# महाराष्ट्र विद्युत नियामक आयोग

# **Maharashtra Electricity Regulatory Commission**

ef. No. MERC/FAC/2023-24/0570

Date: 02 November, 2023

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 2022, November 2022 and December 2022.

Reference: 1. GEPL's FAC submission for the month of October 2022, November 2022 and

December 2022 vide email dated 28 February, 2023.

Sir,

Upon vetting the FAC calculations for the months of October 2022, November 2022 and December 2022 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	November	December
	2022	2022	2022
Z <sub>FAC</sub> allowed for recovery (Rs. Crore)	0.157	0.136	0.126

The Commission allows the carry forward FAC of Rs. 3.13 Crore, Rs. 3.64 Crore, and Rs. 4.18 Crore for the months of October 2022, November 2022 and December 2022, respectively. Further, as directed by the Commission, GEPL shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and, also for information of all the stakeholders.

Yours faithfully,

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

Encl: Annexure A: Detailed Vetting Report for the period of October 2022 to December 2022.

Page 1 of 20

#### **ANNEXURE**

Detailed Vetting Report Date: 02 November, 2023

# POST-FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF OCTOBER 2022, NOVEMBER 2022 AND DECEMBER 2022

<u>Subject:</u> Post-facto approval of Fuel Adjustment Charges (FAC) submissions of GEPL for

the months of October 2022, November 2022 and December 2022.

Reference: 1. GEPL's FAC submission for the month of October 2022, November 2022 and

December 2022 vide email dated 28 February, 2023.

#### 1. FAC submission by GEPL:

1.1 GEPL has made FAC submissions for the months of October 2022, November 2022 and December 2022 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 2022, January 2023 and February 2023.

#### 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 The summary of the FAC Vetting Report approvals granted by the Commission till date is given below:
  - Prior approval of the FAC for the month of April, 2020 vide FAC Vetting Report dated 7 June, 2020.
  - Post-facto approval to the FAC for the month of May and June, 2020 vide FAC vetting Report dated 25 September, 2020.
  - Post-facto approval to the FAC for the months of July 2020, August 2020 and September 2020 vide FAC vetting Report dated 30 November, 2020



Page 2 of 20

- Post-facto approval to the FAC for the months of October 2020, November 2020 and December 2020 vide FAC vetting Report dated 16 March, 2021.
- Post-facto approval to the FAC for the month of January to March, 2021 vide FAC Vetting Report dated 18 June, 2021.
- Post-facto approval to the FAC for the month of April to June, 2021 vide FAC Vetting Report dated 11 October, 2021.
- Post-facto approval to the FAC for the month of July to September, 2021 vide FAC Vetting Report dated 30 December, 2021.
- Post-facto approval to the FAC for the months of October 2021, November 2021 and December 2021 vide FAC Vetting Report dated 28 June 2023.
- Post-facto approval to the FAC for the months of January 2022, February 2022 and March 2022 vide FAC Vetting Report dated 24 July, 2023.

- 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 28 February, 2023, GEPL has filed FAC submissions for the months of October 2022, November 2022 and December 2022 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 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
----------	--------	----------------	-----	--------	----	-----

	Approved by	Monthly	Actual Sales (MU)			
Consumer Category	the Commission (MU)	Approved (MU)	Oct-22	Nov-22	Dec-22	
	(I)	(II=I/12)	(III)	(IV)	(V)	
HT Category	Andrews Person					
HT-I Industrial	49.29	4.11	1.98	1.80	1.73	
HT-II Commercial	1.91	0.16	0.12	0.05	-	
LT Category						
LT-II (A) Commercial (0-20 kW)	1.31	0.11	0.04	0.03	0.03	
LT-II (B) Commercial (above 20 kW)	0.28	0.02	0.14	0.05	0.00	
LT-III (A) Industrial (0-20 kW)	0.12	0.01	0.03	0.03	0.03	
LT-III (B) Industrial (above 20 kW)	5.67	0.47	0.24	0.23	0.22	
LT-IV Electric Vehicle (EV) Charging Stations	a bowl has state	729G 3/8X	0.00	0.00	0.00	
Total	58.58	4.88	2.55	2.20	2.02	

3.3 It can be observed from above Table 1 that the actual sales during the months of October 2022, November 2022 and December 2022 is 2.55 MU, 2.20 MU and 2.02 MU, respectively, which is 47.74%, 55.00% and 58.53% lower than monthly approved energy sales of 4.88 MU for the FY 2022-23. The major variation was primarily observed in all categories except LT II B – Commercial (above 20 kW) and LT III A – Industry (0 - 20 kW). However, the major reduction was observed in the HT-I Industrial, LT-II (A) Commercial (below 20 kW) and LT-III (B) Industrial categories, which is due to the continuation of impact work for home in IT industry in GEPL SEZ area. Also, it can be observed that the sales in the month from October 2022 to December 2022 have been decreased due to seasonal variation in winter season.

