



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2023-24/ 0163

Date: 6 March 2024

To,
The Chief Executive Officer,
Adani Electricity Mumbai Limited,
Devidas Lane, Off SVP Road,
Near Devidas Telephone Exchange
Borivali (W), Mumbai – 400 092

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of AEML-D for the month of June 2023.

Reference: 1. AEML-D FAC submission for the month of June, 2023 vide email dated 19 October, 2023.
2. The data gaps were communicated vide emails dated 29 October, 2023.
3. AEML-D replied vide emails dated 9 January, 2024.

Sir,

Upon vetting the FAC calculations for the month of June 2023 as mentioned in the above reference, the Commission has accorded approval for charging FAC amount of **Rs. 52.01 Crore**. However, the Commission in FAC approval for April 2023 has decided to accumulate the monthly FAC for the period April 2023 to June 2023. Considering the same, the said amount along with the applicable carrying cost (excluding carrying cost pertaining to the period of delay) and the FAC amount for the month of June 2023 adds up to **Rs. 156.28 Crore** which can be levied on the consumers. Accordingly, the FAC amount chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
June 2023	156.28

In line with the approach considered by the Commission during approval of the FAC proposals for April 2023 and May 2023, the Commission has decided to allow the recovery of aforesaid amount equally over three months from March 2024 to May 2024 along with the applicable carrying cost for the recovery period of three months, subject to the cap of 20% of variable component of tariff.

AEML-D is directed to streamline the process of timely submission of the FAC filings for the period beyond July 2023 and submit the pending filings at the earliest. Failure of AEML-D to adhere to the timeline established by the Commission may force the Commission to take appropriate action for the

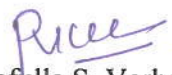
delays including but not limited to disallowance of the interest on working capital during the period of delay, forfeiture of the carrying cost, etc.

Further, as directed in the Order in Case No. 231 of 2022, in order to maintain transparency in the management and use of such FAC Fund, AEML-D shall maintain a monthly account of such FAC fund and upload it on its website for information of stakeholders.

AEML-D is directed to file their future FAC submissions taking into consideration data gaps raised in previous months to ensure timely prior approval.



Yours faithfully,


(Dr. Prafulla S. Varhade)
Director (EE), MERC

Encl: Annexure A: Detailed Vetting Report for the month of June, 2023.

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF JUNE 2023

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of AEML-D for the month June 2023.

Reference: 1. AEML-D FAC submission for the month of June 2023 vide email dated 19 October, 2023.
2. The data gaps were communicated vide emails dated 29 October, 2023.
3. AEML-D replied vide emails dated 9 January, 2024.

1. FAC submission by AEML-D:

- 1.1 AEML-D has made FAC submissions for the month of June 2023 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by AEML-D, the Commission has accorded prior approval to AEML-D for the FAC amount of **Rs. 52.01 Crore**. However, the said amount is added to the existing FAC fund amount as of end of May 2023, along with the applicable carrying cost and the total amount of **Rs. 156.28 Crore** can be levied on the consumers.
- 1.2 The Commission has decided to allow the recovery of aforesaid amount equally over three months from March 2024 to May 2024, subject to the cap of 20% of variable component of tariff along with the applicable carrying cost for this recovery period.

2. Background

- 2.1 On 31 March, 2023 the Commission has issued the Mid Term Review Order in respect of AEML-D (Case No. 231 of 2022) for approval of Truing-up of FY 2019-20 to FY 2021-22, Provisional Truing-up for FY 2022-23 and Revised Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25. Revised Tariff has been made applicable from 1 April, 2023.
- 2.2 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats for filing of FAC submissions to all Distribution Licensees including SEZs. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission. On 19 May, 2021, the Commission has also issued guidelines for considering consumer sales in FAC computation from April, 2021 onwards based on uniform methodology.
- 2.3 As per Prior Approval of FAC Guidelines dated 20 April, 2020, the Commission directed Distribution Licensee to seek prior approval for monthly FAC computations. Accordingly, vide its email dated 19 October 2023, AEML-D has filed FAC submissions for the month of June 2023 for prior approval of the Commission. The Commission has scrutinized the



submissions provided by AEML-D and has also verified the power purchase bills and other fuel related invoices provided along with its submissions.

3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by AEML-D in the FAC submission and as approved by the Commission are as shown in the Table 1 below:

Table 1: Energy Sales – Approved and Actual

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (June 2023) (MU)
	(I)	(II=I/12)	(III)
LT Category			
BPL	0.01	0.00	0.00
LT-I: Residential	4,897.01	408.08	512.93
LT-II: Commercial	3,245.40	270.45	257.16
LT-III(A): LT Industrial upto 20 kW TOD Option	391.95	32.66	27.45
LT-III(B): LT Industrial above 20 kW	446.52	37.21	37.59
LT-IV: LT -Public Service (A)	44.66	3.72	2.59
LT-IV: LT -Public Service (B)	215.84	17.99	17.13
LT-V (A): LT - Agriculture Pumpsets	0.05	0.00	0.01
LT-V (B): LT - Agriculture Others	0.39	0.03	0.03
LT-VI: LT - EVCS	3.73	0.31	0.20
HT Category			
HT I (Industrial)	614.12	51.18	31.33
HT II (Commercial)	426.79	35.57	44.09
HT III (Group Housing Soc.)	10.96	0.91	1.39
EHT I: Industry	180.00	15.00	-
EHT IV: Metro & Monorail	120.00	10.00	6.81
HT VI (A) - Public Services	11.46	0.96	0.62
HT VI (B) - Public Services	306.62	25.55	23.18
HT VIII- EV Charging station	70.00	5.83	-
Total	10,985.51	915.46	962.51

**In Case of AEML-D, the sales are approved on annual basis. Monthly approved sales are derived based on approved annual sales for comparison purpose.*

3.2 It can be observed from above Table 1 that actual sales during June 2023 is 962.51 is 5.14% more than approved energy sales of 915.46 MU per month for the FY 2023-24. The sale considered is after netting off the GCN credit for Open Access consumption. AEML-D has considered the energy sales for FAC purposes for June 2023 as follows:

- Energy sales data for HT consumers (AMR) & LT consumers (load above 20 kW) where meters are read remotely or where monthly reading are downloaded is considered for nth month (i.e., for June 2023).



- For cycle consumers (LT cycle billing), consumption data provided is for bill generation (bill posting date) from 1st June to 30th June. These energy sales will pertain to the period which will comprise on an average half of May and half of June.

3.3 The monthly and cumulative sales for major consumer categories are shown below in the

3.4 Table 2 below:

Table 2: Monthly and Cumulative Sales for major Consumer Categories (MU)

Year\ Sales (MU)	Residential	Commercial	Industrial	Others	Total (FY 2023-24)	Total (FY 2022-23)
Monthly Approved	409.00	306.02	121.05	79.40	915.46	772.24
Actual – April, 2023	415.29	276.27	104.27	47.02	842.85	796.26
Actual – May, 2023	468.73	285.83	106.62	48.82	910.00	865.26
Actual – June, 2023	514.32	301.24	96.37	50.57	962.51	897.75
Approved - Cumulative till June 2023	1,227.00	918.05	363.15	238.19	2,746.38	2,316.72
Actual - Cumulative till June 2023	1,398.35	863.35	307.26	146.41	2,715.36	2,559.27

4. Power Purchase Details

4.1 Following are the list of sources from which AEML-D procures power to meet its demand:

- Purchase from Adani Dahanu Thermal Power Station (ADTPS)
- Renewable energy procurement (RPS) including Solar and Non-Solar
- Bilateral Contracts and Imbalance pool
- Medium-Term Power Purchase and Short-Term Power Purchase

Apart from above, there are incidental purchases from Open Access and Rooftop.

4.2 The Commission in its MTR Order dated 31 March, 2023 in Case No. 231 of 2022 had approved the Power Purchase for FY 2023-24 from four major sources i.e., Adani Dahanu Thermal Power Station, Renewable sources, Medium-term sources, and Short-term sources.

