

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission



Ref. No. MERC/FAC/2024-25/0645

The Chairman and Managing Director

Maharashtra State Electricity Distribution Company Ltd., 5th Floor, Prakashgad, Plot No. G-9 Bandra (East), Mumbai 400 051

Subject:

Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of July, 2024.

Reference:

1. MSEDCL's FAC submission dated 20 August, 2024 for prior approval of

FAC for the month of July, 2024.

2. Data gaps communicated to MSEDCL vide email dated 26 August, 2024.

3. MSEDCL's response to data gaps by email dated 04 September, 2024.

Sir.

Upon vetting the FAC calculations for the month of July, 2024 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 367.56 Crore. The said amount is added to the existing FAC Fund and accordingly total FAC Fund as on July, 2024 is Rs 374.30 Crore. As per FAC approval for June, 2024 to levy Rs 629.87 Crore up to billing month of October, 2024, the FAC chargeable to consumers is as shown in the table below:

| Month | FAC Amount (Rs. Crore) |
|------------|------------------------|
| July, 2024 | 629.87 |

MSEDCL shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

(Dr. Rajendra G. Ambekar) Secretary, MERC

Encl: Annexure A: Detailed Vetting Report for the month of July, 2024.

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Detailed Vetting Report
Date: 24 October, 2024

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF JULY, 2024

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of July, 2024.

Reference: MSEDCL's FAC submission dated 20 August, 2024 and 4 September, 2024 for

prior approval of FAC for the month of July, 2024.

1. FAC submission by MSEDCL:

1.1 MSEDCL has submitted FAC submissions for the month of July, 2024 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MSEDCL against the data gaps issued, the Commission has accorded approval for FAC amount of Rs. 367.56 Crore. The said amount is added to the FAC Fund and accordingly total FAC Fund as on July, 2024 is Rs 374.39 Crore However, as per FAC approval for June, 2024 to levy Rs 629.87 Crore up to billing month of October, 2024, the FAC chargeable to consumers is Rs 629.87 Crore.

2. Background

- 2.1 On 31 March, 2023, the Commission has issued Tariff Order for MSEDCL, (Case No.322 of 2019) for True-up of FY 2019-20, FY 2020-21 and FY 2021-22, provisional Truing-up for FY 2022-23, and Aggregate Revenue Requirement and Revised Tariff for FY 2023-24 and FY 2024-25. Revised Tariff has been made applicable from 1 April, 2023.
- 2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:
 - "7.5.13 Therefore, using its powers for Removing Difficulty under Regulations 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

- Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost.
- Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost.



- Such carry forward of negative FAC shall be continued till next tariff determination process.
- In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism, upon seeking prior approval from the Commission.
- 7.5.14 In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders.
- 7.5.15 As the Commission has continued concept of FAC fund as stated above to stabilise the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.
- 8.5.14 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month on which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month."
- 2.3 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats along with the checklist to file FAC submissions for prior approval to all Distribution Licensees. The Commission also directed all Distribution Licensees to file FAC submissions by 15th of every month prior to the month for which the FAC is proposed to be levied for prior approval.
- 2.4 Accordingly, MSEDCL has filed FAC submissions for the month of July, 2024 for prior approval. The Commission has scrutinized the submissions provided by MSEDCL and has also verified the fuel and power purchase bills provided along with its submissions.

3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by MSEDCL in the FAC submission and as approved by the Commission are as shown in the table below:

| | Yearly Approved | Monthly | Actual Sales | |
|---------------------|------------------------------|---------------|-----------------|--|
| Consumer Category | by the Commission (MU) | Approved (MU) | July, 2024 (MU) | |
| HT Category | | | | |
| Industry (General) | 40,970.86 | 3,354.80 | 3,338.75 | |
| Industry (Seasonal) | 171 GUTY REGU | 3.12 | 5.25 | |

| | Yearly Approved | Monthly | Actual Sales |
|--|------------------------------|---------------|-----------------|
| Consumer Category | by the Commission (MU) | Approved (MU) | July, 2024 (MU) |
| Commercial | 2,085.56 | 162.30 | 167.05 |
| Railways/Metro/Monorail | 115.31 | 9.67 | 13.36 |
| Public Water Works (PWW) | 2,248.88 | 186.39 | 187.19 |
| Agricultural – Pumpsets | 803.74 | 18.43 | 13.81 |
| Agricultural – Others | 278.19 | 23.73 | 22.91 |
| Group Housing Society (Residential) | 235.32 | 20.75 | 21.50 |
| Public Services - Government | 359.02 | 31.07 | 31.47 |
| Public Services - Others | 900.99 | 76.20 | 79.35 |
| Electric Vehicle Charging Stations | 63.69 | 4.15 | 9.39 |
| MSPGCL Auxiliary | 398.52 | 13.13 | 34.95 |
| Sub-total (A) | 48,631.73 | 3,903.74 | 3,924.98 |
| LT Category | | | |
| BPL | 64.73 | 5.43 | 2.77 |
| Residential | 27,688.73 | 2,418.41 | 2,390.40 |
| Non-Residential | 7,273.13 | 573.62 | 613.14 |
| Public Water Works | 967.36 | 77.34 | 78.40 |
| AG Metered (Pump-sets) | 18,813.96 | 1,590.25 | 1,368.24 |
| AG Metered (Others) | 259.21 | 18.21 | 16.50 |
| Industrial | 12,671.55 | 1,046.18 | 1,094.60 |
| Streetlights | 923.14 | 86.38 | 88.60 |
| Public Services | 789.73 | 66.24 | 77.20 |
| Electric Vehicle Charging Stations | 2.55 | 0.18 | 1.22 |
| Sub-total (B) | 69,454.09 | 5,882.25 | 5,731.07 |
| Total - Metered (C = A+B) | 1,18,085.82 | 9,785.99 | 9,656.05 |
| Unmetered Sale (D) | 8,719.33 | 599.13 | 749.18 |
| Grand Total(C+D) | 1,26,805.15 | 10,385.12 | 10,405.24 |

- 3.2 For the month of July, 2024, it is observed that actual sales of 10405.24 MU is higher as compared to the approved energy sales of 10,385.12 MU.
- 3.3 MSEDCL has submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of July, 2024. As per the data, the billing of about 97.36% of sales is undertaken as per actual meter readings and balance 2.64% is assessed on an estimated basis. 100% of HT billing is undertaken on actual basis and estimation is only for LT category. The figures do not include the agriculture sales which is on estimated basis for the month of July, 2024.
- 3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the



month of July, 2024 except for agriculture consumers are as given below:

| Sr. No. | Particulars | No. of Meters for which actual meter reading is done either manually or through AMR | reading is which meter anually or reading are | | |
|------------|-------------|---|---|----------|--|
| 1 | НТ | 23604 | 0 | 23604 | |
| 2 | LT | 23793150 | 2572470 | 26365620 | |
| 1,42 | Total | 23816754 | 2572470 | 26389224 | |

