

No: MERC/FAC/20102011/ 02

Date : 1 April, 2011

The Director
Reliance Infrastructure Limited,
Reliance Energy Centre,
Santacruz (East), Mumbai 400 0055

Subject: Approval of Reliance Infrastructure Ltd Fuel Adjustment Charges (FAC) for the period July 2010 to September 2010. (QII - FY11)

Ref erence : Reliance Infrastructure's submission vide letter dated 28 Jan 2011 and 5 March 2011 (Revised) for Post facto approval of FAC for the period July 2010 to September 2010

Sir,

With reference to your submission referred to above, in pursuance of directions in the Tariff Order dated 15th June 2009, 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 of Rs. (39.1511) Crores, Rs. (42.7395) Crores, Rs. (19.5823) Crores for the months of July 2010, August 2010 and Sept 2010 resp. to be refunded to the Consumers, the carried forward amount for recovery at future date is Nil.

The details are tabulated in the enclosed Annexure.

Yours faithfully
Sd/
(P.B.Patil)
Registrar, MERC

Encl : Detailed Vetting Report for QII- FY11

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.

Detailed Vetting Report

Date : April, 2011

Reference :

- a) Reliance Infrastructure's submission dated January 28, 2011.
- b) E-Mail advise dated 23 February 2011 from Director –Tariff
- c) Revised submission sent on 5 March 2011

The Commission has issued Tariff Orders on 8th September 2010 for R Infra G (Case 99 of 2009) and TPC-G (Case 96 of 2009), vide which the generation tariff for these utilities for FY11 has been determined, The said tariff orders are applicable with effect from September 2010. The tariff order applicable to Reliance Infra D for the period Q2FY11 (July-August-September 2010) for the current FAC submission, was issued on 15th June 2009 (Case 121 of 2008). In the said T O, the Commission has directed that Reliance Infra –D may recover any variations in the cost of power due to variations in the fuel costs, with respect to the levels stipulated in the said order, from its consumers through the FAC mechanism as elaborated in MERC (Conditions of Tariff), Regulations 2005. Accordingly, vide its revised submission of February 25, 2011 Reliance Infra –D has computed the FAC for the month of July, August, and September 2010 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 In terms of the aforesaid MERC Regulation a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for the FAC charges. Accordingly, RInfra-D has submitted details of FAC chargeable to all consumers for July, August, and September 2010
- 3 RInfra-D meets its power requirement through procurement from the following sources
 - a) Procurement from R Infra –G (DTPS)
 - b) Purchase from TPC-G
 - c) RPS Power
 - d) Bilateral Purchases (as per SLDC)
 - e) UI purchases (as per SLDC)

RInfra-D has submitted affidavit verifying the application. RInfra-D has also submitted the power purchase bills of TPC and the IBSM statements issued by SLDC for the months July, August, and September 2010 resp.

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

- 4 **Validation of Fuel Adjustment Cost for July, August, September 2010**

The Commission has assessed FAC charge of RInfra-D for the said period based on the FAC formula approved in the Tariff Regulations. The methodology adopted for vetting the FAC computations is as follows:

5 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. (0.391), (0.205), (0.014) per kWh in July, August, September 2010, 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 is Rs. 3.413, 3.599, 3.790 per kWh for months July, August, September 2010 respectively, as against Approved rate of Rs.3.804 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.

6 Assessment of Variable (Fuel) Cost of own generation (RInfra-G)

The Commission has assessed the variable cost of own generation (RInfra -G) taking into consideration change in fuel mix, actual fuel price and normative heat rate and which are Rs. 1.807, 1.816, 1.794 per kWh for months July, August, September 2010 respectively as against Rs.2.082 per kWh considered in the APR Order of R Infra-D for FY 2009-10,

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 Rs. 6923.75 Lakhs for 344.44 MU net generation in July 2010, Rs 7379.55 Lakhs for 356.530 MU net generation in August 2010 and Rs 7007.94 Lakhs for net generation of 343.590 MU in September 2010. The per unit rate, thereby, would be Rs. (2.010) per kWh, Rs (2.070) per kWh and Rs(2.040) per kWh for July 2010, August 2010 and September 2010 resp.

7 Change in Fuel Mix

RInfra-G has used blending ratio of Raw coal: Washed coal: Imported coal; F grade coal as follows:

Order Values	F grade	Washed Coal	Imported Coal
	Month		
July-10	7%	73%	20%
August-10	20%	50%	30%
September-10	0%	74%	26%
	11%	69%	20%

The Commission has accepted the change in fuel mix effected by RInfra-G for July, August, September 2010

8 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 RInfra-G. The Commission has considered calorific value of the coal basket as fired coal at DTPS based on the certificate issued by independent verification agency.

RInfra-G has incurred Coal related expenses of Rs. 33.43 Lakhs, 27.88 Lakhs, 26.87 Lakhs for the months July, August, September 2010 respectively. The expenses pertain to handling of Washed coal and Imported coal.

The Commission has allowed these expenses as fuel cost expenses in the respective months.

9 Heat Rate

R-Infra has considered the approved heat rate viz. 2500 kcal/kWH, as per the APR Order for FY 2009-10 for computing normative actual variable (fuel) cost of generation for assessment of FAC, which is allowed.

