



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No: MERC/FAC/20162017/01235

Date: 26 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 July, 2016 to September, 2016.

Reference: a) RInfra-D's FAC submission for month of July, 2016 to September, 2016 vide letter dated 25 November, 2016.

Sir,

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

Month	FAC Amount (Rs. Crore)
July, 2016	9.22
August, 2016	7.75
September, 2016	2.91

Since, FAC for the period of April 2016 to September 2016 has been calculated based on the power purchase cost approved for FY 2015-16 in the prevailing Tariff Order dated 26 June, 2015, RInfra is directed to recalculate FAC for this period after considering the power purchase cost approved for FY 2016-17 in Tariff Order dated 21 October, 2016. RInfra shall adjust the resultant FAC amount which remains to be recovered / refunded in next FAC billing process.

Yours faithfully,


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

Encl: Annexure: Detailed Vetting Report for the month of July, 2016 to September, 2016.

Cc as enclosed:

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

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



ANNEXURE

Detailed Vetting Report

Date: 26 December, 2016

Post Facto approval of FAC Charges for the months of July, 2016 to September, 2016 submitted by RInfra-D

Subject: Post Facto approval of FAC submissions of RInfra-D for the month of July, 2016 to September, 2016.

Reference: a) RInfra-D's FAC submission for month of July, 2016 to September, 2016 vide letter dated 25 November, 2016.

1. FAC Submission by RInfra-D

1.1 MERC (Multi Year Tariff) Regulations, 2015 becomes applicable for tariff determination of 3rd Control Period of FY 2016-17 to FY 2019-20. However, Tariff Order under this MYT Regulations, 2015 applicable for FY 2016-17 has been issued only on 21 October, 2016 and made effective from 1 October, 2016. Therefore for the period of July to September, 2016, Tariff Order dated 26 June, 2015 was applicable.

1.2 Accordingly, RInfra-D, in its submission has computed the FAC for the months of July, 2016 to September, 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.

1.3 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 second 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<math>\lt;/math>D interface in the 'Energy Balance' tabulation of the FAC submission, is arrived at as follows:

RInfra-D Requirement (MU)	Formula	Jul 2016	Aug 2016	Sep 2016
Energy sales at Distribution voltages	(i)	671.91	669.05	643.41
Distribution Loss	(ii)	52.42	78.48	78.51
Net Energy input at Distribution Voltages	(iii) = (i) + (ii)	724.33	747.53	721.91
Transmission Loss	(iv)	34.96	36.35	27.15
Gross Energy input at Transmission Voltages	(v) = (iii) + (iv)	759.28	783.89	749.06
Less: Open Access	(vi)	13.86	14.58	9.96
Net Energy input at Transmission Voltages	(vii)=(v)-(vi)	745.42	769.30	739.11

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

MU

Source of Purchase	Jul 2016	Aug 2016	Sep 2016
RInfra-G (Own Generation)	297.10	291.35	277.69
Renewable Energy based Generating Stations	43.44	48.33	30.82
Other Generating Stations	229.90	294.44	313.02
Traders	76.28	48.03	34.33
Other Sources	98.71	87.15	83.24
Grand Total	745.42	769.30	739.11

3. Variable cost of power purchase of RInfra-D

3.1 RInfra-D has considered power purchase from the following sources:

- Procurement from RInfra-G (DTPS)
- Purchase from Other Generating Stations such as VIPL
- RPS Power
- Bilateral Purchases
- 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 July, 2016 to September, 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 July, 2016 to September, 2016 is shown in the table below:

Sr. No.	Particular	Unit	Jul 2016	Aug 2016	Sep 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	2.85	2.85	2.79
3.0	Change in variable cost of generation and power purchase (2.0-1.0)	Rs/kWh	0.08	0.09	0.03
4.0	Net Power Purchase	MU	745.42	769.30	739.11
5.0	Change in variable cost of generation and power purchase (3.0 x 4.0)	Rs Crore	6.31	7.08	2.13
6.0	Change in fixed cost of power purchase	Rs Crore	0.23	0.23	0.23
7.0	Net variation in power purchase cost	Rs Crore	6.54	7.30	2.35

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)
July, 2016	2.63
August, 2016	0.45
September, 2016	0.56



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 July, 2016 to September, 2016.

