the fixed cost obligation has been honoured and Rs.0.37 Crore, Rs. 0.36 Crore and Rs. 0.37 Crore in the month of October 2020, November 2020 and December 2020 respectively has been paid. As no power was scheduled the variable cost is nil. The Commission has verified all the invoices.
- 5.4 Bilateral Purchase: The Commission notes than GEPL has procured power from MBPPL on short-term basis in the month of October 2020, November 2020 and December 2020. This source was not approved by the Commission in Case No. 330 of 2019 dated 30 March 2020 while determining MYT Tariff however in Case No 231 of 2020 dated 23 January, 2021, the Commission has approved the source of power purchase. The relevant extract of the Commission Order in Case No 231 of 2020 is as below:

"9.4 The Commission notes that due to COVID-19, demand of MBPPL has reduced to the tune of 4.5Mw to 6.4 MW. But as per medium term PPA, JPL is the source of power of 10MW and MBPPL is required to pay fixed costs as per terms and conditions of Medium term PPA which unnecessary burdens the consumers of MBPPL with fixed cost. **MBPPL for selling surplus power of 3.5 MW has entered into bilateral agreement with GEPL from October, 2020 to March 2021** and it is proposed to continue the above arrangement till June 2021, i.e., till the expiry of MBPPL's Medium-term PPAs.

9.5 The Commission notes that MBPPL in the past also had sold surplus power. The Commission verifies the viability of the bilateral agreement and found that this agreement ensures the variable cost of Rs. 2.65/Unit for GEPL against the variable cost of Rs. 2.83/Unit from GMRETL under medium term PPA. This will reduce the variable cost burden as well as STU charges reducing per unit cost even if the fixed cost is mandatory to pay under medium term agreement. Thus, there is expected saving of Rs. 0.80/kWh for

GEPL. Also, overall power purchase cost of MBPPL is expected to reduce by Rs. 0.50/kWh for MBPPL.

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. As far as KRCIPPL is concerned, it is proposing to meet its demand for the period of April to June 2021 through separate short-term contract, before combined power procurement can be started from 1 July 2021. The Commission allows the same."

- 5.5 GEPL has procured power from MBPPL at a variable cost per unit of Rs. 2.65 / kWh for the month of October 2020, November 2020 and December 2020 as against the approved cost of Rs. 2.65 / kWh. The Commission has verified the bills from the purchase
- 5.6 **Power Procurement from Exchange/Other Peak Sources**: GEPL has procured 0.01 MU for the month of October 2020 from GMREL Peak source and there was no purchase in the months of November 2020 and December 2020. GEPL has purchased power at Rs. 4.37 / kWh for the month of October 2020 which is higher than Rs. 4.28 / kWh approved by the Commission in the MYT Order. The Commission has verified the bills from the purchase.
- 5.7 **Renewable Sources:** The Commission has also approved Rs. 0.06 Crore each for October 2020, November 2020 and December 2020 for purchase of REC to meet Renewable Purchase Obligation. GEPL has not purchased any REC for the months of October 2020, November 2020 and December 2020. By avoiding purchase of REC, GEPL has reduced power purchase cost but created liability for future months.
- 5.8 **Imbalance Pool:** It is observed that GEPL has injected 0.02 MUs, 0.05 MUs and 0.05 MUs to the imbalance pool in the months of October 2020, November 2020 and December 2020 respectively. The said injection into the pool may be on account of either decrease in demand of consumers than that 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.
- 5.9 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.

- 5.10 The Commission has noted that GEPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.11 **Approved Cost**: The details of the overall cost approved and actual for the month of October 2020, November 2020 and December 2020 as per MYT Order is as shown in the Table 2 below:

| Source | | Power Purchas e Quantu m(MU) | Fixed Cost (Rs. Crore) | Fixed Cost (Rs./kW h) | Variab le Cost (Rs. Crore) | Variabl e Cost (Rs./k Wh) | Total Cost (Rs. Crore) | APPC (Rs./k Wh) |
|------------------------------|----------------------|--|---------------------------------|--------------------------------|-------------------------------------|------------------------------------|---------------------------------|-----------------------|
| | Approved | 2.17 | 0.45 | 2.07 | 0.61 | 2.82 | 1.06 | 4.89 |
| GMR | Actual (October) | - | 0.37 | - | - | - | 0.37 | - |
| Energy Trading Limited | Actual (November) | - | 0.36 | - | - | - | 0.36 | - |
| | Actual (December) | - | 0.37 | - | - | - | 0.37 | - |
| | Approved | | | | | | | |
| Bilateral | Actual (October) | 1.64 | - | - | - | 2.65 | 0.43 | 2.65 |
| Purchase (MBPPL) | Actual (November) | 1.59 | - | - | - | 2.65 | 0.42 | 2.65 |
| | Actual (December) | 1.61 | - | - | - | 2.65 | 0.43 | 2.65 |
| | Approved | 1.62 | I | - | 0.69 | 4.28 | 0.69 | 4.28 |
| Exchange/O | Actual (October) | 0.01 | - | - | 0.00 | 4.37 | 0.00 | 4.37 |
| ther Peak Source | Actual (November) | - | - | - | - | - | - | - |
| | Actual (December) | - | - | - | - | - | - | - |
| Solar & | Approved | - | - | - | 0.06 | - | 0.06 | - |