#### 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 Approved Power Purchase sources:

- 4.2.1 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 was valid up to March, 2021.
- 4.2.2 Post that, the Commission in its Order dated 30 June, 2021 in Case No. 69 of 2021 has provided the approval of Power Purchase Agreement and Adoption of Tariff determined through transparent bidding process for a Short-Term procurement of power up to 14MW (RTC) for one year starting from 1 July, 2021 to 30 June, 2022 through combined power procurement. In the said Order, the quantum estimated for GEPL is up to 4.5 MW (Up to 2 MW RTC and up to 2.5 MW between 0800 and 2300 hours). The relevant extract is as given below:

Page 4 of 20

"Accordingly, the Commission approves PPA dated 27 May 2021 entered between KRC DISCOMs (Mindspace Business Parks Private Limited; Gigaplex Estate Private Limited; KRC Infrastructure and Projects Private Limited) and Kreate Energy (I) Pvt. Ltd. – Power Department of Sikkim."

However, GEPL has not purchased power from Kreate Energy (I) Pvt., as the PPA with Kreate Energy was valid till 30<sup>th</sup> June 2022.

- 4.2.3 Subsequently, KRC DISCOMs had filed a Petition before the Commission seeking approval for undertaking combined power purchase at Power Exchange linked rates for the period from July 2022, till alternative arrangements are in place. The Hon'ble Commission in its Order dated 15 September 2022 in Case No. 138 of 2022, has allowed KRC DISCOMs to procure the power under exchange linked contracts till March 2023.
- 4.2.4 In this regard the Commission in its analysis and rulings in the Order in Case No. 138 of 2022 had noted the following:
  - "11. Thus, failure of M/s Kreate Energy (I) Pvt. Ltd to supply power as per contract during the period of April to June 2022 and non-successful bidding process has resulted into KRC DISCOMs to depend on Power Exchanges for meeting its consumer demand. Further due to high demand, bids for all time blocks were not getting cleared on power exchanges and hence during that period, KRC DISCOMs had to depend on DG Set for maintaining continuity of power supply to its consumers. To avoid such situations, KRC DISCOMs entered into exchange linked bilateral contract with M/s GMR Energy Trading Ltd and has requested the Commission to allow such contract till it successfully selects supplier through bidding process.
  - 12. The Commission notes that exchange linked bilateral contract is undertaken outside the power market platform. Such contract does not strictly fall under Section 62 (tariff determined by the Commission as per Tariff Regulations) or Section 63 (tariff discovered through competitive bidding process) of the Electricity Act, 2003. The Commission has been considering such contracts for pass through in power purchase expenses as such contracts form very small quantum of total power purchase basket of Distribution Licensee and tariff is linked to the rates that are transparently discovered in power exchange, beside most of the time some discount is also offered by seller in such contracts. But in the present case, KRC DISCOMs have proposed to meet all its power purchase quantum through such exchange linked contracts. In the normal course, such arrangement is not advisable, and this would not have been allowed. But considering the efforts taken by KRC DISCOMs for procurement of power through competitive bidding, and the fact that during high demand period, bid quantum was not getting cleared on power exchange platform forcing them to supply power from DG set is neither economical nor it is viable for longer

periods, the Commission deems it fit to allow such exchange linked contracts till KRC DISCOMs successfully discovers tariff in due bidding process. The Commission also notes that KRC DISCOMs are procuring green power from GDAM/GTAM market segment on power exchanges. Such green power procurement is meeting part of its load requirement. Also, such exchange linked contracts and green power procurement from exchange is also helping KRC DISCOMs to maintain Grid Discipline by not overdrawing power from the Grid.

- 13. The Commission also notes that such exchange linked contracts entered by KRC DISCOM have charged premium (50 paise/unit) over the exchange price for certain period (7 days). KRC DISCOM have justified it as during that period its contracted supplier refused to supply the power and its bids on power exchanges were not getting cleared for all the time blocks, hence to maintain continuity in power supply, KRC DISCOM had to agree to such premium. In this regard, the Commission notes that KRC DISCOM has separately filed Petition in Case No. 162 of 2022 seeking compensation towards increased power purchase expenses on account of non-supply of power by its supplier, the Commission will decide on the issue of allowing such premium as passthrough during that proceeding.
- 14. Having allowed exchange linked contracts as above, the Commission notes that price being discovered on power exchange during recent past is much higher than average power procurement rate (Rs. 3.92 per unit) approved in MYT Orders of KRC DISCOMs. This will ultimately impact the consumer tariff through FAC mechanism or truing up process (if full expenses cannot be allowed due to FAC ceiling) in upcoming Mid Term Review process which will ultimately reduce the electricity tariff advantage vis-à-vis tariff applicable to parallel licensee in that area. Therefore, to remain competitive and protect interest of their consumers, KRC DISCOMS shall take extra efforts for finding cheaper and reliable source of power supply. Hence, the Commission allows such sole power procurement from exchange linked contracts only for FY 2022-23. KRC DISCOMs shall ensure that firm source of supply is contracted before March 2023."
- 4.2.5 In reply to the Commissions query, the KRC Discoms have replied that they have floated tenders for power procurement four time from April 2022 to June 2022, however they did not receive bid/participation from the market participants. Despite their best efforts, KRC discoms were left without any power procurement agreement.
- 4.2.6 Further, on behalf of GEPL, MBPPL has initiated short-term competitive bidding process 5th time on 9 August, 2022 and decided to combinedly procure 8 MW RTC Power and 4 MW Peak Power (08:00 23:00 Hrs for Weekdays, i.e., Monday to Friday and excluding Saturday and Sunday) for a period of one year from 1 November, 2022 to 31 October, 2023 for KRC Discoms (Mindspace Business Parks Private Limited; Gigaplex Estate Private Limited; KRC Infrastructure and Projects Private Limited).



