

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No: MERC/FAC/ 20162014 01160

Date: 8 December, 2016

The Director,

Reliance Infrastructure Limited, Devidas Lane, Off SVP Road, Near Devidas Telephone Exchange, Borivali (W) Mumbai 400 092

Subject:

Post Facto approval of Fuel Adjustment Charges (FAC) submissions of

RInfra-D for the month of April, 2016 to June, 2016.

Reference:

a) RInfra-D's FAC submission for month of April, 2016 to June, 2016 vide

letter dated 23 September, 2016.

Sir,

Upon vetting the FAC calculations for the months of April, 2016 to June, 2016 submitted vide letters under above reference, the Commission has accorded post facto approval for the FAC amount (net of excess T&D loss), as detailed below:

Month	FAC Amount (Rs. Crore)
April, 2016	23.39
May, 2016	17.15
June, 2016	3.09

The above approval of FAC amount is subject to the final True up of FY 2016-17 under MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

(Dr. Rajendra Ambekar) Director (Tariff), MERC

Encl: Annexure: Detailed Vetting Report for the month of April, 2016 to June, 2016.

Cc as enclosed:

Names and Addresses of Consumer Representatives authorized as per Section 94 (3) of the Electricity Act 2003

Prayas Energy Group,	The President,			
Amrita Clinic, Athawale Corner,	Mumbai Grahak Panchayat,			
Lakdipool-Karve Road Junction,	Grahak Bhavan, Sant Dynyaneshwar Marg,			
Deccan Gymkhana, Karve Road,	Behind Cooper Hospital,			
Pune 411 004	Vile Parle (West), Mumbai 400 056			
The General Secretary,	The President,			
Thane Belapur Industries Association,	Vidarbha Industries Association,			
Plot No.P-14, MIDC, Rabale Village,	1st floor, Udyog Bhawan,			
PO Ghansoli, Navi Mumbai 400 701	Civil Lines, Nagpur 440 001			
Maharashtra Chamber of Commerce,	Chamber of Marathwada Industries and			
Industry & Agriculture,	Agriculture,			
Oricon House, 6 th Floor,	Bajaj Bhavan, P-2, MIDC Area, Station Road,			
12k. Dubash Marg, Fort, Mumbai- 400001	Aurangabad – 431 005			
(Nashik Branch)				
Email: maccia.nsk@gmail.com				



Subject:

Post Facto approval of FAC submissions of RInfra-D for the month of

April, 2016 to June, 2016.

Reference:

a) RInfra-D's FAC submission for month of April, 2016 to June, 2016 vide

letter dated 23 September, 2016.

1. FAC Submission by RInfra-D

- 1.1 RInfra-D, in its submission has computed the FAC for the months of April, 2016 to June, 2016 in accordance with Mid Term Review Order (MTR Order) dated 26 June, 2015 in Case No. 4 of 2015, for approval of Truing up of FY 2012-13 and FY 2013-14, provisional Truing up of 2014-15 and revised ARR and revised Tariff for FY 2015-16.
- 1.2 In terms of the MERC (MYT) Regulations, 2011 a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for FAC charges. Accordingly, RInfra-D has submitted details of FAC chargeable from consumers for first quarter of FY 2016-17.

2. FAC Methodology

- 2.1 The methodology for arriving at FAC is as per MERC MYT Regulations, 2011 amended from time to time. The salient features for arriving at FAC for the above period are as under:
 - Variable cost of generation is calculated based on net generation for RInfra-G, other generating stations, traders and procurement of Renewable energy.
 - Normative/specified parameters of Heat Rate, Auxiliary Consumption, Transmission and Distribution Loss are considered
 - Actual Distribution losses have been computed based on metering arrangement.
 - Power purchase requirement for RInfra-D is considered from all sources of power usually purchased by the utility. The source include power from RInfra-G, renewable sources, power purchase through other generating stations like VIPL and power purchase through bilateral contracts.
 - As submitted by RInfra-D, energy at the T \diamond D interface in the 'Energy Balance' tabulation of the FAC submission, is arrived at as follows:



RInfra-D Requirement (MU)	Formula	Apr 2016	May 2016	June 2016
Energy sales at Distribution voltages	(i)	718.46	779.65	747.46
Distribution Loss	(ii)	54.41	91.49	97.04
Net Energy input at Distribution Voltages	(iii) = (i) + (ii)	772.87	871.15	844.50
Transmission Loss	(iv)	31.28	35.26	34.10
Gross Energy input at Transmission Voltages	(v) = (iii) + (iv)	804.15	906.41	878.60
Less: Open Access	(vi)	7.24	10.37	9.96
Net Energy input at Transmission Voltages	(vii)= (v)-(vi)	796.90	896.04	868.64

