



MERC

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

13th Floor, Centre No. 1, World Trade Centre, Cuffe Parade, Colaba, Mumbai - 400 005.
Tel.: 022-2216 3964 / 2216 3965 / 2216 3969 ♦ Fax : 022-2216 3976 ♦ Website : www.mercindia.org.in
E-mail : mercindia@mercindia.org.in

No: MERC/FAC/20122013/02084

Date: December 14, 2012

The Director,
Reliance Infrastructure Limited,
Devidas lane, Off SVP Road
Near Devidas Telephone Exchange
Borivali (W), Mumbai 400 0092.

Subject: Approval of Reliance Infrastructure Ltd Fuel Adjustment Charges (FAC) for the period *October 2011 to December 2011*. (QIII – F.Y. 2011- 2012)

Reference: a) Reliance Infrastructure's submission vide letter dated 13th June, 2012 for Post facto approval of FAC for the period *October 2011 to December 2011*. (QIII – F.Y. 2011- 2012)
b) Subsequent clarifications received by R Infra by E_Mail

Sir,

With reference to your submission referred to above, in pursuance of directions in the Tariff Order dated 29 July 2011, I am directed to forward herewith the decision of the Commission (refer Annexure) for further necessary action.


The Commission has post facto approved FAC amount as tabulated below:

Sr. No.	Month	FAC Amount	Remarks
1	October 2011	(10.4073) crores	To be <i>Refunded</i> to the Consumers.
2	November 2011	(33.3766) crores	To be <i>Refunded</i> to the Consumers.
3	December 2011	(18.1742) crores	To be <i>Refunded</i> to the Consumers.

The carried forward amount for recovery at future date is *NIL*.

The Commission has noted that the procurement rate of Renewable Energy as submitted by R Infra for QIII FY12 is much higher than that in the previous 2 quarters. The Commission will address the issue during the Annual True-up. The details are tabulated in the enclosed Annexure.

Yours faithfully


(Kuldip N. Khawarey)
Secretary, MERC

Encl: Detailed Vetting Report for QIII- F.Y. 2011-2012

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 7001	The President, Vidarbha Industries Association, 1 st floor, Udyog Bhawan, Civil Lines, Nagpur 440 001.

ANNEXURE

Detailed Vetting Report

Date: December 13, 2012

Subject: Approval of Reliance Infrastructure Limited Fuel Adjustment Charges (FAC) for the period *October 2011 to December 2011 (QIII – F.Y. 2011-2012)*

Reference:

- a) Reliance Infrastructure's submission vide letter dated 13th June, 2012 for post facto approval of FAC for the period *October 2011 to December 2011 (QIII – F.Y. 2011-2012)*
- b) Subsequent clarifications submitted by R Infra

1. The Commission has issued Tariff Order on 29th July 2011 in case No 72 of 2010 in the matter of Reliance Infrastructure Limited Distribution Business' (R Infra –D) Petition for Truing Up for the FY 2008-09, Annual Performance Review for the FY 2009-10 and Tariff Determination for the FY 2010-11.

The Commission has issued Tariff Order on 29th September 2010 for R Infra G (Case 99 of 2009) , vide which the generation tariff for the utility for FY 11 has been determined, The said tariff order is applicable with effect from September 2010. In the said T O, the Commission has directed that:

The rate of energy charge (ex bus) for the FY 2010-11 has been approved for DTPS, based on approved operational parameters and assumed fuel price for the FY 2010-11. Any variations in the fuel prices shall be dealt with FAC Mechanism.

Accordingly, vide its submission of 13th June, 2012 Reliance Infra –D has computed the FAC for the month of October, November and December 2011 as directed, and detailed methodology as per MERC (Terms and Conditions of Tariff) Regulations, 2005.

The relevant parameters approved in the said APR Order for computation of FAC are enclosed at Appendix-1

2. R Infra-D meets its power requirement through procurement from the following sources:
- a) Procurement from R Infra –G (DTPS)
 - b) RPS Power
 - c) Bilateral Purchases (as per SLDC)
 - d) UI purchases (as per SLDC)

R Infra-D has submitted affidavit verifying the application and the energy balance statements issued by SLDC for the July 2011.

