

RInfra–Generation (RInfra-G)

Executive Summary – English:

Multi Year Tariff (MYT) Mid-Term Review
(MTR) Petition for the Control Period: FY
2016-17 to FY 2019-20

Filed with

Maharashtra Electricity Regulatory Commission



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1. BACKGROUND

1.1 Multi-Year Tariff (MYT) Regulations

The Hon'ble Maharashtra Electricity Regulatory Commission (hereinafter referred to as "Hon'ble Commission" / "Hon'ble MERC") has issued the following Regulations in exercise of powers conferred under relevant sections of the Electricity Act, 2003 (hereinafter referred to as EA, 03):

- Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011 (hereinafter referred to as MYT Regulations, 2011) on February 4, 2011 and
- Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2015 (hereinafter referred to as MYT Regulations, 2015) on December 8, 2015

MYT Regulations, 2011 is applicable for Reliance Infrastructure Limited (hereinafter referred to as RInfra) for the Second Control Period from FY 12-13 onwards (vide an Order of the Hon'ble Commission in Case No. 45 of 2011) until FY 15-16. MYT Regulations, 2015 is applicable for the Third Control Period from FY 16-17 until FY 19-20.

1.2 Objective of the MTR Petition

Regulation 5.1 (b) of MYT Regulations, 2015 provides for filing of Mid-Term Review (MTR) Petition comprising of truing up for FY 15-16 and FY 16-17, provisional truing up for FY 17-18 and revised ARR forecast and tariffs for FY 18-19 and FY 19-20. In accordance with the said Regulation, RInfra-Generation (hereinafter referred to as RInfra-G) has filed the present MTR Petition.

2. POWER PURCHASE ARRANGEMENT

Pursuant to the directions of the Hon'ble Commission, RInfra-G has entered into a Power Purchase Arrangement (PPA) with RInfra-Distribution (RInfra-D), which was approved by the Hon'ble Commission vide its Order dated February 12, 2009 in Case No. 8 of 2008. As per the said PPA, the entire net generation of DTSPS is to be supplied to RInfra-D, for a period of 10 years from the date of effectiveness of the arrangement i.e. 23rd February, 2008.

Pursuant to directions issued by the Hon'ble Commission in its respective MYT Orders for RInfra's Generation business (Case No. 14 of 2016) as well as Distribution business (Case No. 24 of 2016), RInfra-G and RInfra-D submitted a Petition (Case No. 5 of 2017) seeking the Hon'ble Commission's approval of a further PPA between RInfra-G and RInfra-D.

The Hon'ble Commission has, vide its Order dated 8 February, 2018 in Case No. 5 of 2017, approved the extension of the existing PPA between RInfra-D and RInfra-G for a period of 5 years, i.e., till 22 February, 2023.

3. TRUING UP OF FY 2015-16

RInfra-G, as part of the present MTR Petition, is submitting the actual expenses incurred and revenues earned for FY 2015-16 based on Audited Accounts for the purpose of truing up of FY 2015-16 under MYT Regulations, 2011.

3.1 Operational Performance

RInfra-G has generated 3824.84 MU (gross units) at a PLF of 87.09% and has maintained availability of 96.60% for FY 2015-16 which is well above the availability norm of 85% specified in the MYT Regulations, 2011. For the purpose of final truing-up of FY 2015-16, the Auxiliary consumption of FGD has been considered at actual of 45.12 MU, which was also approved by the Hon'ble Commission in the MYT Order.

3.2 Fuel Cost

The actual fuel cost incurred during FY 2015-16 is Rs. 976.82 Cr. However, the fuel cost computed on actual landed price and based on the normative parameters as per the MYT Regulations, 2011 is Rs. 1030.18 Cr. The difference of the two is Efficiency Gains and RInfra-G is entitled to a variable cost of Rs. 976.82 Crore plus 2/3rd of the difference between Rs. 1030.18 Crore and Rs. 976.82 Crore i.e. Rs. 1012.39 Crore. The 1/3rd of the efficiency gain is shared with the consumer.

3.3 PLF Incentive

Regulation 49.8 of MYT Regulations, 2011 specifies the provision of incentive on achieving higher PLF over the norms of 85% specified for coal based Thermal Generating Stations. During FY 2015-16, RInfra-G, achieved a PLF of 87.09%, and is therefore entitled for PLF incentive of Rs. 13.68 Crore.

3.4 Operation & Maintenance Expenses

RInfra-G submits that the actual O&M expense incurred during FY 2015-16 is Rs. 143.22 Crore including efficiency gain of Rs. 3.36 Crore as against Rs. 139.27 Crore (excluding efficiency gain) provisionally approved by the Hon'ble Commission.

