



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2024-25/ 0662

Date: 30 October, 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, 2024.

Reference: 1. AEML-D FAC submission for the month of June 2024 vide email dated 26th August 2024
2. The data gaps were communicated vide email dated 5th September 2024
3. AEML-D replied vide email dated 10th September 2024

Sir,

Upon vetting the FAC calculations for the month of June 2024 as mentioned in the above reference, the Commission has accorded approval for charging FAC amount of **Rs. 47.57 Crore**. The FAC fund available at the beginning of June 2024 is **NIL** and hence the closing balance of the FAC recoverable at the end of 2024 is **Rs. 47.57 Crore**.

AEML-D has submitted the FAC proposal for June 2024 on 26th August 2024 instead of filing it in the month of July 2024 as per the prescribed regulatory timelines. This delay in FAC submission has led to a delay in allowing the FAC recovery on a regular basis.

In its FAC submission for July 2024, AEML-D has requested the Commission to allow cumulative recovery of FAC for the period June 2024 to July 2024 in November 2024 and December 2024 at FAC ceiling rate (20% of category energy charge) to ensure that accumulated revenue gap can be mopped up to the maximum possible and avoiding the impact of carrying cost on the accumulated amount. In this regard, AEML-D has also submitted that the Commission vide letter dated 30th August 2024, has approved the FAC for the period up to May 2024 and also has approved the category wise FAC for recovery for the billing months from September 2024 to October 2024 at the ceiling rate (20% of category energy charges) and considered the balance FAC amount of **Rs. 47.96 crore** to be recovered in the month of November 2024. AEML-D has suggested that the amount allowed to be recovered in November 2024 (**Rs. 47.96 Crore**) should be clubbed with the FAC accumulated for the period June 2024 to July 2024 and allowed for recovery in the months of November 2024 and December 2024 at the ceiling rate (20% of category energy charges). Accordingly, as the billing for the month of November 2024 has not commenced, AEML-D has requested the Commission to revise the FAC allowed for recovery in November 2024 to 20% of category energy charge

Approval of FAC Charges for the month of June 2024

and allow recovery of the total accumulated FAC for the period June 2024 to July 2024 including the recovery allowed earlier in November 2024 (Rs. 47.96 Crore) over the billing period of November 2024 and December 2024. The portion of the accumulated FAC not recovered over the period November 2024 and December 2024 is proposed to be carried forward for recovery in future period.

Similar situation was prevailing earlier as well, and this situation could have been envisaged well in advance by AEML-D and they could have ensured time submission of FAC proposals and response to data gaps raised by the Commission presently and in the past as well.

As highlighted by the Commission in the past FAC approval reports, variation in FAC amounts over different months lead to variation in Tariff for end consumers on a monthly basis thereby defeating the objective of creating FAC stabilization fund. In similar situations in the past, the Commission has taken an approach to accumulate the FAC leviable and allowing the recovery of such accumulated amounts in ensuing billing months. Similar approach was also adopted by the Commission for the period January 2024 to May 2024 wherein the recovery was allowed over the period September 2024 to November 2024 at the ceiling rate (20% of category energy charge). Accordingly, considering the accumulated FAC over the period June 2024 and July 2024, the Commission deems it appropriate to adopt a similar approach of accumulating the FAC for June 2024 to July 2024 and allowing recovery at the ceiling limit of the FAC charge (20% of category energy charge) which would ensure that the accumulated FAC gets passed through via the FAC mechanism to the maximum extent possible in the remaining period and thus avoiding the impact of carrying cost on the accumulated FAC and the revenue gap to be carried forward to the new Multi Year Tariff control period will be minimal, thus minimising the carrying cost impact on the consumers to that extent. Accordingly, the Commission considers it appropriate to accumulate the FAC for the period of June 2024 and July 2024 and allow its recovery in the ensuing billing months at ceiling tariff. The recovery will start from November 2024 and the overall period of recovery will be decided in the Commission's approval on the FAC submission for July 2024. Accordingly, the total FAC amount chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
June 2024	0

Accordingly, the Commission allows AEML-D to carry forward the FAC amount of Rs. 47.57 Crore for recovery in the future period along with the applicable carrying cost (excluding the period of delay). The issue related to disallowance of carrying cost for the period of delay in FAC submissions by AEML-D has been discussed in detail by the Commission in its approval on FAC for the month of April 2023. Same reasons are also valid in the present situation as well.

In view of the above, the Commission deems it appropriate to not allow AEML-D to recover the carrying cost on the FAC over the period of delay. Considering the accumulation of the FAC over a period of 2 months, under normal circumstances, the accumulated FAC for the period June 2023 to July 2024 would have been recoverable from September 2024 onwards.



Accordingly, considering that the delay is attributable to AEML-D, the Commission deems it appropriate to disallow the carrying cost for the period of delay from September 2024 to October 2024.

AEML-D is also directed to streamline the process of timely submission of the FAC filings for the period beyond July 2024 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,



Prafulla
(Dr. Prafulla Varhade)
Director (Technical), MERC

Annexure A: Detailed Vetting Report for the month of June 2024.

ANNEXURE
Detailed Vetting Report
Date: __ October, 2024

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF JUNE 2024

Subject: Prior approval of Fuel Adjustment Charges (FAC) submissions of AEML-D for the month June 2024.

Reference:

1. AEML-D FAC submission for the month of June 2024 vide email dated 26th August 2024
2. The data gaps were communicated vide email dated 5th September 2024
3. AEML-D replied vide email dated 10th September 2024

1. FAC submission by AEML-D:

- 1.1 AEML-D has made FAC submissions for the month of June 2024 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. 47.57 Crores**
- 1.2 The opening FAC at the beginning of June 2024 is **NIL** and considering the FAC for the month of June 2024 of **Rs. 47.57 Crores**, the total FAC recoverable at the end of June 2024 is **Rs. . 47.57 Crores**
- 1.3 With the objective of reducing the Tariff variations and also considering the delayed FAC submissions on part of AEML-D for the period of June 2024 to July 2024, the Commission, in line with the approach adopted in the past, is allowing accumulation of the FAC amount for the period of June 2024 to July 2024 and such accumulated FAC is being allowed to be recovered in the future billing months starting November 2024.
- 1.4 Further, considering delay in submission of FAC by AEML-D, the Commission has disallowed the carrying cost for the period of delay. The positive FAC for June 2024 to July 2024 was expected to be levied from September 2024 onwards. On account of delay on part of AEML-D, the recovery is possible only from November 2024 onwards. Hence, the carrying cost for delayed period (September 2024 to October 2024) is disallowed and shall not be allowed to be passed through to AEML-D consumers.
- 1.5 Further, as discussed in para 11.2 to 11.5 of this report, the recovery of FAC for the period June 2024 to July 2024 will start from November 2024 and the overall period for recovery will be discussed in the Commission's approval on the FAC submission for July 2024.



