# महाराष्ट्र विद्युत नियामक आयोग

# **Maharashtra Electricity Regulatory Commission**

Ref. No. MERC/FAC/2023-24/ 0 571

Гο,

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 January 2023, February 2023, and March 2023.

Reference:

1. GEPL's FAC submission for the month of January 2023, February 2023, and

March 2023 vide email dated 30 May 2023.

2. Data gaps raised vide email dated 24 July, 2023

3. GEPL's response to queries raised vide email dated 01 August 2023.

Sir,

Upon vetting the FAC calculations for the months of January 2023, February 2023, and March 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	January 2023	February 2023	March 2023
Z <sub>FAC</sub> allowed for recovery (Rs. Crore)	0.117	0.116	0.135

The Commission allows the carry forward FAC of Rs. 4.70 Crore, Rs. 5.30 Crore, and Rs. 5.90 Crore for the months of January 2023, February 2023, and March 2023, respectively. The Commission has not approved any FAC Fund amount to be carried forward to next FAC billing cycle with holding cost. Further, as directed by the Commission, GEPL shall maintain the monthly account of FAC Fund, if applicable and upload it on its website to maintain transparency of FAC Fund and, also for information of all the stakeholders.

Yours faithfully,

Date: 02 November, 2023

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

Encl: Annexure A: Detailed Vetting Report for the period of January 2023 to March 2023.

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#### ANNEXURE

Detailed Vetting Report Date: 02 November, 2023

# POST-FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JANUARY 2023, FEBRUARY 2023, AND MARCH 2023

<u>Subject:</u> Post-facto approval of Fuel Adjustment Charges (FAC) submissions of GEPL for the months of January 2023, February 2023, and March 2023.

Reference: 1. GEPL's FAC submission for the month of January 2023, February 2023, and March 2023 vide email dated 30 May, 2023.

2. Data gaps raised vide email dated 24 July, 2023

3. GEPL's response to queries raised vide email dated 1 August 2023.

#### 1. FAC submission by GEPL:

1.1 GEPL has made FAC submissions for the months of January 2023, February 2023, and March 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 months of January 2023, February 2023, and March 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



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- 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.
- Post-facto approval to the FAC for the months of April 2022, May 2022 and June 2022 vide FAC Vetting Report dated 2023.
- Post-facto approval to the FAC for the month of July 2022, August 2022 and September 2022 vide FAC Vetting Report dated \_\_\_\_\_\_\_, 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 30 May, 2023, GEPL has filed FAC submissions for the months of January 2023, February 2023, and March 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 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)	Jan-23	Feb-23	Mar-23	
	(I)	(II=I/12)	(III)	(IV)	(V)	
HT Category						
HT-I Industrial	49.29	4.11	1.58	1.58	1.86	
HT-II Commercial	1.91	0.16	-	-	-	
LT Category	10/01	The War				
LT-II (A) Commercial (0-20 kW)	1.31	0.11	0.03	0.03	0.03	

Consumer Category	Approved by	Monthly	Actual Sales (MU)			
	the Commission (MU)	Approved (MU)	Jan-23	Feb-23	Mar-23	
	(I)	(II=I/12)	(III)	(IV)	(V)	
LT-II (B) Commercial (above 20 kW)	0.28	0.02	0.00	0.00	0.00	
LT-III (A) Industrial (0-20 kW)	0.12	0.01	0.03	0.03	0.04	
LT-III (B) Industrial (above 20 kW)	5.67	0.47	0.22	0.21	0.24	
LT-IV Electric Vehicle (EV) Charging Stations	2022 in Cres No.	s Sepumber	0.00	0.00	0.00	
Total	58.58	4.88	1.87	1.86	2.17	

3.3 It can be observed from above Table 1 that the actual sales during the months of January 2023, February 2023, and March 2023 is 1.87 MU, 1.86 MU and 2.17 MU, respectively, which is 61.72%, 61.88%, and 55.52% 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, HT-II Commercial (no sales), 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.