- 4.2.7 The Commission has approved the PPAs signed with GMRETL and PTC at Average Rate of Rs. 6.35/kWh for RTC and Rs. 7.95/kWh for Peak Power, respectively in its order dated 28 October, 2022 in Case No. 177 of 2022. The quantum estimated for GEPL is up to 2.5 MW i.e., up to 1.5 MW RTC for the period 1 November, 2022 to 31 October, 2023 and up to 1 MW Peak Power for the period 1 November, 2022 to 28 February, 2023. The generator identified by GMRETL is Birla Carbon for RTC supply and peak power is being supplied by PTC through M/s NSL Sugars Ltd., which is a bagasse-based plant which offers Renewable Energy Power, which will be sufficient to meet the RPO requirement as well as green tariff requirement of KRC DISCOMs.
- 4.3 Accordingly, GEPL has purchased power from GMR Energy Trading Limited (GMRETL) on a bilateral basis from November 2022 at the rates of Rs. 6.26/kWh in the month of November 2022 and Rs. 6.16/kWh in the month of December 2022. Also, peak load purchases are made from PTC at the rate of Rs. 8.10/kWh in the month of November 2022 and December 2022, which are higher than the Power procurement cost of Rs. 3.92/kWh was approved by the Commission in Tariff Order in Case No. 330 of 2019 from the medium-term source and Rs. 4.28/kWh from the Short-Term sources.
- 4.4 Further, GEPL has procured RE power through IEX in the GDAM and GTAM during the months of October 2022, November 2022 and December 2022. GEPL purchased 0.40 MUs and 1.16 MUs of Solar and Non-Solar power in October 2022 at an average rate of Rs. 5.29/kWh and Rs. 5.28/kWh, respectively. Further, GEPL purchased 0.25 MUs and 0.78 MUs of Solar and Non-Solar Power in November 2022 at an average rate of Rs. 5.98/kWh. Similarly, GEPL purchased 0.09 MUs and 0.69 MUs of Solar and Non-Solar Power in December 2022 at an average rate of Rs. 6.49/kWh and Rs. 6.50/kWh, respectively.
- 4.5 The Commission notes that GEPL has purchased RE power through the power exchanges to meet the RPO obligations in the months of October 2022 to December 2022. The power purchase has been through the power exchanges where the prices are market driven and competitively discovered. While the Commission had allowed the KRC DISCOMs to procure RECs to meet the RPO obligations in the MYT order, the Commission in its Order in Case no. 231 of 2020 dated 23 January 2021 has also permitted the KRC DISCOMs to procure RE power before FY 2022-23, so that the benefit of RE purchase can be passed on to the consumers.
- 4.6 GEPL has also procured 1.14 MU, 4049 units, and 4212 units of power from Power Exchange at average rates of Rs. 4.64/kWh, Rs. 11.60/kWh and Rs. 11.16/kWh during the months of October 2022, November 2022 and December 2022, respectively. GEPL has fulfilled its total load requirement by procuring power from power exchanges under its various products GDAM/GTAM for green power requirements and TAM, DAM and RTM for the month of October 2022 only.
- 4.7 Summary of power purchase of GEPL is as under:

Sr. No.	Particular	Compliance				
1	Purchase from Approved Sources	The commission in its of 2022 has allowed I exchange linked contract In order dated 28 Octommission has approved RTC for period from 1 Notes peak for period from 1 Notes In line with the aforest GMRETL, PTC and through the second sec	KRC DISCON ts till FY 2022 tober, 2022 i ed for combin lovember, 202 lovember, 202 said order Gl	As to procuse 2-23. In Case No sed power process to 31 Octo 22 to 28 February Land Process Pro	. 177 of 2022 the ocurement of 8 MW ber, 2023 and 4 MW uary, 2023.	
2	Merit Order Dispatch	GEPL procure power generators to cater Bas respectively.				
3	Fuel Utilization Plan	Not applicable. All the s 63 of EA, 2003.	ources of pow	er procureme	ent fall under Section	
4	DSM Pool	GEPL has injected 0.04 October 2022, November the DSM pool.				
5	Sale of Surplus Power	There was no sale of Su December 2022.	rplus power in	n the months	of October 2022 to	
6	Power Purchase	Actual Power Purchase is 2022, November 2022; approved monthly power compared to actual sales.	and December purchase of	r 2022, resp	ectively, as against	
496	Source wise Power Purchase	Source Name	Approved (MU)	Actual Oct 2022 (MU)	Proportion of each Source in Actual Purchase (%)	
100	01.1 25	RE Solar	0.41 (Solar)	0.40	15%	
7	01.0	RE Non-Solar	0.59 (non- Solar)	1.16	44%	
	1 (0.13)	Other Medium-Term source/ Bilateral Purchase	3.72		0%	
		Exchange/ Other Peak Source	0.39	1.14	43%	
V.	THE PART OF PRESIDENCE OF SHEET	Source				
191	ed out amount or \$20055	DSM Pool Total	5.10	(0.04) <b>2.66</b>	-2%	