3.5 Further, comparison of sales for April to July for FY 2024-25 as compared to last year is as shown below:

| Particulars | LT - Residential (MU) | LT Others (MU) | HT (MU) | Ag- Unmetered | Total (MU) | |
|-------------------|-----------------------------|----------------------|------------|------------------|---------------|--|
| Apr-23 | 2100 | 3614 | 4446 | 934 | 11093 | |
| Apr-24 | 2397 | 3621 | 4000 | 892 | 10910 | |
| May-23 | 2399 | 4356 | 4622 | 898 | 12275 | |
| May-24 | 2706 | 3720 | 4118 | 904 | 11449 | |
| June-23 | 2728 | 4281 | 4492 | 858 | 12359 | |
| June-24 | 2881 | 3639 | 4067 | 869 | 11456 | |
| July-23 | 2317 | 3180 | 4483 | 708 | 10688 | |
| July-24 | 2390 | 3341 | 3925 | 749 | 10405 | |
| Apr-23 to July-23 | 9543 | 15430 | 18043 | 3399 | 46415 | |
| Apr-24 to July-24 | 10375 | 14321 | 16110 | 3414 | 44219 | |

- 3.6 The Commission observes that overall sales in July, 2024 has decreased as compared to July, 2023 due to decrease in HT Sales.
- 3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and consumption obtained for FY 2024-25 is bifurcated monthly on the basis of monthly input ratio of FY 2022-23 for estimation of monthly sale. The Commission while approving the FAC for the month of June, 2024 has restricted the agriculture sales to approved sales (based on the approved norm of Consumption/HP) as specified in MYT Tariff Order. MSEDCL in response to data gaps raised by the Commission has submitted the load (HP) details of agriculture connections. Further, the Commission has approved monthly sales for the agriculture connections. Accordingly, the Commission has computed the norm of consumption/HP based on the monthly approved agriculture sales and considered the norms based on monthly approved sales for allowing the sales for the month of July 2024. Any adjustment in sales due to HP

variation will be reconciled while actual data is submitted as per actual billing undertaken by MSEDCL. Based on the norms approved by the Commission in the Tariff Order, the agriculture sales - metered and unmetered approved by the Commission are as given below:

| E E | 1 | Metered | | | Unmetered | I PER SELECTION | Total | | | |
|-----------------------------------|-----------------|-------------------------|---------------------------------|--------------------|-------------------------|---------------------------------|-----------------|-------------------------|---------------------------------|--|
| Particulars | Sale in MU's | Cumulative Load (HP) | Consumpti on / HP – Units | Sale in MU's | Cumulative Load (HP) | Consumpti on / HP - Units | Sale in MU's | Cumulative Load (HP) | Consumpti on / HP - Units | |
| MSEDCL - April 24-July 24 | 6194 | 61953640 | 100 | 3414 | 34494471 | 99 | 9608 | 96448111 | 100 | |
| As Approved - April 24 - July 24 | 6185 | 61953640 | 100 | 3306 | 34494471 | 96 | 9491 | 96448111 | 98 | |

3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 47.84 MU of unmetered agriculture sales for the month of July, 2024 and considered in computation of Distribution Loss to restrict the consumption based on actual sales per HP or approved Sales per HP, whichever is lower.

4. Power Purchase Details

- 4.1 The Commission has approved following sources in the Tariff Order for power purchase by MSEDCL.
 - a) MSPGCL
 - b) Central Generating Stations i.e., NTPC, TAPP etc.
 - c) IPPs i.e., JSW, Adani Power, Mundra UMPP, Emco, Rattan India and Sai Wardha
 - d) Renewable Energy (Solar and Non-Solar)

In addition to the aforesaid, MSEDCL procures power in short term, though the said source is not approved by the Commission, in case of any shortfall of approved sources or to optimize the power purchase cost. Also, there may be some variation in real time (unscheduled interchange) which will be settled through Balancing and Settlement Mechanism approved by the Commission.

4.1 Summary of Power Purchase from MSEDCL is as follows:

| Sr. No. | Particular | Compliance | | | | | | | |
|------------|---|--|--|--|--|--|--|--|--|
| 1 | Sources of approved Power Purchase | MSEDCL has purchased power from approved sources. In addition, power is procured on power exchange to optimise the power purchase cost | | | | | | | |
| 2 | Merit Order Dispatch | MSEDCL has followed merit order for scheduling of power and preference was given to cheapest power. | | | | | | | |

| Sr. No. | Particular | | Comp | pliance ' | | | | | | | | |
|------------|--|---|--|--|---|--|--|--|--|--|--|--|
| 3 | Fuel Utilization Plan | Explanation give | en below – Para 5.8 | and Para 5.9) | sation Plan (Detailed | | | | | | | |
| 4 | Deviation Quantum | | nderdrawn (188.48 | | ctual schedule | | | | | | | |
| 5 | Sale of Surplus Power | | er has been sold by | | | | | | | | | |
| 6 | Power Purchase | Actual Net Por 12125.68 MU. | actual Net Power Purchase is 12155.23 MU as against approved 2125.68 MU. | | | | | | | | | |
| 7 | Source wise Power Purchase | Source Name | Approved (MU) | Actual (MU) | Proportion of each Source in Actual Purchase | | | | | | | |
| | Turchase | MSPGCL | 4,029.11 | 4,098.38 | 34% | | | | | | | |
| | | NTPC | 2,127.07 | 2,836.92 | 23% | | | | | | | |
| | | IPP | 1,726.46 | 2,930.00 | 24% | | | | | | | |
| | | Renewable | 3,639.75 | 1,832.36 | 15% | | | | | | | |
| | (i) | Must Run | 603.29 | 646.05 | 5% | | | | | | | |
| | | Short Term | 0.00 | - | 0% | | | | | | | |
| | | Sale of Power | 0.00 | ¥ | 0% | | | | | | | |
| | | DSM | 0.00 | -188.48 | -2% | | | | | | | |
| | | Total | 12,125.68 | 12,155.23 | 100% | | | | | | | |
| ÷ | Purchase: a. Section 62 of Electricity Act, 2003 | been verified from submitted by M As part of verification of of MYT Order/Tall MSEDCL. B. CGS- NTPC | om the MTR Order SEDCL. erification of energoperational paramet riff Regulations is of the second control of t | in Case No. 226 gy charges cla ers, fuel cost, C carried out and | SEDCL, the same has 6 of 2022 and invoice imed by MSEDCL, and invoice submitted by invoice submitted by | | | | | | | |
| | b. Section 63 of Electricity Act, 2003 – IPPs | Cost and MUs v | Cost and MUs verified as per Invoice | | | | | | | | | |
| 9 | RE Purchase | | ASEDCL and invoi | | able purchase details urchased from SECI, | | | | | | | |

| Sr. No. | Particular | | Compliance |
|------------|-------------------------------|---|--|
| 10 | Short Te Power Purchase | m | MSEDCL has not purchased any short-term power for the month. |