#### 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 14 MW (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:

"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 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 pass-through 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 an 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., a bagasse-based plant which offers



Renewable Energy Power, which is helpful in meeting the RPO requirement as well as green tariff requirement of KRC DISCOMs.

- 4.2.8 The peak power contract with GMRETL expired in February 2023. In order to fulfill the peak power requirement of KRC Discoms from a firm contracted source, MBPPL, on behalf of all the three KRC DISCOMs, initiated a short-term competitive bidding process on 17 November 2022, and decided to collectively procure 4 MW of peak power (from 08:00 to 23:00 Hrs) for a period of eight months, from 01 March 2023 to 31 October 2023. However, bids were received only for the months of March 2023, August 2023, September 2023, and October 2023. The finalized rate for these months, determined through bidding and negotiation, was Rs. 7.90/kWh. However, the PPA was signed with successful bidder (PTC India) for the month of March 2023 only, expecting better price discovery for the peak power for the period of August 2023 to October 2023. An intimation letter in this regard was submitted to the Commission by KRC DISCOMs vide its letter dated 10 January 2023.
- 4.3 Accordingly, GEPL has purchased power from GMR Energy Trading Limited (GMRETL) on a bilateral basis at the rates of Rs. 6.16/kWh in the month of January 2023, Rs. 6.31/kWh in the month of February 2023 and Rs. 6.56/kWh in the month of March 2023. Though the rates are higher than the Power procurement cost of Rs. 3.92/kWh 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 January 2023, February 2023, and March 2023. GEPL purchased 0.02 MUs and 0.63 MUs of Solar and Non-Solar power in January 2023 at an average rate of Rs. 8.24/kWh and Rs. 8.26/kWh, respectively. Further, GEPL purchased nil quantum of Solar power and 0.35 MUs of non-Solar power in February 2023 at an average rate of Rs. 8.36/kWh. Similarly, GEPL purchased 0.02 MUs and 0.49 MUs of Solar and non-Solar power in March 2023 at an average rate of Rs. 6.78/kWh and Rs. 8.00/kWh, respectively. This non-Solar power includes peak power procurement of bagasse based renewable power through PTC at the rate (including scheduling charges) of Rs. 8.10/kWh in the month of January 2023, Rs. 8.10/kWh in the month of February 2023 and Rs. 8.05/kWh in the month of March 2023.
- 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 January 2023 to March 2023. 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 procured 0.27 MU, 0.65 MU, and 0.77 MU of power from Power Exchange at average rates of Rs. 6.58/kWh, Rs. 7.76/kWh, and Rs. 5.98/kWh during the months of January 2023, February 2023, and March 2023, respectively. GEPL has fulfilled its total load requirement by procuring power from PTC & power exchanges under its various products GDAM/GTAM for green power requirements and TAM, DAM, and RTM for conventional power.
- 4.7 Summary of power purchase of GEPL is as under:

Sr. No.	Particular		Comp	liance '				
1	Purchase from Approved Sources	The 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 FY 2022-23.  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 and 4 MW peak for period from 1 November, 2022 to 28 February, 2023 (which was extended for the month of March 2023).  In line with the aforesaid order GEPL has procured power from GMRETL, PTC and through various product of power exchange.						
2	Merit Order Dispatch	Yes. GEPL procures power on short term basis whereby there are two generators to cater Base and Peak load for RTC and Peak hour, respectively.						
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.						
4	DSM Pool	GEPL has injected 0.05 MU, 0.05 MU and 0.11 MU in the month of January 2023, February 2023, and March 2023, respectively, into the DSM pool.						
5	Sale of Surplus Power	There was no sale of St 2023.	urplus power in	the months of J	anuary 2023 to March			
6	Power Purchase	Actual Power Purchase is <b>1.96 MU</b> , <b>1.95 MU</b> , and <b>2.28 MU</b> for January 2023, February 2023, and March 2023, respectively, as against approved monthly power purchase of <b>5.10 MU</b> due to lower actual sales as compared to approved sales.						
	Source wise Power	980			,			
7	Purchase	Source Name	Approved (MU)	Actual Jan 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
	55.0	RE Solar	0.41	0.02	1%			
	170 (T1.8) 1001 1014	RE Non-Solar (incl. PTC peak)	0.59	0.63	32%			



