



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2023-24/0175

Date: 11 March, 2024

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 July 2023, August 2023, and September 2023.

Reference:

1. GEPL's FAC submission for the month of July 2023, August 2023, and September 2023 vide email dated 01 December 2023.
2. Datagaps raised vide email dated 23 December, 2023.
3. GEPL's response to datagaps vide email dated 23 January, 2024.

Sir,

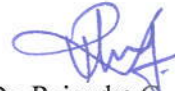
Upon vetting the FAC calculations for the months of July 2023, August 2023, and September 2023 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	July 2023	August 2023	September 2023
Z _{FAC} allowed for recovery (Rs. Crore)	0.176	0.185	0.173

The Commission allows the carry forward FAC of Rs. 0.578 Crores, Rs. 0.635 Crores, and Rs. 0.733 Crores for the months of July 2023, August 2023, and September 2023, 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 July 2023 to September 2023.

ANNEXURE

Detailed Vetting Report

Date: 11 March, 2024

**POST-FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JULY 2023,
AUGUST 2023, AND SEPTEMBER 2023**

Subject: Post-facto approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the months of July 2023, August 2023, and September 2023.

Reference:

1. GEPL's FAC submission for the month of July 2023, August 2023, and September 2023 vide email dated 01 December 2023.
2. Datagaps raised vide email dated 23 December, 2023.
3. GEPL's response to datagaps vide email dated 23 January, 2024.

1. FAC submission by GEPL:

1.1 GEPL has made FAC submissions for the months of July 2023, August 2023, and September 2023 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 2023, August 2023, and September 2023.

2. Background:

2.1 On 31 March, 2023 the Commission has issued MTR Order in respect of GEPL (Case No. 215 of 2022) for Truing up of Aggregate Revenue Requirement for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional Truing up for FY 2022-23 and approval of revised estimates of ARR and Tariff for FY 2023-24 and FY 2024-25. Revised Tariff has been made applicable from 1 April, 2023.

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
- 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.



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

- 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.
- Post-facto approval to the FAC for the months of April 2022, May 2022 and June 2022 vide FAC Vetting Report dated 02 November 2023.
- Post-facto approval to the FAC for the month of July 2022, August 2022 and September 2022 vide FAC Vetting Report dated 02 November 2023.
- Post-facto approval to the FAC for the month of October 2022, November 2022 and December 2022 vide FAC Vetting Report dated 02 November 2023.
- Post-facto approval to the FAC for the month of January 2023, February 2023 and March 2023 vide FAC Vetting Report dated 02 November 2023.
- Post-facto approval to the FAC for the month of April 2023, May 2023 and June 2023 vide FAC Vetting Report dated 11 January 2024.

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 01 December 2023, GEPL has filed FAC submissions for the months of July 2023, August 2023, and September 2023 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 MTR Order dated 31 March 2023 passed by the Commission in Case No. 215 of 2022, 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:

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (MU)		
			July-23	August - 23	September-23
	(I)	(II=I/12)	(III)	(IV)	(V)
HT Category					
HT-I Industrial	22.26	1.86	1.89	1.99	1.86
HT-II Commercial	0.75	0.06	-	-	-
LT Category					
LT-II (A) Commercial (0-20 kW)	0.39	0.03	0.04	0.04	0.04
LT-II (B) Commercial (above 20 kW)	0.42	0.04	0.01	0.01	0.01



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (MU)		
			July-23	August - 23	September-23
	(I)	(II=I/12)	(III)	(IV)	(V)
LT-III (A) Industrial (0-20 kW)	0.28	0.02	0.04	0.04	0.04
LT-III (B) Industrial (above 20 kW)	2.22	0.19	0.24	0.24	0.23
LT-IV Electric Vehicle (EV) Charging Stations			0.00	0.00	0.00
Total	26.32	2.19	2.21	2.31	2.16

3.3 It can be observed from above Table 1 that the actual sales during the months of July 2023, August 2023, and September 2023 is 2.21 MUs, 2.31 MUs and 2.16 MUs, respectively, which is **0.66%**, and **5.39%** higher, and **1.38%** lower, respectively than the monthly approved energy sales of **2.19 MUs** for the FY 2023-24. The major variation was primarily observed in all categories except HT II- Commercial (no sales) and LT II B – Commercial (above 20 KW).