Sr. No.		Particular			Complia	Compliance				
la 8 to	equences sey, 2023 a sary, 2023, served no	ed power pro 2 to 34 Octob 2 to 28 Febra 1PL line pro	combin ber, 202 ber, 202 ber, 202	Source Name	Approved (MU)	Actual Nov 2022 (MU)	Proportion of each Source in Actual Purchase (%)			
ing.	nidaxe sev		g autoins	RE Solar	0.41 (Solar)	0.25	11%			
of de				RE Non-Solar	0.59 (non- Solar)	0.78	34%			
3552 10	one IIA to		woqlo	Other Medium-Term source/ Bilateral Purchase	3.72	1.07	47%			
monte.			O. LS MI Class Day	Exchange/ Other Peak Source (PTC)	0.39	0.33	14%			
				DSM Pool	- Table 1	(0.15)	-7%			
20,10	of October		ii tawes	Total	5.10	2.28	100%			
iles Ó n negn. a plea n	e ,yisvilosiy, a		ecombe	Source Name	Approved (MU)	Actual Dec 2022 (MU)	Proportion of each Source in Actual Purchase (%)			
nois	und			RE Solar	0.41 (Solar)	0.09	4%			
all some	Laurah			RE Non-Solar	0.59 (non- Solar)	0.69	33%			
			J3. (naid	Other Medium-Term source/ Bilateral Purchase	3.72	1.10	53%			
1 22	1		-man, (mile	Exchange/ Other Peak Source	0.39	0.33	16%			
				DSM Pool	-	(0.11)	-5%			
1 - 9			9.14	Total	5.10	2.10	100%			
65			98.	The Commission in its or of 2022 has allowed K exchange linked contract bidding process.	RC DISCOM	Is to procure	e the power under			
				In Order dated 28 Oct Commission has approve RTC for period from 1 N peak for period from 1 N	ed for combine ovember, 202 ovember, 202	ed power pro 2 to 31 Octob 2 to 28 Febru	curement of 8 MW er, 2023 and 4 MW ary, 2023.			
VL 10 1	1 10116	BECTRICITY RECO		# While the Commission RECs to meet the RPO			*			

Sr. No.	Particular	Compliance
	(310)	Case no. 231 of 2020 dated 23 January, 2021, the Commission has also permitted the KRC DISCOMs to procure RE power before FY 2022-23, so that the benefit of RE purchase can be passed on to the consumers.
8	Power Purchase under Section 63 of Electricity Act, 2003	Monthly power purchase invoices are submitted by GEPL. Power 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.

#### 5. Power Purchase Cost:

- 5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of October 2022, November 2022 and December 2022, 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 2022, November 2022 and December 2022 is Rs. 1.34 Crore, Rs. 1.49 Crore, and Rs. 1.41 Crore respectively, which is significantly lower than the total approved monthly Power Purchase cost of Rs. 1.91 Crore by the Commission. This is on account of lower power sales and corresponding lower procurement of power.
- 5.3 Medium Term Source: The Commission in its Order 28 October, 2022 in Case No. 177 of 2022 the Commission has approved for combined power procurement of 8 MW RTC for period from 1 November, 2022 to 31 October, 2023 and 4 MW peak for period from 1 November, 2022 to 28 February, 2023. GEPL procured 1.07 MUs and 1.10 MUs from GMRETL in the months of November 2022 and December 2022, respectively. Average rates of power purchase are Rs. 6.26/kWh in November 2022 and Rs. 6.16/kWh in December 2022. Also, peak load of 0.33 MU has been procured from November 2022 and December 2022 at the rate of Rs. 8.10. kWh.
- 5.4 Power Procurement from Exchange/Other Peak Sources: KRC DISCOMs procured power the Power exchange only for October 2022. GEPL has procured 1.14 MUs for the month of October 2022, to meet the peak demand from DAM / RTM / TAM products available on IEX platform, which contributed to 43% of the total power purchase during the months of October 2022, average rate of power purchase was high at Rs. 4.64/kWh in October 2022, because of non-availability of any medium-term contracted source. The higher cost of purchase from exchange reflects the trends observed in the power exchange in the month of June 2022.