r.	Particular	Compliance					
		Other Medium-Term source/ Bilateral Purchase	3.72	1.10	56%		
4		Exchange/ Other Peak Source	0.39	0.27	14%		
		DSM Pool	-	(0.05)	-3%		
		Total	5.10	1.96	100%		
mm (C) (16) D (16) M	tion 127 of 2022 the Comern of \$ 54W RTN 1023 tast 4 MW pea-	Source Name	Approved (MU)	Actual Feb 2023 (MU)	Proportion of each Source in Actual Purchase (%)		
n Gora	most rower from	RE Solar	0.41	<del>-</del>	0%		
in stor		RE Non-Solar (incl. PTC peak)	0.59	0.35	18%		
Assign Rophin		Other Medium-Term source/ Bilateral Purchase	3.72	1.00	51%		
on a		Exchange/ Other Peak Source	0.39	0.65	33%		
di leo		DSM Pool	-000	(0.05)	-3%		
		Total	5.10	1.95	100%		
01   S1   10   10   10   10   10   10		Source Name	Approved (MU)	Actual Mar 2023 (MU)	Proportion of each Source in Actual Purchase (%)		
		RE Solar	0.41	0.02	1%		
		RE Non-Solar (incl. PTC peak)	0.59	0.49	22%		
		Other Medium-Term source/ Bilateral Purchase	3.72	1.11	49%		
		Exchange/ Other Peak Source	0.39	0.77	34%		
, les		DSM Pool		(0.11)	-5%		
		Total	5.10	2.28	100%		

Sr. No.	Particular	Compliance
		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 and 4 MW peak for period from 1 November, 2022 to 28 February, 2023 (which was extended for March 2023 as well).
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 January 2023, February 2023, and March 2023, 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 January 2023, February 2023, and March 2023 is Rs. 1.34 Crore, 1.40 Crore, and 1.55 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 dated 28 October, 2022 in Case No. 177 of 2022 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 (which was later extended for March 2023). GEPL procured 1.10 MUs, 1.00 MUs and 1.11 MUs of conventional power from GMRETL in the months of January 2023, February 2023, and March 2023, respectively. Average rates of power purchase are Rs. 6.16/kWh in January 2023, Rs. 6.31/kWh in February 2023, and Rs. 6.56/kWh in March 2023.
- 5.4 Power Procurement from Exchange/Other Peak Sources: KRC DISCOMs procured power from the Power exchange for January to March 2023. GEPL has procured 0.27 MU, 0.65 MU, and 0.77 MU of power from Power Exchange at average rates of Rs. 6.58/kWh, Rs. 7.76/kWh and Rs. 5.98/kWh during the months of January 2023, February 2023, and March 2023, respectively. The higher cost of purchase from exchange reflects the trends observed in the power exchange in the respective months as shown in the below figure.



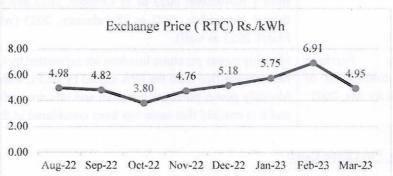


Figure 1: Exchange price trends (RTC)