4.3 Summary of power purchase of AEML-D is as shown in Table 3 below:

Table 3: Summary of Power Purchase for June 2023

Sr. No.	Particular	Compliance
1	Purchase from Approved Sources	Yes. AEML-D has procured power from ADTPS, AEL-MTPP, Solar and Non-solar Sources and Bilateral sources in the month of June 2023, which are approved sources of power purchase.
2	Merit Order Dispatch	Yes. AEML-D had scheduled power as per MoD.
3	Fuel Utilization Plan	There is only one thermal generating station of AEML-G, and it has sourced raw / washed coal during the month based upon the availability. Hence there is no scope for improvement in optimal fuel utilization.
4	DSM Pool	AEML-D has injected 1.15 MU into the DSM pool as per DSM mechanism.
5	Sale of Surplus	AEML has made sale of 52.69 MUs of surplus power during the month of



Sr. No.	Particular	Compliance																																				
	Power	June 2023.																																				
6	Power Purchase	Actual Power Purchase is 987.11 MUs as against approved 1044.45 MUs.																																				
7	Source wise Power Purchase	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual (MU)</th> <th>Proportion of each Source in Actual Purchase</th> </tr> </thead> <tbody> <tr> <td>ADTPS</td> <td>307.02</td> <td>234.42</td> <td>23.75%</td> </tr> <tr> <td>RE Sources</td> <td>341.30</td> <td>351.37</td> <td>35.60%</td> </tr> <tr> <td>AEL-MTPP</td> <td>366.00</td> <td>346.15</td> <td>35.07%</td> </tr> <tr> <td>Bilateral sources</td> <td>60.88</td> <td>108.62</td> <td>11.00%</td> </tr> <tr> <td>Bilateral Sale</td> <td>(101.25)</td> <td>(52.69)</td> <td>-5.34%</td> </tr> <tr> <td>DSM Pool & Other</td> <td>-</td> <td>(0.76)</td> <td>-0.08%</td> </tr> <tr> <td>Banking cost/ Banking return</td> <td>70.50</td> <td>-</td> <td>-</td> </tr> <tr> <td>Total</td> <td>1,044.45</td> <td>987.11</td> <td>100.00%</td> </tr> </tbody> </table> <p><i>*The power purchase quantum/cost approved in MTR Order on yearly basis, however monthly approved numbers are derived from comparison purpose.</i></p> <p><i># The Commission has, vide order dated 29-08-2022 in Case No. 149 of 2022 on the petition filed by AEML-D, approved purchase of 500 MW medium term power for the period 1-9-2022 to 14-10-2024. The power flow has accordingly commenced.</i></p>	Source Name	Approved (MU)	Actual (MU)	Proportion of each Source in Actual Purchase	ADTPS	307.02	234.42	23.75%	RE Sources	341.30	351.37	35.60%	AEL-MTPP	366.00	346.15	35.07%	Bilateral sources	60.88	108.62	11.00%	Bilateral Sale	(101.25)	(52.69)	-5.34%	DSM Pool & Other	-	(0.76)	-0.08%	Banking cost/ Banking return	70.50	-	-	Total	1,044.45	987.11	100.00%
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Total	1,044.45	987.11	100.00%																																			
8	Power Purchase under Section 62 of Electricity Act, 2003	<p>AEML-D is purchasing power from only one source i.e., ADTPS under Section 62 of EA, 2003.</p> <p>As part of verification of fixed cost claimed by AEML-D, the same has been verified from the AEML-G MTR Order in Case No. 229 of 2022.</p> <p>As part of verification of energy charges claimed by AEML-D, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MTR Order is carried out.</p>																																				
9	RE Purchase	Monthly power purchase invoices are submitted by AEML-D. Power Purchase rates are verified from the PPA signed by AEML-D with contracted sources of power. For short-term RE sources, monthly power purchase quantum and rate are verified from the invoices, and it is ensured that same has been considered in the FAC calculation.																																				
10	Short Term Power Purchase	Short-term power purchase invoices (from exchange and other sources) of June 2023 are submitted by AEML-D. All the power purchase quantum and rate are verified from the invoices, and it is ensured that same has been considered in the FAC calculation.																																				

4.4 **AEML-D has purchased 987.11 MUs of power as against approved 1044.45 MUs from the sources approved by the Commission.**

5. **Power Purchase Cost**



- 5.1 The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of June 2023, in order to verify the claim of AEML-D regarding Average Power Purchase Cost (APPC). The Commission has verified the actual as well as approved Net Purchase (MUs), Fixed Cost, Variable Cost (Rs./kWh) and Power Purchase Cost considered in FAC computation from the invoices and applicable MTR Order respectively.
- 5.2 As submitted by AEML-D, the Power Purchase cost incurred in June 2023 is Rs. 475.40 which is higher than the approved Power Purchase cost of Rs. 447.99 Crore by the Commission for the month of June 2023. This is on account of the higher cost of power purchase from ADTPS, AEL-MTPP, and other bilateral sources (including exchange) and sale of surplus power at a lower rate, in June 2023. As against the submission of AEML-D, the approved and actual Quantum of power purchase (MU), Power Purchase Cost (Rs. Crore) and Average Power Purchase Cost (Rs. /kWh) for the month of June 2023 is shown in Table 4 below:

Table 4: Approved and Actual APPC and Power Purchase Quantum & Cost

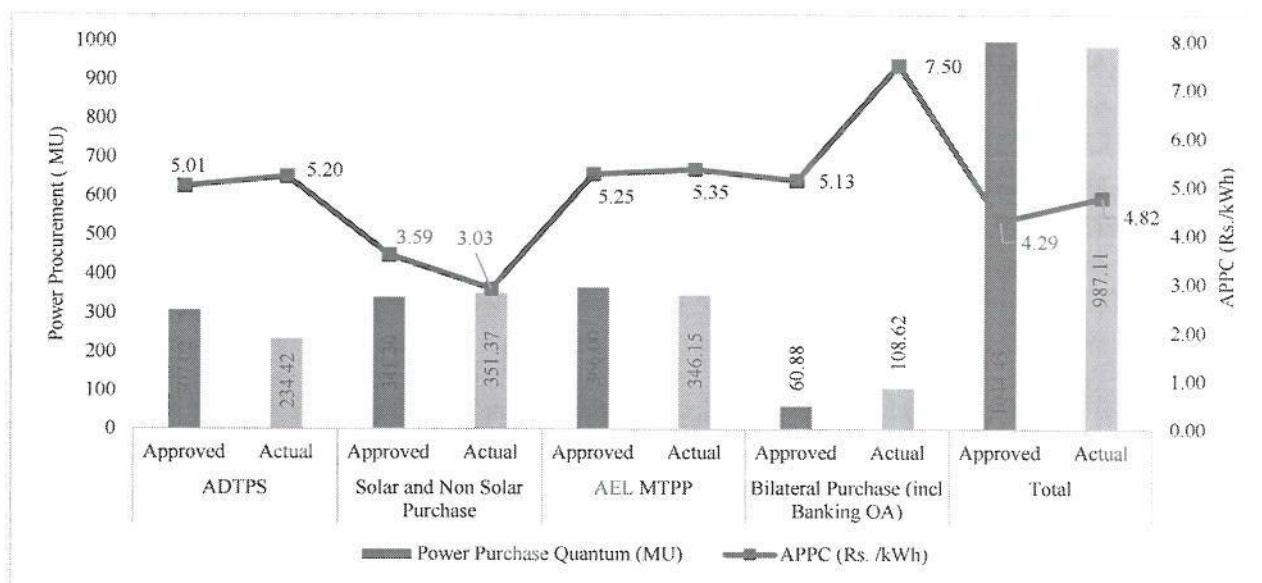
Particulars	Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs. /kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs. /kWh)	Total Cost (Rs. Crore)	APPC (Rs. /kWh)
ADTPS	Approved	307.02	30.45	0.99	123.33	4.02	153.78	5.01
	Actual	234.42	30.11	1.28	91.87	3.92	121.98	5.20
Solar and Non-Solar Purchase	Approved	341.30	-	-	122.64	3.59	122.64	3.59
	Actual	351.37	-	-	106.54	3.03	106.54	3.03
AEL MTPP	Approved	366.00	81.51	2.23	110.77	3.03	192.28	5.25
	Actual	346.15	80.94	2.34	104.41	3.02	185.35	5.35
Bilateral Purchase	Approved	60.88	-	-	31.23	5.13	31.23	5.13
	Actual	108.62	-	-	81.48	7.50	81.48	7.50
Pool/DSM	Approved	-	-	-	-	-	-	-
	Actual	(1.15)	-	-	1.12	(9.72)	1.12	(9.72)
OA/RTS	Approved	-	-	-	-	-	-	-
	Actual	0.39	-	-	0.09	2.42	0.09	2.42
Sale of Surplus Power	Approved	(101.25)	-	-	(51.94)	5.13	(51.94)	5.13
	Actual	(52.69)	-	-	(16.85)	3.20	(16.85)	3.20
Other Charges (Rebate availed)	Approved	-	-	-	-	-	-	-
	Actual	-	-	-	(4.30)	-	(4.30)	-
Banking cost / Banking Return	Approved	70.50	-	-	-	-	-	-
	Actual	-	-	-	-	-	-	-
Total	Approved	1,044.45	111.95	1.07	336.03	3.22	447.99	4.29
	Actual	987.11	111.05	1.13	364.35	3.69	475.40	4.82

**In case of AEML-D, there is no monthly approval for purchases. The monthly approved power purchase is arrived based on annual approved power purchase for comparison purpose.*

- 5.3 The Figure 1 below shows the variation in Approved & Actual Power Purchased Quantum and Approved & Actual APPC for all the power purchase sources of AEML-D:



Figure 1: Approved & Actual Power Purchase and APPC for June 2023



5.4 The Commission has noted that AEML-D has followed Merit Order Dispatch for scheduling of power. As solar and non-solar sources have must run status, they have been scheduled first and all the other sources are scheduled according to SLDC instructions.

