

No: MERC/FAC/20112012/ **001889**

Date : November 1, 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 January 2011 to March 2011. (QIV - FY11)

Reference : Reliance Infrastructure's submission vide letter dated August 25, 2011 for Post facto approval of FAC for the period January 2011 to March 2011. (QIV - FY11)

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. (45.1464) Crores, Rs. (22.9278) Crores, Rs. (5.1999) Crores for the months of January 2011, February 2011 and March 2011 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

(Kuldip N.Khawarey)
Secretary, MERC

Encl : Detailed Vetting Report for QIV- 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.

ANNEXURE

Detailed Vetting Report

Date : November 1, 2011

Reference : Reliance Infrastructure's submission dated August 25, 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. 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 submission of August 25, 2011 Reliance Infra –D has computed the FAC for the month of January, February, and March 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 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 January, February, and March 2011
- 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 January, February, and March 2011 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 January, February, March 2011

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. (0.194), (0.191) per kWh, in January and February, and has increased by Rs. 0.057 per kWh in March 2011,. Considering the normative actual variable (fuel) cost of generation for DTSPS and actual power purchase from other sources, the rate of variable charge for power is Rs. 3.798, 3.786, 4.019 per kWh for months January, February, March 2011 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. 2.051, 2.060, 2.176 per kWh for months January, February, March 2011 respectively as against Rs.2.082 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 Rs. 8505.70 Lakhs for 359 MU net generation in January 2011, Rs 7541.61 Lakhs for 315.74 MU net generation in February 2011 and Rs 9025.17 Lakhs for net generation of 359.43 MU in March 2011.

It is also noted that in January, February and March 2011, R Infra-D has banked 118.143 MU, 59.661 MU and 30.975 MU of DTSPS power resp. at the rate Rs 2.369/kWh, amounting to Rs. 2226.08 Lakhs, at the rate Rs.2.389 amounting to Rs1425.04 Lakhs and at the rate Rs. 2.511 amounting to Rs. 777.78 Lakh respectively, which is deducted from the total cost of Power procurement done for Mumbai License area, for these respective months.

The normative per unit rate, of power procurement thereby, would be Rs. 3.798 per kWh, Rs 3.786 per kWh and Rs 4.019 per kWh for January 2011, February 2011 and March 2011 resp.

7 Change in Fuel Mix

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

	F grade	Washed Coal	Imported Coal
Order Values	7%	73%	20%
<u>Month</u>			
January-10	26%	48%	27%
February-10	25%	50%	25%
March-10	20%	50%	30%

The Commission has accepted the change in fuel mix effected by RInfra-G for January, February, March 2011

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. 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 has incurred Coal related expenses of Rs. Nil, Rs. 14.00 Lakhs, Rs.(2.91) Lakhs for the months January, February, March 2011 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 2010-11 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 7.11%, 7.242% and 7.289% in January, February, March 2011 respectively 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 January, February, March 2011 respectively is 4.75 MU, 4.75 MU and 4.75 MU respectively, against average 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 71.13 Lakhs, Rs 68.92 Lakhs and Rs 73.33 Lakhs for the months January, February, March 2011, respectively.

12 Change in variable cost of power purchase:

Total variable cost of power purchase from all sources for January, February, March 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 MU	From others MU	From R Infra- G Rs Lakhs	From others Rs Lakhs	From R Infra- G Rs./kWH	From others Rs/kWH	
January 2011	359.0	330.701	8505.70	16069.63	2.369	4.859	3.798
February 2011	315.74	301.371	7541.61	15059.79	2.389	4.997	3.786
March 2011	359.43	385.192	9025.17	20506.54	2.511	5.324	4.019

Note :

1. Deduction as above, for excessive Transit Loss has been made in final tabulation
2. For the above 3 months, R Infra has banked power from DTPS , the cost of which is subtracted herein, so that the net cost of energy for the month is reduced to that extent

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 (1.239), (0.580), (0.063) per kWh for the months January, February, March 2011 respectively.

13 Working Capital Interest (I)

Rs lakhs

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
January 2011	32294.8	21705.07	-10589.80	13%	(114.72)
February 2011	32294.8	21107.43	-11187.4	13%	(121.20)
March 2011	32294.8	28680.61	-3614.19	13%	(39.15)

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

14 Adjustment for Over Recovery/Under Recovery (B)

After adjustment for over-recovery/under-recovery ('B'), the Adjustment factor for over-recovery/under-recovery

For the month of January 2011 Rs (43.6319) Crores

For the month of February 2011 Rs (20.7319) Crores

For the month of March 2011 Rs (20.2014) 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 January, February, March 2011

Actual Distribution Loss is as follows :

Actual loss for January 2011 10.377%

Actual loss for February 2011 3.524%

Actual loss for March 2011 11.433%

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

19 Recovery of FAC:

The Commission has assessed FAC to be refunded in the month of January, February, March 2011 as Rs. (4514.64) Lakhs, (Rs 2292.78) Lakhs, and Rs (519.99) 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 January, February, March 2011 is given in the table below:

SUMMARY TABLE

Sr. No.	Parameter	Unit	Value		
			January 2011	February 2011	March 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 variable cost corresponding to excess auxiliary consumption	Rs Lakh	(36.73)	(97.68)	1533.83
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	(36.73)	(97.68)	1533.83
1.4	Working Capital Interest (I)	Rs Lakh	(114.72)	(121.20)	(39.15)
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	(4363.19)	(2073.91)	(2020.14)
1.6	FAC (A) = C + I + B	Rs Lakh	(4514.64)	(2292.78)	(525.47)
2.0	Calculation of FAC_{kWh}				
2.1	Sale within License Area	MU	481.752	506.503	601.398
2.2	Excess Distribution Loss	MU		-	-
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(93.71)	(45.27)	(8.65)
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	(93.71)	(45.27)	(8.65)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(4514.64)	(2292.78)	(519.99)
3.2	FAC (A) disallowed corresponding to excess Distribution loss	Rs Lakh	-	-	(5.47)
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 January
2011, February 2011, March 2011

			Norms
Form No.	Particulars	Unit	(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