- 5.5 Other charges: In January 2023, Liquidated Damages credit was received from Kreate in compliance with APTEL Order in appeal No. 428 of 2022 amounting to Rs. 3,12,305/- have been considered separately in January 2023. The Liquidated Damages pertains to the payment of compensation amount for unscheduled power from 12.10.2021 to 31.10.2021 by the Kreate Energy India Pvt. Ltd to GEPL.
- Renewable Sources: The Commission has approved Rs. 0.29 Crore each for January 2023, February 2023, and March 2023 for purchase of RE power to meet Renewable Purchase Obligation (RPO). GEPL has purchased RE Solar and RE Non-Solar during the period January 2023 to March 2023. The RE Solar purchase quantum was 0.02 MU, Nil MU and 0.02 MU at a power purchase rate of Rs. 8.24/kWh, Rs. Nil/kWh and Rs. 6.78/kWh in the months of January 2023, February 2023, and March 2023, respectively. Similarly, the RE Non-Solar purchase quantum was 0.63 MU, 0.35 MU, and 0.49 MU at a power purchase rate of Rs. 8.26/kWh, Rs. 8.36/kWh, and Rs. 8.00/kWh in the months of January 2023, February 2023, and March 2023, respectively. This non-Solar power includes procurement of 0.33 MUs, 0.27 MUs and 0.30 MUs of bagasse based peak power from PTC in the month of January 2023, February 2023, and March 2023, respectively. The RE based peak load from PTC was procured at the rate of Rs. 8.10/kWh, Rs 8.10/kWh, and Rs 8.05/kWh for January 2023, February 2023, and March 2023, respectively.
- 5.7 Accordingly, GEPL has sourced the RE Solar and RE non-Solar power from the exchange (GDAM and GTAM) and RE non-Solar from PTC 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 0.05 MU, 0.05 MU, and 0.11 MU in the month of January 2023, February 2023, and March 2023, respectively into the DSM Pool. The Commission has also considered the average price of the power in the DSM pool (Rs. 3.96/kWh, Rs. 5.39/kWh and Rs. 4.17/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 January 2023 to March 2023.
- 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.
- 5.13 The APPC during the period January 2023 to March 2023 is higher due to purchase of higher cost power both conventional (contracted as well as power exchange) and RE sources (contracted as well as power exchange).
- 5.14 The details of the overall cost approved and actual for the months of January 2023, February 2023, and March 2023, as per MYT Order is as shown in the Table 2 below:

Table 2: Approved and Actual Power Purchase Cost for GEPL

Source	Particular	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 (January 2023)	1.10	15	-	0.68	6.16	0.68	6.16
Sources – Bilateral	Actual (February 2023)	1.00	-	B. =	0.63	6.31	0.63	6.31
	Actual (March 2023)	1.11	-	-	0.73	6.56	0.73	6.56
Exchange/	Approved	0.39	- 1		0.17	4.29	0.17	4.29
Other Peak Source	Actual (January 2023)	0.27	-	-	0.18	6.58	0.18	6.58
teromos y	Actual (February 2023)	0.65	eglop <del>-</del>	haisp (s	0.50	7.76	0.50	7.76
	Actual (March 2023)	0.77	-	60130 <u>1</u>	0.46	5.98	0.46	5.98
Solar & Non-Solar	Approved	0.41 (Solar)			0.12 (Solar)	2.90 (Solar)		2.90 (Solar)
RE (incl. PTC peak) / REC		0.59 (Non- Solar)	-	-	0.17 (Non- Solar)	2.87 (Non- Solar)	(Non-	2.87 (Non-Solar)
	Actual (January 2023)	0.02 (Solar)	4	1,24	0.01 (Solar)	8.24 (Solar)		8.24 (Solar)
		0.63 (Non- Solar)	\ <u>/</u>	P. 120.0	0.52 (Non- Solar)	8.26 (Non- Solar)		
	Actual (February	-	-		-	-	-	-
	2023)	0.35 (Non- Solar)	-	-	0.29 (Non- Solar)		(Non-	(Non-
	Actual (March 2023)		-	-	0.01 (Solar)	6.78	0.01	
		0.49		2 2 2	0.39	8.00	0.39	8.00

