

No: MERC/FAC/2011-2012/00815

Date: 9 July , 2012

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 2011 to September 2011*. (QII – F.Y. 2011- 2012)

Reference: Reliance Infrastructure's submission vide letter dated March 9, 2012 for Post facto approval of FAC for the period *July 2011 to September 2011*. (QII – F.Y. 2011-2012)

Sir,

With reference to your submission referred to above, in pursuance of directions in the Tariff Order dated 29th 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 Rs Crore | Remarks |
|----------------|----------------|--------------------------------|-----------------------------------------|
| 1 | July 2011 | (9.8348) | To be <i>Refunded</i> to the Consumers. |
| 2 | August 2011 | 1.299 | To be <i>Recovered</i> from Consumers. |
| 3 | September 2011 | (59.7571) | To be <i>Refunded</i> to the Consumers. |

The carried forward amount for recovery at future date at the end of the said quarter is Rs. (25.5911) Crore.

The details are tabulated in the enclosed Annexure.

Yours faithfully

Sd/
(Rajendra Ambekar)
Director-Tariff MERC

Encl: Detailed Vetting Report for QII- 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. |

Detailed Vetting Report

Date: June 20, 2012

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

Reference: Reliance Infrastructure's submission vide letter dated 9 March, 2012 for Post facto approval of FAC for the period *July 2011 to September 2011*. (QII – F.Y. 2011- 2012)

1. The Commission has issued Tariff Order on 29 July, 2011 in Case 72 of 2010 in the matter of Reliance Infrastructure Ltd. Distribution Business (RInfra-D) Petition for Truing Up for FY 2008-09, Annual Performance Review for FY 2009-10 and Tariff Determination for FY 2010-11.

The Commission has issued Tariff Order on 8th 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 FY 2010-11 has been approved for DTPS, based on approved operational parameters and assumed fuel price for FY 2010-11. Any variations in the fuel price shall be dealt with under FAC mechanism.

Accordingly, vide its submission of March 9, 2012 Reliance Infra –D has computed the FAC for the month of July, August and September 2011 as directed, and with 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 July, August and September 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. (0.531), (0.319) and (0.608) per kWh in July, August and September, 2011 respectively. Considering the normative actual variable (fuel) cost of generation for DTPS and actual power purchase from other sources, the rate of variable charge for power purchase is Rs. 3.077, 3.274 and 3.003 per kWh for months July, Aug and Sep, 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. 2.641, 2.611 and 2.572 per kWh for months July, Aug and Sep 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:

Table-1

| | July 2011 | August 2011 | September 2011 |
|-------------------------------------|------------------|--------------------|-----------------------|
| Normative Variable Cost. (Rs Lakhs) | 9036.21 | 8205.74 | 8381.79 |
| Net Generation (In MUs) | 342.10 | 314.29 | 325.94 |

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 DTPS based on the certificate issued by independent verification agency.

R Infra has incurred Coal related expenses of Rs 35.46 Lakhs, Rs. 34.21 Lakhs and Rs. 213.42 Lakhs for the months July, August and September 2011.resp. 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, excluding FGD is reported as 7.415%, 7.633% and 7.480% in July, August & September 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 for July, August and September 2012 respectively.

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. 94.50 Lakhs, Rs. 73.40 Lakhs and Rs. 47.13 Lakhs for the months July, August & September 2011 respectively.

10. Change in variable cost of power purchase:

Total variable cost of power purchase from all sources for July, August & September 2011 is summarized as under:

Table-2

| 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) | |
| July 2011 | 342.100 | 298.076 | 9036.21 | 10757.06 | 2.641 | 3.609 | 3.077 |
| August 2011 | 314.290 | 323.491 | 8205.74 | 12748.62 | 2.611 | 3.941 | 3.274 |
| September 2011 | 325.940 | 292.015 | 8381.79 | 10224.33 | 2.572 | 3.501 | 3.003 |

Note:

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

11. Interest on Working Capital (I)

Table-3

| Month | Variable Cost as per Order (per month) Rs Lakhs | Actual variable cost (Norm) Rs Lakhs | Variance between Actual Variable cost and "Order" variable cost Rs Lakhs | Rate of IWC | IWC (Rs Lakh) |
|----------------|--------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------|--------------------|----------------------|
| July 2011 | 25358.856 | 19698.77 | -5660.08 | 13% | (61.32) |
| August 2011 | 25358.856 | 20880.96 | -4477.89 | 13% | (48.51) |
| September 2011 | 25358.856 | 18558.99 | -6799.86 | 13% | (73.67) |

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:

Table-4

(Rs. Lakhs)

| Month | Adjustment Factor |
|----------------|--------------------------|
| July 2011 | 1,452.37 |
| August 2011 | 1,297.10 |
| September 2011 | (3,145.32) |

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 specified allowable Distribution loss at 10.92%. The actual Distribution Loss is:

July : 11.05% ; August; 09.67%; September: 09.98%

As the Distribution Loss occurring in July 2011 is in excess of the specified value, **Rs. 08.88 Lakhs** have been disallowed from the FAC of the month of July 2011 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 Rs 64.20 paise/kWh. (average).

17. Recovery of FAC

The Commission has assessed FAC to be refunded in the month of July, August & September 2011 as Rs. (983.48) Lakhs, Rs. 129.99 Lakhs, and Rs. (5975.71) Lakhs respectively. The slab wise and tariff categorywise calculation is attached

Note :

- 1) In the initial submission of R Infra, for the month July 2012, R Infra had not considered the deduction of excess distribution loss from the recoverable FAC amount. After applied the said correction, the final figure of FAC for the month July 2012 is Rs(983.48) Lakhs instead of Rs.(992.36) Lakhs submitted earlier. This is as correction acknowledged in by R Infra vide the E Mail dated 12 June 2012
- 2) R Infra, in its said FAC submission has not submitted the tabulation of slab wise/category wise FAC charged in August 2011. As clarification to the query raised, RInfra, vide its E-Mail dated 12 June 2012 has clarified as follows :

MERC issued ARR order for FY 2010-11 in Case no 72 of 2010 on 29th July 2011 which lead to change of Base Rate based on power purchase cost approved by MERC. Since the impact of revised Base Rate was not available before commencement of billing for August 11, RInfra decided not to recover/refund any FAC charge for the month of August 11. Accordingly, following message was sent to consumers in the bills for August 11:

"In view of MERC order dated 29th July 2011 in case No. 72 of 2010, the FAC for the billing month August 2011 is being computed and the same shall be adjusted in the FAC of September 2011"

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 considering the cap on monthly FAC charge for July, August & September 2011 is given in the table below:

SUMMARY TABLE

The Summary Tables are as follows:

Table -5

| Sr. No. | Parameter | Unit | Value | Value | Value |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|------------|------------|
| | | | July 2011 | Aug 2011 | Sep 2011 |
| (A) | (B) | (C) | (D) | (D) | (D) |
| 1.0 | Calculation of FAC (A) | | | | |
| 1.1 | Disallowance of change in variable cost of generation corresponding 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 | (2,383.41) | (1,118.60) | (2,756.72) |
| 1.3 | Apportionment of change in variable cost of generation and power purchase to License Area (C) | Rs Lakh | (2,383.41) | (1,118.60) | (2,756.72) |
| 1.4 | Working Capital Interest (I) | Rs Lakh | (61.32) | (48.51) | (73.67) |
| 1.5 | Adjustment for Over Recovery/Under Recovery (B) | Rs Lakh | 1,452.37 | 1,297.10 | (3,145.32) |
| 1.6 | FAC (A) = C + I + B | Rs Lakh | (992.36) | 129.99 | (5,975.71) |
| 2.0 | Calculation of FAC_{GWh} | | | | |
| 2.1 | Sale within License Area | MU | 547.916 | 551.141 | 532.181 |
| 2.2 | Excess Distribution Loss | MU | 4.948 | - | - |
| 2.3 | FAC Charge (FAC _{GWh}) without considering cap on monthly FAC Charge | Paise/kWh | (17.95) | 2.36 | (112.29) |
| 2.4 | Cap on monthly FAC Charge | Paise/kWh | 64.20 | 64.20 | 64.20 |
| 2.5 | FAC Charge (FAC_{GWh}) considering cap on monthly FAC Charge | Paise/kWh | (17.95) | 2.36 | (112.29) |
| 3.0 | FAC (A) | | | | |
| 3.1 | FAC (A) considering cap on Monthly FAC Charge | Rs Lakh | (983.48) | 129.99 | (5,975.71) |
| 3.2 | FAC (A) disallowed corresponding to excess Distribution loss | Rs Lakh | (8.88) | - | - |
| 3.3 | Carried forward FAC (A) for recovery during future period | Rs Lakh | 0.00 | - | (2,559.11) |