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 The KRC DISCOMs have entered into a PPA with GMR Energy Trading Limited (GMRETL) for purchase of 8 MW base load power from the period from 1 November 2022 to 31 October 2023. This PPA has been duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. The DISCOM wise share of power in the PPA is as follows: (i) GEPL's - 1.5 MW; (ii) KRCIPPL – 1.5 MW; and (iii) MBPPL – 5 MW. The generator identified by GMRETL is Birla Carbon for RTC supply.

4.2.2 In its MTR Order dated 31 March 2023 in Case No. 215 of 2022, the Commission has approved the power procurement from GMRETL at an average rate of Rs. 6.35/kWh for RTC power for the period 1 Nov 2022 to 31 October 2023. However, the month-wise rate of power purchase from GMRETL as approved by the Commission in its Order in Case No. 177 of 2022 varies as follows: (i) July 2023 – Rs. 5.99/kWh; (ii) August 2023 – Rs. 6.20/kWh; (iii) September 2023 – Rs. 6.40/kWh.

4.3 Accordingly, GEPL has purchased RTC power from GMR Energy Trading Limited (GMRETL) at the rates of Rs. 6.05/kWh in the month of July 2023, Rs. 6.26/kWh in the month of August 2023 and Rs. 6.47/kWh in the month of September 2023. The rate also includes the open access scheduling charges over and above the approved power purchase rate.

4.4 Further, GEPL has procured RE power through IEX in the GDAM and GTAM during the months of July 2023, August 2023, and September 2023. GEPL purchased 0.21 MUs and 0.84 MUs of Solar



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

and Non-Solar power in July 2023 at an average rate of Rs. 4.56/kWh and Rs. 5.73/kWh, respectively. Further, GEPL purchased 0.03 MUs of Solar power and 1.29 MUs of non-Solar power in August 2023 at an average rate of Rs. 8.36/kWh and Rs. 6.55/kWh, respectively. Similarly, GEPL purchased 0.09 MUs and 1.26 MUs of Solar and non-Solar power in September 2023 at an average rate of Rs. 8.08/kWh and Rs. 6.77/kWh, respectively.

- 4.5 The Commission notes that GEPL has also purchased RE power through the power exchanges to meet the RPO obligations in the months of July 2023 to September 2023. The power purchase has been through the power exchanges where the prices are market driven and competitively discovered. The Commission in the MTR Order in Case no. 215 of 2022 has approved the RE procurement up to the RPO percentage stipulated in the Regulations for FY 2023-24 and FY 2024-25 and the tariff of RE sources is considered as Rs. 4.90 per unit which is weighted average rate of GDAM for the period of July to December 2022.
- 4.6 GEPL has procured 0.18 MUs, 0.02 MUs, and 0.02 MUs of power from Power Exchange at average rates of 5.32/kWh, 7.89/kWh and 11.30/kWh during the months of July 2023, August 2023, and September 2023, 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 conventional power apart from contracted power from GMRETL.
- 4.7 Summary of power purchase of GEPL is as under:

Sr. No.	Particular	Compliance								
1	Purchase from Approved Sources	Yes. In order dated 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. Further, I in the MTR Order dated 31 March, 2023, in Case No. 215 of 2022, the Commission has approved a combined power procurement of 8 MW RTC for the three KRC DISCOMs, effective until October 31, 2023. In line with the aforesaid order GEPL has procured power from GMRETL, MPL (wind power), and through various products of power exchange.								
2	Merit Order Dispatch	Yes. GEPL procures power on short term basis i.e from GMRETL (Generator – Birla Carbon) and bilateral mode of transaction (Wind generator). Further, GEPL met its peak power requirement through various product from power exchange which is in line with MOD principles.								
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.								
4	DSM Pool	GEPL has drawn 0.00 MUs, and 0.06 MUs and 0.02 MUs in the month of July, August, and September 2023 respectively.								
5	Sale of Surplus Power	There was no sale of surplus power in the months of July 2023 to September 2023.								
6	Power Purchase	Actual Power Purchase is 2.32 MUs, 2.50 MUs, and 2.33 MUs for July 2023, August 2023, and September 2023, respectively, as against approved monthly power purchase of 2.29 MUs due to higher actual sales as compared to approved sales.								
7	Source wise Power Purchase	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Monthly approved (MU)</th> <th>Actual Jul 2023 (MU)</th> <th>Proportion of each Source in Actual Purchase (%)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Source Name	Monthly approved (MU)	Actual Jul 2023 (MU)	Proportion of each Source in Actual Purchase (%)				
Source Name	Monthly approved (MU)	Actual Jul 2023 (MU)	Proportion of each Source in Actual Purchase (%)							