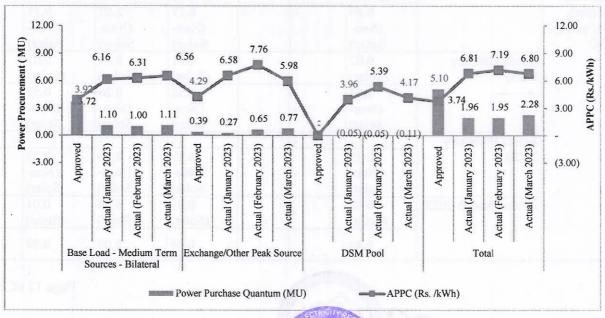


Source	Particular	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./ kWh)	Total Cost (Rs. Crore)	APPC (Rs./ kWh)
	Sahor due to purelisis	(Non- Solar)	isM or E	ency 20	(Non- Solar)	(Non- Solar)	(Non- Solar)	(Non- Solar)
DSM / Pool	Approved	Mod to Us	er all bos	lesface-	kanonasan-	o dood soi-	10 300a -	-
	Actual (January 2023)	(0.05)	-	(oyani:	(0.02)	3.96	(0.02)	3.96
	Actual (February 2023)	(0.05)	ara bs <u>u</u>	hovers	(0.03)	5.39	(0.03)	5.39
	Actual (March 2023)	(0.11)	-	-	(0.05)	4.17	(0.05)	4.17
SLDC Fee	Approved							
	Actual (January 2023)		0.00	bizkst.	-	-	0.00	-
	Actual (February 2023)	- 100	0.00	-		-	0.00	-
	Actual (March 2023)	Prince A	0.00	riek pi-	-	-	0.00	
Total	Approved	5.10	-	1	1.91	3.74	1.91	3.74
	Actual (January 2023)	1.96	0.00	-	1.34	6.81	1.34	6.81
	Actual (February 2023)	1.95	0.00	-	1.40	7.19	1.40	7.19
	Actual (March 2023)	2.28	0.00		1.55	6.80	1.55	6.80

<sup>\*</sup>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	Base Load	January 2023	3.92	6.16	GEPL procured power from GMR
	- Medium	February 2023	no supriming	6.31	Energy on bilateral basis because
	Term	March 2023	pessilib odi s	6.56	of non-availability of any approved contracted sources.
2	Solar &	January 2023	2.90	8.24 (Solar)	Market discovered rate: RE power
	Non-Solar	not healt tell tun b	(Solar)	8.26 (non-Solar)	was purchased during the period
	RE (incl.	February 2023	2.07	deni terri englesiya	from January 2023 to March 2023
	PTC peak)		2.87	8.36 (non-Solar)	from Power Exchange (GDAM
	/REC	March 2023	(non- Solar)	6.78 (Solar)	and GTAM) and PTC (peak)
di av.	100 A A A	Porchard of Red Love Red Red Red Red Red Red Red Red Red Re	Solar)	8.00 (non-Solar)	instead of REC procurement approved in the MYT Order. The peak power purchase of RE power from PTC was approved by the Commission in its Order dated 28 October, 2022 in Case No. 177 of 2022.
3	Exchange/	January 2023	4.29	6.58	Market discovered rate; Short term
73.	Other Peak	February 2023		7.76	power purchase from Power
	Source	March 2023	Decayang	5.98	Exchange through DAM, TAM, and RTM. The rates are higher than the approved rates as the average power purchase rates in the power exchange were higher during the months of January 2023, February 2023, and March 2023.
4	DSM /	January 2023	-	3.96	DSM rates are based on supporting
	Imbalance	February 2023	Secretary Section	5.39	documents provided by GEPL.
	Pool	March 2023		4.17	
5	Total	January 2023	3.74	6.81	Due to above factors.
		February 2023		7.19	
		March 2023	n total	6.80	1 300 R000000001 1.1

5.17 Considering the above, the Commission allows the average power purchase cost of Rs. 6.81/kWh, Rs. 7.19/kWh and Rs. 6.80/kWh for the months of January 2023, February 2023, and March 2023, 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 January 2023, February 2023, and March 2023, 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 January 2023, February 2023, and March 2023 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 January 2023, February 2023, and March 2023.

