

# महाराष्ट्र विद्युत नियामक आयोग

# **Maharashtra Electricity Regulatory Commission**

Ref. No. MERC/FAC/2023-24/0172

Date: 11 March, 2024

To,
The Managing Director,
KRC Infrastructure and Projects Private Ltd.,
Raheja Tower, Level-9, Block G,
Plot No. C-30,
Bandra Kurla Office Complex,
Bandra (E), Mumbai – 400 051

Subject:

Post facto approval of Fuel Adjustment Charges (FAC) submissions of KRCIPPL for the

months of July 2023, August 2023, and September 2023.

Reference:

1. KRCIPPL's FAC submission for the months July 2023, August 2023, and September 2023 vide email dated 01 December, 2023.

- 2. Datagaps communicated vide email dated 23 December, 2023.
- 3. KRCIPPL'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 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 <sub>FAC</sub> allowed for recovery (Rs. Crore)	0.136	0.136	0.128

The Commission allows the carry forward FAC of Rs. 0.605 Crores, Rs. 0.590 Crores, and Rs. 0.641 Crore in the months of July 2023, August 2023, and September 2023, respectively. Further, as directed by the Commission, KRCIPPL 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, August 2023, and September 2023.

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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 KRCIPPL for the months of July 2023, August 2023, and September 2023.

Reference:

- 1. KRCIPPL's FAC submission for the months July 2023, August 2023, and September 2023 vide email dated 01 December, 2023.
- 2. Datagaps communicated vide email dated 23 December, 2023.
- 3. KRCIPPL's response to datagaps vide email dated 23 January, 2024.

# 1. FAC submission by KRCIPPL:

1.1 KRCIPPL 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 KRCIPPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of September 2023, October 2023, and November 2023.

## 2. Background

- 2.1 On 31 March 2023 the Commission has issued MTR Order in respect of KRCIPPL (Case No. 214 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 to the FAC for the month of April 2020 vide FAC vetting Report dated 7 June,
     2020.
  - Post-facto approval to the FAC for the months of May and June 2020 vide FAC vetting Report dated 30 September 2020.
  - Post-facto approval to the FAC for the months of July 2020, August 2020, and September 2020 vide FAC vetting Report dated 08 December 2020.
  - Post-facto approval to the FAC for the months of October 2020, November 2020 and December 2020 vide FAC vetting Report dated 25 March 2021.
  - Post-facto approval to the FAC for the month of January to March 2021 vide FAC Vetting Report dated 10 June 2021.



- Post-facto approval to the FAC for the month of April 2021, May 2021, and June 2021 vide FAC Vetting Report dated 24 August 2021.
- Post-facto approval to the FAC for the month of July 2021, August 2021, and September 2021 vide FAC Vetting Report dated 5 January 2022.
- Post-facto approval to the FAC for the month of October 2021, November 2021 and December 2021 vide FAC Vetting Report dated 28 June 2023.
- Post-facto approval to the FAC for the month of January 2022, February 2022 and March 2022 vide FAC Vetting Report dated 24 July 2023.
- Post-facto approval to the FAC for the month of April 2022, May 2022 and June 2022 vide FAC Vetting Report dated 2 November 2023.
- Post-facto approval to the FAC for the month of July 2022, August 2022 and September 2022 vide FAC Vetting Report dated 2 November 2023.
- Post-facto approval to the FAC for the month of October 2022, November 2022 and December 2022 vide FAC Vetting Report dated 2 November 2023.
- Post-facto approval to the FAC for the month of January 2023, February 2023 and March 2023 vide FAC Vetting Report dated 2 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 from the Commission on a quarterly basis for FAC charges within 60 days of close of each quarter. Accordingly, vide its letter dated 1 December, 2023. KRCIPPL 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 KRCIPPL 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. 214 of 2022, the Commission has approved revised tariffs to maintain zero cross subsidy across tariff categories.
- 3.2 The net energy sales within the licence area as submitted by KRCIPPL 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	Actu	al Sales	(MU)
Consumer Category	the Commission (MU)	Approved (MU)	Jul- 23	Aug- 23	Sep- 23
	(I)	(II=I/12)	(III)	(IV)	(V)
HT Category					
HT-I Industrial	21.51	1.79	1.74	1.75	1.63
HT-II Commercial	-	20	-	-	-
HT III – EV Charging Stations		-	0.00	0.00	0.00
LT Category					
LT-II (A) Commercial (0-20 kW)	0.02	0.00	0.00	0.00	0.00
LT-II (B) Commercial (above 20 kW)	0.78	0.07	0.04	0.04	0.05