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Sr. No.	Particular	Compliance			
		RE Solar	0.24	0.21	9%
		RE Non-Solar	0.26	0.84	36%
		Short-term sources (GMR STPP)	0.46	1.09	47%
		Exchange/ Other Peak Source/New Source	1.33	0.18	8%
		DSM Pool	0.00	0.00	0%
		Total	2.29	2.32	100%
		Source Name	Monthly approved (MU)	Actual August 2023 (MU)	Proportion of each Source in Actual Purchase (%)
		RE Solar	0.24	0.03	1%
		RE Non-Solar	0.26	1.29	51%
		Short-term sources (GMR STPP)	0.46	1.11	44%
		Exchange/ Other Peak Source/New Source	1.33	0.02	1%
		DSM Pool	0.00	0.06	3%
		Total	2.29	2.50	100%
		Source Name	Monthly approved (MU)	Actual September 2023 (MU)	Proportion of each Source in Actual Purchase (%)
		RE Solar	0.24	0.09	4%
		RE Non-Solar	0.26	1.26	54%
		Short-term sources (GMR STPP)	0.46	0.94	40%
		Exchange/ Other Peak Source/New Source	1.33	0.02	1%
		DSM Pool	0.00	0.02	1%
		Total	2.29	2.33	100%
		<p>The PPA for combined power procurement of 8 MW RTC for the three KRC DISCOMs for the period up to 31 October, 2023 was duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. Subsequently, in the MTR Order dated March 31, 2023, in Case No. 215 of 2022, the Commission has approved the power procurement through this source until 31 October 2023. The share of GEPL in this contract is 1.5 MW. RE procurement is approved at a rate of Rs. 4.90/kWh which is weighted average rate of GDAM for the period of July to December 2022.</p>			
8	Power Purchase under Section 63 of Electricity Act, 2003	<p>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.</p>			

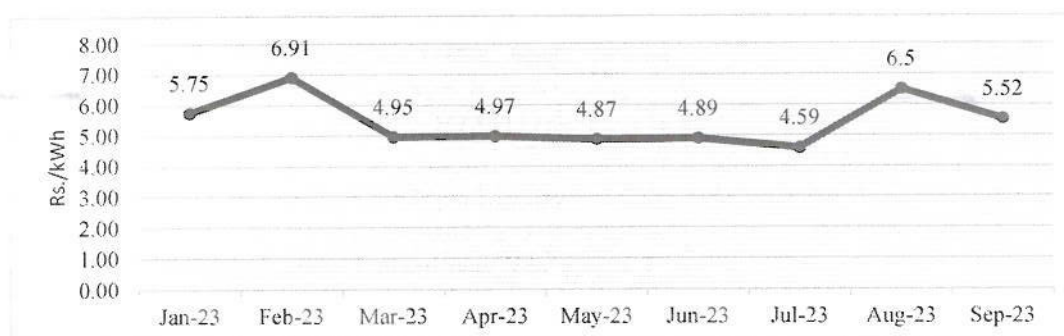


Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

5. Power Purchase Cost:

- 5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of July 2023, August 2023, and September 2023, 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 MTR Order respectively.
- 5.2 The Power Purchase cost incurred in July 2023, August 2023, and September 2023 is **Rs. 1.33 Crores, Rs. 1.60 Crores, and Rs. 1.56 Crores** respectively, which is significantly higher than the total approved monthly Power Purchase cost of **Rs. 1.26 Crores** by the Commission. The power purchase cost is higher than approved cost on account of higher power sales and corresponding higher procurement of power.
- 5.3 **Short term sources:** The KRC DISCOMs have entered a PPA with GMR Energy Trading Limited (GMRETL) for purchase of 8 MW base load power from the period from 1 November 2022 to 31 October 2023. This PPA has been duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. Subsequently, the Commission in MTR Order dated 31 March 2023 in Case no. 215 of 2022 has approved the power procurement from this source until 31 October 2023. GEPL procured 1.09 MUs, 1.11 MUs and 0.94 MUs of conventional power from GMRETL in the months of July 2023, August 2023, and September 2023, respectively. Average rates of power purchase are Rs. 6.05/kWh in July 2023, Rs. 6.26/kWh in August 2023, and Rs. 6.47/kWh in September 2023.
- 5.4 **Power Procurement from Exchange/Other Peak Sources:** KRC DISCOMs procured power from the Power Exchange for July to September 2023. GEPL has procured 0.18 MUs, 0.02 MUs, and 0.02 MUs of power from Power Exchange at average rates of Rs. 5.32/kWh, Rs. 7.89/kWh and Rs. 11.30/kWh during the months of July 2023, August 2023, and September 2023, respectively. Though the actual cost of power purchase through exchange is higher in July 2023, August 2023, and September 2023, the quantum procured is miniscule at 0.18 MUs, 0.02 MUs, and 0.02 MUs. The trends observed in the power exchange in the respective months as shown in the below figure.