Table 4: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
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	6.81	7.19	6.80
3	Change in average power purchase cost (=2 -1)	Rs./kWh	3.07	3.45	3.05
4	Net Power Purchase	MU	1.96	1.95	2.28
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.60	0.67	0.70

#### 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	Jan-23	Feb-23	Mar-23
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.14	0.13	0.12
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.13	0.12	0.12
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	0.01	0.00	(0.01)
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	4.18	4.70	5.30
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	4.18	4.70	5.29



# 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. 0.03 Crore, Rs. 0.04 Crore, and Rs. 0.04 Crore for the months January 2023, February 2023, and March 2023, respectively.
- 8.2 Holding cost for the month of January 2023 to March 2023 is calculated by considering MCLR + 150 basis points which turns out to be 9.80%, 9.90%, and 10.00% for January 2023, February 2023, and March 2023, respectively.
- 8.3 The Commission has computed the holding cost towards the amount over recovered in the month of January 2023 to March 2023 which is as shown in the Error! Reference source not found. below:

			7.50	
Particulars	Units	Jan-23	Feb-23	Mar-23
Adjustment factor for over-recovery/under-recovery	Rs. Crore	4.18	4.70	5.29
Interest rate	%	9.80%	9.90%	10.00%
Carrying cost for over-recovery/under-recovery	Rs.	0.03	0.04	0.04

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

#### 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. 4.819 Crore, Rs. 5.417 Crore and Rs. 6.035 Crore for the months of January 2023, February 2023, and March 2023, respectively. Accordingly, the Commission has determined FAC fund of nil at the end of both the months January 2023 to March 2023 (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 9.80%, 9.90%, and 10.00% for January 2023, February 2023 and March 2023, respectively. Accordingly, the Commission has calculated holding cost of nil amount



for the months January 2023, February 2023, and March 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 Error! Reference source not found.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	Approve d in Tariff Order	Jan-23	Feb-23	Mar-23
1	Net Energy input at Distribution Voltages	MU	4.94	1.90	1.89	2.21
2	Energy sales at Distribution voltages	MU	4.88	1.87	1.86	2.17
3	Distribution Loss (1 - 2)	MU	0.06	0.03	0.03	0.04
4	Distribution Loss as % (3/1)	%	1.20%	1.72%	1.44%	1.62%
5	Annual Sliding Distribution Loss	%		1.24%	1.17%	1.08%
6	Excess Distribution Loss = [Annual Sliding Distribution Loss - Distribution loss approved] x Net Energy Input (1)	MU	Londo, pos	0.001	-gooding	6.00
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	, ylga tre Z	0.002	an Edol	_

10.3 As seen from the above Error! Reference source not found.7, the annual sliding distribution loss for the months of January 2023, February 2023, and March 2023 is 1.24%,

- 1.17 %, and 1.08%, respectively. The annual sliding distribution loss for the months of January 2023 is slightly higher than the MYT approved distribution loss of 1.20%.
- 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 January 2023, February 2023 and March 2023. GEPL has considered Rs. 0.001 Crore disallowance of FAC due to excess distribution loss for the months of January 2023, 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

11.1 The summary of the FAC amount as approved by the Commission for the month January 2023, February 2023, and March 2023 which is allowed to be recovered in the billing month March 2023, April 2023 and May 2023 as shown in the Error! Reference source not found.8 below.

Table 8: Summary of Allowable ZFAC

Sr. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
1	Calculation of ZFAC	lu Elivaria			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.603	0.673	0.696
1.2	Carrying cost for over- recovery/under-recovery (C)	Rs. Crore	0.034	0.039	0.044
1.3	Adjustment factor for over- recovery/under-recovery (B)	Rs. Crore	4.182	4.705	5.295
1.5	$Z_{FAC} = F + C + B$	Rs. Crore	4.819	5.417	6.035
2	Calculation of FAC Charge	etc. en gama	bini sa isi		
2.1	Energy Sales within the License Area	MU	1.869	1.861	2.171
2.2	Excess Distribution Loss	MU	0.001	ai neilalea	
2.3	ZFAC per kWh *	Rs./kWh	25.79	29.11	27.80
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	0.002	2 5 2 0 0 C 2 5 0 0 C 2 5 0 0 C 2 5 0 0 C 2 5	-
3.2	Allowable FAC	Rs. Crore	4.818	5.417	6.035
4	Utilization of FAC Fund			- ZODECH	
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-	