ADTPS

5.5 AEML-D has a PPA with ADTPS (own generation). **The Commission in Case No. 231 of 2022 has approved monthly energy quantum of 307.02 MUs from ADTPS at the rate of Rs. 5.01/kWh. AEML-D has purchased 234.42 MU for the month of June 2023 at an average rate of Rs. 5.20/kWh.**

5.6 **Fixed Cost:** The Fixed cost approved for FY 2023-24 in Case No. 229 of 2022 (AEML-G) is Rs. 365.35 Crore. The same has also been considered in the AEML-D Order in Case No. 231 of 2022. The actual payment of Fixed Cost for the month of June 2023 is to be done according to the entitlement under Case No. 229 of 2022 i.e., Rs. 365.35 Crore, as the payment is to be done according to Generator's Tariff Order.

5.7 **The actual PLF of ADTPS in June 2023 was 72.11% as compared to approved PLF of 92.90%.** ADTPS was available for generation during the month, the average Plant Availability Factor for the month (PAFM) for both Units of AEML-G was 85.31%. The actual PAFM for both units of AEML-G in June 2023 was 92.68% during peak hours and 83.83% during off peak hours. The capacity charge for peak hours works out to Rs. 6.09 Crore and the capacity charge for off peak hours works out to Rs. 24.02 Crore, totalling Rs. 30.11 Crores for the month of June 2023.



- 5.8 **Due to lower generation as compared to approved generation, there is an increase of Rs. 0.29/kWh in the Fixed cost and accordingly the actual Fixed Cost per unit is Rs. 1.28/kWh as compared to the approved Fixed Cost of Rs. 0.99/kWh.**
- 5.9 **Energy Charges:** AEML-G has considered the normative operational parameters such as PLF, Availability, Auxiliary Energy Consumption (without FGD), Additional Auxiliary Energy Consumption for FGD, Station Heat Rate and Secondary fuel Oil Consumption as approved by the Commission in Case No. 229 of 2022 for the month of June 2023.
- 5.10 AEML-D has submitted documents to verify the quantity of coal purchased and total cost including breakup of all the cost such as washing charges, Coal handling charges, transportation charges and liaising charges incurred for Domestic Coal and Imported Coal, as applicable, for the month of June 2023.
- 5.11 **Washed Coal:** AEML-D has submitted that AEML-G has received 1,04,536.75 MT of washed coal at the plant boundary of ADTPS at a rate of Rs. 5,421.69 per MT and has consumed 1,03,461.95 MT of washed coal in June 2023. "Other Charges" in the closing stock of the last month i.e., May 2023 amounting to Rs. 0.60 Crores have also been considered in the opening stock of the month of June 2023.
- 5.12 In the month of June 2023, AEML has considered Rs. (1075) /- as washed coal analysis charges done by IGI at mine end for short analysis at unloading end for the month of May 2023.
- 5.13 In the month of June 2023, AEML has included Rs. Rs. 6,80,111/-, Rs 5,04,261/- and Rs. 1,96,435/- as an adjustment under freight charges for raw coal, freight charges for washed coal and coal loading charges respectively, on account of diesel escalation for May 2023.
- 5.14 In the month of June 2023, Rs. (16,35,275)/- have been included as adjustment under washing charges for penalty on ash content.
- 5.15 The input tax credit (ITC) due to sale of coal rejects works out to Rs. (12,75,300)/- which has been included as an adjustment under SECL coal purchase cost. The ITC available to AEML-D for supply to SEEPZ area is set off against the GST paid on purchase of coal / LDO or against the GST paid for other services such as Railway freight, Liaison and supervision, analysis etc. The differential ITC for May 2023 (difference between ITC on GST for May 2023 considered on provisional basis in May 2023 FAC and ITC on GST for May 2023 as per actuals) amounting to Rs. (6,100)/- has been considered under respective heads for June 2023.
- 5.16 AEML-G has paid railway demurrage charges of Rs. 72,135/- in May 2023. These charges are on account of detention of railway's rolling stock after the expiry of free time for 02 no. of rakes containing washed coal and the same has been considered in the month of June 2023.
- 5.17 The Commission has examined the invoices and the supporting excel working provided by AEML-D and has found it to be appropriate. The working of the washed coal fuel cost considered for June 2023 is as shown in the Table 5 below:



in that month from an older stock, then in such case “As Received” GCV of that coal purchased in the most recent month (May 2023 or earlier, as applicable, in the present case) would be considered. In the present case, the washed coal was purchased in June 2023 and hence the GCV of this coal will be considered. The Commission has adopted this approach while approving the FAC submissions from August 2022 onwards for AEML-D. The Commission would also be following same approach while approving FAC for AEML-D in ensuing months as well.

- 5.24 Accordingly, the ‘As Received GCV’ of 3653 kCal/kg for washed coal has been considered by the Commission for computing the weighted average GCV and further calculating the energy charge for the month of June 2023.
- 5.25 The transit loss claimed by AEML-D for the month of June 2023 is 993.70 MT which is 0.942% of the overall quantum of washed coal dispatched in that month.
- 5.26 The ‘As fired’ GCV of washed coal considered by AEML-D is 3,645 kCal/kg. Considering the difference between the ‘As Received’ GCV and the ‘As Fired’ GCV, the stacking loss for washed coal works out to 8 kCal/kg which within the limit of 120 kCal/kg.
- 5.27 **Raw Coal:** AEML-D has submitted detailed computation and methodology for booking the coal consumption cost. AEML-D has calculated the total coal consumption cost on the basis of Weighted Average Price Method by adding the purchases during the month in the opening inventory stock. The closing inventory is then obtained by deducting the coal consumed from the total of opening inventory and purchases during the respective month. AEML-D has purchased 92,185.23 MT Raw Coal (at plant boundary) from SECL and has consumed 81,981.35 MT of raw coal in June 2023. As per weighment of coal at ADTPS, the raw coal received is 92,185.23 MT and the weighment of coal dispatched by SECL was 95,608.47 MT. The difference is reported as the transit loss which is 3,423.24 MT which is 3.58% of the total coal dispatched during the month of June 2023.
- 5.28 AEML-D has considered an amount of Rs. (668)/- under raw coal analysis charges done by IGI at ADTPS for short analysis at unloading end for the month of May 2023 in the FAC calculation for June 2023.
- 5.29 AEML-D has considered provisional ITC on GST paid for June 2023 on Liasoning, analysis charges etc. amounting to Rs. (2,22,805)/- under respective heads. Further, differential ITC on GST for May 2023 (difference between ITC on GST for May 2023 considered on provisional basis in May 2023 FAC and ITC on GST for May 2023 as per actuals) amounting to Rs. (198)/- has also been considered under respective heads in June 2023.
- 5.30 AEML-G has paid railway demurrage charges of Rs. 2,19,241/- in May 2023. These charges are on account of detention of Railway’s rolling stock after the expiry of free time for 08 no. of rakes containing washed coal and the same has been considered in the month of June 2023.



- 5.31 In June 2023, Credit Notes amounting to Rs. (33,36,380)/- pertaining to previous months from July 2022 to September 2022 has been received from SECL and has been considered under coal purchase from SECL.
- 5.32 The working of the raw coal fuel cost considered for June 2023 is as shown in the Table 6 below:

Table 6: Working of Raw Coal Rate for June 2023

Particular	Quantity (MT)	Cost (Rs. Crore)	Price (Rs. /MT)
Inventory			
Opening (as on 1 st June)	372.56	0.18	4,961.38
Addition during month	92,185.23	45.78	4,965.59
Total	92,557.79	45.96	4,965.57
Consumption			
Actual	81,981.35	40.71	4,965.57
Other Charges	-	0.00	-
Total	81,981.35	40.71	4,965.58

- 5.33 The overall cost approved towards consumption of raw coal is Rs. 40.71 Crore for the month of June 2023.
- 5.34 **With regards to the raw coal, the weighted average landed cost for consumption in the month of June 2023 is Rs. 4,965.58 /MT.** AEML-D has consumed 81,981.35 MT of raw coal during the month of June 2023.
- 5.35 AEML-G has disputed the GCV results as declared by CIMFR for some of the rakes of raw coal received from SECL in June 2023. The financial outcome of this dispute, if any, will be considered in future months after resolution of the dispute.
- 5.36 It has been observed that in June 2023, AEML-G has purchased raw coal from SECL only. AEML-D has considered the 'As billed' GCV of raw coal as 4052 kCal/kg, while the 'As Received GCV' of same coal as per M/s IGI certificate (third party appointed by AEML-G for GCV measurement at receiving end) is 2823 kCal/kg for June 2023. As per clause 50.6 of MYT Regulations, 2019, actual loss in GCV of coal between "As Billed by Supplier" and "As Received at generating station" is allowed subject to maximum loss of 300 kcal/kg. The GCV loss calculated by AEML- D (difference between 'As Billed' GCV and 'As Received' GCV) for raw coal for the month of June 2023 is 1229 kCal/kg.
- 5.37 Hence, as mentioned above, the GCV loss (1229 kCal/kg) for raw coal for the month of June 2023 is outside the limit of 300 kcal/kg and 'As Billed' GCV of 3752 kCal/kg for calculation is considered (i.e., maximum of the 'As Received' GCV or 'As Billed' GCV minus 300 kCal/kg).
- 5.38 In accordance with the methodology mentioned in para 5.22 to para 5.23, the Commission has approved "As Received" GCV as 3752 kCal/kg for raw coal. The "As Fired" GCV of raw coal is 2792 kCal/kg. The same has been used to work out the stacking loss of 960 kCal/kg for raw coal.