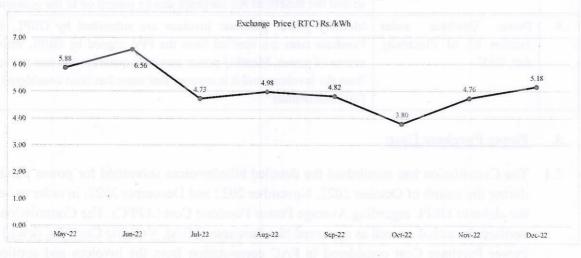


Figure 1: Exchange price trends (RTC)

- 5.5 Other charges: The scheduling and rescheduling charges for January 2022 to September 2022 amounting to Rs. 60,750/- have been considered separately in October 2022 along with Compensation Amount of Rs. 1,00,366/- received from GMR Energy as per provision of Schedule B Clause 7(4)(2)(1) of IEX Business Rules.
- 5.6 Renewable Sources: The Commission has approved Rs. 0.29 Crore each for October 2022, November 2022 and December 2022 for purchase of RE power to meet Renewable Purchase Obligation (RPO). GEPL has purchased RE Solar and RE Non-Solar during the period October 2022 to December 2022. The RE Solar purchase quantum was 0.40 MU, 0.25 MU and 0.09 MU at a power purchase rate of Rs. 5.29/kWh, Rs. 5.98/kWh and Rs. 6.49/kWh in the months of October 2022, November 2022 and December 2022, respectively. Similarly, the RE Non-Solar purchase quantum was 1.16 MU, 0.78 MU and 0.69 MU at a power purchase rate of Rs. 5.28/kWh, Rs. 5.98/kWh and Rs. 6.50/kWh in the months of October 2022, November 2022 and December 2022, respectively.
- 5.7 Accordingly, GEPL has sourced the RE Solar and RE Non-Solar Power from the exchange (GDAM) and RE Non-Solar Power from the exchange (GTAM) to meet the RPO obligation.
- 5.8 The Commission notes that the price of power is competitively discovered for power procured through power exchange and GEPL has provided all the necessary supporting documents for verification of the cost. Accordingly, the Commission approves inclusion of the power purchased from RE sources for recovery through the FAC mechanism.
- 5.9 **DSM Pool:** GEPL has injected 0.04 MU, 0.15 MU, and 0.11 MU in the month of October 2022, November 2022 and December 2022, respectively into the DSM Pool. The Commission has also considered the average price of the power in the DSM pool (Rs. 3.39/kWh, Rs. 4.18/kWh and Rs. 4.22/kWh) as submitted by the Licensee for FAC computation along with the supporting documentation.
- 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 No sale of surplus power was done during the period October 2022 to December 2022.
- 5.12 Approved Cost: The Commission has noted that GEPL procured nil quantum of power from its approved sources due to non-availability of any medium-term contracted source. The Medium-Term Power Purchase Agreement of GEPL with Kreate Energy (I) Pvt. Ltd. has expired on 30 June 2022.
- 5.13 The APPC during the period October 2022 to December 2022 is higher due to purchase of higher cost power both conventional and RE sources from power exchange to meet the higher demand in the months October 2022 to December 2022.
- 5.14 The details of the overall cost approved and actual for the months of October 2022, November 2022 and December 2022, as per MYT Order is as shown in the Table 2 below:

Table 2: Approved and Actual Power Purchase Cost for GEPL

Source	Particulars	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./ kWh)	Total Cost (Rs. Crore)	APPC (Rs./ kWh)
Base Load -	Approved	3.72	-	-	1.46	3.92	1.46	3.92
Medium Term	Actual (October 2022)		-	-	-	-	-	-
Sources -	Actual (November 2022)	1.07	-	-	0.67	6.26	0.67	6.26
Bilateral	Actual (December 2022)	1.10	- 11 - 11 I		0.68	6.16	0.68	6.16
Exchange/Ot	Approved	0.39	1		0.17	4.29	0.17	4.29
her Peak	Actual (October 2022)	1.14	-	-	0.53	4.64	0.53	4.64
Source	Actual (November 2022)	0.33	-	The	0.27	8.14	0.27	8.14
	Actual (December 2022)	0.33	( -	-	0.27	8.14	0.27	8.14
Solar & Non-Solar	Approved	0.41 (Solar)	aretu esta	-	0.12 (Solar)	2.90 (Solar)	0.12 (Solar)	2.90 (Solar)
RE/REC		0.59 (Non- Solar)		-	0.17 (Non- Solar)		0.17 (Non- Solar)	2.87 (Non- Solar)
	Actual (October 2022)	0.40 (RE Solar)		-	0.21 (RE Solar)	5.29 (RE Solar)	0.21 (RE Solar)	5.29 (RE Solar)
		1.16 (RE Non Solar)	1 1-		0.61 (RE Non Solar)	5.28 (RE Non Solar)	0.61 (RE Non Solar)	5.28 (RE Non Solar)
	Actual (November 2022)	0.25 (RE Solar)	-	-	0.15 (RE Solar)	5.98 (RE Solar)	0.15 (RE Solar)	5.98 (RE Solar)
	1994	0.78 (RE Non Solar)	() = min() = =	A	0.47 (RE Non Solar)	5.98 (RE Solar)	0.47 (RE Non Solar)	5.98 (RE Solar)
	Actual (December 2022)	0.09 (RE Solar)	nois sion	n for va	0.06 (RE Solar)	6.49 (RE Solar)	0.06 (RE Solar)	6.49 (RE Solar)
	and a second design of	0.69 (RE Non Solar)	lan ( engl	yel kdoj	0.45 (RE Non Solar)	6.50 (RE Non Solar)	0.45 (RE Non Solar)	6.50 (RE Non Solar)
DSM / Pool	Approved	-	-	-	-	-	-	-
1	Actual (October 2022)	(0.04)	-	-	(0.01)	3.39	(0.01)	3.39
	Actual (November 2022)	(0.15)	-	and a le	(0.06)	4.18	(0.06)	4.18
	Actual (December 2022)	(0.11)	-	2 .	(0.05)	4.22	(0.05)	4.22
SLDC Fee	Approved							
Lavigacia	Actual (October 2022)		0.00075	-	•	_	0.001	_