Supporting documents from R Infra-G such as certified copies “Coal related expense” have also been enclosed.

3. **Validation of Fuel Adjustment Cost for October, November and December 2011**

The Commission has assessed FAC charge of R Infra-D for the said period based on the FAC formula approved in the Tariff Regulations.



4. Change in Variable Cost of own generation and power purchase (C):

Due to change in variable (fuel) cost of generation and power purchase, the actual weighted average variable (fuel) cost of generation and power purchase has varied (decreased) by Rs. (0.145), (0.468) and (0.299) per kWh in October, Nov and Dec, 2011 respectively. Considering the normative actual variable (fuel) cost of generation for DTGS and actual power purchase from other sources, the rate of variable charge for power purchase is Rs. 3.304, 2.982 and 3.150 per kWh for months October, Nov and Dec, 2011 respectively, as against Approved rate of Rs. 3.449 per kWh for these months.

Change in variable (fuel) cost of own generation and power purchase, has been arrived at by multiplying the total quantum of gross generation and power purchase with the change in weighted average cost of generation and power purchase.

5. Assessment of Variable (Fuel) Cost of own generation (R Infra-G)

The Commission has assessed the variable cost of own generation (R Infra -G) taking into consideration change in fuel mix, actual fuel price and normative heat rate, which are Rs. 2.592, 2.397 and 2.616 per kWh for months October, Nov and Dec 2011 respectively as against Rs. 1.814 per kWh considered in the APR Order of R Infra-D for FY 2010-11.

It is to be noted here that the “Normative actual” cost of generation is higher than the “actual” cost of generation due to efficient generation parameters of Dahanu thermal units. This is approved.

The total normative variable cost of own (R Infra G) generation amounts to:

	October 2011	November 2011	December 2011
Normative V. C. (In Lacs)	9174.92	7981.48	9002.13
Net Generation (In MUs)	353.99	332.95	344.15

6. Actual Fuel Price

The Commission has assessed fuel price in terms of heat content (Rs./Mkcal) by considering actual fuel price based on the audited statement of fuel cost submitted by R Infra. The Commission has considered calorific value of the coal basket as fired coal at DTGS based on the certificate issued by independent verification agency.

R Infra has incurred Coal related expenses of Rs 27.14 Lakhs, Rs. 34.21 Lakhs and Rs. 37.98 Lakhs for the months October, November and December 2011. These are approved.



7. Heat Rate

R-Infra has considered the approved heat rate viz. 2500 kcal/kWH, as per the APR Order for FY 2010- 11 for computing normative actual variable (fuel) cost of generation for assessment of FAC, which is allowed.

8. Disallowance of FAC corresponding to excess auxiliary consumption

The Auxiliary consumption at DTGS is reported as 7.412%, 7.467% and 7.370% in October, November & December 2011 respectively, against the approved value of 8.5 % (excl. of FGD). Hence there is no disallowance on account of excess auxiliary consumption. The Auxiliary Consumption of FGD is taken at the normative value of 4.750 MU per month, for the months October, November and December 2011.

9. Disallowance of FAC corresponding to excess Transit Loss

Excess Transit Loss is computed based on the normative transit loss approved in the APR Order. Fuel adjustment cost corresponding to excess Transit Loss has been disallowed and is computed by multiplying the excess transit loss with the washed coal consumption rate per metric ton (MT). The FAC disallowed corresponding to excess Transit Loss has been worked out as Rs. 76.19 Lakhs, Rs. 49.69 Lakhs and Rs. 159.36 Lakhs for the months October, November & December 2011 respectively.

10. Change in variable cost of power purchase:

10.1 Total variable cost :

Total variable cost of power purchase from all sources for October, November & December 2011 is summarized as under:

Month	Procurement of Energy		Normative Actual Cost		Normative Rate of Power Purchase		Average Rate (Rs/kWh)
	From R Infra-G (MUs)	From others (MUs)	From R Infra- G (Rs lakhs)	From others (Rs lakhs)	From R Infra- G (Rs./kWh)	From others (Rs./kWh)	
October 2011	353.99	308.99	9174.92	12807.67	2.591	4.144	3.304
November 2011	332.95	296.30	7981.48	10829.62	2.397	3.655	2.982
December 2011	344.15	235.41	9002.13	9414.11	2.616	3.999	3.150

Note:

R Infra-D has submitted the data for the power purchase cost certified by cost accountant.