Sr. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
4.2	Holding Cost on FAC Fund	Rs. Crore	-	-	-
4.3	Z <sub>FAC</sub> for the month (Sr. No. 3.2)	Rs. Crore	4.818	5.417	6.035
4.4	Closing Balance of FAC Fund	Rs. Crore	-	-	-
4.5	Z <sub>FAC</sub> leviable/refundable to consumer	Rs. Crore	4.818	5.417	6.035
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.117	0.116	0.135
6	Carried forward FAC for recovery during future period (3.1-3.2-4)	Rs. Crore	4.701	5.301	5.900

- 11.2 It can be seen from the above Table 8Error! Reference source not found. that the standalone FAC for the month of January 2023, February 2023 and March 2023 is Rs. 4.818 Crore, Rs. 5.417 Crore and Rs. 6.035 Crore respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 25.79/kWh, Rs. 29.11/kWh and Rs. 27.80/kWh for the months of January 2023, February 2023, and March 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 January 2023, February 2023, and March 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 January 2023, February 2023, and March 2023 as shown in Table 8 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. 0.117 Crore, Rs. 0.116 Crore and Rs. 0.135 Crore for the months of January 2023, February 2023 and March 2023, respectively. Thus, FAC equivalent Rs. 4.701 Crore (i.e., Rs. 4.818 Crore minus Rs. 0.117 Crore) for the month of January 2023, Rs. 5.301 Crore (i.e., Rs. 5.417 Crore minus Rs. 0.116 Crore) for the month of February 2023, and Rs. 5.900 Crore (i.e., Rs. 6.035 Crore minus Rs. 0.135 Crore) for the month of March 2023 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 January 2023 to March 2023. The value of the opening FAC fund in January 2023 after considering the holding cost is Nil. The

Commission has determined a positive FAC of Rs. 4.818 Crore, Rs. 5.417 Crore and Rs. 6.035 Crore for January 2023, February 2023 and March 2023, respectively. Accordingly, the positive FAC determined by the Commission for January 2023, February 2023 and March 2023 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  $Z_{FAC}$  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/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 Table 9 shows per unit  $Z_{FAC}$  for the month of January 2023, February 2023, and March 2023 to be levied on consumers of GEPL in the billing month March 2023, April 2023 and May 2023.



Table 9: Category wise FAC Revenue for billing month of month March 2023, April 2023, and May 2023

Sr. No	Consumer Category	Slabs	ZFAC computed for the month of January 2023 (Rs. Crore)	Z FAC computed for the month of February 2023 (Rs. Crore)	Z FAC computed for the month of March 2023 (Rs. Crore)
	HT Category	in inte	SERVICE CONTROL		
1	HT- I Industrial	all units	0.095	0.095	0.112
2	HT-II Commercial	all units	-	-	-
May in	LT Category	AND AND AND			
3	LT-II(A) Commercial (0-20 kW)	all units	0.002	0.002	0.003
4	LT-II (B) Commercial (above 20 kW)	all units	0.000	0.000	0.000
5	LT-III (A) Industrial (0-20 kW)	all units	0.003	0.003	0.003
6	LT-III (B) Industrial (above 20 kW)	all units	0.016	0.016	0.018
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	0.000	0.000	0.000
	Total FAC Recovery (Rs. Crore)		0.117	0.116	0.135

- 12.4 The Commission has issued MTR Order on 31 March, 2023 and approved the revised power purchase cost for FY 2022-23 in the Provisional Truing-up of FY 2022-23 and accordingly determined tariff for FY 2023-24 (effective from 1 April 2023) and FY 2024-25. Thus, the power purchase cost for FY 2022-23 (which also includes the FAC for the period till March 2023) has already been adjusted on provisional basis along through the provisional truing up for FY 2022-23.
- 12.5 Thus, the FAC recovery for the previous months has already been allowed till March 2023. Vide MTR Order dated 31 March 2023, revised Tariff has been made effective from 1 April 2023 onwards.