3.5 Capital Expenditure and Capitalization

RInfra-G submits that capitalisation for FY 2015-16 including the interest during construction (IDC) is Rs. 31.63 Crore as against Rs. 31.04 Crore approved by the Hon'ble Commission in the MYT Order.

3.6 Debt-Equity Ratio

As there is no actual loan taken during FY 2015-16 for the purpose of capital expenditure in Generation business, RInfra-G has considered normative funding of capex schemes in the ratio of 70:30 for the purpose of computation of Interest on loan and Return on Equity (RoE) for truing up of FY 2015-16 in line with the Regulation 31 of MERC MYT Regulations, 2011.

3.7 Depreciation

The Depreciation has been worked out in accordance with the Depreciation rates specified in MERC MYT Regulations 2011 and has been calculated on the opening level of Gross Fixed Asset (GFA) of FY 2015-16 and on the assets added during the year as well, based on the actual date of capitalisation. In accordance with the MYT Regulations, 2011, if any asset in opening balance as on 01.04.2015 has reached 70% depreciation or crossed such value during FY 2015-16, the depreciation thereafter on such asset is determined considering the revised rate, which is worked out by spreading the balance depreciable value over the balance useful life of the asset.

3.8 Interest on Working Capital

RInfra-G has computed Working Capital requirement and interest thereof as per Regulation 35.1 of MERC MYT Regulations, 2011. RInfra-G has considered the State Bank of India Advance Rate (SBAR) of 14.75% as approved by the Hon'ble Commission in its MYT Order for calculating the interest on the working capital.

3.9 Interest on Loan Capital

Since, there are no actual loans in case of RInfra- G but the normative loan is still outstanding, the weighted average interest rate for FY 2015-16 has been worked out based on weighted average interest rate of outstanding actual loan balance as on 1 April, 2015 of RInfra-T and RInfra-D which is 10.92%. This weighted average interest rate has been applied on the average of opening and closing loan balance for FY 2015-16, considering the opening normative loan balance as admitted and approved by the Hon'ble Commission in its MYT Order and the normative loan added during FY 2015-16 corresponding to 70% of capitalisation during FY 2015-16.

3.10 Return on Equity

Regulation 32.1 of MERC MYT Regulations, 2011 specifies the provision of Return on Equity capital @ 15.5% per annum on the opening Equity base of the particular year. Employing the same methodology, RInfra-G has computed allowable RoE on the opening equity base of FY 2015-16 in the present Petition.

3.11 Income Tax

RInfra-G has worked out Income Tax for FY 2015-16 considering the Regulatory Profit before Tax based on Income and permissible expenses.

3.12 Revenue from Sale of electricity

RInfra-G submits that the total revenue from sale of electricity generated for FY 2015-16 is Rs. 1373.63 Crore which includes energy charges (plus FAC), fixed charges and the PLF Incentive.

3.13 Non-Tariff Income

RInfra-G submits that the total non-tariff income considered during FY 2015-16 is Rs. 16.84 Crore against Rs. 17.30 Crore approved by the Hon'ble Commission in the MYT Order.

3.14 Truing up for FY 2015-16

RInfra-G submits the summary of final truing up for FY 2015-16 in the table below:

Table 1: True Up Summary for FY 2015-16

| Sr No. | Particulars (in Rs. Crore) | MYT Order (provisional true-up) | Actual (for final true-up) |
|----------|---|---------------------------------|----------------------------|
| | Expenditure | | |
| 1 | Fuel Expenses | 976.82 | 976.82 |
| 2 | Operation & Maintenance Expenses | 139.27 | 139.86 |
| 3 | Depreciation | 27.02 | 27.88 |
| 4 | Interest on Long-term Loan Capital | 19.92 | 19.90 |
| 5 | Interest on Working Capital | 15.88 | 15.42 |
| 6 | Other Expenses | - | - |
| 7 | Income Tax | 40.18 | 53.09 |
| A | Total Expenditure (1+2+3+4+5+6+7) | 1,219.09 | 1,232.96 |
| | | | |
| 8 | Return on Equity | 88.23 | 88.23 |
| 9 | Add: Incentive for Higher PLF | - | 13.68 |
| 10 | Add: 2/3rd of Efficiency gain in Fuel Cost | - | 35.58 |
| 11 | Add: 2/3rd of Efficiency gain in O&M Expenses | - | 3.36 |
| | | | |
| B | Total of RoE+ Gains+ Incentive (8+9+10+11) | 88.23 | 140.85 |
| | | | |
| | Revenue | | |
| 12 | Revenue from sale of electricity | 1,373.86 | 1,373.63 |
| 13 | Other Income | 17.30 | 16.84 |
| C | Total Revenue (12+13) | 1,391.16 | 1,390.47 |
| | | | |