Figure 1: Exchange price trends (RTC)



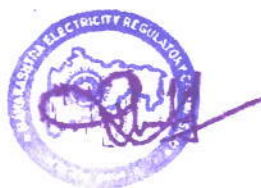
- 5.5 **Renewable Sources:** The Commission has approved Rs. 0.25 Crore each for July 2023, August 2023, and September 2023 for purchase of RE power to meet Renewable Purchase Obligation (RPO). GEPL has purchased RE Solar and RE Non-Solar during the period July 2023 to August 2023. The RE Solar purchase quantum was 0.21 MUs, 0.03 MUs and 0.09 MUs at a power purchase rate of Rs. 4.56/kWh, Rs. 8.36/kWh and Rs. 8.08/kWh in the months of April 2023, May 2023, and



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

June 2023, respectively. Similarly, the RE Non-Solar purchase quantum was 0.84 MUs, 1.29 MUs, and 1.26 MUs at a power purchase rate of Rs. 5.73/kWh, Rs. 6.55/kWh, and Rs. 6.77/kWh in the months of July 2023, August 2023, and September 2023, respectively.

- 5.6 GEPL has sourced RE non-Solar power through the bilateral mode of transaction (wind generator), the RE Solar, and RE non-Solar power from the exchange (GDAM and GTAM), to meet the RPO obligation.
- 5.7 In the reply to datagaps regarding unavailability of invoices pertaining to RE power procurement from MPL in the FAC proposal, GEPL submitted that it has not received invoices from the MPL for the month of August 2023 and September 2023. GEPL has considered wind generator calculation on the provisional basis based on the Renewable Energy (RE) replacement schedule derived from data provided by the Maharashtra State Load Dispatch Centre (MSLDC). Further, GEPL submitted that the actual invoices pertaining to August 2023 and September 2023 were received in the month of November 23 and the same will be submitted with FAC calculation for the month of November 2023. Any credit/ debit adjustments against the provisional accounting shall be duly taken into the FAC computation of November 2023.
- 5.8 The Commission notes that the price of power is competitively discovered for the power sourced from the 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 drawn 0.00 MUs, 0.06 MUs, and 0.02 MUs in the months of July 2023, August 2023, and September 2023 respectively from the DSM pool. The Commission has also considered the average price of the power in the DSM pool [Rs. (42.50)/kWh, Rs. 4.60/kWh and Rs.5.21/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 July 2023 to September 2023.
- 5.12 **Approved Cost:** The Commission has noted that GEPL procured 1.09 MUs, 1.11 MUs, and 0.94 MUs in July 2023, August 2023, and September 2023, respectively, from short term source (GMRETL) approved in the MTR Order. However, it does not have any approved medium-term contracted source.
- 5.13 The APPC during the period July 2023 to September 2023 is higher due to purchase of higher cost power both conventional (contracted as well as power exchange) and RE sources (power exchange).
- 5.14 The details of the overall cost approved and actual for the months of July 2023, August 2023, and September 2023, as per MTR Order is as shown in the Table 2 below:



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Table 2: Approved and Actual Power Purchase Cost for GEPL