	Approved by	Monthly	Actual Sales (MU)			
Consumer Category	the Commission (MU)	Approved (MU)	Jul- 23	Aug- 23	Sep- 23	
	(I)	(II=I/12)	(III)	(IV)	(V)	
LT-III (A) Industrial (0-20 kW)	-	-	0.01	0.01	0.01	
LT-III (B) Industrial (above 20 kW)	5.03	0.42	0.38	0.38	0.36	
LT-IV Electric Vehicle (EV) Charging Stations			-	-	: <b>-</b> :	
Total	27.34	2.28	2.18	2.19	2.05	

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 are 2.18 MUs, 2.19 MUs and 2.05 MUs respectively which is around 4.36%, 3.77% and 6.06% lower than approved monthly energy sales of 2.28 MUs for July 2023, August 2023, and September 2023. The major variation was observed in the LT-II (A) Commercial (0-20 kW) and LT-II (B) Commercial (above 20 kW).

# 4. Power Purchase Details:

4.1 KRCIPPL is a deemed Distribution Licensee notified by the Commission for its IT & ITeS SEZ located at Village Kharadi, Taluka Haveli, District Pune. KRCIPPL does not own or operate any generating stations. Accordingly, KRCIPPL 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. 214 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.
- 4.2.3 Accordingly, KRCIPPL 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.
- 4.3 Further, KRCIPPL has also procured RE power through IEX in the GDAM and GTAM, PXIL in GTAM and Manikaran Power Limited during the months of July 2023, August 2023, and September 2023. KRCIPPL purchased 0.35 MUs and 0.60 MUs of Solar and non-Solar power in July 2023 at an average rate of Rs. 4.54/kWh and Rs. 5.77/kWh, respectively. Similarly, KRCIPPL purchased 0.02 MUs and 1.15 MUs of Solar and non-Solar power in August 2023 at an average rate of Rs. 7.66/kWh and Rs. 5.63/kWh. Similarly, KRCIPPL purchased 0.12 MUs and 1.16 MUs of Solar and non-Solar power in September 2023 at an average rate of Rs. 7.36/kWh and Rs. 5.70/kWh.



- 4.4 The Commission notes that KRCIPPL has also purchased RE power through the power exchanges and Manikaran Power Limited to meet the RPO obligations in the months of July 2023 to September 2023. The power purchase has been through power exchanges where the prices are market driven and competitively discovered. The Commission in the MTR Order in Case no. 214 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.
- 4.5 KRCIPPL has procured 0.17 MUs, 0.01 MUs and 0.03 MUs of power from Power Exchange at average rates of Rs. 5.55/kWh, Rs. 9.16/kWh and 9.30/kWh during the months of July 2023, August 2023, and September 2023, respectively. KRCIPPL has fulfilled its total load requirement by procuring power from power exchanges under its various products GDAM/GTAM for green power requirements apart from contracted power from Manikaran Power Limited TAM, DAM, and RTM for conventional power apart from contracted power from GMRETL.
- 4.6 Summary of power purchase of KRCIPPL is as under:

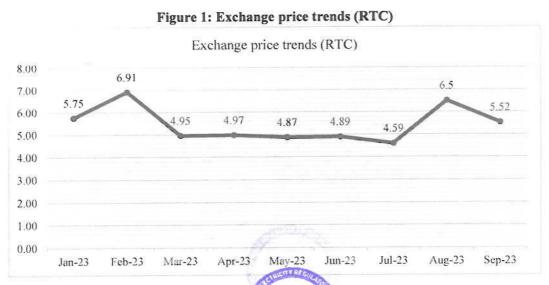
Sr. No.	Particular			pliance	
1	Purchase from Approved Source	has approved for combin November, 2022 to 31 March, 2023, in Case No power procurement of 8 October 31, 2023.	october, 202 0.214 of 2022, MW RTC for d order KRCl	curement of 8 M 23. Further, in the Commission of the three KRC	of 2022 the Commission IW RTC for period from the MTR Order dated 3 in has approved a combine DISCOMs, effective unti-
2	Merit Order Dispatch	Yes, KRCIPPL procur generator (GMRETL -	es power on Birla Carbon power require	short term base) to cater base ment through va	sis whereby there is on power for RTC. Further arious product from power
3	Fuel Utilization Plan	Not applicable. All the EA, 2003.	sources of po	wer procuremen	nt fall under Section 63 of
4	DSM Pool	KRCIPPL has drawn 0. 2023, August 2023, and			MUs in the month of Jul M pool.
5	Sale of Surplus Power	KRCIPPL has sold the 8.15/kWh in the month	150 HTC		Js at average rate of Rs
6	Power Purchase		, and Septemb	er 2023, respect	2.36 MUs in the months of tively, as against approve
7	Source wise Power	Source Name	Approved (MU)	Actual Jul 2023 (MU)	Proportion of each Source in Actual Purchase (%)
	Purchase	RE Solar	0.25	0.35	15%
		RE Non-Solar	0.28	0.60	26%
		Peak sources (GMR STPP)	0.45	1.09	48%
		Exchange/ Other Peak Source/New Source	1.43	0.17	7%
		DSM Pool	envare.	0.09	4%

Sr. No.	Particular		Con	npliance	
140.		Sale of Surplus Power	_	_	
		Total	2.41	2.29	100%
	Power	Source Name	Approved (MU)	Actual Aug 2023 (MU)	Proportion of each Source in Actual Purchase (%)
		RE Solar	0.25	0.02	1%
		RE Non-Solar	0.28	1.15	48%
		Peak sources (GMR STPP)	0.45	1.11	46%
		Exchange/ Other Peak Source (PTC)/New Source	1,43	0.01	0%
		DSM Pool	-	0.12	5%
		Sale of Surplus Power	-	(0.00)	0%
		Total	2.41	2.40	100%
		Source Name	Approved (MU)	Actual Sep 2023 (MU)	Proportion of each Source in Actual Purchase (%)
		RE Solar	0.25	0.12	5%
		RE Non-Solar	0.28	1.16	49%
		Peak sources (GMR STPP)	0.45	0.94	40%
		Exchange/ Other Peak Source/New Source	1.43	0.03	1%
		DSM Pool		0.10	4%
		Sale of Surplus Power	1 <del>=</del> );	-	<u> </u>
		Total	2.41	2.36	100%
		however monthly appro	power procur	ement of 8 MW	Order is on yearly basis, omparison purpose.  RTC for the three KRC as duly approved by the
		- Charles and a constant and the configuration of t			n Case No. 177 of 2022, in Case No. 214 of 2022,
3		the Commission has app	proved the pov	wer procurement	through this source until
		31 October, 2023. The s			
		RE procurement is approrate of GDAM for the pe			vhich is weighted average 2.
8	Power				RCIPPL. Monthly power
	Purchase under	purchase quantum and r	ate are verifie	d from the invoi	ces, and it is ensured that
	Section 63 of Electricity Act, 2003	same has been considered	ea 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 July 2023, August 2023, and September 2023, to verify the claim of KRCIPPL 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. 1.29 Crores, Rs. 1.43 Crores and Rs. 1.47 Crores, respectively, which is higher than the approved monthly Power Purchase cost of Rs. 1.32 Crores by the Commission for the months of July 2023, August 2023, and September 2023, respectively.
- 5.3 Short Term Source: 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. Subsequently, the Commission in MTR Order dated 31 March 2023 in Case no. 214 of 2022 has approved the power procurement from this source until 31 October 2023. KRCIPPL 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 at an average rate of power purchase of Rs. 6.05/kWh in July 2023, Rs. 6.26/kWh in August 2023 and Rs. 6.47/kWh in September 2023.
- Power procurement through Exchange and Other Peak Resource: KRCIPPL has procured 0.17 MUs, 0.01 MUs and 0.03 MUs in the months of July 2023, August 2023, and September 2023 from DAM / RTM products available on exchange platforms. Though the purchase from exchange contributed to 7.39%, 0.41% and 1.41% of the total power purchase during the months of July 2023, August 2023, and September 2023, respectively. The average rate of power purchase was Rs. 5.55/kWh, Rs. 9.16/kWh, and Rs. 9.30/kWh in July 2023, August 2023, and September 2023, respectively through these sources. Though the actual average power purchase cost through exchange is higher in July 2023, August 2023 and September 2023, the quantum procured is miniscule at 0.17 MU, 0.01 MU and 0.03 MU. The trends observed in the power exchange in the respective months as shown in the below figure.