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 26th August 2024, AEML-D has filed FAC submissions for the month of June 2024 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 Table 1 below.

Table 1: Energy Sales – Approved and Actual

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (June 2024) (MU)
	(I)	(II=I/12)	(III)
LT Category			
BPL	0.01	0.00	0.00
LT-I: Residential	4,993.84	416.15	559.26
LT-II: Commercial	3,603.86	300.32	264.72
LT-III(A): LT Industrial up to 20 kW TOD Option	462.41	38.53	28.28
LT-III(B): LT Industrial above 20 kW	503.82	41.99	26.54
LT-IV: LT -Public Service (A)	50.23	4.19	2.83
LT-IV: LT -Public Service (B)	242.48	20.21	17.93
LT-V (A): LT - Agriculture Pump sets	0.05	0.00	0.01
LT-V (B): LT - Agriculture Others	0.39	0.03	0.02
LT-VI: LT - EVCS	10.63	0.89	1.10
HT & EHT Category			



Approval of FAC Charges for the month of June 2024

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (June 2024) (MU)
	(I)	(II=I/12)	(III)
HT I (Industrial)	725.22	60.44	53.60
HT II (Commercial)	448.14	37.35	47.72
HT III (Group Housing Soc.)	10.64	0.89	1.40
HT IV (Railways)	-	-	0.28
HT V - Public Services (A)	17.90	1.49	0.29
HT V - Public Services (B)	379.81	31.65	22.36
HT VI - EV Charging station	70.00	5.83	0.66
EHT I - Industry	180.00	15.00	-
EHT IV - Metro & Monorail	120.00	10.00	6.55
Total	11,819.43	984.95	1033.54

*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 2024 is 1033.54 MU which is 4.9 % higher than approved energy sales of 984.95 MU per month for the FY 2024-25**. 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 2024 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 2024).
- 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 Table 2 below:

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

Year\ Sales (MU)	Residential	Commercial	Industrial	Others	Total (FY 2024-25)	Total (FY 2023-24)
Monthly Approved	417.04	337.67	140.95	89.29	984.95	915.46
Actual - April, 2024	430.58	282.27	96.19	56.08	855.39	842.85
Actual - May, 2024	523.28	316.79	109.14	56.08	1,005.30	910.00
Actual - June, 2024	560.66	312.44	108.42	52.02	1,033.54	962.51



Year\ Sales (MU)	Residential	Commercial	Industrial	Others	Total (FY 2024-25)	Total (FY 2023-24)
Approved - Cumulative till June 2024	1,251.12	1,013.00	422.86	267.87	2,954.86	2,746.38
Actual - Cumulative till June 2024	1,514.52	911.50	313.75	164.19	2,894.23	2,715.36

4. Power Purchase Details

- 4.1 The Commission in its MTR Order dated 31 March, 2023 in Case No. 231 of 2022 had approved the Power Purchase by AEML-D for FY 2023-24 from the following list of sources to meet its demand:
- Purchase from Adani Dahanu Thermal Power Station (ADTPS)
 - Renewable energy procurement (RPS) including Solar and Non-solar
 - Bilateral Contracts, Banking of power, 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 Summary of power purchase of AEML-D is as shown in Table 3 below:

Table 3: Summary of Power Purchase for June 2024

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 2024, which are approved sources of power purchase.
2	Merit Order Dispatch	Yes. AEML-D had scheduled power as per MoD. With regards to the interstate contracts, as mentioned in the preceding month's FAC approvals, all Interstate contracts viz. RE Hybrid (700 MW), DSPPL (40 MW), AEL-MTPP (500 MW) and other short-term transactions are being scheduled under GNA/ T-GNA, from October 2023.
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 drawn 9.54 MU from the DSM pool as per DSM mechanism.
5	Sale of Surplus Power	AEML has made sale of 69.14 MUs of surplus power during the month of June 2024 to avoid underdrawal beyond deviation limit due to surplus power or as demand had dropped substantially.
6	Power Purchase	Actual Power Purchase is 1013.00 MUs as against approved 1,124.64 MUs.
7	Source wise	



Approval of FAC Charges for the month of June 2024

Sr. No.	Particular	Compliance			
		Source Name	Approved * (MU)	Actual (MU)	Proportion of each Source in Actual Purchase
	Power Purchase	ADTPS	306.57	227.57	22.47%
		RE Sources	419.15	391.49	38.65%
		AEL-MTPP	197.00	329.81	32.56%
		Bilateral and Banking	304.46	142.60	14.08%
		Bilateral Sale	(102.54)	(69.14)	-6.83%
		Imbalance Pool & Other		(9.33)	-0.92%
		Total	1,124.64	1,013.00	100.00%
		<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> <p><i>@ Includes power banked under the banking arrangement with MPL-RUNVL, and MPL (source- BYPL). Accordingly, net banking quantum of 53.79 MU has been considered by AEML-D in June 2024.</i></p>			
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-D MTR Order in Case No. 231 of 2022. As part of verification of energy charges claimed by AEML-D, operational parameters, fuel cost, GCV, etc is verified from the AEML-G MTR Order Case No. 229 of 2022.</p>			
9	RE Purchase	<p>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 power sourced from exchange, monthly power purchase quantum and rate are verified from the invoices, and it is ensured that same has been considered in the FAC calculation.</p>			
10	Short Term Power Purchase	<p>Short-term power purchase invoices (from exchange and other sources) of June 2024 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.</p>			