Source	Month	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)
Short term sources (GMR STPP)	Approved	0.46	-	-	0.29	6.34	0.29	6.34
	Actual (July 2023)	1.09	-	-	0.66	6.05	0.66	6.05
	Actual (Aug 2023)	1.11	-	-	0.69	6.26	0.69	6.26
	Actual (Sep 2023)	0.94	-	-	0.61	6.47	0.61	6.47
Exchange/Other Peak Source/ New Source	Approved	1.33	-	-	0.72	5.40	0.72	5.40
	Actual (July 2023)	0.18	-	-	0.10	5.32	0.10	5.32
	Actual (Aug 2023)	0.02	-	-	0.02	7.89	0.02	7.89
	Actual (Sep 2023)	0.02	-	-	0.02	11.30	0.02	11.30
Solar & Non-Solar RE/REC	Approved	0.24 (RE Solar)	-	-	0.12 (RE Solar)	4.90 (RE Solar)	0.12 (RE Solar)	4.90 (RE Solar)
		0.26 (RE Non-Solar)	-	-	0.13 (RE Non-Solar)	4.90 (RE Non-Solar)	0.13 (RE Non-Solar)	4.90 (RE Non-Solar)
	Actual (July 2023)	0.21 (RE Solar)	-	-	0.10 (RE Solar)	4.56 (RE Solar)	0.10 (RE Solar)	4.56 (RE Solar)
		0.84 (RE Non Solar)	-	-	0.48 (RE Non Solar)	5.73 (RE Non Solar)	0.48 (RE Non Solar)	5.73 (RE Non Solar)
	Actual (Aug 2023)	0.03 (RE Solar)	-	-	0.02 (RE Solar)	8.36 (RE Solar)	0.02 (RE Solar)	8.36 (RE Solar)
		1.29 (RE Non Solar)	-	-	0.84 (RE Non Solar)	6.55 (RE Non Solar)	0.84 (RE Non Solar)	6.55 (RE Non Solar)
	Actual (Sep 2023)	0.09 (RE Solar)	-	-	0.07 (RE Solar)	8.08 (RE Solar)	0.04 (RE Solar)	8.08 (RE Solar)
		1.26 (RE Non Solar)	-	-	0.85 (RE Non Solar)	6.77 (RE Non Solar)	0.85 (RE Non Solar)	6.77 (RE Non Solar)
DSM / Pool	Approved	-	-	-	-	-	-	-
	Actual (July 2023)	0.00	-	-	(0.00)	(42.50)	(0.00)	(42.50)
	Actual (Aug 2023)	0.06	-	-	0.03	4.60	0.03	4.60
	Actual (Sep 2023)	0.02	-	-	0.01	5.21	0.01	5.21
SLDC Fee	Approved	-	-	-	-	-	-	-
	Actual (July 2023)	-	0.00	-	-	-	0.00	-
	Actual (Aug 2023)	-	0.00	-	-	-	0.00	-
	Actual (Sep 2023)	-	0.00	-	-	-	0.00	-
Total	Approved	2.29	-	-	1.26	5.48	1.26	5.48



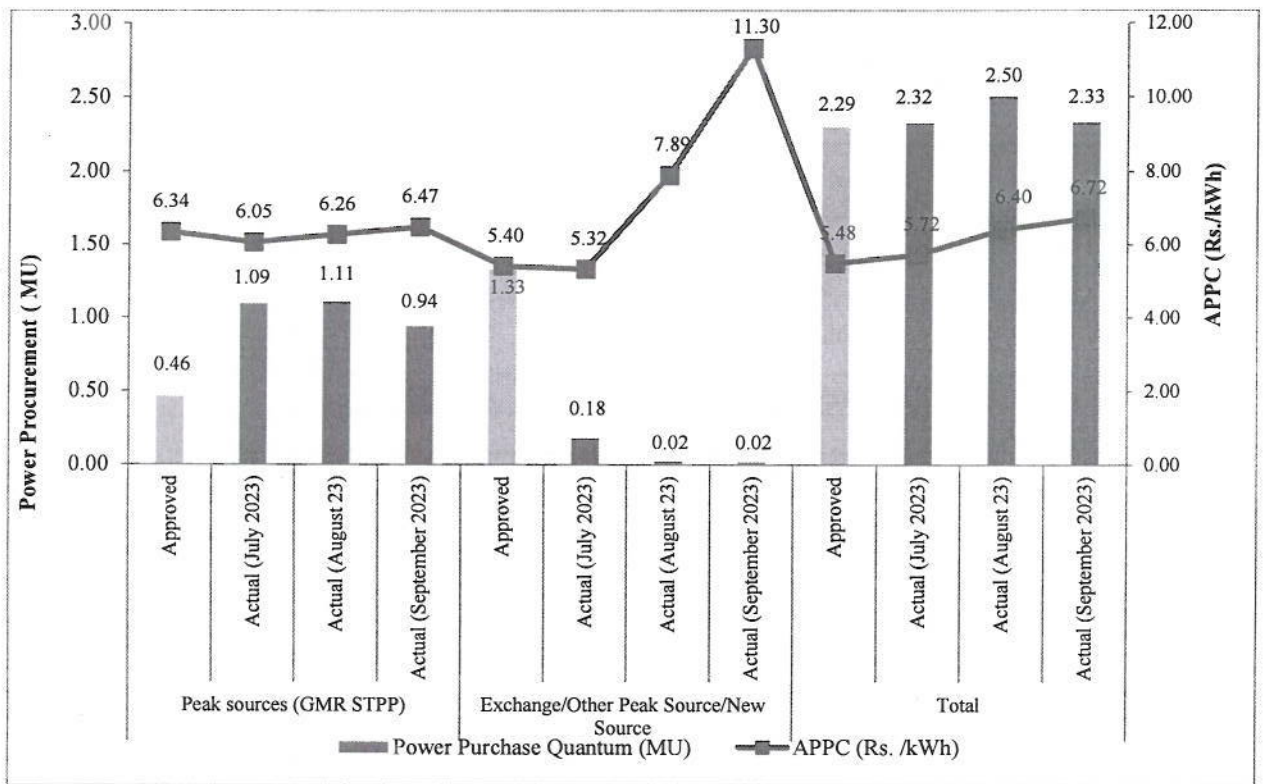
Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Source	Month	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 (July 2023)	2.32	0.00	-	1.33	5.72	1.33	5.72
	Actual (Aug 2023)	2.50	0.00	-	1.60	6.40	1.60	6.40
	Actual (Sep 2023)	2.33	0.00	-	1.56	6.72	1.57	6.72