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- 5.5 Renewable Sources: The Commission has approved Rs. 0.26 Crore each for July 2023, August 2023, and September 2023 for purchase of RE power to meet the Renewable Purchase Obligation. KRCIPPL has purchased RE Solar and RE non-Solar during the months of July 2023, August 2023, and September 2023. The RE Solar purchase quantum was 0.35 MUs at a power purchase rate of Rs. 4.54/kWh in July 2023, 0.02 MUs at the rate of Rs. 7.66/kWh in August 2023 and 0.12 MUs at the rate of Rs. 7.36/kWh in September 2023. Similarly, the RE non-Solar purchase quantum was 0.60 MUs at a power purchase rate of Rs. 5.77/kWh in July 2023, 1.15 MUs at the rate of Rs. 5.63/kWh in August 2023 and 1.16 MUs at the rate of Rs. 5.70/kWh in September 2023.
- 5.6 Accordingly, KRCIPPL has sourced the RE Solar and RE non-Solar power from the exchange (GDAM and GTAM) and Manikaran Power Limited to meet the RPO obligation.
- 5.7 The APPC for solar and non-solar sources are higher than approved rate of Rs. 4.90/kWh for both solar and non-solar in the months of July 2023, August 2023, and September 2023. The Commission notes that the price of power is competitively discovered for the power sourced from the power exchange and KRCIPPL 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.
- 5.8 DSM Pool: KRCIPPL has drawn 0.09 MUs, 0.12 MUs and 0.10 MUs in the month 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. 3.57/kWh, Rs. 5.54/kWh and Rs. 5.13/kWh) as submitted by the Licensee for FAC computation along with the supporting documentation for the months July 2023, August 2023, and September 2023, respectively.
- 5.9 The Commission has noted that KRCIPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.10 Sale of Surplus Power: KRCIPPL has sold surplus power of 0.002 MUs in the month of August 2023. No sale of surplus power was done during the months of July 2023 and September 2023.
- 5.11 Approved Cost: The Commission has noted that KRCIPPL 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.
- 5.12 The APPC during the period July 2023 to September 2023 is higher due to purchase of higher cost of power from both conventional and RE sources (both contracted as well as exchange).
- 5.13 The details of the overall cost approved as per MTR Order and the actual cost for the months of July 2023, August 2023 and September 2023 is as shown in the Table 2Table 2 below:

Table 2: Approved and Actual Power Purchase Cost for KRCIPPL

Source		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)
	Approved	0.45	-	-	0.28	6.35	0.28	6.35
Peak sources	Actual (July 2023)	1.09	-	-	0.66	6.05	0.66	6.05
(GMR STPP)	Actual (August 2023)	1.11	-	-	0.69	6.26	0.69	6.26
	Actual (September 2023)	0.94	-	-	0.61	6.47	0.61	6.47
	Approved	1.43	AUTON.	-	0.77	5.40	0.77	5.40