4.3 **AEML-D has purchased 1013.00 MUs of power as against approved 1,124.64 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 2024, 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), 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 2024 is Rs. 488.55 Crore** which is lower than the **approved average Power Purchase cost of Rs. 489.58 Crore** by the Commission for the month of June 2024. This is primarily on account of the banking transactions undertaken in June 2024 wherein while the energy was received by AEML-D, there was no cost associated with it presently. 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 2024 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	306.57	31.36	1.02	120.05	3.92	151.41	4.94
	Actual	227.57	31.36	1.38	87.23	3.83	118.59	5.21
Solar and Non-Solar Purchase (Includes RE component of RE + Thermal RTC source)	Approved	419.15	-	-	160.89	3.84	160.89	3.84
	Actual	391.49	-	-	131.94	3.37	131.94	3.37
AEL MTPP	Approved	197.00	43.87	2.23	59.62	3.03	103.49	5.25
	Actual	329.81	81.00	2.46	106.42	3.23	187.42	5.68
Banking cost / Banking Return #	Approved	110.55	-	-	-29.61	-2.68	-29.61	-2.68
	Actual	53.79	-	-	-	-	-	-
Bilateral Purchase	Approved	76.32	-	-	39.15	5.13	39.15	5.13
	Actual	88.81	-	-	69.88	7.87	69.88	7.87
RE + Thermal RTC (Conventional component)	Approved	117.60	-	-	57.62	4.90	57.62	4.90
	Actual	-	-	-	-	-	-	-
Banking OA charges + Trading Margin	Approved	-	-	-	-	-	-	-
	Actual	-	-	-	0.40	-	0.40	-
Pool/ DSM	Approved	-	-	-	-	-	-	-
	Actual	(9.54)	-	-	1.66	(1.74)	1.66	(1.74)
OA/RTS/Banking OA and Trading margin	Approved	-	-	-	-	-	-	-
	Actual	0.21	-	-	0.09	4.11	0.09	4.11
Sale of Power	Approved	(102.54)	-	-	(52.60)	5.13	(52.60)	5.13
	Actual	(69.14)	-	-	(26.01)	3.76	(26.01)	3.76
Other Charges / Rebate / Addl InSTS charges	Approved	-	-	-	-	-	-	-
	Actual	-	-	-	4.57	-	4.57	-
Total	Approved	1,124.64	75.23	0.67	414.34	3.68	489.58	4.35
	Actual	1,013.00	112.36	1.11	376.19	3.71	488.55	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.

Includes power banked under the banking arrangement with MPL-RUNVL, and MPL (source- BYPL). Accordingly, net banking quantum of 53.79 MU has been considered by AEML-D in June 2024. The cost pertaining to the quantum of energy received during the month (78.83 MU) is not considered presently

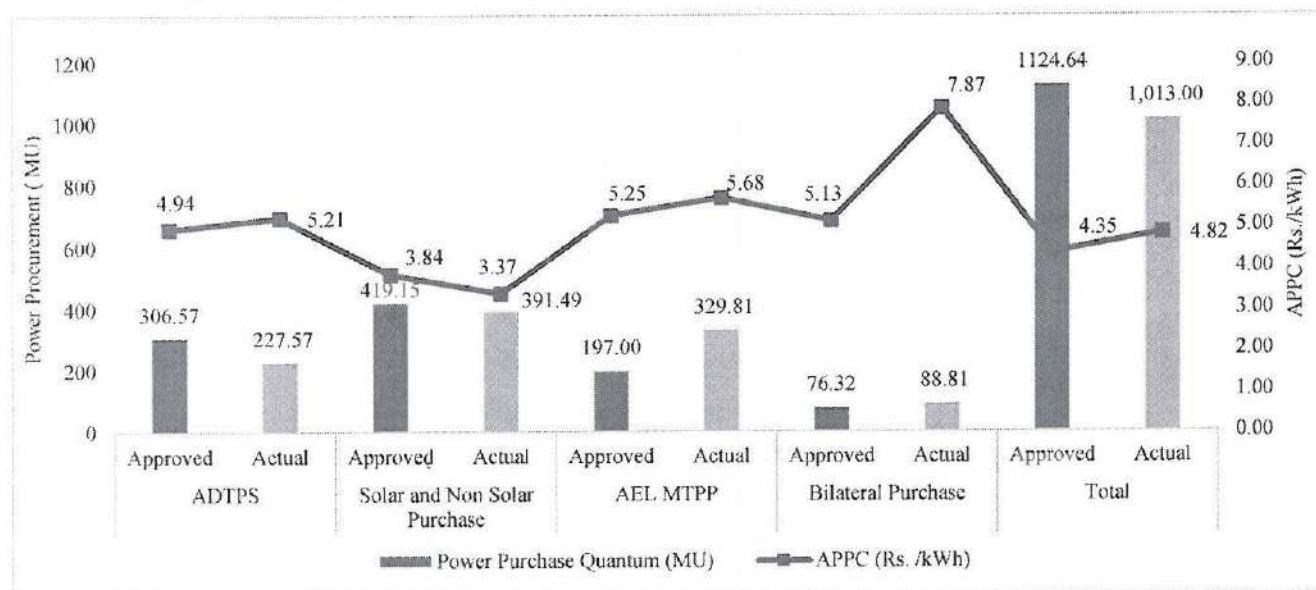


Approval of FAC Charges for the month of June 2024

and will be considered in the month in which the energy is returned to the banking partner. Further, the cost related to the Banking quantum returned to the banking partner during the month (25.04 MU) has not been considered separately, since the banking quantum is supplied from the power available from the existing portfolio of AEML and its cost is therefore already included in the power purchase cost for the month of June 2024.

- 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 2024



- 5.4 AEML-D has submitted that Merit Order Despatch has been followed. As discussed in the FAC approval for previous months, all Interstate contracts viz. RE Hybrid (700 MW), DSPPL (40 MW), AEL-MTPP (500 MW) and other short-term transactions are being scheduled under GNA/ T-GNA, from October 2023. The Commission has noted the submission.