- 5.39 **Imported Coal:** AEML-G has neither purchased nor consumed any imported coal in June 2023. Also, there was nil quantum imported coal reported in opening inventory of the month of June 2023.
- 5.40 **LDO:** AEML-D has procured 96 KL of LDO during June 2023, and it has consumed 68.95 KL of Light Diesel Oil in the month of June 2023.
- 5.41 The working of the LDO fuel cost considered for June 2023 is as shown in the Table 7 below:

Table 7: Working of LDO Rate for June 2023

Particular	Quantity (KL)	Cost (Rs. Crore)	Price (Rs. /KL)
Inventory			
Opening (as on 1 st June)	401.92	2.96	73,609.67
Addition during month	96.00	0.65	67,491.25
Total	497.92	3.61	72,430.02
Consumption			
Actual	68.95	0.50	72,430.02
Other Charges	-	-	-
Total	68.95	0.50	72,430.02

- 5.42 The overall cost approved towards LDO consumption expenses for the month of June 2023 is Rs. 0.50 Crore. **With regards to the LDO, the weighted average landed cost of consumption for the month of June 2023 is Rs. 72,430.02 /KL.**
- 5.43 As per MYT Regulations, 2019 for calculation of Energy Charge Rate, the Commission has notified the maximum stacking loss allowed in Clause 50.7 as reproduced below:

“Any variation in Price and Gross Calorific Value of coal/lignite or gas or liquid fuel as billed by supplier less actual stacking loss subject to the maximum stacking loss of 85 kcal/kg or 120 kcal/kg, as the case may be, vis-a-vis approved values shall be adjusted on month to month basis on the basis of average Gross Calorific Value of coal/lignite or gas or liquid fuel in stock received and weighted average landed cost incurred by the Generating Company for procurement of coal/lignite, oil, or gas or liquid fuel, as the case may be for a power Station.”

- 5.44 In line with MYT Regulations, 2019 and MYT Order in Case No. 298 of 2019, the Commission has considered stacking loss of 120 kcal/kg (minimum of actual weighted average loss considering washed coal, raw coal, and imported coal of 429 kcal/kg or 120 kcal/kg as per Regulation) for calculation of energy charge rate.
- 5.45 Considering the approved rates for washed coal, raw coal, LDO, the fuel cost, GCV and normative operational parameters, the revised energy charges work out to Rs. 3.919/kWh which is lower than the approved variable cost of Rs. 4.017/kWh as per the MTR Order for AEML-G (Case No. 229 of 2022). The variation between approved and the claimed energy charges is on account in the variation in the approach for considering the GCV of coal during



the month as adopted by the Commission and as proposed by AEML-D. This decrease is also due to non-consumption of imported coal in the month of June 2023.

- 5.46 **Incentive:** As per Regulation 46.3 of MYT Regulations, 2019 specifies the target PLF of 85%. Since the PLF for June 2023 was less than 85% (both in peak hours and off-peak hours), AEML-G has not claimed any incentive for June 2023.
- 5.47 Variation in power purchase expenses from ADTPS on account of change in quantum and per unit rate is as shown in Table 8 below:

Table 8: Variation in Power Purchase expenses from ADTPS for June 2023

Source	Approved Quantum (MU)	Approved rate (Rs. /kWh)	Actual quantum (MU)	Actual rate (Rs. /kWh)	Variation due to quantum (Rs. Crore)	Variation due to rate (Rs. Crore)	Total variation (Rs. Crore)
ADTPS	307.02	5.01	234.42	5.20	(36.36)	4.56	(31.80)

- 5.48 Based on the above, **APPC for ADTPS works out to Rs. 5.20/kWh as against approved rate of Rs. 5.01/kWh. There is an increase of Rs. 0.19/kWh in APPC for the month of June 2023. Fixed cost variation is contributing to increase of Rs. 0.29/kWh and variable cost variation is contributing Rs. 0.10/kWh to the decrease.** The decrease in variable cost is due to non-consumption of imported coal in the month of June 2023.
- 5.49 **Power from other generator (AEL- MTPP):** AEML-D has submitted that the Commission has, vide order dated 29 August, 2022 in Case No. 149 of 2022 on the petition filed by AEML-D, approved purchase of 500 MW medium term power for the period 1 September, 2022 to 14 October, 2024. Power flow has commenced and accordingly power purchase of 346.15 MUs and the associated cost has been considered in the June 2023 month FAC by AEML-D.
- 5.50 **Solar Purchase:** AEML-D has an Energy Purchase Agreement (EPA) with Dhursar Solar Power Private Limited (DSPPL). The Commission has approved power purchase at the rate of Rs. 10.30/kWh from DSPPL. **AEML-D has purchased 4.64 MUs from DSPPL at the same rate of Rs. 10.30/kWh as approved in the MTR Order.** The Commission has verified the bills/invoices submitted and found them to be correct.
- 5.51 **Wind Solar Hybrid:** AEML also has PPA with Adani Hybrid Energy Jaisalmer Four Limited for 700 MW. The Commission has approved renewable power purchase quantum of 285.85 MU at the rate of Rs. 3.24/kWh from wind solar hybrid for FY 2023-24. The project has fully commissioned with Hybrid capacity of 700 MW. **AEML-D has purchased 281.99 MU in the month of June 2023 from wind solar hybrid source at the same rate of Rs. 3.24/kWh as approved in the MTR Order.**
- 5.52 **Non-Solar Purchase:** AEML-D also has an EPA with three non-solar sources namely Vector Green Energy Private Limited, Tembhu Power Private Limited and Reliance Clean Power



Private Limited. The Commission has approved power purchase from non-solar sources. The actual APPC and approved APPC from all the sources is as shown in the Table 9 below:

Table 9: Approved and Actual APPC from Non-Solar Sources

Source	Approved (Rs./MT)	Actual (Rs./MT)
Vector Green Energy Private Limited)	5.07	-
Tembhu Power Private Limited	4.26	-
Reliance Clean Power Limited	5.81	5.81

- 5.53 The Commission has approved power purchase rate for Vector Green Energy Limited, and Reliance Clean Power Private Limited in the MTR Order in Case No. 231 of 2022 and AEML-D has procured power from Reliance Clean Power Private Limited sources at the same rate during June 2023. No power has been purchased from Vector Green Energy Private Limited during in June 2023. Further, no power has been purchased from Tembhu Power Pvt. Ltd. (small hydro plant affected due to flooding happened (Krishna River) in July 2021 and which was re-commissioned on 31 May, 2022) during June 2023.
- 5.54 Further, AEML-D has also procured 1.62 MUs of short term RE power through IEX Green Day Ahead Market (GDAM) at an average rate of Rs. 7.10/kWh.
- 5.55 **Short Term Market Linked Contracts:** AEML-D in the MTR Petition in Case No. 231 of 2022 had submitted that it is exploring tie up of Short-Term Wind power from generators located in Maharashtra and had estimated quantum of approximately 526 MU at the purchase rate of Rs. 2.94/kWh. The Commission, in its Order, approved the quantum as estimated by AEML-D, however, the rate approved was Rs. 4.90/kWh, considering the average GDAM rate from July 2022 to December 2022.
- 5.56 AEML-D had submitted in the FAC application that it had contracted up to 240 MW in June 2023 on short term basis. However, since it was “upto” 240 MW, AEML-D has been able to actually contract 234.45 MW in June 2023. 156.95 MW of this overall capacity is contracted at the rate of Rs. 2.94 per kWh (through competitive bidding) while 77.45 MW has been contracted through day-ahead exchange linked contract. In response to the datagaps raised by the Commission, AEML-D submitted the quantum of 77.45 MW has been contracted from intra state renewable energy sources, through day ahead exchange linked contract. Through such a contract, the trading margin of IEX is also saved. Also, this is an exchange linked contract where the contracted rate is lower than the rate discovered in IEX Day Ahead Market (DAM) for June 2023.
- 5.57 AEML-D has stated that the bill/ invoice against the said contract/LOI was not received, as GCN has not been received by the seller from MSEDCL. Thus, since the quantum is not known at this point of time, AEML-D has estimated it in proportion to the generation capacity of sources. A working of this estimation as submitted by AEML-D is provided below:



Table 10: Estimation of STPP RE procured in proportion to capacity

Particular	Capacity (MW)	Energy (MU)	Remark
Total RE Capacity (Contracted + OA)	470	108.29	Provisional Actual REMC as per SLDC DSM bill data (A)
OA (LT+MT+ST)	196	45.17	Provisional Actual REMC in proportion of Capacity (B = $196/470 \times 108.29$)
Contracted (LT + ST)	274	63.11	Provisional Actual REMC in proportion of Capacity (C = $274/470 \times 108.29$)
Contracted RE (LT)	45	7.87	Actual RE Energy as per Bills (D)
Contracted RE (ST) by AEML-D	229	55.24	Estimated ST RE Energy (C – D)

- 5.58 Further, the cost against the power procurement these sources is not claimed in this month, since invoices are not received. AEML-D has submitted that once the invoices are received, the cost will be claimed in the month in which payment is made. However, some of the invoices pertaining to the transaction from this source in April 2023 and May 2023 were paid in June 2023, amounting to Rs. 3.06 Crore, and the same is considered as part of power purchase cost.
- 5.59 AEML-D in the earlier submission under similar circumstances had considered the quantum under OA and had not considered the cost in that month. Further, for determining the weighted average power purchase cost (WAPPC), AEML-D excluded the OA quantum from the total purchase to further compute FAC charges. However, subsequently in the month of receipt of such invoice, to not give retrospective effect, all of this quantum and cost was now considered in the month of receipt of invoices and also as a part of WAPPC for the purpose of FAC computation. Further, the said quantum was also reduced from the OA quantum in the month of receipt of the invoices to give contra effect to the transaction. Considering the approach adopted in the past, the Commission sought clarification from AEML-D for the proposed change in its approach towards treatment of energy quantum and PP cost under the present situation.
- 5.60 In response to the clarification sought by the Commission, AEML-D submitted that during the period of 8 months prior to April 2023 when it adopted the principle of adjusting the quantum and cost basis the actual invoice received, the quantum of such power purchased by AEML-D was only 14.24 MU. However, from the month of April 2023, AEML-D has contracted capacity of 157 MW in April 2023 and May 2023 and up to 240 MW in June 2023, the resultant monthly quantum of power is huge as compared to earlier. AEML-D has already submitted the monthly FAC till August 2023 and has estimated the quantum to the tune of approximately 232 MU. The corresponding bills for purchase in a given month are later being received over the course of several months and therefore, if the quantum of power purchase was also to be deferred, similar to cost, it would again not be possible to consider it in any single month in future, as invoices are not received in one go. Accordingly, it would not be correct to not consider such a huge quantum of power in the month of consumption, as it



would make the purchase quantum understated compared to consumed power and hence fictitious. In case of minor quantum as in earlier months, this approach was possible. Considering the same, AEML-D requested the Commission to consider its revised approach. The Commission noted the submission and considered the approach adopted by AEML-D for computation of the FAC for the month of June 2023. However, as discussed in the approval of FAC for the month of April 2023, the approach adopted presently by AEML-D leads to a situation where in the month in which the units are considered without any corresponding cost, the power purchase cost (Rs./kWh) is understated and vice-versa in the month in which the cost is reported without any corresponding units. To avoid such situation, AEML-D is required to consider both (units as well as cost), albeit based on assumption, to minimise the impact of this variation. This approach should be adopted by AEML-D appropriately in the future months for which filing has not been done yet.

- 5.61 Additionally, AEML-D has also received invoices amounting to Rs. 1.61 Crores pertaining to the supply of energy in the period March 2022 to October 2022. This has been considered as a part of power purchase cost.
- 5.62 Accordingly, the Commission approves the power purchase of short term RE (market linked contracts and competitively bid) considered in the month of June 2023. However, AEML-D needs to track the market movements and ensure that the terms of the contract are beneficial for the consumers.
- 5.63 As the approval by the Commission is on yearly energy quantum, the monthly variation in power purchase from various sources of power is being accepted provided cumulative power procured from majority of the sources is within the approved energy quantum.
- 5.64 Variation in power purchase expenses from RE sources on account of change in quantum and per unit rate is as shown in Table 11 below:

Table 11: Variation in Power Purchase expenses from Renewable Energy Sources for June 2023

Source	Approved Quantum (MU)	Approved rate (Rs./ kWh)	Actual quantum (MU)	Actual rate (Rs./ kWh)	Variation due to quantum (Rs. Crore)	Variation due to rate (Rs. Crore)	Total variation (Rs. Crore)
Solar							
DSPPL	4.35	10.30	4.64	10.30	0.30	0.00	0.30
Adani Hybrid Energy Jaisalmer Four Limited – Wind Solar Hybrid (AHEJFL)	285.85	3.24	281.99	3.24	(1.25)	(0.00)	(1.25)
Non-Solar							
Vector Green Energy Pvt. Ltd.	0.07	5.07	-	-	(0.03)	-	(0.03)
Tembhu Power Pvt. Ltd.	1.00	4.26	-	-	(0.42)	-	(0.42)
Reliance Power Ltd.	6.24	5.81	7.87	5.81	0.95	0.00	0.95



Source	Approved Quantum (MU)	Approved rate (Rs./ kWh)	Actual quantum (MU)	Actual rate (Rs./ kWh)	Variation due to quantum (Rs. Crore)	Variation due to rate (Rs. Crore)	Total variation (Rs. Crore)
Short Term RE (contracted) / Exchange (G-DAM, G-TAM)	43.80	4.90	56.86 [#]	1.02 [#]	6.40	(22.04)	(15.65)
Total RE Sources	341.30	3.59	351.37	3.03	5.94	(22.04)	(16.10)

[#] This includes the provisional quantum of power purchased from short term RE sources for which the invoices are not available. No cost has been considered against this energy and hence the actual rate appears to be lower.

5.65 **APPC for renewable sources for the month of June 2023 works out to Rs. 3.03/kWh which is lower than the MTR approved level of Rs. 3.59/kWh. One of the reasons is consideration of the quantum of power procured from short term (contracted) RE sources without considering the associated cost.**

5.66 **Power from other generator (AEL-MTPP):** AEML-D has submitted that the Commission has, vide order dated 29 August 2022 in Case No. 149 of 2022 on the petition filed by AEML-D, approved purchase of 500 MW medium term power for the period 1 September, 2022 to 14 October, 2024. Power flow has commenced and accordingly power purchase of 346.15 MUs and the associated cost (@ Rs. 5.35/kWh) has been considered in the June 2023 month FAC by AEML-D.

5.67 **Bilateral Purchase:** AEML-D has undertaken bilateral purchase of power from power exchange (IEX, HPX and PXIL), through exchange price linked bilateral contracts and inter-discom trade at the average rate of Rs. 7.50/kWh which is significantly higher than the approved rate of Rs. 5.13/ kWh. It is observed that the average power prices in the short-term market are higher in the month of June 2023 as compared to the prices in the month of May 2023 which is also seen in the average price of power purchase from bilateral contracts seen in May 2023 (6.72/kWh). However, the rate observed in June 2023 is lower as compared to the prices observed during January 2023, and February 2023, March 2023, and April 2023 which is also reflected in the average price of power purchase from bilateral contracts in January 2023 (Rs. 9.55/kWh), February 2023 (Rs. 9.99/kWh), March 2023 (Rs. 6.50/kWh), and April 2023 (7.32/kWh). The trend of the average rates discovered on IEX (at regional periphery) are shown below for reference:

Table 12: Power Prices in short term market (Rs./kWh)

Month	Jan-23	Feb-23	Mar-23	Apr-23	May-23	June-23
RTC	5.75	6.91	4.95	4.97	4.87	4.89
Evening (17-23 Hrs)	6.87	7.91	5.68	6.28	6.36	6.11
Day (10-17 Hrs)	6.39	6.09	4.08	3.53	3.80	3.68
Night (0-6, 23-34 Hrs)	3.04	5.42	4.74	5.81	5.62	5.96
Morning (6-10 Hrs)	7.66	9.45	5.74	4.11	3.20	3.31

5.68 AEML-D relies on the short-term purchase to meet the shortfall beyond long term tie-up and has purchased 108.62 MUs through bilateral purchase (IEX, HPX, PXIL, exchange linked



contracts) which is 11.66% of its total power purchase for June 2023. The summary of the power procured from the various short-term sources is reproduced in the table below:

Table 13: Summary of power procured from short term sources

Sr. No.	Source	Net Purchase (MU)	Power Purchase Cost (Rs. Crore)	Average Power Purchase Cost (Rs./kWh)
Bilateral Sources				
1	IEX	27.65	13.14	4.75
2	PXIL	0.70	0.72	10.33
3	HPX	77.27	65.70	8.50
4	STPP (Exchange linked contracts)	2.99	1.73	5.80
5	Exchange sale cost	-	0.13	-
6	SLDC schedule charges and OA charges for STPP		0.05	-
7	Total	108.62	81.48	7.50