4.2 The following table show the variation in average power purchase cost (Rs/kWh) for the month of July, 2024 submitted by MSEDCL as compared to average power purchase cost approved in Tariff Order:

| | | der Dated 3 ved for Jul | | | l for July, 2 tted by MS | | | Variation | |
|---|----------|----------------------------|--------------------------------------|----------|-----------------------------|--------------------------------------|------------|--------------|--------------------------------------|
| Particulars | Quantum | PP Cost | Average Power Purchase Cost | Quantum | PP Cost | Average Power Purchase Cost | Quantum | PP Cost | Average Power Purchase Cost |
| | MU | Rs. Crore | Rs/kWh | MU | Rs. Crore | Rs/kWh | MU | Rs. Crore | Rs/kWh |
| MSPGCL – Thermal | 3,788.13 | 2,130.47 | 5.62 | 3,952.62 | 2,260.99 | 5.72 | 164.49 | 130.53 | 0.10 |
| MSPGCL- Hydro | 240.98 | 69.65 | 2.89 | 145.77 | 59.79 | 4.10 | (95.22) | (9.86) | 1.21 |
| NTPC | 2,127.07 | 869.65 | 4.09 | 2,836.92 | 1,248.52 | 4.40 | 709.85 | 378.87 | 0.31 |
| 1.JSW | 0.00 | 16.05 | - | 161.16 | 80.66 | 5.01 | 161.16 | 64.61 | - |
| 2.Mundra UMPP | 0.00 | 40.23 | | 405.54 | 176.94 | 4.36 | 405.54 | 136.70 | a |
| 3.Adani Power | 780.51 | 498.99 | 6.39 | 1,509.08 | 1,078.44 | 7.15 | 728.58 | 579.45 | 0.75 |
| 4.Emco | 116.36 | 46.87 | 4.03 | 82.61 | 36.45 | 4.41 | (33.75) | (10.42) | 0.38 |
| 5.Rattan India | 698.17 | 285.62 | 4.09 | 605.91 | 227.26 | 3.75 | (92.26) | (58.36) | (0.34) |
| 6.Sai Wardha | 131.42 | 63.78 | 4.85 | 165.71 | 69.10 | 4.17 | 34.29 | 5.32 | (0.68) |
| Total IPPs (1 to 6) | 1,726.46 | 951.55 | 5.51 | 2,930.00 | 1,668.85 | 5.70 | 1,203.55 | 717.30 | 0.18 |
| 7.Non- Solar | 2,273.60 | 1,126.34 | 4.95 | 1,149.27 | 584.33 | 5.08 | (1,124.33) | (542.00) | 0.13 |
| 8.Solar | 1,366.15 | 462.01 | 3.38 | 683.09 | 227.42 | 3.33 | (683.06) | (234.59) | (0.05) |
| Renewable Energy including REC (7 to 8) | 3,639.75 | 1,588.35 | 4.36 | 1,832.36 | 811.76 | 4.43 | (1,807.39) | (776.59) | 0.07 |
| Must Run - KAPP, TAPP, Dodson etc | 603.29 | 191.65 | 3.18 | 646.05 | 258.64 | 4.00 | 42.76 | 67.00 | 0.83 |
| Short Term | 0.00 | 0.00 | | - | - | | - | | 7 |

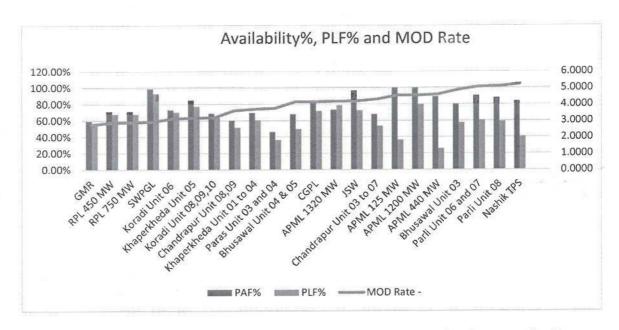


| | The second second | ler Dated 3 ved for July | | | for July, 2 tted by MS | | Variation | | | | | |
|------------------|-------------------|-----------------------------|--------------------------------------|----------------|---------------------------|--------------------------------------|-----------|--------------|------------------------------------|----------|---------|------|
| Particulars | Quantum | PP Cost | Average Power Purchase Cost | Quantum | PP Cost | Average Power Purchase Cost | Quantum | PP Cost | Average Power Purchase Cost Rs/kWh | | | |
| | MU | Rs. Crore | Rs/kWh | MU | Rs. Crore | Rs/kWh | MU | Rs. Crore | | | | |
| Sale of Power | 0.00 | 0.00 | | - | - | -0 | - | :=0 | - | | | |
| DSM | 0.00 | 0.00 | | -188.48 | -188.48 | -188.48 | -188.48 | -20.12 | 1.07 | (188.48) | (20.12) | 1.07 |
| PGCIL | 0.00 | 336.44 | | - | 320.15 | | - | (16.29) | - | | | |
| Total | 12,125.68 | 6,137.75 | 5.06 | 5.06 12,155.23 | 6,789.59 | 5.59 | 29.55 | 651.84 | 0.52 | | | |

- 4.3 Thus, for the month of July, 2024, total variation in power purchase cost is Rs. 651.84 Crore, out of which Rs. 14.96 Crore was on account of higher quantum (29.55 MU) of power purchase and Rs. 636.89 Crore was on account of higher rate of average power purchase by Rs. 0.52/kWh. FAC mechanism allows only impact of variation in power purchase rate to be passed through as FAC rate over and above approved tariff.
- 4.4 The detailed explanation in respect of approval of cost of power purchase of each of the source mentioned in the above table is given in subsequent paragraphs.

5. Power Purchase Cost

- 5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of MSEDCL with regards to average power purchase cost for the month of July, 2024. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost from the relevant bills/invoices received for all purchasing sources. MSEDCL has purchased power from approved sources as per the Tariff Order.
- 5.2 It was observed that due to planned/forced outages during the month, the availability of some of the MSPGCL and IPP generating stations was lower than normative availability.
- 5.3 The Commission notes that CGS stations having lower variable cost were dispatched almost to the extent of availability declared by the generator.
- 5.4 The Commission has also verified the PLF% and MOD rates of all the operational State Generating Stations and IPPs and has found that units having lower rates in MOD had higher PLF. The graph showing the comparison of Variable Cost in MoD Stack and monthly Plant Availability Factor (PAF) and PLF for SGS and IPPs is given below:



SGS/IPPs Stations are considered for comparison and MOD Rate considered is as applicable from 16 July, 2024 to 31 July, 2024.