SLABWISE AND TARIFF CATEGORYWISE FAC CHARGE

Table – 6A

| Consumer Categories | July'11 | | | August'11 | | | September'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 | | | | | | | | | |
| LT I - Below Poverty Line | 0.005 | (0.0364) | (0.00) | | | | 0.005 | 0.0261 | 0.00 |
| | | | | | | | | | |
| LT -I Residential (Single Phase) | - | | - | | | | - | | - |
| 0-100 | 160.175 | (0.2692) | (430.48) | | | | 158.467 | 0.1932 | 305.76 |
| 101-300 | 94.704 | (0.5056) | (478.83) | | | | 90.548 | 0.3628 | 327.51 |
| 301-500 | 9.933 | (0.8330) | (82.75) | | | | 8.989 | 0.5978 | 53.73 |
| 500and above | 2.968 | (0.9648) | (28.64) | | | | 2.669 | 0.6923 | 18.48 |
| | | | | | | | | | |
| LT -I Residential Three phase | | | | | | | | | |
| 0-100 | 17.186 | (0.2692) | (45.65) | | | | 16.749 | 0.1932 | 31.18 |
| 101-300 | 25.013 | (0.5056) | (126.47) | | | | 24.030 | 0.3628 | 87.18 |
| 301-500 | 11.462 | (0.8330) | (95.48) | | | | 10.787 | 0.5978 | 64.49 |
| 500and above | 18.353 | (0.9648) | (177.07) | | | | 17.695 | 0.6923 | 122.50 |
| | | | | | | | | | |
| LT II : LT - Non - Residential or Commercial | | | | | | | | | |
| LT II (a) - 0-20 kW | 106.231 | (0.7230) | (766.83) | | | | 104.698 | 0.5188 | 538.71 |
| | | | | | | | | | |
| LT II (a) TOD Option | - | (0.7230) | (0.00) | | | | 0.005 | 0.5188 | (0.03) |
| | - | (0.7684) | - | | | | - | 0.5514 | - |
| | - | (0.8139) | - | | | | - | 0.5840 | - |
| | - | (0.6547) | - | | | | - | 0.4698 | - |
| | | | | | | | | | |
| LT II (b) - 20-50 kW | 5.527 | (0.9330) | (52.21) | | | | 5.216 | 0.6695 | 37.08 |
| | 2.346 | (0.9785) | (22.96) | | | | 2.216 | 0.7022 | 15.56 |
| | 1.961 | (1.0239) | (20.08) | | | | 1.828 | 0.7348 | 13.43 |
| | 1.740 | (0.8648) | (15.05) | | | | 1.575 | 0.6206 | 9.78 |
| | | | | | | | | | |
| LT II (c) - above 50 kW | 10.171 | (0.9921) | (107.55) | | | | 9.220 | 0.7119 | 68.75 |
| | 4.379 | (1.0375) | (45.43) | | | | 3.983 | 0.7445 | 29.66 |
| | 3.762 | (1.0831) | (40.74) | | | | 3.442 | 0.7772 | 26.75 |
| | 3.856 | (0.9239) | (35.63) | | | | 3.497 | 0.6630 | 23.18 |
| | | | | | | | | | |
| LT III - LT Industrial upto 20 kW | 10.773 | (0.7057) | (76.00) | | | | 10.879 | 0.5064 | 55.26 |
| | - | (0.7057) | - | | | | - | 0.5064 | - |
| | - | (0.7511) | - | | | | - | 0.5390 | - |
| | - | (0.7966) | - | | | | - | 0.5716 | - |
| | - | (0.6374) | - | | | | - | 0.4574 | - |
| | | | | | | | | | |
| LT IV - LT Industrial above 20 kW | 7.538 | (0.6738) | (47.89) | | | | 7.653 | 0.4836 | 34.32 |
| | 2.984 | (0.7193) | (22.41) | | | | 2.994 | 0.5162 | 16.14 |
| | 2.701 | (0.7648) | (21.52) | | | | 2.729 | 0.5488 | 15.60 |
| | 3.237 | (0.6056) | (20.63) | | | | 3.277 | 0.4346 | 14.99 |
| | | | | | | | | | |
| LT-V : LT- Advertisements and Hoardings | 0.188 | (1.6059) | (3.09) | | | | 0.207 | 1.1524 | 2.31 |
| | | | | | | | | | |
| LT VI: LT -Street Lights | 4.172 | (0.7557) | (31.53) | | | | 4.775 | 0.5423 | 25.89 |
| | | | | | | | | | |
| LT-VII (A): LT -Temporary Supply Religious | 0.001 | (0.3465) | (0.00) | | | | 0.691 | 0.2486 | 0.73 |
| | | | | | | | | | |
| LT-VII (B): LT -Temporary Supply Others | 8.023 | (1.4377) | (114.71) | | | | 8.666 | 1.0317 | 86.9286947 |
| | | | | | | | | | |
| LT VIII: LT - Crematorium & Burial Grounds | 0.121 | (0.3465) | (0.31) | | | | 0.068 | 0.2486 | 0.1680288 |
| | | | | | | | | | |
| LT IX: LT -Agriculture | 0.003 | (0.0727) | (0.00) | | | | 0.003 | 0.0522 | 0.0014459 |