- 5.69 AEML-D has submitted the bill/invoices regarding the purchase of power from exchange and the Commission has verified the energy quantum and power purchase cost and found it to be appropriate. AEML-D has also submitted the sample LOIs for day ahead exchange linked contract. Accordingly, the Commission approves the aforesaid bilateral purchase with APPC of Rs. 7.50/kWh.
- 5.70 AEML-D has to pay fees of Rs. 7,500 per month to MSLDC towards IEX standing clearance in advance, for next month. The said amount is as per the amount approved by the Commission in SLDC Order in Case No. 291 of 2019 (same as that approved by the Commission in the SLDC's MTR Order in Case No. 233 of 2022) and the same is considered as part of Bilateral purchase cost in FAC for June 2023 towards fees paid for July 2023. Further, in the month of June 2023, IEX standing clearance was sought from MSLDC, for which an amount of Rs.7,500 was paid to MSLDC. The same is also considered as part of power purchase cost.
- 5.71 Further, in the month of June, AEML-D has received bill from STU additional transmission charges (ATC) for the month of Sep-22 to Mar-23, amounting to Rs. 11,526. This has been considered as part of Bilateral purchase cost, in FAC for June 2023. The Commission has noted the submissions.
- 5.72 Variation in power purchase expenses from bilateral sources on account of change in quantum and per unit rate is as shown in Table 14 below:

Table 14: Variation in Power Purchase expenses from bilateral sources for June 2023

Source	Approved Quantum (MU)	Approved rate (Rs. /kWh)	Actual quantum (MU)	Actual rate (Rs. /kWh)	Variation due to quantum (Rs. Crore)	Variation due to rate (Rs. Crore)	Total variation (Rs. Crore)
Bilateral Purchase	60.88	5.13	108.62	7.50	24.49	25.76	50.24



5.73 **DSM Pool:** AEML-D has submitted that for the month of June 2023, it has injected 1.15 MUs under the DSM mechanism and has incurred cost of Rs. 1.12 Crore.

5.74 **Power Procurement from Open Access and Roof Top Solar Consumers:** As per MERC (Distribution Open Access) (First Amendment) Regulations, 2019:

“20.5. The unutilised banked energy at the end of the month, limited to 10% of the actual total generation by such Renewable Energy generator in such month, shall be considered as deemed purchase by the Distribution Licensee at a rate equivalent to that stipulated under yearly Generic RE Tariff Order applicable for respective technology...

...Provided further that provision relating to Banking of the Principal Regulations shall continue to apply for existing Open Access Agreements or contracts as on date of notification of the first amendment of the Principal Regulations, till the expiry of the approved period for such OA transactions, beyond which provision relating to Banking under Regulation 20 of the first amendment of the Principal Regulations shall apply.”

Further, as per MERC (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations, 2015:

“10.3. The unadjusted net credited Units of electricity as at the end of each financial year shall be purchased by the Distribution Licensee at its Average Cost of Power Purchase as approved by the Commission for that year, within the first month of the following year:”

5.75 The surplus energy of RE Open Access consumers (Firm and Non-firm) purchased by AEML-D as per the aforementioned regulations is 0.39 MU at a cost of Rs. 0.09 Crore and is considered in the FAC for the month of June 2023. AEML-D has submitted the details of the power procured as a part of the submission which has been verified based on consumer wise detail provided by AEML-D.

5.76 **Sale of Surplus Power:** AEML has sold 52.69 MUs under bilateral sale and received Rs. 16.85 Crore for the month of June 2023. The Commission, vide MTR Order for AEML-D, has approved the sale of surplus power at Rs. 5.13/kWh (at the same rate of bilateral short term power purchase rate), however, the actual rate realised for sale of power (Rs. 3.90/kWh) is way below actual bilateral purchase rate of Rs. 7.50/kWh for June 2023). While the purchase and sale may be in different time blocks during the day, AEML-D has to ensure that power available from contracted sources is optimally utilised before resorting to purchases from the costlier bilateral sources. Also, the sale of excess power should not lead to undue burden on the consumers on account of the difference in the cost of purchase and sale. With commencement of power flow from medium term PPA source, AEML-D appears to be in surplus and has been selling a significant amount of surplus power. **Therefore AEML-D should take a review of purchase of costlier exchange power and costlier power through exchange linked contracts as now it has sufficient capacity on account of new medium term PPA.**



- 5.77 **Other Charges:** AEML-D has considered rebate pertaining to payments made towards power purchase from contracted generators of Renewable energy, traders from short term power purchase, payment made for InSTS charges, SLDC charges etc. in the month of June 2023. Though AEML submitted that there are no specific supporting bills showing the rebate. The rebate being claimed is considering the billed amount as per the invoices and the rebate available as per contracts/ invoice. The Commission has scrutinized the details and has approved Rs. 4.30 Crore as rebate to be considered as part of power purchase cost for the month of June 2023. There is no standby previous year adjustment for the month of June 2023.
- 5.78 **Monthly Standby charges payable to MSEDCL:**
- 5.78.1 The Commission in the MTR order has approved standby charges as a part of the power purchase cost for the years FY 2021-22 (6 months) and FY 2022-23 to FY 2024-25. In this context, AEML-D had filed an IA before the Hon'ble Appellate Tribunal for Electricity (Hon'ble APTEL) (IA No. 844 of 2023 in Appeal No. 516 of 2023) in the matter of payment of standby charges to MSEDCL against the MTR Order of the Commission for AEML-D in Case No. 231 of 2022.
- 5.78.2 In the hearing held before the Hon'ble APTEL on 26-09-2023, the Hon'ble APTEL set aside the direction issued to AEML-D to the extent it related to payment of standby charges. The relevant extract from the Daily Order is as follows:
- "The directions issued to the Appellant in the impugned Order, to the extent it related to payment of stand by charges, is set aside."*
- 5.78.3 Taking into cognizance the Order of the Hon'ble Tribunal, AEML-D has excess cost recovered from the consumers (as part of the tariff). AEML-D has now proposed considering this surplus as an adjustment to the FAC, so as to shield the consumers from FAC shock as it would not be fair to subject consumers to FAC on the one hand, while also charging a higher tariff to consumers due to in-built stand-by charges without a corresponding cost. AEML-D has considered an opening balance of Rs. 228.84 Crore as the standby charges available at the beginning of June 2023. Additionally, AEML-D has also considered holding cost of Rs. 1.84 Crore and Rs. 15.41 Crore as Standby charges for the month of May 2023 as additional cost considered in the MTR Order (difference between approved vs claimed). This amount has been considered for adjustment against the FAC for the month of June 2023 (Rs. 48.65 Crore).
- 5.78.4 Thus, to avoid double imposition of these surplus standby charges on the consumers AEML-D has proposed to make monthly adjustments to offset the surplus of standby charges through the FAC. Accordingly, AEML-D has submitted to not recover the FAC from the consumers in June 2023 even though the FAC for the month is positive.



5.78.5 The Commission has noted AEML-D's submission. With regard to the consideration of Standby charges, the Commission's ruling for the years FY 2023-24 and FY 2024-25 in its MTR Order in Case no. 231 of 2022 is as below:

"The Commission has clarified in the earlier Section that any review of the Standby arrangement can be done by the Commission only after hearing all the Parties concerned, and mere written communication regarding discontinuation of the Standby facility is not sufficient. The Commission has hence, considered AEML-D's share of the Standby Charges payable to MSEDCL, based on its share of Non-Coincident Peak Demand (NCPD) and Coincident Peak Demand (CPD), as determined in the MTR Order of MSEDCL dated 31st March 2023 in Case No. 226 of 2022."

5.78.6 Further, the Hon'ble APTEL in the daily order (APL No. 516 OF 2023 & IA No. 844 of 2023 dated 26.09.2023) has stated the following:

"This issue of the Appellant's liability to pay standby charges to MSEDCL cannot be adjudicated independently, in a separate petition, after the tariff order has been passed, and ought to have been considered as part of the Appellant's tariff determination exercise. We see no reason, in such circumstances, to examine the rival submissions on merits, and are of the view that the MERC should be directed to consider this issue, relating to payment of stand by charges by the Appellant to MSEDCL, in this petition itself after giving the parties involved an opportunity of being heard. We make it clear that the order now passed by us shall not disable MERC, if it so chooses, to hear the other Distribution Licensees in the city of Mumbai; and to then pass a detailed order assigning reasons on the issue of the Appellant's liability to pay standby charges.

The directions issued to the Appellant in the impugned order, to the extent it related to payment of stand by charges, is set aside. We make it clear that we have not expressed any opinion on the merits of the rival contentions; and it is open to the parties involved to raise all such contentions, as are available to them in law, before the MERC. The IA stands disposed of."