| Sr No. | Particulars (in Rs. Crore) | MYT Order (provisional true-up) | Actual (for final true-up) |
|----------|--|---------------------------------|----------------------------|
| 14 | Stand Alone Revenue Gap/(surplus) for FY 2015-16 (A+B-C) | (83.84) | (16.65) |
| 15 | Add Gap Arising due to Impact of ATE judgment | 135.74 | 135.74 |
| 16 | Add Revenue Surplus along with the carrying cost for FY 2012-13 and FY 2013-14 | (58.51) | (58.51) |
| 17 | Add provisional Surplus of FY 2014-15 Truing Up | (11.11) | (11.11) |
| | | | |
| D | Revenue Gap/ (Surplus) (14+15+16+17) | (17.72) | 49.47 |
| E | Carrying cost for Half Year | | 3.65 |
| F | Revenue Gap with Carrying Cost (D+E) | (17.72) | 53.12 |

4. TRUING UP OF FY 2016-17

RInfra-G, as part of the present MTR Petition, is submitting the actual expenses incurred and revenues earned for FY 2016-17 based on Audited Accounts for the purpose of truing up of FY 2016-17 under MYT Regulations, 2015.

4.1 Operational Performance

RInfra-G has generated 3742.53 MU (gross units) at a PLF of 85.45% and has maintained availability of 99.51% for FY 2016-17 which is well above the availability norm of 85% specified in the MYT Regulations, 2015. For the purpose of final truing-up of FY 2016-17, the Auxiliary consumption of FGD has been considered at actual of 45.89 MU.

4.2 Fuel Cost

The actual fuel cost incurred during FY 2016-17 is Rs. 1003.63 Cr. However, the fuel cost computed on actual landed price and based on the normative parameters as per the MYT Regulations, 2015 is Rs. 1079.61 Cr. The difference of the two is Efficiency Gains and RInfra-G is entitled to a variable cost of Rs. 1003.63 Crore plus 1/3rd of the difference between Rs. 1079.61 Crore and Rs. 1003.63 Crore i.e. Rs. 1028.96 Crore. The 2/3rd of the efficiency gain is shared with the consumer.

4.3 PLF Incentive

Regulation 48.7 of MYT Regulations, 2015 specifies the provision of incentive on achieving higher PLF over the norms of 85% specified for coal based Thermal Generating Stations. During FY 2016-17, RInfra-G, achieved a PLF of 85.45%, and is therefore entitled for PLF incentive of Rs. 0.83 Crore.

4.4 Operation & Maintenance Expenses

RInfra-G submits that the actual O&M expense incurred during FY 2016-17 is Rs. 146.66 Crore including efficiency gain of Rs. 0.93 Crore as against Rs. 147.84 Crore (excluding efficiency gain) provisionally approved by the Hon'ble Commission.

4.5 Capital Expenditure and Capitalization

RInfra-G submits that capitalisation for FY 2016-17 including the interest during construction (IDC) is Rs. 33.09 Crore as against Rs. 69.15 Crore approved by the Hon'ble Commission in the MYT Order.

4.6 Debt-Equity Ratio

As there is no actual loan taken during FY 2016-17 for the purpose of capital expenditure in Generation business, RInfra-G has considered normative funding of capex schemes in the ratio of 70:30 for the purpose of computation of Interest on loan and Return on Equity (RoE) for truing up of FY 2016-17 in line with the Regulation 26 of MERC MYT Regulations, 2015.

4.7 Depreciation

The Depreciation has been worked out in accordance with the Depreciation rates specified in MERC MYT Regulations 2015 and has been calculated on the opening level of Gross Fixed Asset (GFA) of FY 2016-17 and on the assets added during the year as well, based on the actual date of capitalisation. In accordance with the MYT Regulations, 2015, if any asset in opening balance as on 01.04.2016 has reached 70% depreciation or crossed such value during FY 2016-17, the depreciation thereafter on such asset is determined considering the revised rate, which is worked out by spreading the balance depreciable value over the balance useful life of the asset.

4.8 Interest on Working Capital

RInfra-G has computed Working Capital requirement and interest thereof as per Regulation 31 of MERC MYT Regulations, 2015. RInfra-G has considered the State Bank of India Base Rate plus 150 basis points, which works out to 10.79% for calculating the interest on the working capital.

4.9 Interest on Loan Capital

Since, there are no actual loans in case of RInfra- G but the normative loan is still outstanding, the weighted average interest rate for FY 2016-17 has been worked out based on weighted average interest rate of actual loan availed during FY 2016-17 by other regulated businesses of RInfra-T and RInfra-D which is 10.95%. This weighted average interest rate has been applied on the average of opening and closing normative loan balance for FY 2016-17, considering the closing loan balance of FY 2015-16

and the normative loan added during FY 2016-17 corresponding to 70% of capitalisation during FY 2016-17.