10.2 Variable cost of Power purchase from Renewable sources:

The Commission has noted that the Variable cost of Power purchase from Renewable sources as submitted by R Infra in its FAC submission for QIIIFY12 is as follows :



Months	Net Purchase	Tariff	PP Amount
Oct-11	2.496	15.44	385.43
Nov-11	2.348	39.22	920.96
Dec-11	1.656	54.15	896.74

The Commission has noted that the rate at which the RE power has been procured is in the range of Rs 15.44 /kWh to Rs 54.15/kWh, which is much higher than the rate in the range of Rs 3.3/kWh to Rs 8.75/kWh in the previous 2 quarters of FY12. The Commission will address the issue during True-up.

11. Working Capital Interest (I)

Month	Variable Cost as per Order (per month)	Actual variable cost (Norm)	Variance between Actual Variable cost and "Order" variable cost	Rate of IWC	IWC (Rs Lakh)
October 2011	25358.856	21906.40	-3452.46	13%	(37.40)
November 2011	25358.856	18761.41	-6597.45	13%	(71.47)
December 2011	25358.856	18256.88	-7101.98	13%	(76.94)

Note 1: The Interest Rate 13% is as per approval of the Commission in the APR Order

Note 2: Interest on working capital has been granted at the approved Interest rate for the eligible amount viz. the difference between the Normative Actual variable cost of Power procurement and the Order cost of power procurement, for the respective month.

12. Adjustment for Over Recovery/Under Recovery (B)

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

(Rs. Lacs)

Month	Adjustment Factor
October 2011	(62.77)
November 2011	(327.87)
December 2011	(47.12)

13. FAC (Total Fuel Adjustment Cost)

Total fuel cost and power purchase adjustment (FAC) has been computed by summing up the change in costs (C), Working Capital Interest (I), and adjustment for over recovery / under recovery (B). The Commission has considered energy sales based on audited submissions of R Infra-D.



14. Excess Distribution Loss

The Commission had considered allowable Distribution loss at 10.25% for the months October, November & December 2011 respectively. The actual Distribution Losses are:

Month	Distribution Losses
October 2011	12.11%
November 2011	10.40%
December 2011	12.23%

Hence *Rs. 22.05 Lakh, Rs. 5.58 Lakhs and Rs. 41.08 Lakhs* have been disallowed from the FAC of the months of October 2011, November 2011 and December 2011 respectively, on account of excess Distribution Loss.

15. FAC per unit

FAC per unit has been computed by considering Total Fuel Adjustment Cost, Energy Sales submitted by R Infra-D and excess distribution loss assessed by the Commission.

16. Cap on Monthly FAC Charge

As per the Tariff Order, the ceiling, based on 10% of the variable component of Tariff, works out to average Rs 64.20 paise/kWh. In all the above months of the Quarter the FAC is to be refunded to the consumers and hence the above cap is not relevant

17. Recovery of FAC

The Commission has assessed FAC to be refunded in the month of October, November & December 2011 as Rs. (1040.73) Lakhs, Rs. (3337.66) Lakhs, and Rs. (1817.42) Lakhs respectively.

18. Summary of Results

The summary of the Total Fuel Cost and Power Purchase Cost Adjustment (FAC), FAC Charge per unit (FAC/kwh) and FAC to be recovered/ refunded considering the cap on monthly FAC charge for October, November & December 2011 is given in the table below:



SUMMARY TABLE

Sr. No.	Parameter	Unit	Value	Value	Value
			Oct 2011	Nov 2011	Dec 2011
(A)	(B)	(C)	(D)	(D)	(D)
1.0	Calculation of FAC (A)				
1.1	Disallowance of change in variable cost of generation corresponding to excess auxiliary consumption	Rs Lakh	-	-	-
1.2	Change in weighted average variable cost of generation and power purchase after accounting for disallowance of change in	Rs Lakh	(962.61)	(2,943.90)	(1,734.44)
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	(962.61)	(2,943.90)	(1,734.44)
1.4	Working Capital Interest (I)	Rs Lakh	(37.40)	(71.47)	(76.94)
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	(62.77)	(327.87)	(47.12)
1.6	FAC (A) = C + I + B	Rs Lakh	(1,062.77)	(3,343.24)	(1,858.50)
2.0	Calculation of FAC_{kWh}				
2.1	Sale within License Area	MU	558.49	542.25	486.03
2.2	Excess Distribution Loss	MU	11.83	0.91	10.99
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(18.63)	(61.55)	(37.39)
2.4	Cap on monthly FAC Charge	Paise/kWh	64.20	64.20	64.20
2.5	FAC Charge (FAC_{kWh}) considering cap on monthly FAC Charge	Paise/kWh	(18.63)	(61.55)	(37.39)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(1,040.73)	(3,337.66)	(1,817.42)
3.2	FAC (A) disallowed corresponding to excess Distribution loss	Rs Lakh	(22.05)	(5.58)	(41.08)
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	(0.00)	(0.00)	0.00



Consumer Categories	Oct-11			Nov-11			Dec-11		
	Qty (Mus)	Rate	Rs. in Lakhs	Qty (Mus)	Rate	Rs. in Lakhs	Qty (Mus)	Rate	Rs. in Lakhs
Low Tension - LT									
LT I : LT -Residential									
<i>LT I - Below Poverty Line</i>	0.01	(0.03)	(0.00)	0.00	(0.04)	(0.00)	0.00	(0.01)	(0.00)
<i>LT -I Residential (Single Phase)</i>									
0-100	159.78	(0.20)	(319.21)	157.19	(0.27)	(420.87)	149.53	(0.10)	(148.38)
101-300	100.79	(0.38)	(378.37)	94.40	(0.51)	(477.31)	71.48	(0.19)	(133.67)
301-500	12.81	(0.62)	(79.24)	11.62	(0.83)	(96.76)	6.09	(0.31)	(18.78)
500and above	4.05	(0.72)	(28.98)	3.85	(0.96)	(37.11)	1.92	(0.36)	(6.85)
<i>LT -I Residential Three phase</i>									
0-100	16.73	(0.20)	(33.32)	16.79	(0.27)	(45.16)	16.84	(0.10)	(16.28)
101-300	25.15	(0.38)	(94.40)	24.96	(0.51)	(126.20)	23.22	(0.19)	(43.42)
301-500	12.71	(0.62)	(78.62)	12.42	(0.83)	(103.49)	9.69	(0.31)	(29.87)
500and above	20.41	(0.72)	(146.19)	19.74	(0.96)	(190.49)	15.99	(0.36)	(57.06)
LT II : LT - Non - Residential or Commercial									
<i>LT II (a) - 0-20 kW</i>	108.62	(0.54)	(584.89)	104.99	(0.72)	(757.36)	98.47	(0.27)	(262.85)
<i>LT II (a) TOD Option</i>	-	(0.54)	-	-	(0.72)	-	-	(0.27)	-
	-	(0.57)	-	-	(0.77)	-	-	(0.28)	-
		(0.60)			(0.81)			(0.30)	
		(0.49)			(0.65)			(0.24)	
<i>LT II (b) - 20-50 kW</i>	5.41	(0.69)	(39.17)	5.44	(0.93)	(51.48)	5.11	(0.35)	(16.77)
	2.27	(0.73)	(16.46)	2.29	(0.98)	(22.42)	2.12	(0.36)	(7.66)
	1.93	(0.76)	(14.68)	1.92	(1.02)	(19.69)	1.86	(0.38)	(7.04)
	1.72	(0.64)	(11.02)	1.60	(0.86)	(13.84)	1.57	(0.32)	(5.03)
<i>LT II (c) - above 50 kW</i>	9.05	(0.74)	(77.53)	9.54	(0.99)	(94.26)	8.60	(0.37)	(26.99)
	3.82	(0.77)	(29.43)	3.94	(1.04)	(40.91)	3.61	(0.38)	(13.85)
	3.44	(0.80)	(27.69)	3.51	(1.08)	(38.04)	3.35	(0.40)	(13.42)
	3.52	(0.69)	(24.15)	3.41	(0.92)	(31.55)	3.37	(0.34)	(11.51)
LT III - LT Industrial upto 20 kW	10.96	(0.52)	(55.34)	9.96	(0.71)	(69.66)	9.43	(0.26)	(24.59)
	-	(0.52)	-	-	(0.71)	-	-	(0.26)	-
	-	(0.56)	-	-	(0.75)	-	-	(0.28)	-
		(0.59)			(0.80)			(0.29)	
		(0.47)			(0.64)			(0.24)	
LT IV - LT Industrial above 20 kW	7.26	(0.50)	(36.31)	7.51	(0.67)	(50.46)	7.29	(0.25)	(18.12)
	2.87	(0.53)	(15.33)	2.97	(0.72)	(21.35)	2.87	(0.27)	(7.63)
	2.61	(0.57)	(14.79)	2.66	(0.76)	(20.37)	2.59	(0.28)	(7.32)
	3.21	(0.45)	(14.44)	3.12	(0.61)	(18.92)	3.07	(0.22)	(6.87)
LT-V : LT- Advertisements and Hoardings	0.24	(1.19)	(2.72)	0.23	(1.61)	(3.96)	0.26	(0.59)	(1.52)
LT VI: LT -Street Lights	4.97	(0.56)	(27.86)	4.91	(0.76)	(37.13)	5.30	(0.28)	(14.82)
LT-VII (A): LT -Temporary Supply Religious	0.20	(0.26)	0.41	0.04	(0.35)	(0.03)	0.03	(0.13)	(0.05)
LT-VII (B): LT -Temporary Supply Others	8.95	(1.07)	(82.08)	8.52	(1.44)	(120.27)	8.47	(0.53)	(51.13)
LT VIII: LT - Crematorium & Burial Grounds	0.07	(0.26)	(0.19)	0.07	(0.35)	(0.26)	0.08	(0.13)	(0.11)
LT IX: LT -Agriculture	0.00	(0.05)	(0.00)	0.00	(0.07)	(0.00)	0.00	(0.03)	(0.00)