2.2 The energy requirement met through the purchase of power from different sources is as under:

MU

Source of Purchase	Apr 2016	May 2016	June 2016
RInfra-G (Own Generation)	179.66	317.27	304.94
Renewable Energy based Generating Stations	21.26	30.38	39.41
Other Generating Stations	354.63	354.47	313.42
Traders/Bilateral	203.08	115.07	110.45
Other Sources	38.28	78.85	100.43
Grand Total	796.90	896.04	868.64

3. Variable cost of power purchase of RInfra-D

- 3.1 RInfra-D has considered power purchase from the following sources:
 - a) Procurement from RInfra-G (DTPS)
 - b) Purchase from Other Generating Stations such as VIPL
 - c) RPS Power
 - d) Bilateral Purchases
 - e) MSEDCL

4. Change in Variable Cost and Fixed Cost of power purchase ("F"):

4.1 Change in variable cost of power purchase has been arrived at by multiplying actual power purchase (MU) with the change in weighted average cost (Rs/kWh) of power purchase. Change in fixed cost has been arrived at by taking the difference between actual fixed cost and approved fixed cost for each of the months.



- 4.2 The Commission has issued its Order dated 26 June, 2015 in Case No. 4 of 2015 for Mid-Term Review, including Truing up for FY 2012-13 and FY 2013-14, Provisional Truing up of FY 2014-15 and revised ARR and Tariff for FY 2015-16.
- 4.3 For the months of April, 2016 to June, 2016, the Commission has approved weighted average variable power purchase cost of Rs. 2.76/kWh. As against this, the normative actual variable cost incurred for the months of April, 2016 to June, 2016 is shown in the table below:

Sr. No.	Particular	Unit	Apr 2016	May 2016	June 2016
1.0	Weighted Average variable cost of generation and power purchase approved by the Commission (Order)	Rs/kWh	2.76	2.76	2.76
2.0	Weighted Average Normative Actual variable cost of generation and power purchase for Month	Rs/kWh	3.05	2.95	2.81
3.0	Change in variable cost of generation and power purchase (2.0-1.0)	Rs/kWh	0.29	0.19	0.05
4.0	Net Power Purchase	MU	796.90	896.04	868.64
5.0	Change in variable cost of generation and power purchase (3.0 x 4.0)	Rs Crore	23.39	17.15	4.06
6.0	Change in fixed cost of power purchase	Rs Crore	0.00	0.00	0.23
7.0	Net variation in power purchase cost	Rs Crore	23.39	17.15	4.28

5. Adjustment for Over Recovery/Under Recovery ("B")

5.1 After adjustment for over-recovery/under recovery (B), the adjustment factor to be added / reduced is as below:

Month	Adjustment Factor (Rs. Crore)
April, 2016	0.00
May, 2016	0.00
June, 2016	(1.16)

6. Carrying Cost/ Holding Cost for Under Recovery/ Over Recovery ("C")

6.1 Carrying/ Holding cost for under/ over recovery has been granted at approved interest rate for the eligible amount viz the difference between the normative actual variable cost of power procurement and approved cost of power procurement for the respective months.



The following table shows the month wise interest rate and amount worked out as Carrying/ Holding cost for under/ over recovery for the months of April, 2016 to June, 2016.

Particulars	Apr 2016	May 2016	June 2016
Applicable Interest Rate	10.80%	10.80%	10.80%
Carrying Cost/ (Holding Cost) for under/ over recovery (Rs. Crore)	0.00	0.00	(0.02)

7. Excess Distribution Loss

7.1 The Commission has considered allowable Distribution Loss at 9.36% for the months of April, 2016 to June, 2016. The actual cumulative Distribution Losses and the corresponding disallowances on account of excess distribution losses are shown in the Table below:

Month	Distribution Losses	Disallowances due to excess Distribution Loss (Rs. Crore		
April, 2016	7.04%	0.00		
May, 2016	8.88%	0.00		
June, 2016	9.76%	0.01		

7.2 As seen from the above table, the Distribution loss % for the month of June, 2016 has been more than the approved Distribution Loss of 9.36%. Therefore, Rs. 1.38 lakh has been deducted on account of excess Distribution Loss from FAC in the month of June, 2016.

8. Cap on Monthly FAC Charge

8.1 Applicability of Revised Ceiling Limit of 20%

The relevant extract from the MERC (Multi Year Tariff) (Third Amendment) Regulations, 2014 is as below:

"13.9 The formula for the calculation of the FAC component of Z-factor Charges as given under:-

Provided that the monthly FAC charge 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."