Table 2: Approved and Actual Power Purchase Cost for GEPL

| Source | | Power Purchas e Quantu m(MU) | Fixed Cost (Rs. Crore) | Fixed Cost (Rs./kW h) | Variab le Cost (Rs. Crore) | Variabl e Cost (Rs./k Wh) | Total Cost (Rs. Crore) | APPC (Rs./k Wh) |
|------------------|----------------------|--|---------------------------------|--------------------------------|-------------------------------------|------------------------------------|---------------------------------|-----------------------|
| Non-Solar REC | Actual (October) | - | - | - | - | - | - | - |
| | Actual (November) | - | - | - | - | - | - | - |
| | Actual (December) | - | - | - | - | - | - | - |
| | Approved | 3.79 | 0.45 | 1.19 | 1.36 | 3.60 | 1.81 | 4.79 |
| | Actual (October) | 1.64 | 0.37 | 2.23 | 0.44 | 2.66 | 0.80 | 4.89 |
| Total | Actual (November) | 1.59 | 0.36 | 2.23 | 0.42 | 2.65 | 0.78 | 4.88 |
| | Actual (December) | 1.61 | 0.37 | 2.27 | 0.43 | 2.65 | 0.79 | 4.92 |

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

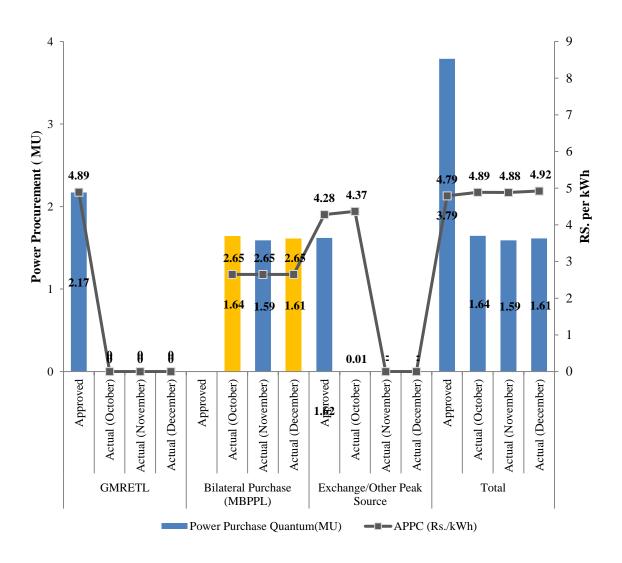


Figure 1: Variation in Power Procurement and Total per unit Cost

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

| Sr. | Source | Month | Approved | Actual Rate | Reason for rate variation |
|-----|------------|---------------|-----------|-----------------------------|-------------------------------------|
| No. | | | Rate (Rs. | (Rs. / kWh) | |
| | | | /kWh) | | |
| 1 | MBPPL | October 2020 | | 2.65 | The power has been purchased at the |
| | | November 2020 | 2.65 | 2.65 | approved rate. |
| | | December 2020 | | 2.65 | |
| 2 | Exchange/ | October 2020 | | 4.37 | Due to lower power purchase, the |
| | Other Peak | November 2020 | | 0.00 | other charges such as Transmission |
| | Source | December 2020 | 4.28 | 0.00 | charges, scheduling charges, fees |
| | | | 4.20 | | etc. have burdened to increase the |
| | | | | | actual unit rate as compared to |
| | | | | | approved rate. |
| 3 | Total | October 2020 | 4.79 | 4.89 | Due to above factors. |
| | | November 2020 | 7./7 | 4.88 | |
| | | December 2020 | | 4.92 | |

5.14 Considering the above, the Commission allows the average power purchase cost of Rs. 4.89 /kWh, Rs. 4.88 / kWh and Rs. 4.92 / kWh for the months of October 2020, November 2020 and December 2020 respectively 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 sales.