4.10 Return on Equity

Regulation 28.3 of MERC MYT Regulations, 2015 specifies the provision of Return on Equity capital @ 15.5% per annum on the opening Equity base of the particular year and on 50% of the equity added during the year. Accordingly, RInfra-G has computed allowable RoE for FY 2016-17.

4.11 Income Tax

RInfra-G has worked out Income Tax for FY 2016-17 considering the Regulatory Profit before Tax based on Income and permissible expenses.

4.12 Revenue from Sale of electricity

RInfra-G submits that the total revenue from sale of electricity generated for FY 2016-17 is Rs. 1382.28 Crore which includes energy charges (plus FAC), fixed charges and the PLF Incentive.

4.13 Non-Tariff Income

RInfra-G submits that the total non-tariff income considered during FY 2016-17 is Rs. 29.44 Crore against Rs. 17.30 Crore approved by the Hon'ble Commission in the MYT Order.

4.14 Truing up for FY 2016-17

RInfra-G submits the summary of final truing up for FY 2016-17 in the table below:

Table 2: True Up Summary for FY 2016-17

| Sr. No. | Particulars (in Rs. Crore) | MYT Order | Actual |
|----------|---|-----------------|-----------------|
| | Expenditure | | |
| 1 | Fuel Expenses | 1,235.45 | 1,003.63 |
| 2 | Operation & Maintenance Expenses | 147.84 | 145.73 |
| 3 | Depreciation | 27.33 | 29.85 |
| 4 | Interest on Long-term Loan Capital | 20.29 | 19.26 |
| 5 | Interest on Working Capital | 12.95 | 19.80 |
| 6 | Other Expense | - | - |
| 7 | Income Tax | 40.18 | 57.71 |
| 8 | Holding Cost of Revenue Gap/(Surplus) of FY 2014-15 | (3.01) | (3.01) |
| 9 | Cumulative Revenue Gap/(Surplus) till FY 2015-16 | (17.72) | (17.72) |
| | | | |
| A | Total Expenditure ((1+2+3+4+5+6+7+8+9)) | 1,463.31 | 1,255.25 |
| | | | |

| Sr. No. | Particulars (in Rs. Crore) | MYT Order | Actual |
|----------|---|-----------------|-----------------|
| 10 | Return on Equity | 91.28 | 90.36 |
| 11 | Add: Incentive for Higher PLF | - | 0.83 |
| 12 | Add: 1/3rd of Efficiency gain/ (losses) in Fuel Cost | - | 25.33 |
| 13 | Add: 1/3rd of Efficiency gain/ (losses) in O&M Expenses | - | 0.93 |
| | | | |
| B | Total of RoE+ Gains+ Incentive (10+11+12+13) | 91.28 | 117.45 |
| | | | |
| | Revenue | | |
| 12 | Revenue from sale of electricity | 1,537.29 | 1,382.28 |
| 13 | Other Income | 17.30 | 29.44 |
| | | | |
| C | Total Revenue (12+13) | 1,554.59 | 1,411.72 |
| | | | |
| D | Revenue Gap/ (Surplus) ((A)+(B))- (C) | - | (39.02) |
| E | Holding Cost for half year | | (2.11) |
| F | Revenue Gap / (Surplus) with holding cost | - | (41.13) |

5. PROVISIONAL TRUE UP OF FY 2017-18

This section deals with the review of performance for FY 2017-18 considering the MYT Order issued by the Hon'ble Commission and the actual performance for first half of FY 2017-18 and estimated performance for second half of FY 2017-18.

5.1 Operational Performance

In the first half of FY 2017-18, RInfra-G has generated 1864.69 MU (gross) at a PLF of 84.91% maintaining Availability of 96.79%. The performance in first half is above the norms as specified in MYT Regulations, 2015. In the first half, mainly due to backing down of plant, the PLF was lower than that approved in the MYT Order. RInfra-G submits that Unit 2 of DTSP was under shutdown from September 20, 2017 to October 10, 2017 due to non availability of sufficient coal. Also, Unit 1 had to operate at technical minimum during the same period. Since October 10, both units have been running depending upon the demand. Based on normative operational parameters in the second half, RInfra-G has projected gross generation of 1944 MU at PLF of 89.01% maintaining the availability same as PLF (89.01%), in second half of FY 2017-18.

5.2 Fuel Cost

The actual fuel cost incurred in the first half of FY 2017-18 is Rs. 559.92 Crore and the fuel cost projected for second half of FY 2017-18 is Rs. 596.67 Crore aggregating to total of Rs. 1156.59 Crore for FY 2017-18.