8.2 As per above Regulations, the ceiling based on 20% of the variable component of Tariff works out to Rs. 151.63 Paise/kWh.

9. The summary of FAC recoverable and carried forward for recovery in future is as follows:

9.1 The summary of the Total Fuel Cost and Power Purchase Cost Adjustment (FAC), FAC Charge per unit (Rs/kWh) and FAC to be recovered considering the cap on monthly FAC charge for April, 2016 to June, 2016 is given in the table below:

Sr. No.	Parameter	Unit	Apr 2016	May 2016	Jun 2016
1	Calculation of FAC (A)		2010	2010	2010
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)		23.39	17.15	4.28
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.00	0.00	(0.02)
1.3	Adjustment factor for over- recovery/under-recovery (B)	Rs. Crore	0.00	0.00	(1.16)
1.4	FAC(A) = F + C + B	Rs. Crore	23.39	17.15	3.10
2	Calculation of FAC _{kWh}				
2.1	Sale within License Area	MU	718.46	779.65	747.46
2.2	Excess Distribution Loss	MU	0.00	0.00	3.40
2.3	FAC Charge (FAC $_{kWh}$) without considering cap on monthly FAC Charge	Rs./kWh	0.33	0.22	0.04
2.4	Cap on monthly FAC Charge	Rs./kWh	1.52	1.52	1.52
2.5	FAC Charge (FAC_{kWh}) considering cap on Monthly FAC charge	Rs./kWh	0.33	0.22	0.04
3	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge to be recovered in June, 2016 to August, 2016	Rs. Crore	23.39	17.15	3.09
3.2	FAC (A) disallowed corresponding to excess Distribution Loss	Rs. Crore	0.00	0.00	0.01
3.3	Carried forward FAC (A) for recovery during future period	Rs. Crore	0.00	0.00	0.00

10. Recovery of FAC

10.1 The Commission approves the FAC computed for the month of April, 2016 to June 2016 as given in the Table above subject to Truing up of RInfra-D for FY 2016-17.



APPEXNDIX-II

APPROVAL OF FUEL ADJUSTMENT CHARGES (FAC) FOR THE MONTHS OF APRIL, 2016 TO JUNE, 2016 TO BE RECOVERED IN JUNE, 2016 TO AUG, 2016

Consumer categories	Category Wise FAC to be levied in month of (Rs/kWh)			
	Jun 2016	Jul 2016	Aug 2016	
Low Tension - LT				
BPL	0.17	0.14	0.20	
		011	0.20	
LT -I Residential (Single Phase)				
0-100	0.17	0.14	0.20	
101-300	0.25	0.21	0.29	
301-500	0.30	0.25	0.35	
500and above	0.36	0.30	0.41	
LT -I Residential (Three Phase)				
0-100	0.17	0.14	0.20	
101-300	0.23	0.19	0.27	
301-500	0.29	0.25	0.34	
500and above	0.35	0.29	0.41	
LT II : LT - Non - Residential or Commercial				
LT II (a) - 0-20 kW	0.30	0.25	0.35	
LT II (b) - 20-50 kW	0.34	0.29	0.40	
LT II (c) - above 50 kW	0.38	0.32	0.44	
LT III - LT Industrial upto 20 kW	0.31	0.26	0.36	
LT IV - LT Industrial above 20 kW	0.31	0.26	0.36	
LT-V : LT- Advertisements and Hoardings	0.70	0.59	0.82	
LT VI: LT -Street Lights	0.31	0.26	0.36	
LT-VII (A): LT -Temporary Supply Religious	0.26	0.21	0.30	
LT-VII (B): LT -Temporary Supply Others	0.70	0.58	0.81	



Consumer categories	Category Wise FAC to be levied in month of (Rs/kWh)			
	Jun 2016	Jul 2016	Aug 2016	
LT VIII: LT - Crematorium & Burial Grounds	0.26	0.22	0.30	
LT IX: LT -Agriculture	0.11	0.10	0.13	
LT X: LT -Public Service (A)	0.29	0.24	0.33	
LT X: LT -Public Service (B)	0.28	0.24	0.33	
High Tension – HT				
HT 1 (Industrial)	0.32	0.27	0.38	
HT 2 (Commercial.)	0.37	0.31	0.43	
HT 3 (Group Housing Soc.)	0.30	0.25	0.35	
HT 4 (Temporary Supply)	0.43	0.36	0.50	
HT – Railways	0.32	0.27	0.37	
HT - Public Services (A)	0.30	0.25	0.35	
HT - Public Services (B)	0.29	0.24	0.33	