Source	Particulars	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./ kWh)	Total Cost (Rs. Crore)	APPC (Rs./ kWh)
	Actual (November 2022)	edensta(i•	0.00075	āmb0 5			0.001	-
	Actual (December 2022)	l mermani :	0.00075	in impo	Lo nice te	- Land	0.001	-
Total	Approved	5.10	a delete	destruction =	1.91	3.74	1.91	3.74
	Actual (October 2022)	2.66	0.00	-	1.34	5.03	1.34	5.03
	Actual (November 2022)	2.28	0.00	ija boš	1.49	6.55	1.50	6.55
	Actual (December 2022)	2.10	0.00	-	1.41	6.70	1.41	6.70

5.15 Source wise approved and actual quantum of power procured from some of the key sources and APPC is shown in the graph below:

12.00 12.00 9.00 9.00 Power Procurement (MU) 6.55 6.00 5.03 4.18 4.22 3.00 3.00 2 10 1.07 0.39 0.33 0.33 (0.11) 0.00 Approved Actual (December 2022) Actual (October 2022) Actual (December 2022) Approved Actual (December 2022) Actual (November 2022) Actual (December 2022) Actual (October 2022) Actual (October 2022) -3.00 (3.00) Base Load - Medium Term Exchange/Other Peak Source DSM Pool Power Purchase Quantum (MU) 

Figure 2: Variation in Power Procurement and Total per unit Cost

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

Table 3: Reasons for Rate Variation for various Sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	Base Load -	October 22	3.92	-	GEPL procured power from GMR
	Medium	November 22		6.26	Energy on bilateral basis because of
	Term	December 22	18500	6.16	non-availability of any approved contracted sources.
2	Solar &	October 22	2.90 (Solar	5.29 (RE Solar)	Market discovered rate: RE power was
	Non-Solar RE/REC		REC)	5.28 (RE Non Solar)	purchased during the period from October 2022 to December 2022 from

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
		November 22	2.87 (Non- Solar)	5.98 (RE Solar)	Power Exchange (GDAM and GTAM) instead of REC procurement approved
	[Line of ]	Land to other		5.98 (RE Solar)	in the MYT Order.
	avie is	December 22	all pile	6.49 (RE Solar)	Average power pu
	tin te	100		6.50 (RE Non Solar)	ng agarawa kuusA C
3	Exchange/	October 22	4.29	4.64	Market discovered rate; Short term
	Other Peak	November 22		8.14	power purchase from Power Exchange
	Source	December 22	III (614 x	8.14	through DAM, TAM and RTM. The Peak power purchase from PTC as approved by the Commission.  The rates are higher than the approved rates as the average power purchase rates in the power exchange were higher during the months of October 2022, November 2022 and December 2022.
4	DSM /	October 22	F 975397 3539	3.39	DSM rates are based on supporting
	Imbalance	November 22		4.18	documents provided by GEPL.
	Pool	December 22		4.22	
5	Total	October 22	3.74	5.03	Due to above factors.
		November 22		6.55	
	31.0	December 22	E AM -	6.70	Pil 1903 marijimertani   3.1

5.17 Considering the above, the Commission allows the average power purchase cost of Rs. 5.03/kWh, Rs. 6.55/kWh and Rs. 6.70/kWh for the months of October 2022, November 2022, and December 2022, respectively as shown in Table 3 above. The increase in power purchase cost is due to non-availability of power from any approved medium term contracted source and reliance on Power exchange and Bilateral transactions. The variation in power purchase cost is on the higher side in October 2022, November 2022 and December 2022, higher cost of RE, and conventional power purchase from exchange.

#### 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 2022, November 2022 and December 2022 as shown in Table 2 above. 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<sub>FAC</sub> is to be passed on to the consumers.
- 6.2 Thus, the following Table 4 shows the Z<sub>FAC</sub> worked out by the Commission on account of difference in power purchase cost for the month of October 2022, November 2022 and December 2022.

Page 14 of 20

Table 4: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	Oct-22	Nov-22	Dec-22
1	Average power purchase cost approved by the Commission	Rs./kWh	3.74	3.74	3.74
2	Actual average power purchase cost	Rs./kWh	5.03	6.55	6.70
3	Change in average power purchase cost (=2 - 1)	Rs./kWh	1.28	2.80	2.96
4	Net Power Purchase	MU	2.66	2.28	2.10
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.34	0.64	0.62

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

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

Table 5 Adjustment for over recovery/under recovery

S. No.	Particulars	Units	Oct-22	Nov-22	Dec-22
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.15	0.16	0.16
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.16	0.16	0.14
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	-0.01	-0.01	0.02
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	2.95	3.13	3.64
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	2.94	3.12	3.66