The Central Board of Excise and Customs (CBEC), vide its circular dated 10 April, 2013, has provided eligibility criteria for grant of exemption from payment of cost recovery charges in respect of various custom facilities based on the staffing norms. In June 2017, Customs had issued a Show Cause Notice (SCN) for recovery of Rs. 6.55 Crore (April 2011 to March 2017) as cost recovery charges due to RInfra-G not meeting the criteria for exemption. RInfra-G submits that the Principal Commissioner of Customs (Preventive) has issued an Order dated 7 February, 2018 directing RInfra to pay the cost recovery charges of Rs. 5,88,95,489 for the period April 2011 to March 2017 by 28 February, 2018. The charges so demanded in the said Order have been paid by RInfra-G in FY 17-18 and accordingly, RInfra-G has included the total Cost Recovery Charges of Rs. 5.89 Crore in the fuel cost of FY 17-18. Thus, the total cost being claimed for FY 2017-18 is Rs. 1162.48 Crore.

5.3 Operation & Maintenance Expenses

The Hon'ble Commission has issued the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2017 on 29.11.2017, wherein the Hon'ble Commission has, inter alia, modified the formula for determination of O&M expenses for Generating Company and Distribution Licensee.

To project the Base O&M cost for FY 2017-18, RInfra-G has applied the escalation factor of 4.26% (considering the amendment Regulation) on the Base O&M expenses for FY 2016-17. To this, the estimated Corporate Allocation expenses and the estimated expenses on Water Charges are added. For both, the expenses for second half are considered same as the actual of first half of FY 2017-18.

Thus, the O&M expenses projected for FY 2017-18 is Rs. 152.61 Crore as against Rs. 152.22 Crore approved by the Hon'ble Commission in the MYT Order.

5.4 Capital Expenditure and Capitalization

During the first half, total assets corresponding to Rs. 26.06 Crore have been capitalised and put to use, including IDC. RInfra-G expects an additional Rs. 44.29 Crore to be capitalised during second half of FY 2017-18. This estimate is based on the present status of ongoing capital works, orders in execution and likely receipt of material, etc. Total capitalization estimated for FY 2017-18 is Rs. 70.34 Crore as against Rs. 39.48 crore capitalization approved by the Hon'ble Commission in the MYT Order.

5.5 Debt-Equity Ratio

As there is no actual loan taken during FY 2017-18 for the purpose of capital expenditure in Generation business, RInfra-G has considered normative funding of capex schemes in the ratio of 70:30 for the purpose of computation of Interest on loan and Return on Equity (RoE) for provisional truing up of FY 2017-18 in line with the Regulation 26 of MERC MYT Regulations, 2015.

5.6 Depreciation

The Depreciation has been worked out in accordance with the Depreciation rates specified in MERC MYT Regulations 2015 and has been calculated on the opening level of Gross Fixed Asset (GFA) of FY 2017-18 as well as on the assets added during the first half and proposed capitalization in second half of FY 2017-18.

In accordance with the MYT Regulations, 2015, if any asset in opening balance as on 1 April, 2017 has reached 70% depreciation or crossed such value during FY 2017-18, the depreciation thereafter on such asset is determined considering the revised rate, which is worked out by spreading the balance depreciable value over the balance useful life of the asset.

For the asset added in second half of FY 2017-18, depreciation is calculated considering mid period addition and at rate as specified in MYT Regulations, 2015.

5.7 Interest on Working Capital

RInfra-G has computed Working Capital requirement as per Regulation 31 of MERC MYT Regulations, 2015.

In view of the MYT (First Amendment) Regulations, 2017, coming into force from 29 November, 2017, the rate of interest on working capital for FY 17-18 is considered at a weighted average of SBI Base Rate plus 150 basis points for the first eight months and at one-year MCLR of SBI plus 150 basis points for the remaining four months, which works out to 10.20% (8.70% + 1.50%).

5.8 Interest on Loan Capital

RInfra-G submits that since there is no external borrowing for financing the proposed capitalisation, the same is proposed to be funded through internal accruals only.

In accordance with the MYT Regulations, 2015, this capital employed is treated as normative debt. and the normative interest rate of 11.16%, which is the weighted average of interest rate applicable on the loans of other regulated businesses of RInfra-T & RInfra-D in line with Regulation 29 of the MYT Regulations, 2015 is considered for computing the interest on loan for FY 2017-18.

5.9 Return on Equity

Regulation 28.3 of MERC MYT Regulations, 2015 specifies the provision of Return on Equity capital @ 15.5% per annum on the opening Equity base of the particular year and on 50% of the equity added during the year. Accordingly, RInfra-G has computed allowable RoE for FY 2017-18.

5.10 Income Tax

For FY 2017-18, Income Tax for RInfra-G has been provisionally considered at the same level of FY 2016-17.