Source			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)
Exchange/Other	Actual (July	2023)	0.17	-	-	0.09	5.55	0.09	5.55
50000	Actual (Augu	ıst 2023)	0.01	(5)	-	0.01	9.16	0.01	9.16
Exchange/Other Peak Source/New Source  Solar & Non- Solar RE/REC  Sale of Surplus power  DSM / Pool  SLDC Fee	Actual (Septe	ember 2023)	0.03	-	(#1)	0.03	9.30	0.03	9.30
		RE Solar	0.25	rejori e	307.00	0.12	4.90	0.12	4.90
	Approved	RE Non- Solar	0.28	- 1	-	0.14	4.90	0.14	4.90
	Y S S	RE Solar	0.35	-	-	0.16	4.54	0.16	4.54
	Actual (July 2023)	RE Non- Solar	0.60	3-7	1.5	0.35	5.77	0.35	5.77
	Actual	RE Solar	0.02	-	1 <del>4</del> 8	0.01	7.66	0.01	7.66
	(August 2023)	RE Non- Solar	1.15		-	0.65	5.63	0.65	5.63
	Actual	RE Solar	0.12	7-3	-	0.09	7.36	0.09	7.36
	(September 2023)	RE Non- Solar	1.16	9 <b>2</b> 5	-	0.66	5.70	0.66	5.70
2.70	Actual (Augu	ust 2023)	(0.00)			(0.00)	8.15	(0.00)	8.15
	Approved			-	-	-		-	-
power	Actual (July	2023)	0.09	152	S <b>A</b>	0.03	3.57	0.03	3.57
DSM / P001	Actual (Aug	ust 2023)	0.12	-	-	0.06	5.54	0.06	5.54
	Actual (Sept	ember 2023)	0.10	62	-	0.05	5.13	0.05	5,13
	Approved			-	-		195 113 114		
CLDC E	Actual (July	2023)	-	0.00	-	(=)	(/ <del>=</del> )	0.00	-
SLDC ree	Actual (Aug	ust 2023)	-	0.00	-	-	-	0.00	-
	Actual (Sept	ember 2023)	-	0.00	-		-	0.00	-
	Approved		2.41	-	-	1.32	5.47	1.32	5.47
Total	Actual (July	2023)	2.29	0.00	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.29	5.62	1.29	5.62
TOTAL	Actual (Aug	ust 2023)	2.40	0.00	1.5	1.43	5.94	1.43	5.95
	Actual (Sept	ember 2023) #	2.36	0.00	1-	1.47	6.22	1.47	6.22

<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

5.14 Source wise approved and actual quantum of power procured from some of the key sources and APPC for month of July 2023, August 2023, and September 2023, respectively, is shown in the graph below:



<sup>#</sup> In August 2023, due to the non-receipt of invoices against the purchase of wind power from MPL, KRCIPPL has considered a quantum of 0.42 MUs and has correspondingly considered amount of Rs. 10.55 Lakh against the same on a provisional basis. KRCIPPL received the invoices against this transaction in the month of September 2023 and hence the same has been considered as the differential amount of Rs. 2.38 Lakh (difference of provisional amount of Rs. 10.55 Lakh and actual amount as per the invoice i.e., Rs. 12.94 Lakh) in the power purchase calculation for the month of September 2023.

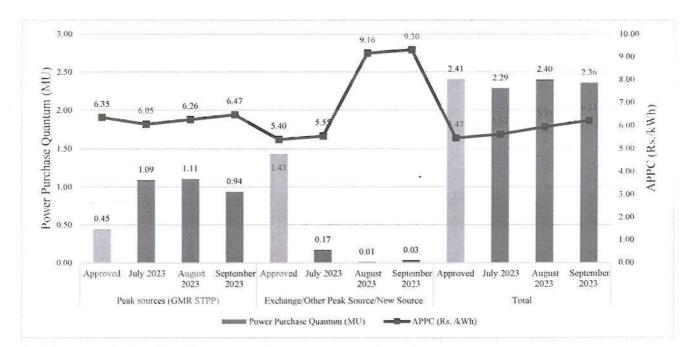


Figure 2: Variation in Power Procurement and Total per unit Cost

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

Table 3: Summary of reasons for rate variation for various power sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation	
		July 2023		6.05	KRCIPPL procured power from GMRETL based on the PPA	
1	Peak sources (GMR STPP)	August 2023	6.35	6.26	which was duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022 and considered as part of	
		September 2023		6.47	the power sources in MTR Order in Case No. 214 of 2022.	
		L.I., 2022		4.54 (S)	Market discovered rate: RE power was purchased during the	
		July 2023		5.77 (NS)	period from July 2023 to September 2023 from Power	
		August 2023		7.66 (S) Exchange (GD	Exchange (GDAM and GTAM). Wind power procured from	
	a 1 (a) a	August 2023			5.63 (NS)	Manikaran Power Limited at average rate of Rs 2.25/kWh for
. 2	Solar (S) & Non-Solar		4.90 (S)	7.36 (S)	Group I projects and Rs 2.52/kWh for Group II to IV	
	(NS) RE/REC	September 2023	4.90 (NS)	5.70 (NS)	projects.  Due to the non-receipt of invoices, the quantum and cost of wind energy procurement in August 2023 were considered on a provisional basis. Now, these invoices were received in September 2023, the differential cost (difference of actual cost	



Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
					and provisional cost in August 2023) is considered in September 2023. However, the differential quantum is not considered in this adjustment.
		July 2023		5.55	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
3	Exchange/ Other Peak Source/New Source	August 2023	5.40	9.16	than the approved rates, however, they are competitively discovered in the power exchange. Further, the quantum is also
		September 2023		9.30	miniscule at levels of 0.17 MUs, 0.01 MUs and 0.03 MUs in July 2023, August 2023, and September 2023.
	DSM /	July 2023		3.57	DSM rates are based on
4	Imbalance	August 2023		5.54	supporting documents provided
	Pool	September 2023		5.13	by KRCIPPL.
		July 2023		5.62	402 M M M M M M M M M M M M M M M M M M M
5	Total	August 2023	5.47	5.95	Due to the above factors
		September 2023	2000	6.22	

5.16 Considering the above, the Commission allows the average power purchase cost of Rs. 5.62/kWh, Rs. 5.95/kWh, and Rs. 6.22/kWh for the month 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 the 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 month of July 2023, August 2023, and September 2023 as shown in Table 23 above. The same has been compared with the average power purchase cost approved by the Commission in MTR Order dated 31 March, 2022 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 July 2023, August 2023, and September 2023 respectively.

Table 4: FAC on account of Fuel and Power Purchase Cost

Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-23
1	Average power purchase cost approved by the Commission	Rs. /kWh	5.47	5.47	5.47
2	Actual average power purchase cost	Rs. /kWh	5.62	5.95	6.22
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.16	0.48	0.75
4	Net Power Purchase	MU	2.29	2.40	2.36
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.04	0.12	0.18



# 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	0.14	0.14	0.14
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.14	0.14	0.14
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	0.00	0.00	(0.00)
2	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.70	0.61	0.59
3	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	0.70	0.61	0.59

# 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. 0.006 Crores, Rs. 0.005 Crores and Rs. 0.005 Crores for the month of July 2023, August 2023, and September 2023.
- 8.2 Carrying/Holding cost is calculated by considering one-year MCLR + 150 basis points which turns out to be 10.02%, 10.05%, and 10.05% for July 2023, August 2023, and September 2023, respectively.
- 8.3 The Commission has computed the holding cost towards the amount under 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	0.699	0.606	0.586
Interest rate	%	10.02%	10.05%	10.05%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.006	0.005	0.005

#### 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. 214 of 2022. Accordingly, as per said principle laid down by the Commission, KRCIPPL 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 Rs. 0.741 Crores, Rs. 0.727 Crores, and Rs. 0.768 Crores for July 2023, August 2023, and September 2023 respectively.
- 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%, 10.05% and 10.05% for July 2023, August 2023, and 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 Error! Reference source not found. 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	Monthly Approved in Tariff Order	Jul-23	Aug-23	Sep-23
1	Net Energy input at Distribution Voltages	MU	2.33	2.22	2.23	2.08
2	Energy sales at Distribution voltages	MU	2.28	2.18	2.19	2.05
3	Distribution Loss (1 - 2)	MU	0.05	0.04	0.03	0.03
4	Distribution Loss as % (3/1)	%	2.25%	1.67%	1.56%	1.64%
5	Annual Sliding Distribution Loss	%		1.54%	1.55%	1.56%
6	Excess Distribution Loss = [Annual Sliding Distribution Loss - Distribution loss approved] x Net Energy Input (1)	MU	=	17.1	-	-
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore		-	-	2:1

10.3 As it can be seen from the Table 7 above, the annual sliding distribution loss for the months of July 2023, August 2023, and September 2023 is 1.54%, 1.55%, and 1.56%, respectively, which is lower than the MTR approved distribution loss of 2.25%. The monthly distribution loss for the months of July 2023, August 2023, and September 2023 is also lower than the MTR approved distribution loss of 2.25%. The Commission has not worked out any disallowance on account of excess Distribution Loss since the actual annual sliding distribution loss is lower than approved distribution loss.

