Detailed Vetting Report

Ref No.: Reliance Infrastructure's submission dated December 24, 2009

Re: Vetting of the Fuel Adjustment Cost (FAC) charges claimed by RInfra-D for July, August, September 2009

RInfra-D, vide its submission dated November 2, 2009, has computed the FAC for the month of July, August, September 2009 in accordance with the Order dated June 4, 2008 in the matter of Annual Performance Review (APR) for FY 2007-08 and Tariff Determination for FY 2008-09 (herein after 'APR Order') and the APR Order for FY2008-09 and for tariff determination for FY 2009-10 passed by the Commission on June 15, 2009 and detailed methodology as per MERC (Terms and Conditions of Tariff) Regulations, 2005.

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

- In terms of the aforesaid 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 from all consumers for July, August, September 2009
- RInfra-D has submitted affidavit verifying the application. RInfra-D has also submitted independent certification agency's report in support of fuel calorific value as received basis of as fired coal at Dahanu Thermal Power Station (DTPS) for the months July, August, September 2009

4 <u>Validation of Fuel Adjustment Cost for July, August, September 2009</u>

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 <u>Change in Variable Cost of own generation and power purchase (C):</u>

Due to increase in variable (fuel) cost of generation and power purchase, the actual weighted average variable (fuel) cost of generation and power purchase has increased by Rs.-0.292 , -0.100, 0.149 per kWH in July, August, September 2009 respectively. Considering the normative variable (fuel) cost of generation for DTPS and actual power purchase from other sources, the variable charge for power is Rs. 3.512, 3.704, 3.953 per kWH for months July, August, September 2009 respectively as against Rs. 3.804, per kWH considered in the APR Order for FY 2008-9 .

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 are Rs. 2.09, 2.06, 1.94 per kWH for months July, August, September 2009 respectively as against Rs. 2.08, per kWH considered in the APR Order of FY 2008-09,

The total variable cost of own generation is assessed at Rs. 7,456.44, 7,457.7, 6,968.47 Lakhs for months July, August, September 2009 respectively

7 Change in Fuel Mix

RInfra-G has used blending ratio of raw coal: washed coal: imported coal as follows: 0%:80%:20% during July 2009, 0%:81%:19% during Aug 2009 and 0%:84%:16% during Sept 09 as against ratio of 7%:73%:20% for the FY 2008-09 considered in the APR Order. The Commission has accepted the change in fuel mix effected by RInfra-G for July, August, September 2009

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. 39.58, 33.47, 29.78 Lakhs for the months July, August, September 200 respectively, and submitted the details and relevant documents justifying the expenses.

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

9 Heat Rate

The R-Infra has considered the approved heat rate (2500 kcal/kWh) as per the APR Order for FY 2008-09 for computing variable (fuel) cost of generation for assessment of FAC, which is allowed.

10 Disallowance of FAC corresponding to excess auxiliary consumption

As there is no excessive auxiliary consumption, there is no disallowance on this respect.

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 110.46, 62.63, 57.89 Lakhs for the months July, August, September 2009 respectively

12 <u>Change in variable cost of power purchase:</u>

Total variable cost of power purchase for July, August and Sept 2009is summarized as under:

Table: Variable Cost of Power Purchase

Month	Units MU	Power	FAC	Total
		Purchase		variable cost
		variable		of Power
		cost		Purchase
July-09	474.14491	21,107.74	554.19	21,661.93
August-09	508.22753	24,234.02	329.22	24,563.24
Sept -09	507.35808	26,384.24	646.06	27,030.30

Note: The Bilateral power purchase in September is comparatively higher than in first 2 months of the quarter. This has caused reduced bill for Power Procurement for July-August 2009 and higher amount for September 2009. RInfra-D has submitted the data for the power purchase cost certified by cost accountant along with the power purchase bills from TPC-G. TPC-G has charged FAC @ Rs 0.238, 0.135, 0.278 per kWH in its invoices for the months July, August, September 2009 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-09	22 204 92	20 710 02	(2 575 00)	120/	(29.72)
	32,294.83	28,719.83	(3,575.00)	13%	(38.73)
August-09					
	32,294.83	31,588.16	(706.67)	13%	(7.66)
September-					
09	32,294.83	33,669.70	1,374.87	13%	14.89

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

The eligible amount of interest which was not included while vetting the Q1 FY10 submission of Reliance Infra has been added to the Carried forward adjustment of the 1st month of the quarter Q2FY10. Reliance Infra should align the future submissions to the vetted report.