10 Disallowance of FAC corresponding to excess auxiliary consumption

The Auxiliary consumption at DTPS , excluding consumption of FGD is reported as 7.448%, 7.413% and 7.425% against the approved value of 8.5 % . Hence no disallowance from the FAC has been made on account of excess auxiliary consumption.

The consumption of FGD in the months July, August, September 2010 is 4.667 MU, 4.667 MU and 4.75 MU respectively, against approved value of 4.75 MU (Annual approved consumption of FGD 57 MU)

11 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 34.88 Lakhs, Rs 102.65 Lakhs and Rs 87.98 Lakhs for the months July, August, September 2010, respectively.

12 Change in variable cost of power purchase:

Total variable cost of power purchase from all sources for July, August & September 2010 is summarized as under:

Month	Procurement of Energy		Normative Actual Cost		Normative Rate of Power Purchase		Average Rate Rs/kWh
	From R Infra- G MU	From others MU	From R Infra- G Rs Lakhs	From others Rs Lakhs	From R Infra- G Rs./kW H	From others Rs/kW H	
July 2010	344.4	393.038	6923.75	18223.48	2.010	4.607	3.413
August 2010	356.530	375.966	7379.55	19028.32	2.070	5.084	3.599
September 2010	343.590	395.073	7007.94	21037.13	2.040	5.338	3.790

RInfra-D has submitted the data for the power purchase cost certified by cost accountant along with the power purchase bills from TPC-G.

The FAC charged by TPC-G to R Infra D is @ Rs (0.2294), (0.0079), (0.0.5608) per kWh for the months July, August, September 2010 respectively.

13 Working Capital Interest (I)
Rs lakhs

Month	Variable Cost as per Order	Actual variable cost (Norm)	Variance between Actual Variable cost and "Order" variable cost	Rate of IWC	IWC
July 2010	32294.83	25,112.35	(7182.48)	13%	(77.81)
August 2010	32294.83	26,305.22	(5989.61)	13%	(64.89)
September 2010	32294.83	27,957.08	(4337.75)	13%	(46.99)

The Interest Rate 13% is as per approval of the Commission in the APR Order of 15 June 2009 (Case 121 of 2008)

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

14 Adjustment for Over Recovery/Under Recovery (B)

The first quarter of the year, all the carried forward amount at the end of the last financial year is Trued-off. Hence, after adjustment for over-recovery/under-recovery ('B'), the Adjustment factor for over-recovery/under-recovery

For the month of July 2010 Rs (10.0205) Crores

For the month of August 2010 Rs (27.2493) Crores

For the month of September 2010 Rs (18.0881) Crores

15 FAC (Total Fuel Adjustment Cost) and

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 RInfra-D.

16 Excess Distribution Loss

The Commission had considered allowable Distribution loss at 10.5% for July, August, September 2010

Actual Distribution Loss is as follows :

Actual loss for July 2010 11.428%

Actual loss for August 2010 10.723%

Actual loss for September 2010 10.573%

17 FAC per unit

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

18 Cap on Monthly FAC Charge

The ceiling based on 10% of the variable component of Tariff works out to Rs 64.2 paise/kWH as per Tariff order for FY 2009-10

19 Recovery of FAC:

The Commission has assessed FAC to be refunded in the month of July, August, and September 2010 as Rs. (3915.11) Lakhs, (Rs 4273.95) Lakhs, and Rs (1958.33) Lakhs respectively,

20 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 considering the cap on monthly FAC charge for July, August, September 2010 is given in the table below:

SUMMARY TABLE

Sr. No.	Parameter	Unit	Value	Value	Value
			July 2010	Aug 2010	Sep 2010
(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 variable cost corresponding to excess auxiliary consumption	Rs Lakh	(2,876.27)	(1,494.80)	(104.02)
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	(2,876.27)	(1,494.80)	(104.02)
1.4	Working Capital Interest (I)	Rs Lakh	(77.81)	(64.89)	(46.99)
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	(1,002.05)	(2,724.93)	(1,808.81)
1.6	FAC (A) = C + I + B	Rs Lakh	(3,956.13)	(4,284.61)	(1,959.83)
2.0	Calculation of FAC_{kWh}				
2.1	Sale within License Area	MU	625.471	626.884	633.753
2.2	Excess Distribution Loss	MU	6.554	1.564	0.516
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(62.59)	(68.18)	(30.90)
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	(62.59)	(68.18)	(30.90)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(3,915.11)	(4,273.95)	(1,958.23)
3.2	FAC (A) disallowed corresponding to excess Distribution loss	Rs Lakh	(41.03)	(10.67)	(1.59)
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	(0.00)	(0.00)

Reliance Infrastructure Ltd
Approval of Fuel Adjustment Charges (FAC) for July 2010,
August 2010, September 2010

Form No.	Particulars	Unit	Norms (FY 09-10)
1	Intra State Transmission Loss	%	4.85%
2	Distribution Loss	%	10.50%
3	Auxiliary Consumption	%	8.50%
4	Transit Loss (for Coal)	%	0.80%
5	Heat Rate	kCal/kWH	2,500
6	Secondary Oil Consumption	ml/kWH	2
7	FGD consumption	MU/year	57