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 306.56 MUs from ADTPS at the rate of Rs. 4.94/kWh. AEML-D has purchased 227.57 MU for the month of June 2024 at an average rate of Rs. 5.21/kWh.**

- 5.6 **Fixed Cost:** The Fixed cost approved for FY 2024-25 in Case No. 229 of 2022 (AEML-G) is Rs. 376.33 Crore. The same has also been considered in the AEML-D Order in Case No. 231 of 2022.

- 5.7 **The actual PLF of ADTPS in June 2024 was 70.01% as compared to approved PLF of 93.01%.** ADTPS was available for generation during the month, the average Plant Availability Factor for the month (PAFM) for both Units of AEML-G in June



2024 was 88.05%. The actual Plant Availability Factor for the month (PAFM) for both units of AEML-G in June 2024 was 88.83 % during peak hours and 87.90% during off peak hours. The actual PLF for both units of AEML-G in June 2024 were 71.47% during peak hours and 69.72% during off peak hours. AEML-G has calculated the capacity charges for peak hours of the month and for off peak hours of the month payable for June 2024 as per Regulation 50.2 of the MYT Regulations, 2019. The capacity charges for peak hours works out to Rs. 6.27 Crore and the capacity charges for off-peak hours works out to Rs. 25.09 Crore, totalling Rs. 31.36 Crore.

- 5.8 **Due to lower generation as compared to approved generation, there is an increase of Rs. 0.36/kWh in the Fixed cost and accordingly the actual Fixed Cost per unit is Rs. 1.38/kWh as compared to the approved Fixed Cost of Rs. 1.02/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 2024.
- 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 2024.
- 5.11 **Washed Coal:** AEML-D has submitted that AEML-G has procured nil amount of washed coal in the month of June 2024. However, AEML-D has consumed 7,591.38 MT of washed coal in June 2024 at a rate of Rs. 5,934.83 per MT.
- 5.12 "Other Charges" from the closing stock of the last month i.e., May 2024 amounting to Rs. 0.60 Crores have also been considered in the opening stock of the month of June 2024.
- 5.13 In the month of June 2024, Rs. 1,09,608/-, Rs. 72,971/- and Rs. 30,217/- have been included 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 2024. Further, Rs. (16,354)/- have been included as a refund received against washed coal railway charges for the month of December 2023.
- 5.14 The input tax credit (ITC) due to sale of coal rejects works out to Rs. (35,040)/- which has been considered as an adjustment under SECL coal purchase cost.
- 5.15 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 2024 is as shown in the Table 5 below:



Table 5: Working of Washed Coal Rate for June 2024

Particular	Quantity (MT)	Cost (Rs. Crore)	Price (Rs. /MT)
Inventory			
Opening (as on 1 st June 2024)	8,537.01	5.19	6,075.06
Addition during month	-	0.02	-
Other Charges			
Total	8,537.01	5.20	6,093.97
Consumption			
Actual	7,591.38	4.10	5,395.69
Other Charges		0.41	
Total	7,591.38	4.51	5,934.83

- 5.16 The overall cost approved towards consumption of washed coal is **Rs. 4.51 Crore** for the month of June 2024.
- 5.17 **With regards to the washed coal, the weighted average landed cost for consumption in the month of June 2024 is Rs. 5,934.83/MT as compared to MTR approved Rs. 5,860.45/MT.** AEML-D has consumed 7,591.38 MT of washed coal during the month of June 2024.
- 5.18 In MYT Order in Case No. 298 of 2019, the Commission has directed AEML-G to consider the GCV 'As Received' or 'As Billed', whichever is higher.
- 5.19 Further, AEML-D has been considering the 'As Received' GCV of the opening stock of the washed for the month. The same was used to work out the stacking loss during the month. The Commission has also been approving the computation of GCV based on the same methodology. However, the Commission has adopted a different approach in the MTR Order for AEML-G in Case No. 229 of 2022.
- 5.20 The Commission in MTR Order in Case no. 229 of 2022 for AEML-G, has stated the following:

"4.10.17 Accordingly, the Commission has recalculated GCV (As Received Basis) on the coal procured during the month / year and the weighted average GCV so computed is considered for computation of stacking loss against the GCV (As Fired). The impact of opening / closing stock has not been considered while computing GCV (As Received Basis), the cyclical usage of the coal will nullify the impact in the going concern in future month / year."

- 5.21 Accordingly, in line with the FAC approval for August 2022 onwards, for the month of June 2024 the Commission has considered 'As Received' GCV of the coal received during the month of May 2024 and has not considered the impact of Opening stock for computing the weighted average 'As Received' GCV for a particular type of coal. Also, if a particular type of coal is not purchased in the month of reference (June 2024 in the present situation) but is consumed in that month from an older stock, then in such case 'As Received' GCV of that coal purchased in the most recent month (May 2024 or



earlier, as applicable, in the present case) would be considered. In the present submission, AEML-G has not procured any washed coal during the month and hence it has considered 0 kCal/kg as the GCV (both billed and as received) for the computation of stacking loss and energy charges. However, in line with the approach discussed earlier, as the washed coal was not purchased in June 2024, hence the GCV of coal received in the month of May 2024 has been considered. The Commission had considered the GCV of 3,633 kCal/kg (max of "As Billed" or "As Received") for computing the weighted average GCV, stacking loss and further calculating the energy charges for May 2024. Accordingly, for the purpose of the present approval, the Commission has considered the GCV of 3,633 kCal/kg i.e. the GCV for washed coal approved by the Commission during the approval of the FAC for May 2024. 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.

- 5.22 In the submission done for the month of June 2024, AEML-D has considered the same approach for determining stacking loss as approved by the Commission. Accordingly, AEML-D has undertaken the Energy charge calculation for ADTPS for June 2024 in line with the above approach and submitted the same for approval of the Commission.
- 5.23 The transit loss claimed by AEML-D for the month of June 2024 is NIL as no washed coal was purchased during the month.
- 5.24 The 'As fired' GCV of washed coal considered by AEML-D is 3,711 kCal/kg. Considering the difference between the 'As Received' GCV (3,633 kCal/kg) and the 'As Fired' GCV, the stacking loss for washed coal works out to (78) kCal/kg which is within the limit of 120 kCal/kg.
- 5.25 **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 1,71,046.43 MT Raw Coal (at plant boundary) from SECL and has consumed 1,82,417.22 MT of raw coal in June 2024. As per weighment of coal at ADTPS, the raw coal received is 1,71,046.43 MT and the weighment of coal dispatched by SECL was 1,72,219.73 MT. The difference is reported as the transit loss which is 1,173.30 MT which is 0.681% of the total coal dispatched during the month of June 2024.
- 5.26 In the month of June 2024, Rs. (210)/- have been included as an adjustment under IGI due short quantity analysis of raw coal in May 2024. Further, the ITC on GST paid through various invoices for the month of May 2024 amounting to Rs. (184307)/- has been considered under respective heads in June 2024.