MSPGCL:

- 5.5 The Commission has observed that MSEDCL has purchased 3952.62 MU from MSPGCL Thermal and Gas Stations. It was observed that MSEDCL has purchased energy from Bhusawal-3, Nashik, Parli 6-7, Parli 8 and Uran generating stations of MSPGCL even though not included in MoD stack approved by the Commission in the Tariff Order to meet the demand due to outage of CGS units (TAPS) and also lower generation from RE sources than approved by the Commission.
- 5.6 The total overall generation was lower than approved during the month. The monthly fixed cost was payable in line with MYT Regulations, 2019 considering the availability of the Plant. The Commission has verified that the fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL for July, 2024. The comparison of Actual and Approved Fixed and Variable Cost of MSPGCL Thermal/Gas units as shown in the table below shows the impact of fixed cost due to lower actual generation.

| | | pproved for . | Actual for July, 2024 | | | | Variations | | | | | | | | | | |
|---------------------|----------|---------------|-----------------------|--------------|-------------|-------------|------------|-------------|--------------|--------------|-------------|-------------|--------|-------------|-------------|-------------|----------|
| Particular s | Quantum | Quantum | vc | VC | FC | FC | APPC | Quantu | vc | VC | FC | FC | APPC | Quantum | VC | FC | APP C |
| | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./k Wh | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./k Wh | MU | Rs./k Wh | Rs./k Wh | Rs./k Wh | |
| MSPGCL - Thermal | 3,788.13 | 3.61 | 1,369.26 | 761.20 | 2.01 | 5.62 | 3,952.62 | 3.96 | 1,566.17 | 694.82 | 1.76 | 5.72 | 164.49 | 0.35 | (0.25) | 0.10 | |

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)



- 5.7 The Commission has verified that fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL and as submitted by MSEDCL for the said units.
- 5.8 The Commission in its Order dated 31 March, 2023 in Case No 227 of 2022 has approved coal mix of generating stations as proposed by MSPGCL for FY 2023-24 and FY 2024-25. The said coal mix included coal beneficiation and procurement of imported coal to meet the requirement of coal for maintaining normative availability and accordingly approved the variable/energy charges for the MSPGCL Stations.
- 5.9 The Commission notes that while approving the FUP, the washed coal and imported coal was required to be used in all the MSPGCL stations except Paras and Parli Stations. However, MSPGCL has finalised tie up for imported coal through competitive bidding from June 2022. The washed coal was used as per FUP except for Chandrapur3-7, Bhusawal and imported coal was also used as per FUP except for Koradi 8-10 unit.
- 5.10 MSEDCL submitted that CIMFR reports for most of the coal samples for coal supplied in July, 2024 are yet to be received, hence MSPGCL has raised provisional FAC bill considering GCV as per the methodology submitted by MSPGCL in Case No 97 of 2020 as given below:
 - a. GCV- As Billed: Consideration of certified loading end GCV data wherever available and where certified data is not available, use mid-point of declared grade GCV.
 - b. GCV As Received: GCV is considered based on the results available at each Station from their respective Station Laboratory.

Accordingly, MSPGCL has raised provisional FAC bill dated 12 August, 2024 considering the aforesaid methodology.

5.11 The comparison of Approved and Actual Energy Charge (including FAC) is as given below:

| Power Station | Approved Energy Charge Rs/kWh | Actual Energy Charge Rs/kWh | Difference Rs/kWh | Difference |
|--------------------------|----------------------------------|--------------------------------|----------------------|------------|
| Bhusawal Unit 03 | 4.461 | 4.968 | 0.507 | 11.37% |
| Bhusawal Unit 04 & 05 | 3.746 | 3.998 | 0.252 | 6.73% |
| Khaperkheda Unit 1 to 4 | 4.218 | 3.876 | -0.342 | -8.11% |
| Khaperkheda Unit 05 | 4.019 | 3.251 | -0.768 | -19.11% |
| Nashik TPS | 4.641 | 5.097 | 0.456 | 9.83% |
| Chandrapur Unit 03 to 07 | 4.097 | 4.277 | 0.180 | 4.39% |
| Chandrapur Unit 08,09 | 3.442 | 3.604 | 0.162 | 4.71% |
| Paras Unit 03 and 04 | 3.510 | 3.804 | 0.294 | 8.38% |
| Parli Unit 06 and 07 | 5.096 | 5.021 | -0.075 | -1.47% |
| Parli Unit 08 | 5.052 | 5.024 | -0.028 | -0.55% |

| Power Station | Approved Energy Charge Rs/kWh | Actual Energy Charge Rs/kWh | Difference Rs/kWh | Difference % |
|----------------------|----------------------------------|--------------------------------|----------------------|--------------|
| Koradi Unit 06 | 3.368 | 3.266 | -0.102 | -3.03% |
| Koradi Unit 08,09,10 | 3.119 | 3.334 | 0.215 | 6.89% |
| GTPS Uran | 6.760 | 5.225 | -1.535 | -22.71% |

- 5.12 The Commission notes that for the month of July, 2024, Energy Charge of all stations have increased except for Khaperkheda, Parli, Koradi 6 and Uran Stations as compared to approved Energy Charge. The Commission notes that Energy Charge has been computed by considering GCV Loss (As Billed As Received) of 650 kCal/kg as approved by the Commission in the Order dated 1 February, 2024 in Case No 132 of 2023.
- 5.13 MSPGCL has undertaken Case-4 bidding and accordingly entered into contract with Ideal Energy Projects Limited (IEPL) at Rs. 3.507/kWh for supply of 180 MW net sent out in lieu of power from one unit of at Nashik by transfer of corresponding linkage coal quantity to IEPL unit for 36 Months. The power from IEPL started from 16 May, 2024. The Commission has granted approval for the said purchase in its Order dated 27 February, 2024 in Case No 14 of 2024. Accordingly, for the month of July, 2024, IEPL has supplied 115.70 MU at Rs 3.507/kWh. The Commission has accordingly considered the said purchase of 115.70 MU for Rs 40.58 Crore at Rs 3.507/kWh
- 5.14 Considering the overall cost of MSPGCL thermal/gas stations, the average power purchase cost is Rs. 5.72/kWh as against Rs. 5.62/kWh approved in the Tariff Order. The average power purchase cost is higher due to higher variable cost by Rs 0.35/kWh which is offset by fixed cost by Rs (0.25/kWh) due to higher generation than approved by the Commission.
- 5.15 Variation in power purchase expenses from MSPGCL can be divided on account of change in quantum and per unit rate as follows:

| | Increase in Expenses for | power purchase from MSPG | CL (Rs. Crore) |
|------------|--|---|----------------|
| Month | On Account of change Quantum of Power Purchase | On Account of change in Per Unit rate of Power Purchase | Total |
| July, 2024 | 92.51 | 38.02 | 130.53 |

5.16 Out of above, variation on account of per unit rate is only considered for FAC computation.

NTPC:

5.17 MSEDCL has purchased total 2836.92 MU of power from NTPC's stations as compared to approved MoD stack of 2127.07 MU during the month of July, 2024.



5.18 The Table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for NTPC's generating stations for July, 2024.

| | 3 41 | Ar | proved for . | July, 2024 | | | | Act | ual for July | , 2024 | | | | Variat | ions | |
|----------|----------|-------------|--------------|--------------|-------------|-------------|----------|---------|--------------|--------------|-------------|-----------------|---------|-------------|-------------|-------------|
| Particul | Quantum | vc | vc | FC | FC | APP C | Quantu | vc | VC | FC | FC | AP PC | Quantum | VC | FC | APPC |
| ars | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./ kWh | Rs./k Wh | MU | Rs./kWh | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./ kW h | MU | Rs./k Wh | Rs./k Wh | Rs./kW h |
| NTPC | 2,127.07 | 1.97 | 419.94 | 449.71 | 2.11 | 4.09 | 2,836.92 | 2.97 | 843.31 | 405.21 | 1.43 | 4.40 | 709.85 | 1.00 | (0.69) | 0.31 |

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

- 5.19 MSEDCL has also claimed Rs 181.01 Crore as advance paid to RGPPL in FY 2013-14 as payment in this month. In reply to the query raised by the Commission, MSEDCL submitted that the said amount was not claimed as power purchase cost for FY 2013-14 and hence not approved in any of the Tariff Orders issued by the Commission. Accordingly, the said amount is considered in FAC computation. Also, the Commission has verified that actual quantum of power purchase and cost from the detailed summary bills/invoices submitted by MSEDCL and found to be in order and accordingly considered the same in FAC computation.
- 5.20 Variation in power purchase expenses from NTPC can be divided into on account of change in quantum and per unit rate as follows:

| | Increase in Expenses | for power purchase from NT | PC (Rs. Crore) |
|------------|--|---|----------------|
| Month | On Account of change Quantum of Power Purchase | On Account of increased Per Unit rate of Power Purchase | Total |
| July, 2024 | 290.22 | 88.64 | 378.87 |

Out of above, variation on account of per unit rate is only considered for FAC computation.