5.11 Revenue from Sale of electricity

RInfra-G submits that the revenue from sale of electricity generated is at the rate of energy charge (plus FAC) and fixed charges as approved by the Hon'ble Commission in its MYT Order in Case No.14 of 2016.

RInfra-G submits that the FAC revenue for first half is considered. However, the PLF incentive for first half is presently not being claimed for provisional true-up.

5.12 Non-Tariff Income

RInfra-G submits that the total NTI for first half is Rs. 7.04 Crore. For second half, NTI is projected at the same level as that of first half of FY 2017-18. Accordingly, the NTI for FY 2017-18 is projected at Rs. 14.07 Crore.

5.13 Provisional Truing up for FY 2017-18

RInfra-G submits the summary of provisional truing up for FY 2017-18 in the table below:

Table 3: Provisional True Up Summary for FY 2017-18

| Sr. No. | Particulars (in Rs. Crore) | Approved in MYT Order | Revised Estimates |
|----------|---|-----------------------|-------------------|
| | Expenditure | | |
| 1 | Fuel Expenses | 1,235.45 | 1,162.48 |
| 2 | Operation & Maintenance Expenses | 152.22 | 152.61 |
| 3 | Depreciation | 28.16 | 31.03 |
| 4 | Interest on Long-term Loan Capital | 21.32 | 20.26 |
| 5 | Interest on Working Capital | 13.06 | 21.59 |
| 6 | Other Expense | - | - |
| 7 | Income Tax | 40.18 | 57.71 |
| A | Total Expenditure (1+2+3+4+5+6+7) | 1,490.39 | 1,445.69 |
| 8 | Return on Equity | 93.81 | 92.71 |
| 9 | Add: Incentive for Higher PLF | - | - |
| 10 | Add: 2/3rd of Efficiency gain in Fuel Cost | - | - |
| 11 | Add: 2/3rd of Efficiency gain in O&M Expenses | - | - |
| B | Total of RoE+ Gains+ Incentive (8+9+10+11) | 93.81 | 92.71 |
| | Revenue | | |
| 12 | Revenue from sale of electricity | 1,566.90 | 1,486.31 |
| 13 | Non Tariff Income | 17.30 | 14.07 |

| Sr. No. | Particulars (in Rs. Crore) | Approved in MYT Order | Revised Estimates |
|---------|------------------------------------|-----------------------|-------------------|
| C | Total Revenue (12+13) | 1,584.20 | 1,500.39 |
| | Revenue Gap/ (Surplus) (A)+(B)-(C) | - | 38.01 |

6. AGGERGATE REVENUE REQUIREMENT FOR FY 18-19 AND FY 19-20

In this section, RInfra-G is presenting the revised projections of ARR and likely tariff for the remaining third and fourth each year of the third Control Period i.e., FY 2018-19 and FY 2019-20, as per the provisions of the MYT Regulations, 2015.

RInfra-G requests the Hon'ble Commission to approve the annual revenue requirement for FY 2018-19 and FY 2019-20.

6.1 Operational Performance

RInfra-G has considered the operational norms for FY 2018-19 and FY 2019-20 as specified in MYT Regulations, 2015, except the Availability and PLF for projecting Ex-bus generation and fuel cost. The plant availability for FY 2018-19 and FY 2019-20 is now projected considering plant outage of 18 days (Planned- 15 days, Unplanned- 3 days). The availability thus determined for FY 2018-19 and FY 2019-20 is 95.07% and 95.08%, respectively. FY 2018-19 and FY 2019-20, the PLF is considered same as Availability, assuming business as usual scenario. Similarly, as per business as usual scenario, the FGD consumption has also been considered as per actuals of FY 2016-17, instead of the likely actuals of FY 2017-18, as FY 2017-18 was an abnormal year, with higher FGD consumption, as a result of unit shutdown / technical minimum run due to coal shortage.

Accordingly, RInfra-G has proposed gross generation of 4164 MU and 4176 MU for FY 2018-19 and FY 2019-20 respectively.

6.2 Fuel Cost

6.2.1 GCV of Fuel

In case of Domestic Coal, the estimated "as received" GCV of FY 17-18 i.e., 3870 kcal/kg has been considered. For FY 2018-19 and FY 2019-20, a Stacking Loss of 50 Kcal/Kg has been assumed (being actual stacking loss for FY 2016-17) and "as-fired" GCV is, thus, estimated at 3820 kcal/kg.