- 5.27 AEML-G has paid railway demurrage charges of Rs. 4,59,224/- for the month of June 2024. These charges are on account of detention of Railway's rolling stock after the expiry of free time for 13 no. of rakes containing raw coal and the same has been considered in the month of June 2024. However, an amount of Rs. 49,550 has been recovered from the contract and hence a net amount of Rs. 4,13,234 has been claimed in June 2024. Also, AEML-G has received a refund of railway charges of Rs (55,727)/- for Raw coal against railway charges paid for November 2023 and December 2023. The details related to railway charges (invoice and summary of charges) along with the justification of incurrance of these charges are provided by AEML-D in its submission.
- 5.28 In the month of June 2024, AEML-G received Debit and Credit Note from SECL amounting to Rs. (5,35,150)/- (i.e. Debit Note of Rs. 15,18,602/- & Credit Note of Rs. (20,53,752)/-. The same has been included as an adjustment under SECL coal purchases in June 2024.
- 5.29 Further, as submitted in earlier FAC submissions, sometimes, during transit of coal from railway siding in Chhattisgarh to ADTPS, few wagons get detached from rakes due to various reasons and does not reach ADTPS. Later, the missing wagons reach ADTPS and the coal quantity in the missing wagons is then accounted. For raw coal, AEML-G has considered additional coal received of 139.55 MT coal in received quantity. This pertains to extra one wagon of raw coal (Wagon No. WR 63950) received against RR No. 162000586 dated 26.04.2024. One wagon (Wagon No. SE 51424) of raw coal rake (RR No. 162000571 dated 08.04.2024) was missing when the rake arrived at ADTPS. Coal in that wagon was transhipped with another wagon (Wagon No. ECO 48918) and the same arrived at ADTPS in June 2024 with quantity 68.5 MT.
- 5.30 The working of the raw coal fuel cost considered for June 2024 is as shown in the Table 6 below:

Table 6: Working of Raw Coal Rate for June 2024

Particular	Quantity (MT)	Cost (Rs. Crore)	Price (Rs./MT)
Inventory			
Opening (as on 1 st June 2024)	1,19,794.85	57.72	4,818.48
Addition during month	1,71,046.43	82.11	4,800.46
Total	2,90,841.28	139.83	4,807.88
Consumption			
Actual	1,82,417.22	87.70	4,807.88
Other Charges	-	0.01	-
Total	1,82,417.22	87.72	4,808.50

- 5.31 The overall cost approved towards consumption of raw coal is **Rs. 87.72 Crore** for the month of June 2024.
- 5.32 **With regards to the raw coal, the weighted average landed cost for consumption in the month of June 2024 is Rs. 4,808.50/MT as compared to MTR approved Rs**



4,875/MT. AEML-D has consumed 1,82,417.22 MT of raw coal during the month of June 2024.

- 5.33 It has been observed that in June 2024, AEML-G has purchased raw coal from SECL only. AEML-D has considered the 'As billed' GCV of raw coal as 3,860 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 3,196 kCal/kg for June 2024. 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 is 664 kCal/kg.
- 5.34 Hence, as mentioned above, the GCV loss (664 kCal/kg) for raw coal for the month of June 2024 is more than 300 kCal/kg and accordingly the 'As Received' GCV of 3,560 kCal/kg has been considered for calculation (i.e., maximum of the 'As Received' GCV or 'As Billed' GCV minus 300 kCal/kg).
- 5.35 In accordance with the methodology mentioned in para 5.18 to para 5.21, the Commission has approved 'As Received' GCV as 3,560 kCal/kg for raw coal. The 'As Fired' GCV of raw coal is 3,154 kCal/kg. The same has been used to work out the stacking loss of 406 kCal/kg for raw coal.
- 5.36 **Imported Coal:** AEML-G has neither purchased nor consumed any imported coal in June 2024.
- 5.37 **LDO:** AEML-G has procured 150 KL of LDO and consumed 65.32 KL of LDO in June 2024. The details of LDO procured and consumed during the month are given below:

Table 7: Working of LDO Rate for June 2024

Particular	Quantity (KL)	Cost (Rs. Crore)	Price (Rs./KL)
Inventory			
Opening (as on 1 st June 24)	368.53	2.72	73,919.01
Addition during month	150.00	1.12	74,678.69
Total	518.53	3.84	74,138.77
Consumption			
Actual	65.32	0.48	74,138.77
Other Charges	-	-	-
Total	65.32	0.48	74,138.77

- 5.38 AEML-D has submitted that the amount of purchase for LDO as per purchase orders was Rs. 1,12,01,803/- while the amount of purchase as per invoices was Rs. 1,04,99,063/-. In June 2024, the amount booked was Rs. 1,12,01,803/-, hence the same was claimed in June 2024 FAC. The difference of Rs. (7,02,741)/- will be booked in



July 2024 and will be passed on in July 2024 FAC. The Commission has noted the submission.

- 5.39 The overall cost approved towards LDO expense for the month of June 2024 is **Rs. 0.48 Crore.**
- 5.40 **With regards to the LDO, the weighted average cost for the month of June 2024 is Rs. 74,138.77 /KL.**
- 5.41 The 'As received' GCV of LDO procured in the month of June 2024 is 10,687 kCal/kg and the 'As fired' GCV of LDO considered by AEML-D is also 10,687 kCal/kg. Considering the difference between the weighted average GCV of received LDO and fired LDO, the stacking loss for LDO works out to nil.
- 5.42 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.”

