



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/20/ WFH/ SBR/ 07

Date: 7 June, 2020

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: Prior approval of Fuel Adjustment Charges (FAC) submissions of KRCIPPL for the month of April, 2020.

Reference:

1. KRCIPPL's FAC submission for the month of April, 2020 vide email dated 15 May, 2020
2. Data Gaps were communicated vide email dated 17 May, 2020.
3. KRCIPPL's replies vide email dated 18 May, 2020

Sir,

Upon vetting the FAC calculations for the month of April, 2020 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	FAC Amount (Rs. Crore)
April, 2020	0

The Commission allows the accumulation of FAC of Rs. 0.02 Crore in the FAC fund as there is a negative FAC in the month of April, 2020. This is on account of lower sales and reasons as mentioned in this vetting report.

Yours faithfully,

(Dr. Rajendra Ambekar)
Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of April, 2020.

ANNEXURE A
Detailed Vetting Report
Date: 7 June, 2020

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF April, 2020

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of KRCIPPL for the month of April, 2020.

Reference: KRCIPPL's FAC submission for the month of April, 2020 vide email dated 15 May, 2020

1. FAC submission by KRCIPPL:

1.1 KRCIPPL has made FAC submissions for the month of April, 2020 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by KRCIPPL, the Commission has accorded prior approval for the FAC amount to be charged in the billing month of June, 2020.

2. Background

2.1 On 30 March, 2020, the Commission has issued Tariff Order in respect of KRCIPPL, (Case No.329 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. 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 As per provisions of MYT Regulations, 2019, before levying FAC for the first month of the 4th Control Period, Distribution Licensee including SEZ is required to seek prior approval of the Commission. Accordingly, vide its email dated 15 May, 2020. KRCIPPL has filed FAC submissions for the month of April, 2020 for prior approval of the Commission. The Commission has scrutinized the submissions provided by KRCIPPL and has also verified 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. 329 of 2019, the Commission has approved revised tariffs so as to maintain zero cross subsidy across tariff categories.

- 3.2 The net energy sales within licence area as submitted by 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

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (MU)
	(I)	(II=I/12)	(III)
HT Category			
HT- I Industrial	18.98	1.58	0.35
HT-II Commercial	3.94	0.33	0.12
LT Category			
LT-II (B) Commercial	2.01	0.17	0.03
LT-III (B) Industrial	-	-	0.09
Total	24.93	2.08	0.60

- 3.3 It can be observed from above Table 1 that the actual sale during the month of April, 2020 is 0.60 MUs, which is 71% lower than the approved energy sales of 2.08 MU per month for the FY 2020-21. The major variation was observed across all consumer categories as seen in the Table 1 above. As submitted by KRCIPPL this variation is on account of the unprecedented lockdown implemented in the month of April owing to COVID- 19 emergency.

4. Power Purchase Details

- 4.1 KRCIPPL is a deemed Distribution Licensee and 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 **Power Procurement from GMR Energy Trading Limited:** The Commission in its MYT Order dated 30 March, 2020 in Case No. 329 of 2019 had approved the Power Purchase of KRCIPPL through short term PPA with GMR Energy Trading Limited (GMRETL) up to 31 May, 2020.
- 4.3 **Power Procurement from Other Sources/Exchange:** The Commission in its MYT Order also approved short-term power procurement jointly with GEPL and MBPPL for remaining period of FY 2020-21 which has to be necessarily done through competitive bidding. KRCIPPL along with MBPPL and GEPL to separately approach the Commission for its approval for the quantum and other terms and conditions of the proposed arrangement for joint procurement of power.
- 4.4 Summary of Power Purchase for KRCIPPL is as follows:

Sr. No.	Particular	Compliance												
1	Purchase from Approved Source	KRCIPPL has purchase from GMRETL during April, 2020 which is approved source of power.												
2	Merit Order Dispatch	KRCIPPL has followed merit order for scheduling of power and preference was given to cheapest power.												
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.												
4	Pool Imbalance	KRCIPPL has supplied 0.24 MU to the imbalance pool by higher scheduling of power												
5	Sale of Surplus Power	No Surplus power available												
6	Power Purchase	Actual Power Purchase for consumers is 0.88 MU as against approved 2.21 MU due to lower sales												
7	Source wise Power Purchase	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual MU)</th> </tr> </thead> <tbody> <tr> <td>GMRETL</td> <td>0.24</td> <td>0.88</td> </tr> <tr> <td>Other Source</td> <td>1.97</td> <td>-</td> </tr> <tr> <td>Total</td> <td>2.21</td> <td>0.88</td> </tr> </tbody> </table>	Source Name	Approved (MU)	Actual MU)	GMRETL	0.24	0.88	Other Source	1.97	-	Total	2.21	0.88
Source Name	Approved (MU)	Actual MU)												
GMRETL	0.24	0.88												
Other Source	1.97	-												
Total	2.21	0.88												

4.5 As per power purchase approved by the Commission in its MYT Order, GMRETL PPA is valid for first two months of FY 2020-21 and for remaining period, power will be sourced from other source. As the Commission has approved power purchase for whole financial year and to work out monthly approval, each source is simply divided by twelve as there is no monthly approval. Hence, quantum of power purchase approved by the Commission and actually purchased by KRCIPPL from GMMRETL is in variance. Similar thing has happened to power purchase from Other Source.

5. Power Purchase Cost:

5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of April, 2020, in order 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 MYT Order respectively.

5.2 **GMR Energy Trading Limited:** KRCIPPL has purchase 0.88 MU at approved rate of 4.63/kWh from GMRETL. There is no deviation in the price of power purchase from GMRETL.

5.3 **Other Source:** Due to lower requirement, KRCIPPL was not required to purchase from other source to meet its power purchase requirement.

5.4 **Renewable Sources:** The Commission has also approved Rs. 0.42 crore annually which converts to Rs. 0.04 Crore for April, 2020 for purchase of REC to meet Renewable Purchase Obligation. KRCIPPL has purchase Nil REC for the month of April, 2020. By

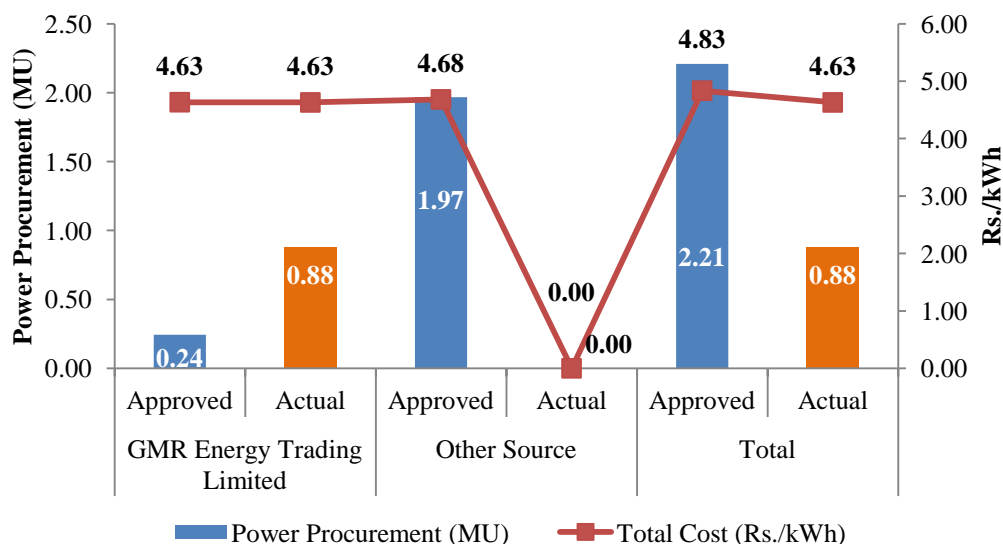
avoiding purchase of REC, KRCIPPL has reduced power purchase cost for April, 2020 but created liability for future.