*KRC has to pay fixed short term open access charges irrespective of quantum of power purchase and hence per unit rate is higher

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:

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	Short-term sources (GMR STPP)	July 2023	6.34	6.05	GEPL procured power from GMRETL based on the PPA which was duly approved by the Commission vide its Order dated 28
		August 2023		6.26	



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
		September 2023		6.47	October 2022 in Case No. 177 of 2022 and considered as part of the power sources in MTR Order in Case No. 215 of 2022.
2	Solar (S) & Non-Solar (NS) RE/REC	July 2023	4.90 (Solar) 4.90 (Non-Solar)	4.56	Market discovered rate: RE power was purchased during the period from July 2023 to September 2023 from Power Exchange (GDAM, and GTAM). RE power was also procured from Manikaran Power Limited. However, due to unavailability of invoices, the quantum and cost are considered on provisional basis. The differential cost will be considered in the FAC computation in the month of receipt of such invoices.
				5.73	
		August 2023		8.36	
				6.55	
		September 2023		6.77	
3	Exchange / Other Peak Source / New Source	July 2023	5.40	5.32	In addition to the contracted power, the peak power requirement was met through procurement of power from the various products of Power Exchange. The rates are higher than the approved rates, however, they are competitively discovered in the power exchange
		August 2023		7.89	
		September 2023		11.30	
4	DSM Imbalance Pool	July 2023	-	(42.50)	DSM rates are based on supporting documents provided by GEPL.
		August 2023		4.60	
		September 2023		5.21	
6	Total	July 2023	5.48	5.72	Due to above factors
		August 2023		6.40	
		September 2023		6.72	

5.17 Considering the above, the Commission allows the average power purchase cost of Rs. 5.72/kWh, Rs. 6.40/kWh and Rs. 6.72/kWh for the months of July 2023, August 2023, and September 2023, respectively as shown in Table 3 above. The variation in power purchase cost is on the higher side in July 2023, August 2023, and September 2023 due to 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 July 2023, August 2023, and September 2023 as shown in Table 2 above. The same has been compared with the average power purchase cost approved by the Commission in MTR Order dated 31 March 2023 in Case no. 215 of 2022 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 July 2023, August 2023, and September 2023.



Table 4: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-23
1	Average power purchase cost approved by the Commission	Rs. /kWh	5.48	5.48	5.48
2	Actual average power purchase cost	Rs. /kWh	5.72	6.40	6.72
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.24	0.92	1.24
4	Net Power Purchase	MU	2.32	2.50	2.33
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.06	0.23	0.29

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	Jul-23	Aug-23	Sep-23
1.1	Incremental cost allowed to be recovered in month n-4	Rs. Crore	0.20	0.20	0.18
1.2	Incremental cost in month n-4 actually recovered in month n-2	Rs. Crore	0.21	0.19	0.20
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.01)	0.00	(0.02)
2	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.70	0.58	0.63
3	Adjustment factor for over-recovery/under-recovery (=1.3+2.0)	Rs. Crore	0.69	0.58	0.61

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. 0.01 Crores, Rs. 0.00 Crores, and 0.01 Crores** for the months of July 2023, August 2023, and September 2023, respectively.