5.78.7 As can be seen from the above extract, the Hon'ble APTEL order does not restrict the Commission from hearing the other Distribution Licensees in the city of Mumbai and then issuing a detailed order towards the consideration of Standby charges. Further, the Hon'ble APTEL has clearly stated that they have not expressed any opinion on the merits of the rival contentions, and it is open to the parties involved to raise all such contentions, as are available to them in law before the Commission. AEML-D has not approached the Commission in this matter with its contention as suggested by the Hon'ble APTEL in its Order.

5.78.8 Accordingly, AEML-D was asked to justify the reason for seeking to refund the stand-by amount when the Hon'ble APTEL has still left it open for the Commission to listen to AEML-D and other licensees in the city of Mumbai and pass a detailed Order.



5.78.9 In the response to data gaps dated 9 January, 2024 for the month of June 2023, AEML-D stated that it has already elaborated the rationale for adjusting the positive FAC against the payable standby charges in its FAC monthly submission for June 2023. AEML-D further submitted that:

“Taking into account the above-mentioned judgment of the Hon’ble APTEL, no standby charges are being paid to MSEDCL, but the same is being recovered through tariffs from consumers. This fact remains regardless of the Hon’ble Commission’s future ruling on AEML-D’s petition regarding stand-by charges as directed by the Hon’ble APTEL. As a result, it would not be appropriate at this moment to accrue a surplus of stand-by costs while also seeking additional power purchase costs as FAC from consumers as per AEML-D. As a result, in order to reduce the burden on consumers, AEML-D has requested that stand-by prices be adjusted in FAC.

If the case is decided against AEML-D, the AEML-D’s future course of action will depend upon the available legal options. As a result, what occurs in the future and whether or not AEML-D pays stand-by charges to MSEDCL is dependent on how the matter is resolved before the Hon’ble Commission and subsequent legal remedies by all stakeholders. As a result, it is preferable by AEML-D that the current situation - one of not paying stand-by charges to MSEDCL but recovering the same from consumers - be corrected in order to lessen the burden of additional power purchase costs on consumers.”

5.78.10 It is evident from the Hon’ble APTEL’s judgement that while the directions issued to the AEML-D in the impugned Order, to the extent it related to payment of stand by charges, is set aside, no opinion on the merits of the rival contentions has been recorded by the Hon’ble APTEL and it has been left open to the parties involved to raise all such contentions, as are available to them in law, before the Commission. Accordingly, the parties involved which also includes AEML-D should have approached the Commission seeking resolution of the issue. While AEML-D and other stakeholders have subsequent legal remedies available post the order issued by the Commission in this matter, it would not be appropriate to speculate the outcome in the matter and consider refunding back the standby charges recovered from the consumers. In case the Commission upholds its decision in the matter, then it will be an undue burden on the consumers to pay back the charges to AEML-D. Further, the FAC process is based on allowing the variation in weighted average power purchase cost (WAPPC) as approved in the relevant Tariff Order vis-à-vis the actual WAPPC. It is a matter of fact the WAPPC approved in the MTR Order of Rs. 4.29/kWh (against which AEML-D has submitted actual WAPPC of Rs. 4.82/kWh) does not include the standby charges considered in the MTR Order. **Accordingly, the Commission does not deem it appropriate to consider allowing AEML-D to adjust the FAC for the month of June 2023 against the standby charges collected by it from the consumers as part of the retail tariff.**

5.78.11 Further, on the point of standby charges not being part of the approved APPC, AEML-D submitted that in the past monthly FAC submissions, it has claimed additional transmission



charges paid to STU as part of FAC when such transmission charges are also not part of the approved APPC, and the Commission has approved the same. Thus, drawing an analogy, AEML-D has adjusted the standby charges.

- 5.78.12 An extract from the Commission's July 2022 FAC Order for AEML-D regarding consideration of additional InSTS charges as a part of the FAC is presented below:

“Additional InSTS charges: STU, in accordance with the Commission's order dated 18 October, 2020 in Case No. 52 of 2020, has levied Rs. 11,015 as additional transmission charges. The same is has been considered in the month of FAC for July 2022. AEML-D has provided the supporting bill raised by STU which has been verified by the Commission.”

- 5.78.13 In this context, it is to be noted that the STU had filed a petition in Case No. 52 of 2020 with the Commission seeking removal of difficulties in implementation of certain provisions of the applicable MYT Regulations. This included seeking approval of the methodology for applying additional transmission charges [as per clause 64.3 (c) of MYT Regulations, 2015] in cases where maximum recorded demand exceeds the base TCR and Contracted Capacity. The Commission clarified the matter and allowed recovery of the additional transmission charges prospectively on 15 min block basis. The additional transmission charges are payable where the recorded demand of long-term TSU is greater than Contracted Capacity and accordingly the charges are payable by the TSUs over and above the transmission charges payable to the transmission licensees under the InSTS Charges framework. These charges are not part of the approved retail tariff of the distribution licensee as these are chargeable only in case where maximum recorded demand exceeds the base TCR and Contracted Capacity. Considering this fact, the Commission, on request of AEML-D, considered allowing recovery of the additional transmission charges through FAC mechanism though they are not part of the WAPCC as these charges are not recovered through the retail tariff. Allowing recovery through the truing up process would lead to the incidence of carrying cost on this amount which is a burden on consumers. However, stand-by charges cannot be considered akin to these charges and cannot be considered for adjustment through the FAC mechanism as their recovery is allowed through the retail consumer tariff.
- 5.78.14 Further, in case of Additional Transmission Charges, there was a specific Order of the Commission to STU to recover Additional Transmission Charges from the Distribution Licensees. However, in present case, though the directions regarding payment of Standby Charges to MSEDCL has been set aside, the Commission has been directed to consider this issue, relating to payment of stand by charges by AEML-D to MSEDCL, in this petition itself after giving the parties involved an opportunity of being heard. Thus, the issue is still open and yet to be decided by the Commission.
- 5.78.15 The Commission also notes that the standby charges may be a part of the Tariff being recovered from the consumers, however, there is no Order of the Commission directing revision in Tariff payable by the consumers of AEML-D on account of non-applicability of Standby Charges.



5.78.16 Notwithstanding the above, the Commission in earlier paragraphs has not considered AEML-D's request to adjust the stand-by charges with the FAC recoverable for the month of June 2023 and hence the comparison of the same with additional transmission charges is infructuous.

5.78.17 Accordingly, the Commission has not accepted AEML-D's request to adjust the standby charges with the FAC recoverable from the consumers for the month of June 2023. AEML-D will be required to recover the positive FAC for June 2023 as approved by the Commission in this Order through levy of FAC on consumers.

5.78.18 Summarised reasons for the rate variation for various sources are given in Table 15 below:

Table 15: Reasons for the rate variation for various sources for June 2023

Sr. No.	Source	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	ADTPS	5.01	5.20	<ul style="list-style-type: none"> The fixed charges are higher by Rs. 0.29 /kWh due to lower generation as compared to the approved generation and the variable cost variation is contributing Rs. 0.10/kWh to the decrease.
2	RE Sources	3.59	3.03	<ul style="list-style-type: none"> RE power procurement from contracted sources Very less quantum of RE power procured through exchange platform. AEML-D contracted Intrastate Wind capacity with AEL in June 2023. However, due to the non-receipt of invoices, it has considered only the estimated quantum on a provisional basis and has not considered any cost regarding this power transaction. This has led to a reduced rate.
3	AEL-MTPP	5.25	5.35	<ul style="list-style-type: none"> The rate of Rs. 5.25/kWh approved in the MTR Order was based on the actual effective rate obtained in the H1 of FY 2022-23 and the same rate was adopted for FY 2023-24 and FY 2024-25 as well. The PPA provides for change in the base fixed charges and variable charges linked to WPI. This also impacts the rate of purchase of energy.
4	Power Exchange (Purchase)	5.13	7.50	<ul style="list-style-type: none"> Market discovered rate. Higher cost purchase of short-term power from Power Exchange (IEX, HPX and PXIL) and through day ahead exchange linked bilateral contracts. Purchase is done at an average rate of Rs. 7.50/kWh
5	Power Exchange (Sale)	5.13	3.20	<ul style="list-style-type: none"> Market discovered rate. Sale of excess power in Power Exchange (IEX, HPX and PXIL), through power exchange based real time / day ahead markets at lower rates.
	Total	4.29	4.82	Variation due to above reasons



5.78.19 Considering the above, the Commission allows the actual average power purchase cost of Rs. 4.82/kWh for the month of June 2023 as shown in Table 15 above as compared to approved average power purchase cost of Rs. 4.29/kWh.

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

6.1 The Commission has worked out the average power purchase costs for the month of June 2023 as shown in Table 15 above. The same has been compared with the average power purchase cost approved by the Commission in MTR Order dated 31 May, 2023 to arrive at the differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

6.2 It is noted that AEML-D has incurred the per unit Power Purchase Cost higher than the approved per unit Power Purchase Cost hence the Z_{FAC} worked out by the Commission on account of difference in power purchase cost for the month of June 2023 is positive as shown in the Table 16 below.