14 Adjustment for Over Recovery/Under Recovery (B)

In the computation of FAC, after Adjustment for over-recovery/under-recovery ('B') and after considering the Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit

For the month of July 2009 Rs 6,770.97 Lakhs (Following the "True-up" exercise) For the month of Aug 2009 Rs 207.95 Lakhs
For the month of Sep 2009 Rs (280.99) Lakhs
has come out as the Adjustment factor for over-recovery/under-recovery

15 FAC (Total Fuel Adjustment Cost) and Sales

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 2009

Actual Distribution Loss is as follows:

Actual July 2009 10.09 % Actual Aug 2009 12.97 % Actual Sep 2009 10.2928 %

FAC amount has been reduced for the months July, August, September 2009 by Rs Lakhs 0, 129.32, 0 respectively.

17 <u>FAC per unit</u>

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 <u>Cap on Monthly FAC Charge</u>

The ceiling based on 10% of the variable component of Tariff works out to Rs 64.2 paise/kWH as per APR order for FY 2008-09

19 <u>Recovery of FAC:</u>

The Commission has assessed FAC to be recovered in the month of July, Aug & September 2009 as Rss.Lakhs 4,342.05, -631.76, 999.32 respectively

The FAC disallowed corresponding to excess T&D Loss is Rs. Lakhs. 0.00, 129.32, 0.00 for July, August, September 2009 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 Aug & September 2009 is given in the table below:

Sr. No.	Parameter	Unit	R-Infra-D Subm	Commission	R-Infra Subm	Commission	R-Infra Subm	Commission
			Ju	1-09	Aug-09		Sep-09	
1	Calculation of FAC (A)							
1.1	Disallowance of change in variable cost of generation	Rs Lakh	0.00	0.00	0.00	0.00	0.00	0.00
	corresponding to excess auxiliary consumption							
1.2	Change in weighted average variable cost of	Rs Lakh	-2,390.18	-2,390.18	-849.96	-849.96	1,265.42	1,265.42
	generation and power purchase after accounting for							-
	disallowance of change in variable cost corresponding							
	to excess auxiliary consumption							
1.3	Apportionment of change in variable cost of	Rs Lakh	-2,390.18	-2,390.18	-849.96	-849.96	1,265.42	1,265.42
	generation and power purchase to License Area (C)			-				
1.4	Working Capital Interest (I)	Rs Lakh	-25.89	-38.73	-9.21	-7.66	13.71	14.89
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	6,704.99	6,770.97	207.95	207.95	-334.26	-280.99
1.6	FAC(A) = C + I + B	Rs Lakh	4,288.91	4,342.05	-651.21	-649.66	944.86	999.32
2	Calculation of FAC _{kwh}							
2.1	Sale within License Area	MU	701.69	701.69	711.16	711.16	727.59	727.59
2.2	Excess Distribution Loss	MU	0.00	0.00	20.15	20.14	0.00	0.00
2.3	FAC Charge (FACkwh) without considering cap on	Paise/ kwh	61.12	61.88	-8.90	-8.88	12.99	13.73
	monthly FAC Charge							
2.4	Cap on monthly FAC Charge	Paise/ kwh	64.20	64.20	64.20	64.20	64.20	64.20
2.5	FAC Charge (FACkwh) considering cap on monthly	Paise/ kwh	61.12	61.88	-8.90	-8.88	12.99	13.73
	FAC							
	Charge							
3	FAC (A)							
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	4,288.91	4,342.05	-633.26	-631.76	944.86	999.32
3.2	FAC (A) disallowed corresponding to excess	Rs Lakh	0.00	0.00	129.39	129.32	0.00	0.00
	Distribution loss							
3.3	Carried forward FAC (A) for recovery during future	Rs Lakh	0.00	0.00	-147.34	-147.21	0.00	0.00
	period							

APPENDIX -1

Reliance Infratructure Ltd Approval of Fuel Adjustment Charges (FAC) for July 2009 to September 2009.

			Norms
Form			(FY 09-
No.	Particulars	Unit	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