Table-6B

| Consumer Categories | July'11 | | | August'11 | | | September'11 | | |
|----------------------------------|----------------|----------|-------------------|-----------|------|--------------|----------------|--------|-----------------|
| | Qty (Mus) | Rate | Rs. in Lakhs | Qty (Mus) | Rate | Rs. in Lakhs | Qty (Mus) | Rate | Rs. in Lakhs |
| <u>High Tension - HT</u> | | | | | | | | | |
| HT I: HT-Industry | 3.390 | (0.6875) | (23.31) | | | | 2.989 | 0.4933 | 14.75 |
| | 1.268 | (0.7329) | (9.29) | | | | 1.120 | 0.5259 | 5.89 |
| | 1.325 | (0.7784) | (10.32) | | | | 1.151 | 0.5586 | 6.43 |
| | 2.187 | (0.6193) | (13.55) | | | | 1.859 | 0.4444 | 8.26 |
| HTII : HT- Commercial | 7.675 | (0.7648) | (56.68) | | | | 6.447 | 0.5488 | 34.43 |
| | 2.890 | (0.8102) | (23.42) | | | | 2.505 | 0.5814 | 14.57 |
| | 2.944 | (0.8557) | (25.19) | | | | 2.558 | 0.6141 | 15.71 |
| | 4.200 | (0.6966) | (29.26) | | | | 3.487 | 0.4999 | 17.43 |
| HT III: HT-Group Housing Society | 2.274 | (0.4692) | (10.68) | | | | 2.242 | 0.3367 | 7.55 |
| HTIV : HT - Temporary Supply | 0.248 | (1.0003) | (2.48) | | | | 0.265 | 0.7178 | 1.90 |
| Total | 547.916 | | (3,114.09) | - | | - | 532.181 | | 2,152.96 |

APPENDIX-1**Approved Parameters for R Infra**

| Form No | Particulars | Unit | Norms (FY 2010-11) |
|----------------|-------------------------------|-------------|---------------------------|
| 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 |