- 5.5 **Imbalance Pool:** KRCIPPL has incremented into imbalance pool by 0.24 MU. KRCIPPL in its reply stated that it has entered into short-term PPA with GMR Energy Trading Limited and accordingly power is being scheduled on advance reservation/first come first serve basis. Due to uncertain phases of lockdown, consumers in the KRCIPPL area were unable to confirm their power requirements. Hence, KRCIPPL had to maintain the minimum energy requirement to meet the demand based on its own estimations, which turned out to be different from the actual demand. KRCIPPL also submitted that in terms of percentage, the variation looks large, however, in terms of quantum it is miniscule in nature. With highly dynamic situation, it is difficult to schedule power to the precision of 100 kW or 200kW accuracy. Deviations were due to uncertain dynamic occupancy situations which were beyond control of the Licensee within the limited power requirement of 1 MW.
- 5.6 It is seen that KRCIPPL has injected 0.24 MUs to the imbalance pool. The said injection into the pool may be on account of either decrease in demand of consumers than estimated by the licensee or due to higher generation than scheduled by the generator. In both the scenarios, power incremented in the imbalance pool is not supplied to its consumers.
- 5.7 The present FAC mechanism includes any variation in power purchase cost which includes both Fixed Charges and Variable Charges. The imbalance pool settlement is done considering Variable Charges on monthly basis and Fixed Cost Reconciliation on yearly basis. Accordingly, considering monthly surplus imbalance pool quantum at provisional variable cost as per FBSM mechanism will increase the overall average power purchase cost which is computed considering both Fixed and Variable Charges, thereby burdening the consumers with FAC. Further, due to historical issues of delay in computing imbalance pool quantum and cost of power, for which appropriate orders are already passed by the Commission, non-consideration of surplus imbalance pool quantum at the time of FAC computation on monthly basis will not have any adverse impact on licensee as it would have anyway paid the entire fixed cost to the generator even if lower quantum of power was supplied. Further, for FAC computation total energy purchased by the licensee is being considered for FAC Computation. In view of the aforesaid, it would not be prudent to burden the consumers by considering the impact of monthly surplus imbalance pool in FAC computation. Accordingly, to balance overall interest of consumers and licensee, the Commission has not considered the surplus imbalance pool quantum and cost in the monthly FAC computation as it will get adjusted during truing-up of the respective year.
- 5.8 **Approved Cost:** The details of the overall cost approved and actual for the month of April, 2020 as per MYT Order is as shown in the Table 2 below:

Table 2: Approved and Actual Power Purchase and APPC for April, 2020

Source		Generation (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Total Cost (Rs. Crore)	Total Cost (Rs./kWh)
GMR Energy Trading Limited	Approved	0.24	-	-	0.11	4.63	0.11	4.63
	Actual	0.88	-	-	0.41	4.63	0.41	4.63
Other Source	Approved	1.97	-	-	0.92	4.68	0.92	4.68
	Actual	-	-	-	-	-	-	-
Solar and Non Solar REC	Approved	-	-	-	0.04	-	0.04	-
	Actual	-	-	-	-	-	-	-
Total	Approved	2.21	-	-	1.07	4.84	1.07	4.83
	Actual	0.88	-	-	0.41	4.63	0.41	4.63

5.9 The Variation is approved and actual quantum of power procured and the APPC is shown in the Figure 1 below:

Figure 1: Variation in Power Procurement and Total per unit Cost for April, 2020

5.10 Considering the above, the Commission allows the average power purchase cost of Rs. 4.63/ kWh for the month of April, 2020 as shown in Table 2 above. The reduction in power purchase cost is due to non-purchase of costlier power, contribution to imbalance pool and non-purchase Renewable Energy Certificates.

6. FAC on account of fuel and power purchase cost (F)

6.1 The Commission has worked out the average power purchase cost for the month as shown in the 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_{FAC} is to be passed on to the consumers.