- 5.43 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 (387) kCal/kg or 120 kCal/kg as per Regulation] for calculation of energy charge rate.
- 5.44 Considering the approved rates for washed coal, raw coal, imported coal and LDO, the fuel cost, GCV and normative operational parameters, the **energy charges** work out to **3.833/kWh** which is lower than the approved variable cost of Rs. **3.916/kWh** as per the MTR Order for AEML-G (Case No. 229 of 2022). Further, the energy charges approved by the Commission presently is lower than the energy charges submitted by AEML-D (Rs. 4.00/kWh) on account of the variation in the approach adopted by the Commission for considering the GCV for washed coal vis-à-vis the approach adopted by AEML-D.
- 5.45 **Incentive:** As per Regulation 46.3 of MYT Regulations, 2019 specifies the target PLF of 85%. Since the PLF for June 2024 was less than 85% (both in peak hours and off-peak hours), AEML-G has not claimed any incentive for June 2024.
- 5.46 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 2024



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	306.57	4.94	227.57	5.21	(39.02)	6.19	(32.82)

- 5.47 Based on the above, **APPC for ADTPS works out to Rs. 5.21/kWh as against approved Rs. 4.94/kWh. There is an increase of Rs. 0.27/kWh in APPC for the month of June 2024. Fixed cost variation is contributing to increase of Rs. 0.36/kWh and variable cost variation is contributing Rs. 0.08/kWh to the decrease.**
- 5.48 **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 the 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 **329.81 MUs** and the associated cost has been considered in the June 2024 month FAC by AEML-D.
- 5.49 **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 5.08 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.
- 5.50 **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 285.19 MU at the rate of Rs. 3.24/kWh from wind solar hybrid for FY 2024-25. The project has fully commissioned with Hybrid capacity of 700 MW. **AEML-D has purchased 294.94 MU in the month of June 2024 from wind solar hybrid source at the same rate of Rs. 3.24/kWh as approved in the MTR Order.**
- 5.51 **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 these non-solar sources in the MTR Order. 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)
Tembhu Power Private Limited	4.26	4.26
Reliance Clean Power Private Limited	5.81	5.81

- 5.52 The Commission has approved power purchase rate for Reliance Clean Power Private Limited in the MTR Order in Case No. 231 of 2022. Accordingly, AEML-D has



procured 6.94 MUs power from Reliance Clean Power Private Limited at the same rate (Rs. 5.81/kWh) during June 2024. Further, 0.16 MU of power has been procured from Tembhu Power Pvt. Ltd. during June 2024 at the rate of Rs. 4.26/kWh.

- 5.53 **RE + Thermal RTC Power:** AEML-D in its MTR Petition in Case No. 231 of 2022 had sought approval for power procurement through RE+Thermal RTC power source. It has stated that that the Commission, vide Order dated 1 November 2022 in Case No. 32 of 2022, has granted approval for procurement of 1,000 MW RE + Thermal (500 MW + additional 500 MW under green shoe option) power on long-term RTC basis. AEML-D has estimated the purchase of power from 15 October 2024 for 1,000 MW (RE + Thermal) on RTC basis. Further it also stated that at least 51% of the power has to be from RE and balance from conventional sources. Therefore, 51% of the projected quantum is considered for meeting the RPO obligation, out of which 50% each is projected towards Solar and Non-Solar obligation. The Commission based on its assessment has considered annual power purchase of 2,879.88 MUs from the proposed RE+Thermal source in FY 2024-25 at the rate of Rs. 4.90/kWh, which is the average GDAM rate of IEX over the 6-month period from July 2022 to Dec 2022. The purchase is expected to being from October 2024 onwards. Accordingly, AEML-D has considered 51% of the approved quantum under RE sources and 49% of the approved quantum under bilateral purchase from conventional sources. **In the month of June 2024, no power has been purchased from this source.**
- 5.54 **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. 2.90/kWh for FY 2023-24 and FY 2024-25. However, while the Commission, in its Order, approved the quantum as estimated by AEML-D for FY 2023-24 at the rate of Rs. 4.90/kWh, considering the average GDAM rate from July 2022 to December 2022, no procurement was approved for FY 2024-25 considering the energy availability considered by the Commission from other sources.
- 5.55 However, considering the power requirement during the month, AEML-D submitted in the FAC application that it had contracted Intrastate Non-Firm Wind capacity up to 517 MW in June 2024 on short term basis. Out of total contracted capacity, part of the power has been contracted through competitive bidding with fixed tariff while the remaining has been contracted through day-ahead exchange linked contract (linked to DAM/GDAM). Through such as exchange linked contract, the trading margin of IEX is also saved. In support of the same, AEML-D has submitted Letters of Intent (LOIs) issued to the generators. Although, the Commission, in its MTR Order has not approved any procurement of short term RE Power for FY 2024-25 considering the energy availability considered by the Commission from other sources, it is matter of fact that RE + Thermal RTC Power was not available in June 2024 and would be available from October 2024 onwards only. Further, the procurement of short term RE Power has been undertaken by AEML-D through competitive bidding process and through exchange



linked contracts. Considering that the rates are discovered through competitive route, the Commission has presently considered the same for approval under this FAC vetting process for June 2024.

- 5.56 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)	751.78	120.99	Prov. Actual REMC as per SLDC DSM bill data
OA (LT+MT+ST)	189.53	30.50	Prov. Actual REMC in proportion of Capacity (B = $189.53/751.78 \times 120.99$)
Contracted (LT + ST)	562.25	90.49	Prov. Actual REMC in proportion of Capacity (C = $562.25/751.78 \times 120.99$)
Contracted RE (LT)	45.00	7.11	Actual RE Energy as per Bills (D)
Contracted RE (ST) by AEML-D	517.25	83.38	Estimated ST RE Energy (C – D)