In case of imported coal, RInfra-G has carried out competitive bidding for purchase of imported coal in line with the directions of the Hon'ble Commission. The GCV of this coal is expected to be about the same as the actual GCV of first half of FY 2017-18, which is 4232 KCal/Kg, which, therefore, has been considered as the "as-received" GCV for FY 2018-19 and FY 2019-20. The actual stacking loss for FY 16-17 for imported coal has been 113 KCal/Kg. Accordingly, for projections of FY 18-19 and FY 19-20, stacking loss of 100 Kcal/Kg has been considered and "as-fired" GCV of Imported Coal has, thus, been worked out as 4132 KCal/Kg.

6.2.2 Landed cost of Fuel

In case of domestic coal, RInfra-G has considered average of actual coal cost of recent three months i.e., July 2017 to September 2017, for both FY 2018-19 and FY 2019-20. The cost considered is approx. Rs. 4625 per MT.

In case of imported coal, the price considered for FY 2018-19 and FY 2019-20 is the annual estimated landed price for FY 2017-18, which is approx. Rs. 5336 per MT (inclusive of transit losses).

Further, as provided in the provisional trueing up section for FY 2017-18, considering the cost recovery charges demanded by Customs, the cost is estimated at Rs. 1 Crore p.a for FY 2018-19 and FY 2019-20 and is included in the fuel cost for FY 2018-19 and FY 2019-20.

Thus, the total fuel cost being claimed for FY 2018-19 and FY 2019-20 is Rs. 1257.64 Crore and Rs. 1261.26 Crore respectively.

6.3 Operation & Maintenance Expenses

As discussed in the Section on provisional true-up of FY 2017-18, the allowable O&M cost for FY 2018-19 and FY 2019-20 is revised based on the formula proposed in the Amendments to the MYT Regulations, as issued by the Hon'ble Commission. Accordingly, the O&M expenses of FY 2018-19 and FY 2019-20 are projected by applying the escalation factor of 4.26% (netted off by 1% efficiency factor) on the estimated O&M expenses of FY 2017-18 as per this Petition, excluding water charges and corporate allocation which is being claimed over and above the allowance. The O&M expense is projected at Rs. 159.12 Crore and Rs. 165.90 Crore respectively for FY 2018-19 and FY 2019-20 respectively.

6.4 Capital Expenditure and Capitalization

RInfra-G submits that the capex plan for FY 2018-19 and FY 2019-20 has been revisited based on outcome of the RLA study, current status of ongoing schemes, and execution of urgent schemes only. RInfra-G has estimated capitalization at Rs. 36 Crore and Rs. 78 Crore for FY 2018-19 and FY 2019-20 respectively.

6.5 Debt-Equity Ratio

Regulation 26 of MERC MYT Regulations, 2015 specifies the funding of capex schemes as per the Debt-Equity ratio of 70:30 and the same is considered by RInfra-G as normative funding for the purpose of computation of interest on loan and return on equity for FY 2018-19 and FY 2019-20.

6.6 Depreciation

Depreciation has been computed in accordance with the provisions of MYT Regulations, 2015 with respect to Depreciation (Regulation 27).

For assets estimated to be added in FY 2018-19 and FY 2019-20, depreciation for half period is computed, considering mid-period addition.

6.7 Interest on Working Capital

RInfra-G has computed Working Capital requirement as per Regulation 31 of MERC MYT Regulations, 2015.

For FY 2018-19 and FY 2019-20, the rate of interest is considered as per MYT (First Amendment) Regulations, 2017 i.e. at one-year MCLR plus 150 basis points. The one-year MCLR as declared by SBI is prevailing at 8.25% since 01-06-2018 and the same is accordingly considered.

6.8 Interest on Loan Capital

RInfra-G submits that since there is no external borrowing for financing the proposed capitalisation, the same is proposed to be funded through internal accruals only.

In accordance with the MYT Regulations, 2015, this capital employed is treated as normative debt. and the normative interest rate of 10.32% and 10.50%, which is the weighted average of interest rate applicable on the loans of other regulated businesses of RInfra-T & RInfra-D in line with Regulation 29 of the MYT Regulations, 2015 is considered for computing the interest on loan for FY 2018-19 and FY 2019-20 respectively.

6.9 Return on Equity

Regulation 28.3 of MERC MYT Regulations, 2015 specifies the provision of Return on Equity capital @ 15.5% per annum on the opening Equity base of the particular year and on 50% of the equity added during the year. Accordingly, RInfra-G has computed allowable RoE for FY 2018-19 and FY 2019-20.

6.10 Income Tax

For FY 2018-19 and FY 2019-20, Income Tax for RInfra-G has been provisionally considered at the same level of FY 2016-17.

6.11 Non-Tariff Income

For re-estimating the NTI for FY 2018-19 and FY 2019-20, RInfra-G has considered it at the same level as considered in this Petition for provisional true-up of FY 17-18, less Rs. 5.18 Crore as likely income from sale of fly ash.