8.2 The Commission has considered one-year SBI MCLR rate of the month plus 150 basis points which works out to be **10.02%** for July 2023, **10.05%** for August 2023, and **10.05%** for September 2023, respectively.

8.3 The Commission has computed the holding cost towards the amount over recovered in the month of July 2023 to September 2023 which is as shown in the **Error! Reference source not found.** below:

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

Particulars	Units	Jul-23	Aug-23	Sep-23
Adjustment factor for over-recovery/under-recovery	Rs. Crore	0.69	0.58	0.61
Interest rate	%	10.02%	10.05%	10.05%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.01	0.00	0.01



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

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. The Commission decided to continue with the same principle for the FY 2023-24 and FY 2024-25 as well as per the decision outlined in the MTR Order in Case No. 215 of 2022. Accordingly, as per said principle laid down by the Commission, GEPL will carry forward the negative FAC amount and accumulate the same in the FAC Fund along with holding cost, as applicable.
- 9.2 The Commission has determined positive FAC of 0.753 Crores, Rs. 0.817 Crores and Rs. 0.904 for the months of July 2023, August 2023, and September 2023, respectively. There was no FAC fund available at the beginning of July 2023. Further, the Commission has determined positive FAC for the months of July 2023, August 2023 and September, 2023. Accordingly, the FAC fund of nil amount has been approved at the end of each the month from July 2023 to September 2023.
- 9.3 The Commission has considered the one-year MCLR rate declared by the SBI from time to time plus 150 basis points which works out to 10.02% for July 2023, 10.05% for August 2023, and 10.05% for September 2023, respectively. Considering that the FAC fund approved by the Commission is nil, the Commission has calculated nil holding cost for the months July 2023, August 2023, and September 2023, to be contributed to the FAC Pool.

10. Disallowance due to excess Distribution Loss:

- 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:

Table 7: Disallowance of FAC due to excess Distribution Loss:

Sr. No.	Particulars	Units	Approved in Tariff Order	Jul-23	Aug-23	Sep-23
1	Net Energy input at Distribution Voltages	MU	2.22	2.24	2.34	2.19
2	Energy sales at Distribution voltages	MU	-	2.21	2.31	2.16



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Sr. No.	Particulars	Units	Approved in Tariff Order	Jul-23	Aug-23	Sep-23
3	Distribution Loss (1 - 2)	MU	0.88	0.03	0.03	0.03
4	Distribution Loss as % (3/1)	%	1.20%	1.54%	1.38%	1.16%
5	Annual Sliding Distribution Loss	%		1.04%	1.05%	1.15%
6	Excess Distribution Loss = [Annual Sliding Distribution Loss - Distribution loss approved] x Net Energy Input (1)	MU	-	0.015	0.014	0.012
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	-	-	-

10.3 As seen from the above Table 7, the annual sliding distribution loss for the months of July 2023, August 2023, and September 2023 is 1.04%, 1.05%, and 1.15%, respectively, which is lower than the distribution loss of 1.20% approved in the MTR Order. The monthly distribution loss for the months of July 2023 and August 2023 is higher than the MTR approved distribution loss of 1.20%, respectively. The monthly distribution loss for the month of September 2023 is lower than the distribution loss of 1.20% approved in the MTR Order.

10.4 The Commission observed that GEPL has worked out the 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 July 2023, August 2023, and September 2023. Though the standalone FAC for all these months is positive, GEPL has considered nil amount of disallowance of FAC due to excess distribution loss for the months of July 2023 to September 2023 since the month wise sliding losses are lower than the approved distribution loss. The Commission considers the same for disallowance of FAC due to excess distribution loss, for the purpose of approval.

11. Summary of Allowable Z_{FAC} :

11.1 The summary of the FAC amount as approved by the Commission for the month July 2023, August 2023, and September 2023 which is allowed to be recovered in the billing month September 2023, October 2023 and November 2023 is shown in the Table 8 below.