- 5.57 Further, in line with the approach adopted by the Commission for approval of the FAC for December 2023, AEML-D has estimated the provisional average rate of power purchase for the short term RE power at Rs. 2.97/kWh. Considering the estimated quantum of 83.38 MUs and the provisional average rate of power of Rs. 2.97/kWh, the cost has been estimated to be Rs. 24.77 crore for the month of June 2024. Further, some of the invoices pertaining to the transactions from this source in the earlier months of July 2023 and Dec 2023 to Feb 2024 were paid in the month of June 2024 amounting to Rs. 1.59 Crore. Accordingly, the total cost of Rs. 26.36 Crores is considered as part of power purchase cost of STPP RE in the month of June 2024.
- 5.58 Accordingly, the Commission approves the power purchase of short term RE in the month of June 2024. However, AEML-D needs to track the market movements and ensure that the terms of the contract are beneficial for the consumers.
- 5.59 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.
- 5.60 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 2024

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	4.34	10.30	5.08	10.30	0.77	(0.00)	0.76
Adani Hybrid Energy Jaisalmer Four Limited - Wind Solar Hybrid (AHEJFL)	285.19	3.24	294.94	3.24	3.16	(0.00)	3.16
Non-Solar					-	-	-
Tembhu Power Pvt. Ltd.	0.99	4.26	0.16	4.26	(0.35)	-	(0.35)
Reliance Power Ltd.	6.25	5.81	6.94	5.81	0.40	(0.00)	0.40
RE + Thermal*	122.39	4.90	-	-	(59.97)	-	(59.97)
Short Term RE and Exchange (G-DAM)	-	-	84.37	3.21	-	27.05	27.05
Total RE Sources	419.15	3.84	391.49	3.37	(56.00)	27.05	(28.95)

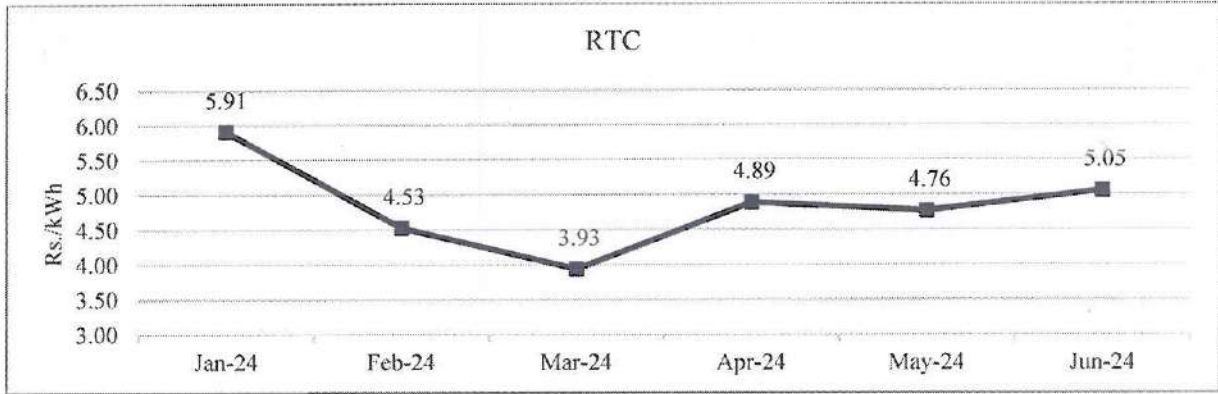
This includes the provisional quantum (83.38 MUs) of power purchased from short term RE (intrastate non-firm) sources for which the invoices are not available. As directed by the Commission, AEML-D has now considered a provisional cost of Rs. 26.36 Crore against this quantum. Further, few bills pertaining to power supply in earlier months (July 2023 and Dec 2023 to Feb 2024) were paid in June 2024 amounting to Rs. 1.59 Crore which were paid in June 2024 have been considered.

* This is only 51% of the total monthly power procurement approved by the Commission from RE-Thermal RTC source.

5.61 **APPC for renewable sources for the month of June 2024 works out to Rs. 3.37/kWh which is lower than MTR approved level of Rs. 3.84/kWh.**

5.62 **Bilateral Purchase:** AEML-D has undertaken bilateral purchase of power from power exchange (IEX, PXIL and HPX), through exchange price linked bilateral contracts and inter-discom trade (BEST and ASL) at the average rate of Rs. 7.87/kWh which is higher than the approved rate of Rs. 5.13/kWh. It is observed that the average power prices in short term market are higher in June 2024 as compared to the prices observed during February 2024, March 2024, April 2024 which is also reflected in the average price of power purchase in February 2024 (6.52/kWh), March (Rs. 5.89/kWh) and April 2024 (Rs. 7.79/kWh). However, it is also observed that the average power prices in short term market are lower in June 2024 as compared to the prices observed during January 2024.





5.63 AEML-D has purchased 88.81 MUs through bilateral purchase (IEX, HPX, exchange linked contracts and Inter Discom Trade) which is 8.77% of its total power purchase for June 2024. The summary of the power procured from the various short-term sources is reproduced in the Table 12 below:

Table 12: 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	60.40	38.04	6.30
2	PXIL	4.16	4.67	11.21
3	HPX	23.91	26.58	11.12
4	STPP ASL	0.27	0.14	5.27
5	STPP BEST	0.07	0.06	8.55
6	Exchange sale cost	-	0.15	-
7	SLDC schedule charges and OA charges for STPP	-	0.24	-
	TOTAL	88.81	69.88	7.87

5.64 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 2024.

5.65 Additionally, AEML-D received a past bill from MSLDC for scheduling and rescheduling charges as per clause no. 6.2.8 of the Commission's Order in Case No. 219 of 2019 dated 30.03.2020 amounting to Rs. 7,75,000/- for May 2024. This is



proposed to be considered as part of Bilateral power purchase cost, in FAC for June 2024. The Commission has noted the submissions.