IPPs

- 5.21 MSEDCL has long term PPA's with IPP's viz: JSW, CGPL Mundra, APML, Emco and Rattan India. The said PPAs are approved by the Commission and power availability from the said sources is considered as per Tariff Order issued by the Commission. Further, MSEDCL has signed PPA with Sai Wardha Power Generation Ltd (SWPGL) for 240 MW as per the Order dated 15 June 2020 in Case No 91 of 2020. SWPGL started delivering 240 MW power to MSEDCL from 5 July 2020.
- 5.22 During scrutiny of the invoices submitted by MSEDCL it was observed that there were differences in the other charges related to Change in Law as considered in FAC computations. The Commission sought clarifications on the same along with reconciliation and additional bills, if a DCL submitted the reconciliation and

- clarified that the aforesaid differences are mainly on account of Change in Law (CIL) claim by IPPs in addition to monthly energy bills during the respective period.
- 5.23 Change in Law (CIL) events in respect of IPPs are related to imposition of GST compensation cess, change in royalty, custom duty, change in NCDP, shortfall in domestic coal etc. These Change in Law events have been approved by the respective Commission's through various Orders, as the case may be, under the provisions of respective PPAs. MSEDCL has submitted the CIL invoices for the concerned period. Further, while scrutinizing the CIL bills it was observed that the amount shown in CIL bills/invoices were not matching against the respective amount considered in FAC computation. In fact, the amounts considered in FAC calculations were observed to be lesser than that of CIL bills/invoices except for claim related to SHAKTI. Change in Law claims raised by the generators are according to their technical parameters, whereas MSEDCL works out the CIL claim amount based on normative / actual parameters. These parameters include SHR of power plant, Auxiliary consumption, GCV of coal, etc. which have impact of coal consumption. Therefore, there is difference in CIL amount claimed by generator and that worked out by MSEDCL. MSEDCL has submitted the detailed reconciliation of CIL, as summarised in Table below:

| | As per | · Vendor - | Rs Cr | As per MSEDCL - Rs Cr | | | | | |
|--------------|--------|------------|--------|-----------------------|--------|--------|--|--|--|
| IPP | CIL | Shakti | Total | CIL | Shakti | Total | | | |
| JSW | 1- | 4 | 2 | 20 | 4 | - | | | |
| CGPL | - | - | - | - | | - | | | |
| APML 125 MW | 3.44 | 18.59 | 22.03 | 3.44 | 18.59 | 22.03 | | | |
| APML 1320 MW | 25.29 | 155.78 | 181.07 | 25.29 | 155.78 | 181.07 | | | |
| APML 1200 MW | 33.00 | 178.46 | 211.46 | 33.00 | 178.46 | 211.46 | | | |
| APML 440 MW | 5.07 | 27.42 | 32.49 | 5.07 | 27.42 | 32.49 | | | |
| GMR | 4.58 | 0.57 | 5.15 | 4.58 | 0.57 | 5.15 | | | |
| RIPL 450 MW | 13.20 | | 13.20 | 10.19 | - | 10.19 | | | |
| RIPL 750 MW | 22.00 | 5.7 | 22.00 | 16.98 | - | 16.98 | | | |
| Sai Wardha | 6.79 | - | 6.79 | 6.79 | - | 6.79 | | | |
| Total | 113.36 | 380.82 | 494.18 | 105.34 | 380.82 | 486.15 | | | |

- 5.24 The Commission notes that MSEDCL has submitted claim of Rs 110.30 Crore towards Change in Law of APML arising out of reconciliation done by the parties in respect of claims towards Taxes & Duties claim. The same has been considered by the Commission in FAC computation for the current month. Thus, on an overall basis, the average power purchase cost from IPPs stands at Rs. 5.70/kWh as compared to monthly approved rate of Rs. 5.51/kWh for the month of July, 2024. The said cost is being considered for the FAC computation based on the scrutiny of invoices and details submitted by MSEDCL.
- 5.25 The table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for IPPs for July, 2024.



| | | Ap | proved for J | July, 2024 | | | | A | ctual for July | y, 2024 | | | - 12-14 | Variat | ions | -45 24 |
|---------------------------|----------|-------------|--------------|--------------|-------------|-------------|----------|---------|----------------|--------------|-------------|-------------|----------|-------------|-------------|-------------|
| Particul ars | Quantum | vc | vc | FC | FC | APP C | Quantu | vc | vc | FC | FC | APPC | Quantum | VC | FC | APPC |
| | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./ kWh | Rs./k Wh | MU | Rs./kWh | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./k Wh | MU | Rs./k Wh | Rs./k Wh | Rs./kW h |
| 1.JSW | - | - | - | 16.05 | - | 5.0 | 161.16 | 4.02 | 64.75 | 15.91 | 0.99 | 5.01 | 161.16 | (7) | | |
| 2.Mundr a UMPP | - | - | 9 | 40.23 | - | - | 405.54 | 3.32 | 134.76 | 42.18 | 1.04 | 4.36 | 405,54 | 4. | | |
| 3.Adani Power | 780.51 | 3.88 | 302.65 | 196.34 | 2.52 | 6.39 | 1,509.08 | 5.82 | 878.45 | 199.99 | 1.33 | 7.15 | 728.58 | 1.94 | (1.19) | 0.75 |
| 4.Emco | 116.36 | 2.77 | 32.27 | 14.61 | 1.26 | 4.03 | 82.61 | 2.57 | 21.26 | 15.19 | 1.84 | 4.41 | (33.75) | (0.20) | 0.58 | 0.38 |
| 5.Rattan India | 698.17 | 3.26 | 227.91 | 57.71 | 0.83 | 4.09 | 605.91 | 2.78 | 168.44 | 58.81 | 0.97 | 3,75 | (92.26) | (0.48) | 0.14 | (0.34) |
| 6. Sai Wardha | 131.42 | 3.33 | 43.73 | 20.04 | 1.53 | 4.85 | 165.71 | 2.98 | 49.33 | 19.77 | 1.19 | 4.17 | 34.29 | (0.35) | (0.33) | (0.68) |
| Total IPPs (1 to 6) | 1,726.46 | 3.51 | 606.57 | 344.98 | 2.00 | 5.51 | 2,930.00 | 4.49 | 1,316.99 | 351.86 | 1.20 | 5.70 | 1,203.55 | 0.98 | (0.80) | 0.18 |

Variable charge inclusive of other charges, CIL etc.