Table 16: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	June 2023
1	Average power purchase cost approved by the Commission	Rs./ kWh	4.29
2	Actual average power purchase cost	Rs. /kWh	4.82
3	Change in average power purchase cost (= 2-1)	Rs./ kWh	0.53
4	Net Power Purchase	MU	987.11
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	52.01

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.

7.2 As stated in the approval of FAC for April 2023, any under-recovery/over-recovery at the end of March 2023 would be adjusted during final truing up of FY 2022-23. Further, the Commission has not allowed recovery of FAC for April 2023. Hence, the deferred over-recovery/under-recovery at the end of May 2023 to be adjusted in June 2023 is considered to be nil.

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

8.1 As there is no adjustment for over recovery/under recovery as mentioned in para 7.2 above, there is no carrying cost on account of such adjustment.

8.2 The carrying/holding cost is computed considering the MCLR + 150 basis points. However, as discussed earlier, in para 7.2 above, the deferred over-recovery/under-recovery at the end of May 2023 to be adjusted in June 2023 is considered to be nil. Hence there is no carrying cost worked out for over-recovery/under-recovery for June 2023.

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.

“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 17 provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss, if any:

Table 17: Disallowance of FAC due to excess Distribution Loss

Sr. No.	Particulars	Units	Approved in Tariff Order	Actual for June 2023	Cumulative up to June 2023	Annual Sliding Distribution Loss up to June 2023
1	Net Energy input at Distribution Voltages	MU	848.41	973.59	2927.39	9,803.65
2	Energy sales at Distribution voltages	MU	790.72	962.51	2715.36	9,206.77
3	Distribution Loss (1 - 2)	MU	57.70	11.08	212.03	596.88
4	Distribution Loss as % (3/1)	%	6.80%	1.14%	7.24%	6.09%
5	Excess Distribution Loss = [Annual Sliding Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-		-	-
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	-	-	-

- 9.3 As seen from the above Table 17, distribution loss for the month of June 2023 is 1.14% which is lower than the MTR Order dated 31 March, 2023 approved distribution loss of 6.80%. Further, the annual cumulative sliding distribution loss up-to June 2023 is 6.09% which is also lower than the distribution losses approved in the MTR Order dated 31 March, 2023. AEML-D submitted that the distribution losses are being reported considering the difference between the input and sales attributable to AEML-D's own consumers. Further, the sales being reported for LT cycle billing is as per bill posting date, whereas the input will be



pertaining to the concerned month itself and thus there will be variation in losses on account of the differing period of purchase and sales.

- 9.4 As part of the analysis, monthly as well as cumulative distribution losses trend is also examined with reference to approved by the Commission and similar period of last financial year as shown in Table 18 below:

Table 18: Monthly and Cumulative Distribution Loss trend of AEML-D

Year	FY 2023-24	FY 2022-23
Approved	6.80%	7.05%
Actual – April	9.72%	12.47%
Actual – May	10.80%	11.48%
Actual – June	1.14%	-4.83%
Actual – Cumulative till June	7.24%	6.72%

- 9.5 As seen from above Table 18, disallowance of FAC due to excess distribution loss for the month of June 2023 is nil. Though the standalone FAC for the month of June 2023 is positive, the annual sliding distribution loss is lower than approved distribution loss by the Commission.

10. Summary of Allowable Z_{FAC}

- 10.1 The summary of the FAC amount as approved by the Commission for the month of June 2023 as shown in the Table 19 below.

Table 19: Summary of Allowable Z_{FAC} for June 2023

Sr. No.	Particulars	Units	As Claimed June 2023	As Approved June 2023
1	Calculation of Z_{FAC}			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	48.65	52.01
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-
1.4	Z_{FAC} = F+C+B	Rs. Crore	48.65	52.01
2	Calculation of FAC Charge			
2.1	Energy Sales within the License Area	MU	1,017.17	962.51
2.2	Excess Distribution Loss	MU	-	-
2.3	Z _{FAC} per kWh	Rs./kWh	0.51	0.54
3	Recovery of FAC			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	-	-
3.2	Allowable FAC	Rs. Crore	48.65	52.01
4	Utilization of FAC Fund			



Sr. No.	Particulars	Units	As Claimed June 2023	As Approved June 2023
4.1	Opening Balance of FAC Fund	Rs. Crore	101.77	103.41
4.2	Carrying Cost on FAC	Rs. Crore	-	0.86
4.3	Z _{FAC} for the month (Sr. No. 3.2)	Rs. Crore	48.65	52.01
4.6	Closing Balance of FAC Fund	Rs. Crore	150.42	156.28
4.7	Z _{FAC} leviable/refundable to consumer	Rs. Crore	-	156.28
5	Total FAC based on category wise and slab wise allowed to be recovered in future billing months	Rs. Crore	-	156.28 [#]
6	Carried forward FAC for recovery during future period (4.7-5)	Rs. Crore	-	-

This excludes the carrying cost for the period March 2024 to May 2024 which is allowed for recovery over and above the base FAC recovery upto June 2023.

10.2 It can be seen from the above Table 19 that opening FAC fund for month of June 2023 is Rs. 103.41 Crores and standalone FAC for the month of June 2023 approved by the Commission is Rs. 52.01 Crore. Accordingly, the FAC amount leviable on the consumer including the carrying cost for the month of June 2023 is Rs. 156.28 Crore.

10.3 Further, considering the carrying cost attributable to the period March 2024 to May 2024 i.e. the period of recovery, the total FAC recoverable is Rs. 157.58 Crores.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MERC 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 Z_{FAC} per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

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

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 standalone FAC amount of Rs. 52.01 Crore for the month of June 2023.
- 11.3 The Commission in its approval for the months of May 2023 had allowed accumulation and carry forward of approved FAC amount of Rs. 102.91 Crore along with applicable carrying cost of Rs. 0.50 Crore. Hence the opening balance of FAC fund is Rs. 103.41 Crore.
- 11.4 Accordingly, considering the approved FAC amount of Rs. 52.01 Crore for the month of June 2023 and the same being added to the FAC fund of Rs. 103.41 Crore along with the applicable carrying cost of Rs. 0.86 Crore, the total amount to be recovered is Rs. 156.28 Crore. After including the carrying cost for the period March 2024 to May 2024, the amount recoverable will be Rs. 157.58 Crore over the three-month period. Further, the Commission has not allowed carrying cost on this amount (Rs. 156.28 Crore) for the period of August 2023 to February 2024, due to delayed FAC submission and further delayed response to datagaps.
- 11.5 In view of the above, per unit Z_{FAC} for the month of June 2023 to be levied on the consumers of AEML-D in the billing months of March 2024, April 2024 and May 2024 is given below:

Table 20: Per unit Z_{FAC} for the month of June 2023 to be levied on the consumers of AEML-D in the billing months of March 2024, April 2024, and May 2024

Consumer Categories	Per unit Z_{FAC} for the month of June 2023 to be levied on consumers of AEML-D in the billing months of March 2024, April 2024, and May 2024 Rs./kWh
LT Category	
LT I - Below Poverty Line	0.40
LT I - Residential (Single Phase)	
0-100	0.40
101-300	0.55
301-500	0.70
500 and above	0.75
LT I - Residential (Three Phase)	
0-100	0.40
101-300	0.50
301-500	0.65
500 and above	0.70



Consumer Categories	Per unit Z _{FAC} for the month of June 2023 to be levied on consumers of AEML-D in the billing months of March 2024, April 2024, and May 2024	
	Rs./kWh	
LT II: LT - Non - Residential or Commercial		
LT II (a) - 0-20 kW	0.60	
LT II (a) TOD Option	0.60	
LT II (b) - 20-50 kW	0.65	
LT II (c) - above 50 kW	0.65	
LT III – Industrial		
LT III (A) - LT Industrial upto 20 kW	0.55	
LT III (B) - LT Industrial above 20 kW	0.60	
LT IV – Public Services		
LT IV (A) : LT -PS - Government Hospitals & Educational Institutions	0.55	
LT IV (B) : LT -PS - Others	0.55	
LT V - Agriculture		
LT V (A) : LT - Agriculture Pumpsets	0.45	
LT V (B) : LT - Agriculture Others	0.55	
LT VI : LT - EVCS	0.50	
HT Category	Rs./kWh	Rs/kVAh [#]
HT I: HT-Industry	0.55	0.55
HT II: HT- Commercial	0.60	0.60
HT III: HT-Group Housing Society	0.60	0.60
EHT I: Industry	0.45	0.45
EHT IV: Railways, Metro & Monorail	0.45	0.40
HT V (a) - Public Services - Govt. EI and Hospitals	0.55	0.50
HT V (b) - Public Services - Others	0.60	0.60
HT VI – HT EVCS	0.55	0.50

- The conversion from Rs./kWh to Rs./kVAh has been done using the PF considered by the Commission in its MTR Order in Case No. 231 of 2022.



