Detailed Vetting Report

Ref No. Reliance Infrastructure's submission dated September 09, 2009 and Revised submission dated November 2, 2009

Re: Vetting of the Fuel Adjustment Cost (FAC) charges claimed by RInfra-D for April, May, June 2009

1 RInfra-D, vide its submission dated November2, 2009, has computed the FAC for the month of April, May, June 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

- 2 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 April, May, June 2009
- **3** 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 month April, May, June 2009

4 Validation of Fuel Adjustment Cost for April, May, June 2009

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 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.0.860, 0.622, 0.403 per kWH in April, May, June 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. 4.167, 3.930, 4.207 per kWH for months April, May, June 2009 respectively as against Rs. 3.307per kWH considered in the APR Order for FY 2007-8 and . Rs 3.804 per kWH considered in the APR Order for 2008-09

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. 2.16, 2.10, 2.02 per kWH for months April, May, June 2009 respectively as against Rs. 1.66 per kWH considered in the APR Order of FY 2007-08, and Rs 2.082 per kWH considered in 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 April, May, June 2009 respectively

7 Change in Fuel Mix

RInfra-G has used blending ratio of raw coal: washed coal: imported coal as follows:

0%:73%:27% during April 2009, 0%:71%:29% during May 2009 and 0%:75%:25% during June 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 April, May, June 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 41.59, 24.37, 49.27) Lakhs for the months April, May, June 2009 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

There is no disallowance during the quarter on account of excess auxiliary consumption as actual auxiliary consumption for the months of April, May, June 2009 is below the normative level as per resp tariff orders

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 43.96, 28.46, 47.60 lakhs for the months April, May, June 2009 respectively

12 Change in variable cost of power purchase:

Total variable cost of power purchase for April, May and June 2009 is summarized as under:

Table: Variable Cost of Power Purchase (Rs. Lakh	Table:	Variable	Cost of Power Purchase	e (Rs. Lakh)
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Month	Units MU	Power Purchase variable cost	FAC	Total variable cost of Power Purchase
April-09	541.80021	29,607.94	-48.21	29,559.73
May-09			-	
	541.56602	32,805.01	315.94	32,489.07
June-09	553.76119	29,932.61	925.44	30,858.05

Note: during the month June 2009, the power procurement from TPC-G has been lower than average "Order" quantity. Also, the Bilateral purchases and cost of UI purchase was high. This has caused excessive bill for Pwer Procurement for June 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 -0.0190057, -0.1258764, 0.3896948 per kWH in its invoices for the months April, May, June 2009 respectively.

13. Working Capital Interest (I)

RInfra-D has not claimed any working capital interest [Note: no support information regarding source of the WC] and accordingly the Commission has not considered the same for determining the Fuel Adjustment Cost for the period as back-up documents as required, commensurate with Regulation 82.5 and as indicated in the "Notes" below the table in Form 6.5 of FAC submission have not been furnished.

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 April 2009 Rs 0 Lakhs (Following the "True-up" exercise)

For the month of May 2009 Rs 3,482.54 Lakhs For the month of June 2009 Rs 4,806.82 Lakhs

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 10.75% for April 2009 and May 2009 and 10.5% for June 2009

Actual Distribution Loss is as follows:

Actual April 2009: 10.23 Actual May 2009: 11.04 Actual June 2009: 10.213909 percent respectively

FAC amount has been reduced for the months April, May, June 2009 by Rs Lakhs 0, 13.31, 0 respectively.

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 54.50 paise/kWh for the months April 2009 and May 2009, considering the revenue from energy charges and consumption for FY 2008-09 as considered in the APR Order for 2007-08 and Rs 64.2 paise/kWH as per APR order for FY 2008-09

19. Recovery of FAC:

The Commission has assessed FAC to be recovered in the month of April, May and June 2009 as Rs.3,923.39 Lakh, Rs.4,145.09 Lakh and Rs.3,906.20 Lakh respectively. The FAC disallowed corresponding to excess T&D Loss is Rs. nil, Rs. 1.93 Lakh and Rs. nil for April, May and June 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 April, May, June 2009 is given in the table below:

Sr. No.	Parameter	Unit	R-Infra- D Subm	Commission	R-Infra Subm	Commission	R-Infra Subm	Commission
			Apr-09		May-09		Jun-09	
1	Calculation of FAC (A)							
1.1	Disallowance of change in variable cost of generation corresponding to excess auxiliary consumption	Rs Lakh	0	0	0	0	0	0
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	7,627.44	7,627.44	5,582.21	5,582.21	3,615.96	3,615.96
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	7,627.44	7,627.44	5,582.21	5,582.21	3,615.96	3,615.96
1.4	Working Capital Interest (I)	Rs Lakh	82.63	0	60.47	0	39.17	0
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	0	0	3,565.17	3,482.54	4,949.92	4,806.82
1.6	FAC(A) = C + I + B	Rs Lakh	7,710.07	7,627.44	9,207.85	9,064.74	8,605.06	8,422.78
2	Calculation of FAC _{kwh}							
2.1	Sale within License Area	MU	760.5327	760.5327	761.60384	761.60384	775.60375	775.60375
2.2	Excess Distribution Loss	MU	0	0	2.4418893	2.4418893	0	0
2.3	FAC Charge (FACkwh) without considering cap on monthly FAC Charge	Paise/ kwh	101.38	100.29	120.51	118.64	110.95	108.60
2.4	Cap on monthly FAC Charge	Paise/ kwh	54.50	54.50	54.50	54.50	64.20	64.20
2.5	FAC Charge (FACkwh) considering cap on monthly FAC Charge	Paise/ kwh	54.50	54.50	54.50	54.50	64.20	64.20
3	FAC (A)							
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	4,144.90	4,144.90	4,150.74	4,150.74	4,979.38	4,979.38
3.2	FAC (A) disallowed corresponding to excess Distribution loss	Rs Lakh	0	0	13.31	13.31	0	0
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	3,565.17	3,482.54	5,043.80	4,900.69	3,625.68	3,443.40

APPENDIX-1

Reliance Infrastructure Ltd Approval of Fuel Adjustment Charges (FAC) for April 2009 to June 2009.

1. Cap on monthly FAC charge:1.1 (for the year Apr'08 to Mar'09)Applicable for submissions of April 2009 & May 2009

Energy Charge, Standby & Expensive Power Charge Sales (Energy units – MU)	(A)	4,587.00	Rs Cr	
	(B)	8,424	MU	
Energy Charge per unit 10 % Cap on Fuel Adjustment Charges	(A) / (B)	(A) / (B) *10 Rs. 5.450 54.50 paise		
1.2 (For the year Apr 09-Mar -10) Applicable for June 2009 Energy Charge, Standby & Expensive Power Charge Sales (Energy units – MU)	(A)	5,811.00	Rs Cr	
	(B)	8,676	MU	
Energy Charge per unit	(A) / (B) *10 Rs 6.676			
10 % Cap on Fuel Adjustment Charges	67 paise			

2. **Summary of Old norms vs. New norms:**

			Old	New
Form			(FY 08-	(FY 09-
No.		Particulars	09)	10)
	Intra State Transmission			
1.4	Loss		4.85%	4.85%
1.4	Distribution Loss		10.75%	10.50%
1.5	Auxiliary Consumption		8.50%	8.50%
2.5	Transit Loss (for Coal)		0.80%	0.80%
3.1	Heat Rate		2,500	2,500
3.2	Secondary Oil Consumption		2	2