5.26 Variation in power purchase expenses from IPPs can be divided into increased on account of change in quantum and per unit rate as follows:

| | Increase in Expense | s for power purchase from II | PP (Rs. Crore) |
|------------|--|---|----------------|
| Month | On Account of change Quantum of Power Purchase | On Account of increased Per Unit rate of Power Purchase | Total |
| July, 2024 | 663.34 | 53.96 | 717.30 |

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Short Term Power Purchase

5.27 MSEDCL has not purchased any short-term power in July 2024 in view of restrictions imposed on MSEDCL to trade on Power Exchange due to outstanding dues of RGPPL.

Must-Run Sources

- 5.28 The sources of Must Run Stations include KAPP, TAPP 1&2, TAPP 3&4, SSP, Pench, Dodson I and Dodson II, Renewable Energy and MSPGCL Hydro (including Ghatghar) etc.
- 5.29 A detailed comparison of approved against actual purchase from Must Run Stations is shown in Table below:

| | | A | pproved for | July, 2024 | | | | A | ctual for Ju | ily, 2024 | | | | Varia | tions | 117 |
|--------------------------------|--------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|---------|-------------|-------------|-------------|
| Particular s | Quantu | VC | VC | FC | FC | APP C | Quantu m | VC | vc | FC | FC | APPC | Quantum | VC | FC | APPC |
| 7-1 | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./ kWh | Rs./k Wh | MU | Rs./kW h | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./k Wh | MU | Rs./k Wh | Rs./k Wh | Rs./kW h |
| MSPGCL- Hydro* | 240.98 | | - | 25.85 | 1.07 | 1.07 | 145.77 | 0.29 | 4.20 | 14.07 | 0.97 | 1.25 | (95.22) | 0.29 | (0.11) | 0.18 |
| MSPGCL- Hydro Lease rent | | | | 43.80 | | To be | | EN MAGO | | 41,52 | | | | | | |

| | | A | pproved for | July, 2024 | | | 9 - 61 | 1 | Actual for Ju | ily, 2024 | | | (F) | Varia | tions | |
|--|----------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|-------------|------------|-------------|-------------|--------|
| Particular 8 | Quantu | VC | vc | FC | FC | APP C | Quantu m | vc | vc | FC | FC | APPC | Quantum | vc | FC | APPC |
| | MU | Rs./k Wh | Rs. Crore | Rs, Crore | Rs./ kWh | Rs./k Wh | MU | Rs./kW h | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./k Wh | MU | Rs./k Wh | Rs./k Wh | Rs./kW |
| 1.Non- Solar | 2,273.60 | 4.95 | 1,126.34 | 4.0 | - | 4.95 | 1,149.27 | 5.05 | 580.09 | 4.24 | 0.04 | 5.08 | (1,124.33) | 0.09 | 0.04 | 0.13 |
| 2.Solar | 1,366.15 | 3.38 | 462.01 | - | - | 3.38 | 683.09 | 3.33 | 227.42 | _ | - | 3.33 | (683.06) | (0.05) | - | (0.05) |
| Renewabl e Energy including REC (1 to 2) | 3,639.75 | 4.36 | 1,588.35 | | 220 | 4.36 | 1,832.36 | 4.41 | 807.52 | 4.24 | 0,02 | 4.43 | (1,807.39) | 0.04 | 0.02 | 0.07 |
| Others- KAPP, TAPP, Dodson etc | 603,29 | 3.14 | 189.62 | 2.02 | 0.03 | 3.18 | 646.05 | 4.01 | 259.14 | (0.49) | (0.01) | 4.00 | 42.76 | 0.87 | (0.04) | 0.83 |

^{*}Variable Cost for Hydro Power is approved in MSPGCL Order whereas total cost is considered under Fixed Cost in the Tariff Order of MSEDCL.

- 5.30 As seen from the aforesaid table, MSEDCL has purchased 145.77 MU of Hydro Power as per variable cost approved by the Commission. This being the cheapest source of power helps in reduction of overall average cost of power purchase. The Koyna generation works on the principle of water year (1st June to 30 May) and hence the available water is used for the peak requirement based on the requirement of MSEDCL. It is observed that hydro purchase is lower than 240.98 MU approved by the Commission as demand being lower was catered from other must run generation and thermal stations.
- 5.31 It is observed that Solar and Non-Solar energy purchased in July, 2024 i.e., 1832.36 MU was lower than approved i.e., 3639.75 MU by the Commission in the Tariff Order. The generation is lower mainly due to lower capacity addition than new PPAs executed by MSEDCL for Wind Power. MSEDCL has not purchased any RECs in the month of July, 2024. The Commission has considered the renewable purchase as per details submitted by MSEDCL and invoices of power purchased from SECI, NVVN and other IPPs.

ISTS Charges - CTU

5.32 As per Regulation 10 of the MYT Regulations, 2019, any variation in Inter-State Transmission Charges shall be pass through under FAC component of Z-factor charge as an adjustment in Tariff on monthly basis. The ISTS charges paid by MSEDCL to Central Transmission Utility of India Ltd (CTU) are considered under FAC computation. Accordingly, the Commission has considered the amount of Rs. 320.15 Crore towards ISTS charges payable to CTU as against Rs. 336.44 Crore approved in the Tariff Order towards FAC computation as per invoice raised by CTU.

Sale of Power

5.33 MSEDCL has not sold short term power in July 2024.



Deviation Quantum and Cost

5.34 MSEDCL has submitted that the deviation quantum (under drawl) of 188.48 MU. As per invoice raised by MSLDC, the quantum is 188.48 MU and corresponding amount receivable is Rs. 20.12 Crore. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of July, 2024.

Approved Cost of Power Purchase

5.35 In view of the above, the overall cost approved in the Tariff Order and actual for the month of July, 2024 considered by the Commission is as shown below:

| | 272 | A | pproved for | July, 2024 | | | 14675 | ATT A | ctual for Jul | y, 2024 | | | | Variat | ions | |
|--|-----------|-------------|--------------|--------------|-------------|-------------|-----------|-------------|---------------|-----------|-------------|------------------|------------|-------------|-------------|-------------|
| Particul | Quantum | vc | vc | FC | FC | APP C | Quantum | vc | vc | FC | FC | AP PC | Quantum | vc | FC | APPC |
| ars | MU | Rs./k Wh | Rs. Crore | Rs. Crore | Rs./ kWh | Rs./k Wh | MU | Rs./kW h | Rs. Crore | Rs. Crore | Rs./k Wh | Rs./ kW h | MU | Rs./k Wh | Rs./k Wh | Rs./kW h |
| MSPGC L – Thermal | 3,788.13 | 3.61 | 1,369.26 | 761.20 | 2.01 | 5.62 | 3,952.62 | 3.96 | 1,566.17 | 694.82 | 1.76 | 5.72 | 164.49 | 0.35 | (0.25) | 0.10 |
| MSPGC L-Hydro | 240.98 | | - | 25.85 | 1.07 | 1.07 | 145.77 | 0.29 | 4.20 | 14.07 | 0.97 | 1.25 | (95.22) | 0.29 | (0.11) | 0.18 |
| MSPGC L- Hydro Lease Rent | - | - | - | 43.80 | - | - | 5 | - | _ | 41.52 | 5 | - | ¥ | = | 742 | _ |
| NTPC | 2,127.07 | 1.97 | 419.94 | 449.71 | 2.11 | 4.09 | 2,836.92 | 2.97 | 843.31 | 405.21 | 1.43 | 4.40 | 709.85 | 1.00 | (0.69) | 0.31 |
| IPPs | 1,726.46 | 3.51 | 606.57 | 344.98 | 2.00 | 5.51 | 2,930.00 | 4.49 | 1,316.99 | 351.86 | 1.20 | 5.70 | 1,203.55 | 0.98 | (0.80) | 0.18 |
| RE includin g REC | 3,639.75 | 4.36 | 1,588.35 | - | - | 4.36 | 1,832.36 | 4.41 | 807.52 | 4,24 | 0.02 | 4.43 | (1,807.39) | 0.04 | 0.02 | 0.07 |
| Must Run - KAPP, TAPP, Dodson etc | 603.29 | 3.14 | 189.62 | 2.02 | 0.03 | 3.18 | 646.05 | 4.01 | 259.14 | (0.49) | (0.01) | 4.00 | 42.76 | 0.87 | (0.04) | 0.83 |
| Short Term | - | - | - | 20 | - | - | - | 8.51 | - | - | 7) | - - - | 55.00 | 24. | | 120 |
| Sale of Power | 3 | - | - | | 2 | - | _ | - | - | u u | + | | 9 | 7 | / 1982 | 850 |
| DSM | - 4 | - | - | - | | 71 | (188.48) | | (20.12) | - | - | 1.07 | (188.48) | 2 | - | 12 |
| PGCIL | - | - | - | 336.44 | - | * | - | 80 | | 320.15 | 351 | 55 | 14 | 5 | | WEU |
| Total | 12,125.68 | 3.44 | 4,173.74 | 1,964.01 | 1.62 | 5.06 | 12,155.23 | 3.93 | 4,777.20 | 2,012.39 | 1.66 | 5.59 | 29.55 | 0.49 | 0.04 | 0.52 |

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

5.36 The overall power purchase cost is higher than approved by the Commission mainly due to higher rate of power purchase cost from MSPGCL, NTPC and IPPs than approved by the Commission which also includes RGPPL claim of Rs 181.01 Crore and Change in Law claim of Rs 110.30 Crore paid to APML as per order of the Commission.

5.37 Considering the above, the Commission allows the average power purchase cost of Rs. 5.59/kWh for the month of July, 2024 as against Rs. 5.06/kWh approved in the Tariff Order.

6. FAC on account of fuel and power purchase cost (F)

6.1 The Commission has worked out the average power purchase cost for the month of July, 2024 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 31 March, 2023 and accordingly arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

6.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of July, 2024.

| S. No. | Particulars | Units | July, 2024 |
|--------|--|-----------|------------|
| 1 | Average power purchase cost approved by the Commission | Rs. /kWh | 5.06 |
| 2 | Actual average power purchase cost | Rs. /kWh | 5.59 |
| 3 | Change in average power purchase cost (=2 -1) | Rs. /kWh | 0.52 |
| 4 | Net Power Purchase | MU | 12,155.23 |
| 5 | Change in fuel and power purchase cost (=3 x 4/10) | Rs. Crore | 636.89 |

7. Adjustment for over recovery/under recovery (B)

7.1 The adjustment for over recovery/under recovery has to be done for the (n-4) month as per provisions of MYT Regulations, 2019. The Commission has allowed FAC recovery from October 23 onwards. MSEDCL submitted FAC recovery of Rs. 845.78 Crore for the month of July, 2024 as against approved amount of Rs. 629.87 Crore. Thus, the adjustment factor to be considered towards over recovery is Rs. 215.91 Crore while computing the allowable FAC for July, 2024.

8. Carrying Cost for over recovery/under recovery (C)

8.1 The following table shows the interest rate and amount worked as carrying / holding cost for under/ over recovery for the month of July, 2024:

| S. No. | Particulars | Units | July-24 |
|--------|--|-----------|----------|
| 1 | Adjustment factor for over-recovery/under-recovery | Rs. Crore | (215.91) |
| 2 | Interest rate | % | 10.25% |
| 3 | Holding/Carrying cost for (over- recovery)/under-recovery | Rs. Crore | (1.84) |

9. Disallowance due to excess Distribution Loss

9.1 Regulation 10.8 of MYT Regulations, 2019 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

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"10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of "Rupees per kilowatt-hour":

Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable"

9.2 The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

| S. N | Particulars | Units | Approved in Tariff Order | Actual for July, 2024 | Actual – cumulative up to July, 2024 | Annual Sliding Distribution Loss – Aug 23 to July 24 |
|------|---|--------------|--------------------------------|-----------------------|---|---|
| 1 | Net Energy Input at Distribution Voltage | MU | 1,27,913.14 | 10,582.51 | 48,292.36 | 145498.23 |
| 2 | MSEDCL Metered Sales (excluding sales at EHV level) | MU | 1,03,900.40 | 8,585.51 | 36,145.85 | 100382.99 |
| 3 | Estimated Consumption of unmetered Sales | MU | 8,719.33 | 701.34 | 3,306.07 | 10133.68 |
| 4 | Distribution Loss (1-2-3) | MU | 15,293.41 | 1,295.66 | 8,840.44 | 34981.56 |
| 5 | Distribution Loss as % of net energy input (4/1) | % | 12.00% | 12.24% | 18.31% | 24.04% |
| 6 | Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1) | MU | - | - | - | 1,274.41 |
| 7 | Disallowance of FAC due to excess Distribution Loss | Rs. Crore | <u></u> | - | - | 51.57 |

9.3 As seen from the above table, the standalone distribution loss for the month of July, 2024 is marginally higher at 12.24% as against approved loss of 12%. The standalone loss for July, 2024 is higher mainly due to estimated Ag sales and sales considered as per billing cycle whereas power purchase is considered for the standalone month. Also, the Commission has restricted the Ag Sales as per norms approved in the Tariff Order leading to higher loss.

9.4 The comparison of Distribution Loss for the July, 2024 as compared to last year is as given below:

| Particulars | FY 2024-25 | FY 2023-24 |
|--------------------------|------------|------------|
| Approved Loss | 12% | 13% |
| April | 26.42% | 26.38% |
| May | 22.99% | 25.90% |
| June | 8.99% | 21.36% |
| July | 12.24% | 15.04% |
| Cumulative up to July | 18.31% | 22.52% |

9.5 Since Annual Sliding Distribution Loss of 24.04% is higher than the approved loss of 12%, the Commission has worked out disallowance of Rs 51.57 Crore on account of excess Distribution Loss for the month of July 2024.