Particulars	Jul 2016	Aug 2016	Sep 2016
Applicable Interest Rate	10.80%	10.80%	10.80%
Carrying Cost/ (Holding Cost) for under/ over recovery (Rs. Crore)	0.05	0.01	0.01

7. Excess Distribution Loss

7.1 The Commission has considered allowable Distribution Loss at 9.36% for the months of July, 2016 to September, 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)
July, 2016	9.19%	0.00
August, 2016	9.44%	0.01
September, 2016	9.66%	0.01

7.2 As seen from the above table, the Distribution loss % for the month of August and September, 2016 has been more than the approved Distribution Loss of 9.36%. Therefore, Rs. 0.68 Lakh and Rs. 0.91 Lakh have been deducted on account of excess distribution loss from FAC in the months of August, 2016 and September, 2016 respectively.

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 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 July, 2016 to September, 2016 is given in the table below:

Sr. No.	Parameter	Unit	Jul 2016	Aug 2016	Sep 2016
1	Calculation of FAC (A)				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	6.54	7.30	2.35
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.05	0.01	0.01
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	2.63	0.45	0.56
1.4	FAC (A) = F + C + B	Rs. Crore	9.22	7.76	2.92
2	Calculation of FAC _{kWh}				
2.1	Sale within License Area	MU	671.91	669.05	643.41
2.2	Excess Distribution Loss	MU	0.00	0.60	2.17
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Rs./kWh	0.14	0.12	0.05
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	0.14	0.12	0.05
3	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge to be recovered in September, 2016 to November, 2016	Rs. Crore	9.22	7.75	2.91
3.2	FAC (A) disallowed corresponding to excess Distribution Loss	Rs. Crore	0.00	-0.01	-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 At the end of September, 2016, FAC to be carried forward for next month is Nil.
- 10.2 The Commission approves the FAC computed for Quarter-I of FY 2016-17 as given in the Table above subject to Truing up of RInfra-D for FY 2016-17.
- 10.3 As the Tariff Order applicable for FY 2016-17 has been issued on 21 October, 2016 and revised Tariff has been made effective from 1 October, 2016, recovery of FAC in the month of October, 2016 has been equated to zero. RInfra needs to get prior approval of FAC for the month of October, 2016 based on revised Tariff.
- 10.4 Accordingly, the Commission accorded its approval for levy of FAC for the month of July 2016 to the consumers in the billing month of September, 2016. FAC for the month of August and September, 2016 remains unrecovered.
- 10.5 Since, FAC for the period of April 2016 to September 2016 has been calculated based on the power purchase cost approved for FY 2015-16 in the prevailing Tariff Order dated 26 June, 2015, RInfra is directed to recalculate FAC for this period after considering the power purchase cost approved for FY 2016-17 in Tariff Order dated 21 October, 2016. RInfra shall adjust the resultant FAC amount which remains to be recovered / refunded in next FAC billing process.



**APPROVAL OF FUEL ADJUSTMENT CHARGES (FAC) FOR THE MONTHS
OF JULY, 2016 TO BE RECOVERED IN SEPTEMBER, 2016**

Consumer categories	Category Wise FAC to be levied in month of (Rs/kWh)
	September 2016
Low Tension - LT	
BPL	0.13
LT -I Residential (Single Phase)	
0-100	0.13
101-300	0.19
301-500	0.23
500and above	0.28
LT -I Residential (Three Phase)	
0-100	0.13
101-300	0.18
301-500	0.23
500and above	0.27
LT II : LT - Non - Residential or Commercial	
LT II (a) - 0-20 kW	0.24
LT II (a) – TOD Option	0.24
LT II (b) - 20-50 kW	0.27
LT II (c) - above 50 kW	0.29
LT III - LT Industrial upto 20 kW	0.24
LT IV - LT Industrial above 20 kW	0.24
LT-V : LT- Advertisements and Hoardings	0.55
LT VI: LT -Street Lights	0.24
LT-VII (A): LT -Temporary Supply Religious	0.20
LT-VII (B): LT -Temporary Supply Others	0.54
LT VIII: LT - Crematorium & Burial Grounds	0.20
LT IX: LT –Agriculture	0.09



Consumer categories	Category Wise FAC to be levied in month of (Rs/kWh)
	September 2016
LT X: LT -Public Service (A)	0.22
LT X: LT -Public Service (B)	0.22
High Tension – HT	
HT 1 (Industrial)	0.25
HT 2 (Commercial.)	0.29
HT 3 (Group Housing Soc.)	0.24
HT 4 (Temporary Supply)	0.34
HT – Railways	0.25
HT - Public Services (A)	0.23
HT - Public Services (B)	0.22