6.2 Thus, the following Table 3 shows the rectified Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of April, 2020.

Table 3: FAC on account of fuel and Power Purchase Cost

Sr. No.	Particulars	Units	April 2020
1	Average power purchase cost approved by the Commission	Rs./kWh	4.83
2	Actual average power purchase cost	Rs./kWh	4.63
3	Change in average power purchase cost (=2 -1)	Rs./kWh	(0.20)
4	Net Power Purchase	MU	0.88
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	(0.02)

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

7.1 As the Commission is determining the FAC for the first time after the adoption of Tariff from April, 2020 there is no past adjustment for over recovery/under recovery.

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

8.1 As the Commission is determining the FAC for the first time after the adoption of Tariff from April, 2020, there is no past adjustment for over recovery/under recovery and hence no carrying cost for over recovery/under recovery.

9. Disallowance due to excess Distribution Loss

9.1 Regulation 10.8 of MYT Regulations, 2019 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

“10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of “Rupees per kilowatt-hour”:

Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable”

- 9.2 The following Table 4 provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss, if any.

Table 4: Disallowance of FAC due to excess Distribution Loss

Sr. No.	Particulars	Units	Approved in MYT Order	Actual for April, 2020
1	Net Energy input at Distribution Voltages	MU	25.70	0.61
2	Energy sales at Distribution voltages	MU	24.93	0.60
3	Distribution Loss (1 - 2)	MU	0.77	0.02
4	Distribution Loss as % (3/1)	%	3.00%	2.56%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU		-

- 9.3 As seen from the above Table 4, excess distribution loss for the month of April, 2020 is nil, because actual distribution loss is lesser than the approved Distribution loss in the MYT Order.

10. Summary of Allowable Z_{FAC}

- 10.1 The summary of the FAC amount as approved by the Commission for the month of April, 2020 is shown in Table 5 below:

Table 5: Summary of Allowable Z_{FAC}

Sr. No.	Particulars	Units	April, 2020
1	Calculation of ZFAC		
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	(0.02)
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-
1.4	ZFAC = F+C+B	Rs. Crore	(0.02)
2	Calculation of per unit FAC		-
2.1	Energy Sales within the License Area	MU	0.60
2.2	Excess Distribution Loss	MU	-
2.3	ZFAC per kWh	Rs./kWh	(0.30)
3	Allowable FAC		-
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	-
3.2	FAC Allowable (1.4-3.1)	Rs. Crore	(0.02)
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	ZFAC for the month	Rs. Crore	(0.02)
4.4	Closing Balance of FAC Fund	Rs. Crore	(0.02)
4.5	ZFAC leviable/refundable to consumer	Rs. Crore	0.00

Sr. No.	Particulars	Units	April, 2020
5.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.00
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	-

10.2 It can be seen from the above Table 5 that standalone FAC for the month of April, 2020 is Rs. (0.02) Crore. As the FAC is negative, the said amount will be accumulated in FAC Fund for stabilisation of FAC in future period.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MERC MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

“10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

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

Where:

ZFAC Cat = ZFAC 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 ZFAC 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 ZFAC on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission....”

11.2 The Commission had invoked power of removing difficulties under MYT Regulation, 2019 and made following changes for computation of FAC.

“Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

- *Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost.*
- *Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost.*

- *Such carry forward of negative FAC shall be continued till the accumulated negative FAC becomes 20 % of monthly tariff revenue approved by the Commission in Tariff Order. In case of KRCIPPL such limit shall be Rs.28 Lakh. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism.*
- *In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism, upon seeking prior approval from the Commission.”*

11.3 Therefore, no FAC would be levied on consumer in the month of April, 2020 and Rs. 0.02 Crore will be carried forward to next billing cycle with holding Cost as a FAC Fund.

11.4 **Accordingly, per unit ZFAC for the month of April, 2020 to be levied on consumers of KRCIPPL in the billing month of June, 2020 is Nil.**