10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of July, 2024 is as shown in the Table below:

| S. No. | Particulars | Units | July, 2024- As submitted | July, 2024- As Approved |
|--------|---|-----------|--------------------------------|-------------------------------|
| 1 | Calculation of ZFAC | | | |
| 1.1 | Change in cost of generation and power purchase attributable to Sales within the License Area (F) | Rs. Crore | 636.89 | 636.89 |
| 1.2 | Carrying cost for over-recovery/under-recovery (C) | Rs. Crore | (1.84) | (1.84) |
| 1.3 | Adjustment factor for over-recovery/under-recovery (B) | Rs. Crore | (215.91) | (215.91) |
| 1.4 | ZFAC = F+C+B | Rs. Crore | 419.13 | 419.13 |
| 2 | Calculation of Per Unit FAC | | | |
| 2.1 | Energy Sales within the License Area | MU | 10,370.29 | 10,357.40 |
| 2.2 | Excess Distribution Loss | MU | 1,269.98 | 1,274.41 |
| 2.3 | ZFAC per kWh | Rs./kWh | 0.40 | 0.40 |
| 3 | Allowable FAC | | | |
| 3.1 | FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10] | Rs. Crore | 3.63 | 51.57 |
| 3.2 | FAC allowable [1.4-3.1] | Rs. Crore | 1,046.80 | 367.56 |
| 4 | Utilization of FAC Fund | | | |
| 4.1 | Opening Balance of FAC Fund | Rs. Crore | 625.96 | 6.68 |
| 4.2 | Carrying Cost/(Holding Cost) on FAC Fund | Rs. Crore | 5.35 | 0.07 |
| 4.3 | Z _{FAC} for the month (Sr. N. 3.2) | Rs. Crore | 415.50 | 367.56 |



| S. No. | Particulars | Units | July, 2024- As submitted | July, 2024- As Approved |
|--------|--|-----------|--------------------------------|-------------------------------|
| 4.4 | Closing Balance of FAC Fund | Rs. Crore | 1,046.80 | 374.30 |
| 4.5 | Z _{FAC} leviable/(refundable) to consumer | Rs. Crore | 1,046.80 | - |
| 5 | Total FAC based on category wise and slab wise allowed to be recovered | Rs. Crore | - | -0 |

10.2 The FAC approved is lower than claimed by MSEDCL due to higher disallowance in view of excess distribution loss approved by the Commission.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

 $Z_{FAC\ Cat}\ (Rs/kWh) = [Z_{FAC}/\ (Metered\ sales + Unmetered\ consumption\ estimates + Excess\ distribution\ losses)]*k*10,$ Where:

 $Z_{FAC\ Cat} = Z_{FAC}$ component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;

k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly Z_{FAC} shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the Z_{FAC} on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission..."

- 11.2 The Commission allows the FAC amount of Rs. 367.56 Crore for the month of July, 2024 to be added to the FAC Fund of Rs. 6.68 Crore as on June, 2024. Thus, the closing balance of FAC fund as on July, 2024 including carrying cost is Rs. 374.30 Crore.
- 11.3 The Commission in its approval for the month of June, 2024 has allowed FAC recovery of Rs 629.87 Crore/month including Carrying Cost up to October, 2024. The Commission has also held that during the aforesaid recovery monthly adjustment towards standalone FAC from July, 2024 onwards will be done while approving the FAC for the said month. As per the aforesaid approval, the amount of Rs 374.30 Crore needs to be added to monthly recovery of Rs 629.87 Crore to levy the same on to consumers. The Commission notes that there also has been positive FAC in respect of submission filed by MSEDCL for August, 2024. The said submission is under scrutiny. Further, the Commission is of the view that it has been consistent philosophy of the Commission to avoid any variation in tariff of the consumers. Accordingly, the Commission has decided to carry forward the FAC Fund of Rs 374.30 Crore along with Carrying Cost without any adjustment in Rs 629.87 Crore.
- 11.4 In a view of above, the per unit Z_{FAC} for the month of July, 2024 to be levied on consumers of MSEDCL in the billing month of October, 2024 is as given below. The rate of FAC is rounded for Rs.0.05 as per letter dated 5 April, 2022. Therefore, same may be reconciled in the next approvals on under/ over recovery:

| Category | Z _{FAC} for the month of October, 2024 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable) |
|----------------------------------|--|
| LT Category | |
| Residential (LT-I) | 1 |
| BPL (0-30 Units) | 0.20 |
| Consumption > 30 Units per month | |
| 1-100 Units | 0.45 |
| 101-300 Units | 0.80 |
| 301-500 Units | 1.10 |
| Above 500 Units | 1.15 |
| Non-Residential (LT-II) | |
| 0-20 kW | 0.80 |
| >20-50 kW | 1.10 |
| >50 kW | 1.25 |
| Public Water Works (LT-III) | |
| 0-20 kW | 0.35 |
| 20-40 kW | 0.50 |
| Above 40 kW | 0.60 |
| Agriculture (LT-IV) | |
| AG unmetered Pump set | |
| Zone 1 | |



| Category | Z _{FAC} for the month of October, 2024 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable) | | |
|--|--|--|--|
| A) 0-5 HP | 60.00 | | |
| B) 5HP -7.5 HP | 100.00 | | |
| C) Above 7.5 HP | 110.00 | | |
| Zone 2 | | | |
| A) 0-5 HP | 15.00 | | |
| B) 5HP -7.5 HP | 35.00 | | |
| C) Above 7.5 HP | 35.00 | | |
| AG Metered Pump Set | 0.30 | | |
| AG Metered Other | 0.55 | | |
| LT Industries (LT-V) | | | |
| 0-20 KW | 0,55 | | |
| Above 20 KW | 0.70 | | |
| Street Light (LT-VI) | | | |
| Grampanchayat A, B & C Class | 0.60 | | |
| Municipal Council | | | |
| Municipal corporation Area | 0.70 | | |
| Public Services (LT VII) | | | |
| Government Educational Institutions | | | |
| and Hospitals | 2.60 | | |
| 0-20 kW | 0.60 | | |
| >20-50 kW | 0.65 | | |
| >50 kW | 0.80 | | |
| Others | 0.55 | | |
| 0-20 kW | 0.55 | | |
| >20-50 kW | 0.85 | | |
| >50 kW | 0.85 | | |
| Electric Vehicle Charging Stations (LT VIII) | 0.75 | | |
| HT Category | | | |
| HT | | | |
| Industry (General) | 0.65 | | |
| Industry (Seasonal) | 0.80 | | |
| Commercial | 1.00 | | |
| Railways/Metro/Monorail | 0.65 | | |
| Public Water Works (PWW) and Sewage Treatment Plants | 0.60 | | |
| Agricultural - Pumpsets | 0.40 | | |
| Agricultural - Others | 0.55 | | |
| Group Housing Society (Residential) | 0.60 | | |
| Public Services – Government Educations Institutions and Hospitals | 0.75 | | |
| Public Services - Others | 0.85 | | |

| Category | Z _{FAC} for the month of October, 2024 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable) | | |
|---|--|--|--|
| Electric Vehicle Charging Stations | 0.55 | | |
| EHV | | | |
| Industry (General) | 0.65 | | |
| Industry (Seasonal) | 0.65 | | |
| Commercial | 0.90 | | |
| Railways/Metro/Monorail | 0.45 | | |
| Public Water Works (PWW) and Sewage Treatment Plants | 0.55 | | |
| Agricultural - Pumpsets | 0.35 | | |
| Group Housing Society (Residential) | 0.60 | | |