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

- 8.1 Carrying/Holding Cost for under recovery/over recovery has been granted at the approved interest rate for the eligible amount which works out to Rs. 0.02 Crore, Rs. 0.02 Crore, and Rs. 0.03 Crore for the months October 2022, November 2022 and December 2022, respectively.
- 8.2 Holding cost for the month of October 2022 to December 2022 is calculated by considering MCLR + 150 basis points which turns out to be 9.20%, 9.45%, and 9.55% for October 2022, November 2022 and December 2022, respectively.
- 8.3 The Commission has computed the holding cost towards the amount over recovered in the month of October 2022 to December 2022 which is as shown in the Table below:



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

Particulars	Units	Oct-22	Nov-22	Dec-22
Adjustment factor for over-recovery/under-recovery	Rs. Crore	2.95	3.12	3.66
Interest rate	%	9.20%	9.45%	9.55%
Carrying cost for over-recovery/under-recovery	Rs. Crore	. 0.02	0.02	0.03

#### 9. Holding Cost for FAC Fund

- 9.1 The Commission in its FAC approval for the month of March 2021 has decided to accumulate the FAC fund arising out of negative monthly FAC up to March 2023 along with the holding cost. Accordingly, as per said principle laid down by the Commission, GEPL has carried forward the negative FAC amount and accumulated the same in the FAC Fund along with holding cost.
- 9.2 On the similar principle, the commission has allowed GEPL to carry forward the negative FAC amount in excess of FAC fund approved in the MYT order and accumulate in the FAC fund up to March 2023 along with holding cost.
- 9.3 The Commission has determined positive FAC of Rs. 3.303 Crore, Rs. 3.793 Crore and Rs. 4.319 Crore for the months of October 2022, November 2022 and December 2022, respectively. Accordingly, the Commission has determined FAC fund of nil at the end of both the months October 2022 to December 2022 (after adjustment of positive/negative FAC for the respective months).
- 9.4 The Commission has considered SBI MCLR rate of the month plus 150 basis points which works out to 9.20%, 9.45%, and 9.55% for October 2022, November 2022 and December 2022, respectively. Accordingly, the Commission has calculated holding cost of nil amount for the months October 2022, November 2022 and December 2022, to be contributed to the FAC Pool.

### 10. <u>Disallowance due to excess Distribution Loss</u>

10.1 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."

10.2 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	Oct-22	Nov-22	Dec-22
Net Energy input at Distribution     Voltages		MU	4.94	2.57	2.20	2.03
2 Energy sales at Distribution voltages		MU	4.88	2.55	2.20	2.02
3	Distribution Loss (1 - 2)	MU	0.06	0.02	0.01	0.01
4	Distribution Loss as % (3/1)	%	1.20%	0.75%	0.30%	0.29%
5	5 Annual Sliding Distribution Loss 6 Excess Distribution Loss = [Annual Sliding Distribution Loss - Distribution loss approved] x Net			1.64%	1.46%	1.29%
6			nowths of	0.01	0.01	0.00

Table 7: Disallowance of FAC due to excess Distribution Loss

10.3 As seen from the above Table 7, the annual sliding distribution loss for the months of October 2022, November 2022 and December 2022 is 1.64%, 1.46%, and 1.29%, respectively, which is higher than the MYT approved distribution loss of 1.20%. The monthly distribution loss for the months of October 2022 to December 2022 are also higher than the MYT approved distribution loss of 1.20%.

Rs.

Cror

0.01

0.01

0.00

10.4 The Commission observed that GEPL has worked out disallowance of FAC due to excess Distribution Loss based on the annual sliding Distribution Loss corresponding to the standalone energy input at distribution voltage for the month of October 2022, November 2022 and December 2022. GEPL has considered Rs. 0.01 Crore, Rs. 0.01 Crore and Rs. 0.00 Crore disallowance of FAC due to excess distribution loss for the months of October 2022, November 2022 and December 2022, respectively, since the standalone FAC for all these months is positive. The Commission considers the same for disallowance of FAC due to excess distribution loss, for the purpose of approval.

#### 11. Summary of Allowable ZFAC

Energy Input (1)

Disallowance of FAC due to

excess Distribution Loss

11.1 The summary of the FAC amount as approved by the Commission for the month October 2022, November 2022 and December 2022 which is allowed to be recovered in the billing month December 2022, January 2023 and February 2023 as shown in the Table8 below.

Table 8: Summary of Allowable ZFAC

Sr. No.	Particulars	Units	Oct-22	Nov-22	Dec-22
1	Calculation of Z <sub>FAC</sub>				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.341	0.640	0.621
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.023	0.025	0.029
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	2.939	3.123	3.657
1.5	$Z_{FAC} = F + C + B$	Rs. Crore	3.302	3.788	4.307
2	Calculation of FAC Charge	5000 131.0			)
2.1	Energy Sales within the License Area	MU	2.551	2.197	2.024
2.2			0.011	0.006	0.002
2.3	ZFAC per kWh *	Rs./kWh	12.944	17.241	21.275
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.621	0.621	0.621
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.621	0.621	0.621
3	Recovery of FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [((2.1+2.2) x 2.3)/10]	Rs. Crore	0.015	0.010	0.004
3.2	Allowable FAC	Rs. Crore	3.287	3.778	4.303
4	Utilization of FAC Fund		O DAT E		
4.1	Opening Balance of FAC Fund	Rs. Crore		olyzkun <b>a-</b>	-
4.2	Holding Cost on FAC Fund	Rs. Crore	1 (1 p) - 1	ws3 :F0=	-
4.3	$Z_{FAC}$ for the month (Sr. No. 3.2)		3.287	3.778	4.303
4.4	Closing Balance of FAC Fund	Rs. Crore	NC	11 Lau (1-	-
4.5	Z <sub>FAC</sub> leviable/refundable to consumer	Rs. Crore	3.287	3.778	4.303
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.157	0.136	0.126
6			3.130	3.642	4.177