Consumer Categories	Oct-11			Nov-11			Dec-11		
	Qty (Mus)	Rate	Rs. in Lakhs	Qty (Mus)	Rate	Rs. in Lakhs	Qty (Mus)	Rate	Rs. in Lakhs
High Tension - HT									
HT I: HT-Industry	3.00	(0.51)	(14.92)	3.00	(0.69)	(20.60)	2.89	(0.25)	(7.25)
	1.13	(0.54)	(6.15)	1.12	(0.73)	(8.20)	1.07	(0.27)	(2.89)
	1.15	(0.58)	(6.66)	1.16	(0.78)	(9.02)	1.13	(0.29)	(3.27)
	1.91	(0.46)	(8.77)	1.83	(0.62)	(11.35)	1.86	(0.23)	(4.26)
HTII : HT- Commercial	6.71	(0.57)	(38.09)	6.74	(0.76)	(51.50)	6.42	(0.28)	(18.16)
	2.51	(0.60)	(15.11)	2.51	(0.81)	(20.33)	2.38	(0.30)	(7.13)
	2.68	(0.64)	(17.01)	2.63	(0.86)	(22.48)	2.53	(0.32)	(8.01)
	3.63	(0.52)	(18.75)	3.54	(0.70)	(24.67)	3.52	(0.26)	(9.07)
HT III: HT-Group Housing Society	1.95	(0.35)	(6.78)	1.81	(0.47)	(8.49)	1.73	(0.17)	(3.00)
HTIV : HT - Temporary Supply	0.28	(0.74)	(2.09)	0.28	(1.00)	(2.76)	0.30	(0.37)	(1.02)
Total	41,375.49		(2,366.35)	41,390.25		(3,088.74)	41,364.03		(1,015.65)



R INFRA LIMITED**APPROVAL OF FUEL ADJUSTMENT CHARGES (FAC) FOR THE MONTHS
OCTOBER, NOVEMBER & DECEMBER 2011**

Form No	Particulars	Unit	Norms
1	Intra State Transmission Loss	%	4.85 %
2	Distribution Loss	%	10.92%
3	Auxiliary Consumption	%	8.50%
4	Transit Loss (For Coal)	%	0.80%
5	Heat Rate	Kcal/kWh	2500
6	Secondary Oil Consumption	MI/kWh	2
7	FGD Consumption	MU/yr	57