# 11. Summary of Allowable ZFAC:

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

Sr. No.	Particulars	Units	Jul- 23	Aug- 23	Sep- 23
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)		0.036	0.115	0.178
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)		0.699	0.607	0.587
1.5	$Z_{FAC} = F + C + B$	Rs. Crore	0.741	0.727	0.768
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	2.179	2.193	2.047
2.2	Excess Distribution Loss	MU	-	4	848
2.3	ZFAC per kWh *	Rs./kWh	3.399	3.314	3.753
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.697	0.697	0.697
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.697	0.697	0.697
3	Recovery of FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [((2.1+2.2) x 2.3)/10]	Rs. Crore	-	-	-
3.2	Allowable FAC	Rs. Crore	0.741	0.727	0.768
4	Utilization of FAC Fund				8
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-	-
4.2	Holding Cost on FAC Fund	Rs. Crore	-	-	-
4.3	Z <sub>FAC</sub> for the month (Sr. No. 3.2)	Rs. Crore	0.741	0.727	0.768
4.4	Closing Balance of FAC Fund	Rs. Crore	-	-	
4.5	Z <sub>FAC</sub> leviable/refundable to consumer	Rs. Crore	0.741	0.727	0.768
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.136	0.136	0.128
6	Carried forward FAC for recovery during future period (3.1-3.2-4)	Rs. Crore	0.605	0.590	0.641

Table 8: Summary of Allowable ZFAC

- 11.2 It can be seen from Table 8 above that the standalone FAC for the month of July 2023, August 2023, and September 2023 is Rs. 0.741 Crores, Rs. 0.727 Crores, and Rs. 0.768 Crores, respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 3.399/kWh, Rs. 3.314/kWh, and Rs. 3.753/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 KRCIPPL. As the FAC per unit computed in the month of July 2023 (Rs. 3.399/kWh), August 2023 (Rs. 3.314/kWh), and September 2023 (Rs. 3.753/kWh) as shown in Table 8 above are higher than the 20% cap (Rs. 0.697/kWh) specified in MYT Regulations, 2019, hence, the restriction is triggered with regards to such ceiling.
  - 11.5 Accordingly, considering the ceiling limit (Rs. 0.697 /kWh) at 20%, the FAC recoverable will be lower. Accordingly, due to ceiling limit (Rs. 0.697 /kWh), the FAC recoverable has been worked out as Rs. 0.136 Crore each for the months of July 2023 and August 2023 and Rs. 0.128 Crore for the month of September 2023.



- 11.6 Thus, considering the ceiling limit of 20% of variable component of tariff and the matter discussed in the preceding paragraph, FAC equivalent to Rs. 0.605 Crore (i.e., Rs. 0.741 Crore minus Rs. 0.136 Crore) for the month of July 2023, Rs. 0.590 Crore (i.e., Rs. 0.727 Crore minus Rs. 0.136 Crore) for the month of August 2023, and Rs. 0.641 Crore (i.e., Rs. 0.768 Crore minus Rs. 0.128 Crore) 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. 0.741 Crores, Rs. 0.727 Crores, and Rs. 0.768 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.

# 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: —

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

#### Where:

 $Z_{FACCat} = Z_{FAC}$  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 9Error! Reference source not found. shows per unit  $Z_{FAC}$  for the month July 2023, August 2023, and September 2023 to be levied on consumers of KRCIPPL in the billing month of September 2023, October 2023, and November 2023.

Table 9: Category-wise FAC Revenue for billing month September 2023, October 2023, and November 2023

Sr. No	Consumer Category	Slabs	Z <sub>FAC</sub> computed for the month of July 2023 (Rs. Crore)	Z <sub>FAC</sub> computed for the month of August 2023 (Rs. Crore)	Z <sub>FAC</sub> computed for the month of September 2023 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	0.097	0.097	0.090
2	HT-II Commercial	all units	-	-	-
3	HT III – EV Charging Stations	all units	0.000	0.000	0.000
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.000	0.000	0.000
4	LT-II (B) Commercial (above 20 kW)	all units	0.003	0.004	0.004
5	LT-III (A) Industrial (0-20 kW)	all units	0.001	0.001	0.001
6	LT-III (B) Industrial (above 20 kW)	all units	0.035	0.034	0.032
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	-	-	121
	Total FAC Recovery (Rs. Crore)		0.136	0.136	0.128