- 11.2 It can be seen from the above Table 8Table that the standalone FAC for the month of October 2022, November 2022 and December 2022 is Rs. 3.130 Crore, Rs. 3.642 Crore and Rs. 4.177 Crore respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 12.944/kWh, Rs. 17.241/kWh and Rs. 21.275/kWh for the months of October 2022, November 2022 and December 2022 respectively as shown above.
- 11.3 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:



- 11.4 The FAC in October 2022, November 2022 and December 2022 is positive and hence same is adjusted in the FAC fund being maintained by GEPL. As the FAC per unit computed in the month of October 2022, November 2022 and December 2022 as shown in Table above is higher than the 20% cap (Rs. 0.621/kWh) specified in MYT Regulations, 2019, hence, the restriction is triggered with regards to such ceiling.
- 11.5 Accordingly, considering the ceiling limit (Rs. 0.621/kWh) at 20%, the FAC recoverable will be lower. Accordingly, due to ceiling limit (Rs. 0.621/kWh), the FAC recoverable has been worked out as Rs. 0.157 Crore, Rs. 0.136 Crore and Rs. 0.126 Crore for the months of October 2022, November 2022 and December 2022, respectively. Thus, FAC equivalent Rs. 3.130 Crore (i.e., Rs. 3.287 Crore minus Rs. 0.157 Crore) for the month of October 2022, Rs. 3.642 Crore (i.e., Rs. 3.778 Crore minus Rs. 0.136 Crore) for the month of November 2022, and Rs. 4.177 Crore (i.e., Rs. 4.303 Crore minus Rs. 0.126 Crore) for the month of December 2022 has remained unrecovered which will be recovered as part of FAC of upcoming months.
- 11.6 The Commission has also approved a holding cost of Nil amount on the opening value of the FAC Fund available during the months of October 2022 to December 2022. The value of the opening FAC fund in October 2022 after considering the holding cost is Nil. The Commission has determined a positive FAC of Rs. 3.287 Crore, Rs. 3.778 Crore and Rs. 4.303 Crore for October 2022, November 2022 and December 2022, respectively. Accordingly, the positive FAC determined by the Commission for October 2022, November 2022 and December 2022 is recoverable from the consumers.

#### 12. Recovery from Consumers:

12.1 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<sub>FAC</sub> 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/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..."

- 12.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations.
- 12.3 The following Table9Error! Reference source not found. shows per unit Z<sub>FAC</sub> for the month of October 2022, November 2022 and December 2022 to be levied on consumers of GEPL in the billing month December 2022, January 2023 and February 2023.

Table 9: Category wise FAC Revenue for billing month of month December 2022, January 2023 and February 2023

Sr. No	Consumer Category	Slabs	ZFAC computed for the month of October 2022 (Rs. Crore)	ZFAC computed for the month of November 2022 (Rs. Crore)	ZFAC computed for the month of December 2022 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	0.119	0.108	0.104
2	HT-II Commercial	all units	0.009	0.004	_
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.003	0.003	0.003
4	LT-II (B) Commercial (above 20 kW)	all units	0.006	0.002	0.000
5	LT-III (A) Industrial (0-20 kW)	all units	0.003	0.002	0.003
6	LT-III (B) Industrial (above 20 kW)	all units	0.017	0.017	0.016
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	0.000	0.000	0.000
	Total FAC Recovery (Rs. Crore)		0.157	0.136	0.126



Freshbled tree the Average Billing Rute for the moneureal consumers shall be based and the categories who is each to such consumers, consequed in accordance with such methodology as may be stroubard by the Categories show

ACLIS - America Cost of Supply in Hisperic for Kills as approved for recovery by the Contact loss the Tartif Cretics

Possible detail that the monthly Zeng shall have exceed 20% of the variable equiponent of Tardfor wheth their scaling as may be aligniated by the Countiston from fine to these

Formited further than my under-prometry in the Zeec on account of such politing shall be coming formed and shall be recovered by the Distribution Licenses over such future people as may be distanced by the Commission..."

- 12.4 The Commission has worked out PAC per unit for each enceptry of consumer based on the formula provided in the above Seguiniland.
- 12.3. The following Tubic9Terror? Mathematic source and found, shows per unit Zeac for the matrix of October 2022, Non-emiliar 2022 and December 2022 to be levied on consumers of Office in the billing month December 2023, January 2023 and February 2023.

Fallic F: Category wise FAC Revenue for hilling mouth of month December 2022, January 2023, and Pubrance 2023.