6.12 Cumulative Revenue Gap till FY 17-18 inclusive of Carrying cost on Revenue Gap / Surplus for FY 2015-16 and FY 2016-17

The carrying cost on the revenue gaps / (surplus) of FY 2015-16 has been worked out as per the terms of the MYT Regulations, 2011 i.e. at the SBI PLR. The SBI PLR for FY 2015-16 is 14.75%, which was also considered by the Hon'ble Commission in the MYT Order.

For FY 2016-17, the carrying cost is computed at SBI Base Rate plus 150 basis points, which works out to 10.79%, in accordance with the reasoning given earlier.

Accordingly, RInfra-G has computed the carrying cost and cumulative revenue gap / surplus at the close of FY 2017-18 as provided in the table below:

Table 4: Computation of carrying cost and cumulative revenue gap

| Particulars / Rs. Crore | Rs. Crore |
|---|--------------|
| Incremental revenue gap of FY 2015-16 | 70.84 |
| Revenue gap for FY 2016-17 | (41.13) |
| Provisional revenue gap for FY 2017-18 | 38.01 |
| Carrying cost on revenue gap for FY 2015-16 | 13.89 |
| Carrying cost on revised revenue gap for FY 2016-17 | (4.19) |
| Total revenue gap with carrying cost | 77.44 |

RInfra-G proposes to recover the said revenue gap in FY 2018-19 alone and not spread it over to FY 19-20 as well, so as to avoid further carrying cost. On the said revenue gap, RInfra-G has worked out carrying cost for half year since the recovery in FY 2018-19 would be evenly spread throughout the year. This further carrying cost amounts to Rs. 3.78 crore.

6.13 Annual Revenue Requirement for FY 2018-19 and FY 2019-20

Based on the cost components discussed above, the revised ARR for FY 2018-19 and FY 2019-20 is being submitted in the table below:

Table 5: Annual Revenue Requirement for FY 2018-19 and FY 2019-20

| Particulars | FY 2018-19 | | FY 2019-20 | |
|------------------------------------|----------------|--------------------|----------------|--------------------|
| | Approved | Revised Projection | Approved | Revised Projection |
| Fuel Expenses | 1186.10 | 1257.64 | 1189.63 | 1261.26 |
| Operation & Maintenance Expenses | 156.74 | 159.12 | 161.40 | 165.90 |
| Depreciation | 30.15 | 33.85 | 32.14 | 36.80 |
| Interest on Long-term Loan Capital | 27.88 | 19.24 | 34.69 | 20.06 |
| Interest on Working Capital | 13.15 | 21.31 | 13.46 | 21.44 |
| Other Expense | - | - | - | - |
| Income Tax | 40.18 | 57.71 | 40.18 | 57.71 |
| Total Expenditure | 1454.20 | 1548.87 | 1471.50 | 1563.18 |
| Add : Return on Equity | 99.93 | 95.18 | 106.01 | 97.83 |
| Less: Non Tariff Income | -17.30 | -8.89 | -17.30 | -8.89 |

| Particulars | FY 2018-19 | | FY 2019-20 | |
|---|----------------|--------------------|----------------|--------------------|
| | Approved | Revised Projection | Approved | Revised Projection |
| Cumulative Revenue Gap / (Surplus) upto close of FY 17-18 | | 77.44 | | |
| Half year carrying cost on cumulative revenue gap* | | 3.78 | | |
| Annual Revenue Requirement | 1536.83 | 1716.37 | 1560.21 | 1652.11 |

*The cumulative revenue gap as worked out will attract further carrying cost during FY 18-19, as it will be assumed to be recovered evenly over the year. Accordingly, half year's carrying cost @ 9.75% (prevailing SBI MCLR + 150 basis points) is added.

It is clarified that, for the purpose of recovery from tariff, the cumulative revenue along with associated carrying cost for FY 18-19 (half year) is included in the Capacity (Fixed) charges for FY 18-19.

The revised fixed cost and Energy Charge for FY 2018-19 and FY 2019-20 is being provided in the table below:

Table 6: Capacity (Fixed) Charges and Energy Charge Rate ex-bus for FY 2018-19 and FY 2019-20

| Particulars | UoM | FY 2018-19 | | FY 2019-20 | |
|---------------------------|-----------|------------|--------------------|------------|--------------------|
| | | Approved | Revised Projection | Approved | Revised Projection |
| Capacity (Fixed) Charges | Rs. Crore | 350.74 | 458.73 | 370.58 | 390.85 |
| Energy Charge Rate ex-bus | Rs./ Kwh | 3.252 | 3.341 | 3.252 | 3.341 |

RInfra-G requests the Hon'ble Commission to approve the revised ARR and the Fixed and Energy Charges as proposed above for FY 2018-19 and FY 2019-20.