Table 8: Summary of Allowable Z_{FAC}

Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-23
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	0.057	0.232	0.289
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.006	0.005	0.005
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.692	0.583	0.611
1.5	$Z_{FAC} = F+C+B$	Rs. Crore	0.754	0.819	0.906
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	2.208	2.312	2.163



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-23
2.2	Excess Distribution Loss	MU	-	-	-
2.3	Z _{FAC} per kWh *	Rs./kWh	3.416	3.543	4.188
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.893	0.893	0.893
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.893	0.893	0.893
3	Recovery of FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss $[(2.1+2.2) \times 2.3/10]$	Rs. Crore	-	-	-
3.2	Allowable FAC	Rs. Crore	0.754	0.819	0.906
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	0.754	0.819	0.906
4.4	Closing Balance of FAC Fund	Rs. Crore	-	-	-
4.5	Z _{FAC} leviable / refundable to consumer	Rs. Crore	0.754	0.819	0.906
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.176	0.185	0.173
6	Carried forward FAC for recovery during future period (3.1-3.2-4)	Rs. Crore	0.578	0.635	0.733

11.2 It can be seen from the above Table 8 **Error! Reference source not found.** that the standalone FAC for the month of July 2023, August 2023 and September 2023 is Rs. 0.754 Crores, Rs. 0.819 Crores, and Rs. 0.906 Crores respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 3.416 /kWh, Rs. 3.543 /kWh and Rs. 4.188 /kWh for the months of July 2023, August 2023, and September 2023 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 July 2023, August 2023, and September 2023 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 July 2023, August 2023, and September 2023 as shown in Table 8 above is higher than the 20% cap (Rs. 0.893/kWh) specified in MYT Regulations, 2019, hence, the restriction is triggered with regards to such ceiling.

11.5 Accordingly, considering the ceiling limit (Rs. 0.893/kWh) at 20%, the FAC recoverable will be lower. Accordingly, due to ceiling limit (Rs. 0.893/kWh), the FAC recoverable has been worked out as Rs. 0.176 Crores, Rs. 0.185 Crores and Rs. 0.173 Crores for the months of July 2023, August 2023, and September 2023, respectively.



- 11.6 Thus, considering the ceiling limit of 20% of variable component of tariff and the matter discussed in the preceding paragraph, FAC equivalent Rs. 0.578 Crores (i.e., Rs. 0.754 Crores minus Rs. 0.176 Crores) for the month of July 2023, Rs. 0.635 Crores (i.e., Rs. 0.819 Crores minus Rs. 0.185 Crores) for the month of August 2023, and Rs. 0.733 Crores (i.e., Rs. 0.906 Crores minus Rs. 0.173 Crores) for the month of September 2023 has remained unrecovered which will be recovered as part of FAC of upcoming months.
- 11.7 There was nil FAC fund available at the beginning of July 2023 and no FAC fund was created during the period from July 2023 to September 2023, accordingly, the Commission has also approved nil holding cost on the FAC Fund during the months of July 2023 to September 2023. The Commission has determined a positive FAC of Rs. 0.754 Crores, Rs. 0.819 Crores and Rs. 0.906 Crores for the months of July 2023, August 2023, and September 2023, respectively. Accordingly, the positive FAC determined by the Commission for July 2023, August 2023 and September 2023 is recoverable from the consumers. The recovery during each month will be subject to the cap of 20% of variable component of tariff as discussed earlier.

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_{FAC} per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

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

Where:

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

k = Average Billing Rate / ACOS ;

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

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

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

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

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



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

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 Table 9 shows per unit Z_{FAC} for the month of July 2023, August 2023, and September 2023 to be levied on consumers of GEPL in the billing month of September 2023, October 2023, and November 2023.

Table 9: Category wise FAC Revenue for billing month of month September 2023, October 2023, and November 2023 (Rs. Crore)

Sr. No	Consumer Category	Slabs	Z_{FAC} computed for the month of Jul 2023	Z_{FAC} computed for the month of Aug 2023	Z_{FAC} computed for the month of Sep 2023
	HT Category				
1	HT- I Industrial	all units	0.147	0.154	0.144
2	HT-II Commercial	all units	-	-	-
	LT Category				
3	LT-II (A) Commercial (0-20 kW)	all units	0.004	0.004	0.004
4	LT-II (B) Commercial (above 20 kW)	all units	0.001	0.001	0.001
5	LT-III (A) Industrial (0-20 kW)	all units	0.004	0.004	0.004
6	LT-III (B) Industrial (above 20 kW)	all units	0.021	0.022	0.020
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	0.000	0.000	0.000
	Total FAC Recovery (Rs. Crore)		0.176	0.185	0.173