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 of October 2020, November 2020 and December 2020 as shown in Table 4 below. 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 4 shows the Z_{FAC} worked out by the Commission on account of difference in power purchase cost for the month of October 2020, November 2020 and December 2020.

| Sr. No. | Particulars | Units | October , 2020 | November , 2020 | December , 2020 |
|------------|--|--------------|-------------------|--------------------|--------------------|
| 1 | Average power purchase cost approved by the Commission | Rs./kWh | 4.79 | 4.79 | 4.79 |
| 2 | Actual average power purchase cost | Rs./kWh | 4.89 | 4.88 | 4.92 |
| 3 | Change in average power purchase cost (=2 -1) | Rs./kWh | 0.10 | 0.10 | 0.14 |
| 4 | Net Power Purchase | MU | 1.64 | 1.59 | 1.61 |
| 5 | Change in power purchase cost (=3 x 4/10) | Rs. Crore | 0.02 | 0.02 | 0.02 |

 Table 4: FAC on account of Power Purchase Cost

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

7.1 The adjustment factor for over recovery/under recovery (B) is as shown in Table 5 below.

| S. No. | Particulars | Units | October, 2020 | November, 2020 | December, 2020 |
|-----------|---|-----------|------------------|-------------------|-------------------|
| 1.1 | Incremental cost allowed to be recovered in Month n-4 | Rs. Crore | 0.13 | 0.14 | 0.14 |
| 1.2 | Incremental cost in Month n-4 actually recovered in month n-2 | Rs. Crore | 0.14 | 0.15 | 0.14 |
| 1.3 | (over-recovery)/under-recovery (=1.2 - 1.1) | Rs. Crore | (0.01) | (0.01) | 0.00 |
| 2 | Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month | Rs. Crore | 0.39 | 0.25 | 0.12 |

 Table 5: Adjustment for over recovery/under recovery

| 3 | Adjustment factor for over-recovery/under- recovery (1.3+2.0) | Rs. Crore | 0.38 | 0.24 | 0.12 | |
|---|--|-----------|------|------|------|--|
|---|--|-----------|------|------|------|--|

7.2 The incremental cost actually recovered as considered by GEPL during the months of October 2020, November 2020 and December 2020 has been verified from the bill report generated through SAP system submitted by GEPL and found to be in order.

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

- 8.1 Carrying/Holding Cost for under recovery/over recovery has been granted at the approved interest rate for the eligible amount. The following Table 6 shows the month wise interest rate and amount worked out as Carrying/Holding Cost for under/over recovery for the months of October 2020, November 2020 and December 2020.
- 8.2 The Commission has considered MCLR rate of October 2020, November 2020 and December 2020 month plus 150 basis points which works out to 8.50% for October 2020, November 2020 and December 2020. Accordingly, the Commission has calculated carrying cost.

| Particulars | Units | October, 2020 | November, 2020 | December, 2020 |
|--|-----------|------------------|-------------------|-------------------|
| Adjustment factor for over-recovery/under- recovery | Rs. Crore | 0.38 | 0.24 | 0.12 |
| Interest rate | % | 8.50% | 8.50% | 8.50% |
| Carrying cost for over-recovery/under- recovery | Rs. Crore | 0.0027 | 0.0017 | 0.0009 |

Table 6: Carrying/Holding Cost for over/under recovery

9. <u>Disallowance due to excess Distribution Loss</u>

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

| Sr. No. | Particulars | Units | Approved in Tariff Order | Actual October, 2020 | Actual November, 2020 | Actual December, 2020 |
|---------|--|--------------|--------------------------------|----------------------------|-----------------------------|-----------------------------|
| 1 | Net Energy input at Distribution Voltages | MU | 3.67 | 1.57 | 1.49 | 1.51 |
| 2 | Energy sales at Distribution voltages | MU | 3.62 | 1.55 | 1.46 | 1.48 |
| 3 | Distribution Loss (1 - 2) | MU | 0.04 | 0.03 | 0.04 | 0.04 |
| 4 | Distribution Loss as % (3/1) | % | 1.20% | 1.76% | 2.36% | 2.36% |
| 5 | Cumulative Distribution Loss | % | 1.20% | 2.24% | 2.26% | 2.27% |
| 6 | Excess Distribution Loss = [Cumulative Distribution Loss - Distribution loss approved] x Net Energy Input (1) | MU | - | 0.02 | 0.02 | 0.02 |
| 7 | Disallowance of FAC due to excess Distribution Loss | Rs. Crore | - | 0.004 | 0.003 | 0.002 |

Table 7: Disallowance of FAC due to excess Distribution Loss

9.3 As seen from the above Table 7, distribution loss for the months of October 2020, November 2020 and December 2020 is 1.76 %, 2.36 % and 2.36 % respectively, which higher than the MYT approved distribution loss of 1.20%.

10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of October 2020, November 2020 and December 2020 which is allowed to be recovered in the billing month September, October and November as shown in the Table 8 below.

| Sr. No. | Particulars | Units | October , 2020 | November , 2020 | December , 2020 |
|------------|---|-----------|-------------------|--------------------|--------------------|
| 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 | 0.016 | 0.015 | 0.022 |

| Table 8: Summary | of Allowable ZFAC |
|------------------|-------------------|
|------------------|-------------------|

| 1.2 | Carrying cost for over-recovery/under- recovery (C) | Rs. Crore | 0.003 | 0.002 | 0.001 |
|-----|--|--------------|-------|-------|-------|
| 1.3 | Adjustment factor for over-recovery/under- recovery (B) | Rs. Crore | 0.380 | 0.239 | 0.123 |
| 1.5 | $Z_{FAC} = F + C + B$ | Rs. Crore | 0.399 | 0.256 | 0.146 |
| 2 | Calculation of FAC Charge | | | | |
| 2.1 | Energy Sales within the License Area | MU | 1.547 | 1.458 | 1.477 |
| 2.2 | Excess Distribution Loss | MU | 0.016 | 0.016 | 0.016 |
| 2.3 | Z _{FAC} per kWh | Rs./kWh | 2.554 | 1.741 | 0.980 |
| 3 | Recovery of FAC | | | | |
| 3.1 | FAC disallowed corresponding to excess Distribution Loss [((2.1+2.2) x 2.3)/10] | Rs. Crore | 0.004 | 0.003 | 0.002 |
| 3.2 | Allowable FAC | Rs. Crore | 0.395 | 0.253 | 0.145 |
| 4 | Utilization of FAC Fund | | | | |
| 4.1 | Opening Balance of FAC Fund | Rs. Crore | - | - | - |
| 4.2 | Holding Cost on FAC Fund | Rs. Crore | - | - | - |
| 4.3 | Z_{FAC} for the month (Sr. No. 3.2) | Rs. Crore | 0.395 | 0.254 | 0.145 |
| 4.4 | Closing Balance of FAC Fund | Rs. Crore | - | - | - |
| 4.5 | Z _{FAC} leviable/refundable to consumer | Rs. Crore | 0.395 | 0.254 | 0.145 |
| 5 | Total FAC based on category wise and slab wise allowed to be recovered | Rs. Crore | 0.143 | 0.135 | 0.136 |
| 6 | Carried forward FAC for recovery during future period (3.1-3.2-4) | Rs. Crore | 0.252 | 0.119 | 0.008 |

- 10.2 It can be seen from the above Table 8 that standalone FAC for the months of October 2020, November 2020 and December 2020 is Rs. 0.40 Crore, Rs. 0.25 Crore and Rs. 0.14 Crore respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 2.55 / kWh, Rs. 1.74 / kWh and Rs. 0.98 / 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 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 months 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. 0.143 Crore, Rs. 0.135 Crore and 0.136 Crore for the months of October 2020, November 2020 and December 2020 respectively. Thus, FAC equivalent to 0.252 Crore (i.e. Rs. 0.395 Crore minus Rs. 0.143 Crore) for the month of October 2020 which is unrecovered is carry forwarded to November, 2020. For November, 2020, FAC equivalent to 0.119 Crore (i.e.

Rs. 0.254 Crore minus Rs. 0.135 Crore) for the month of November 2020 which is unrecovered is carry forwarded to December 2020. For December 2020, FAC equivalent to 0.008 Crore (i.e. Rs. 0.145 Crore minus Rs. 0.136 Crore) for the month of December 2020 has remained unrecovered. Accordingly, the Commission allows the recovery of Rs. 0.008 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: —

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

 $Z_{FAC \ Cat} = Z_{FAC}$ 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/subcategory/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 9 shows Z_{FAC} revenue for the month of October 2020, November 2020 and December 2020 to be levied on consumers of GEPL in the billing month of December 2020, January 2021 and February 2021.

Table 9: Category wise FAC Revenue for Billing Month of December 2020, January 2021 and
February 2021

| Sr. No | Consumer Category | Slabs | Z _{FAC} to be levied for the month (Rs. Crore) | | |
|--------|-------------------------------------|-----------|--|--------|--------|
| | | | Dec-20 | Jan-21 | Feb-21 |
| | HT Category | | | | |
| 1 | HT- I Industrial | all units | 0.12 | 0.11 | 0.11 |
| 2 | HT-II Commercial | all units | 0.01 | 0.01 | 0.01 |
| | LT Category | | | | |
| 3 | LT-I General Purpose | all units | | | |
| 4 | LT-II(A) Commercial (0-20 kW) | all units | 0.00 | 0.00 | 0.00 |
| 5 | LT-II (B) Commercial (above 20 kW) | all units | 0.00 | 0.00 | 0.00 |
| 6 | LT-III (A) Industrial (0-20 kW) | all units | 0.00 | 0.00 | 0.00 |
| 7 | LT-III (B) Industrial (above 20 kW) | all units | 0.01 | 0.01 | 0.01 |
| | Total | | 0.14 | 0.13 | 0.13 |