- 5.66 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. 7.87/kWh.
- 5.67 Variation in power purchase expenses from bilateral sources on account of change in quantum and per unit rate is as shown in Table 13 below:

Table 13: Variation in Power Purchase expenses from bilateral sources for June 2024

Particulars	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	76.32	5.13	88.81	7.87	6.41	24.33	30.73

- 5.68 **Banking Return:** AEML-D has entered into a banking arrangement wherein AEML-D has banked 200 MW power during 06:00 to 18:00 hours with MPL-RUVNL over the period 1st November 2023 to 29th February 2024. Under the arrangement, the return of banked power by MPL-RUVNL shall be from 15th March 2024 to 30th June 2024 with the return percentage at 102% of banked energy at delivery point i.e. Regional Periphery. Under this contract, for the month of June 2024, AEML-D has received 78.83 MU and accordingly the same is considered in energy purchase quantum. The LOI for the same has already been provided in the earlier months FAC submission.
- 5.69 Further, AEML-D has also entered into banking arrangement for up to 200 MW wherein MPL (source- BYPL) will be banking power with AEML-D from October 2023 to December 2023 and 1st March 2024 to 15th April 2024. The return of banked power at 105% by AEML-D will be from 20th June 2024 to 30th September 2024. Under this contract, for the month of June 2024, AEML-D has returned the quantum of 25.04 MU. The cost related to the Banking quantum has not been considered separately, since the banking quantum is supplied from the power available from the existing portfolio of AEML and its cost is therefore already included in the power purchase cost for the month of June 2024. The LOI for the same has been already provided as part of October 2023 month FAC.
- 5.70 Thus, the total net Banking considered is 53.79 MU. The breakup of the banked quantum is shown below in the table below:



Table 14: Break-up of banked energy

Particular	Banking (MU)
Banking return (MPL - BYPL)	(25.04)
Forward Banking (MPL-RUVNL)	78.83
Total	53.79

- 5.71 Further, for the purpose of banking, open access charges (Rs. 0.16 Crore) as well as trading margin (Rs. 0.24 Crore) have been incurred under the banking contract. The same has been included in the cost of power procurement for June 2024.
- 5.72 **DSM Pool:** AEML-D has submitted that for the month of June 2024, it has injected 9.54 MUs into the pool under the DSM mechanism and has incurred cost of Rs. 1.66 Crore.
- 5.73 **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.”

- 5.74 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 Roof-Top Solar and RE Open Access consumers (Firm and Non-firm) purchased by AEML-D as per the aforementioned regulations is 0.21 MU at a cost of Rs. 0.09 Crore and is considered in the FAC for the month of June 2024. 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 Power:** AEML has sold 69.14 MUs under bilateral transaction and received Rs. 26.01 Crore for the month of June 2024 at the average rate of 3.76/kWh which is lower than the approved rate of 5.13/kWh. This is inclusive of the sale made to BEST under



IDT of 0.005 MU at Rs. 0.002 Crore and sale made to ASL under IDT of 5.79 MU at Rs. 2.25 crore.

- 5.77 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. 3.76/kWh) is below actual bilateral purchase rate of Rs. 7.87/kWh for June 2024).
- 5.78 In response to the query raised by the Commission in this regard, AEML-D has stated that at AEML, during day ahead planning, availability from all the contracted sources (LT/MT/ST) is first mapped against the forecast demand and, if there is Surplus/shortfall, then only day ahead power Sale/Purchase is undertaken through power exchange or through bilateral contracts, if any. During Intraday operations, based on variation in demand & REMC schedule, real time surplus/shortfall is bid on Realtime market (RTM) to minimize deviation in pool under DSM Regulations.
- 5.79 AEML demand varies across the day. Similarly, the availability from generators also varies during the day, especially from RE Generators, wherein it is maximum during daytime and lower during evening and night. Therefore, surplus is generally observed during solar hours of the day due to solar generation component of RE Hybrid. Surplus power is also higher during Sundays & Holidays due to lower demand as compared to availability from contracted sources. Shortfall is generally observed during non-solar hours i.e. evening and nighttime. Therefore, Day Ahead /Intraday purchase is undertaken only in case of shortfall w.r.t. forecast demand and sale is undertaken only if in surplus.
- 5.80 The contracted sources generally have Fixed cost and variable cost, however, the surplus sale rate is decided based on the variable cost only. If the sale realization rate is lower than the variable cost, AEML undertakes backing down upto technical minimum for all contracts wherever possible. However, RE contracts must absorb contracts and Inter-State Bilateral contracts cannot be revised on Day ahead/intraday basis, hence they are also must absorb contracts. Generally, AEML undertakes sale only if the sale realization rate is higher than the variable cost of marginal Generator. However, if the surplus is arising from the technical minimum/ must absorb quantum/ SLDC instructions, then it has to be sold at the available market rate else it goes into DSM pool at zero rate as it cannot be backed down.
- 5.81 The rates mentioned in the data gap are composite rate (FC+VC), hence purchase rate appears to be higher than the sale realization rate. However, in reality by undertaking sale transaction AEML has optimized the overall cost because the sale realization rate is higher than variable cost of marginal generation, except in case of must absorb sale time blocks
- 5.82 The Commission has noted the submissions of AEML-D and opines that 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, subject to technical constraints, should ensure that the consumers are not adversely impacted on account of the above stated issues.**

- 5.83 **Charges to STU (MSETCL):** STU in accordance with the Commission Order dated 18-10-2020 in Case No. 52 of 2020, has levied Rs. 2,01,22,587/- as additional transmission charges for InSTS. The same is proposed to be considered in the month of FAC for June 2024. Commission has noted the submission.
- 5.84 **Charges to CTU (GNA charges):** AEML-D has received a bill amounting to Rs. 8,06,61,192/- from Central Transmission Utility (CTU) for Regional Transmission Account as per the CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations, 2020. Since the bill pertains to the power sourced during June-24, the amount is proposed to be considered in the month of FAC for June 2024. Commission has noted the submission.
- 5.85 **Charges levied by STU (GNA charges):** AEML-D has received bills amounting to Rs. 2,09,250/- for the period of May 2024 and Rs. 1,35,000 for the period of June 2024 from MSETCL for Operating charges for Short Term GNA Transaction as per MERC Order in Case No. 233 of 2022 and Case No. 239 of 2022 dated 31-03-2023 and CERC (Connectivity band General Network Access to the Inter-State Transmission System) Regulation, 2022. Since the bill for the month of May 2024 is received in June-24 and another bill pertains to the power sourced during June 2024, the amount is proposed to be considered in the month of FAC for June 2024.
- 5.86 **Other Charges:** AEML-D has considered rebate (Rs. 5.55 Crore) 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 2024.
- 5.87 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 2024

Sr. No.	Source	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	ADTPS	4.94	5.21	<ul style="list-style-type: none"> There is an increase of Rs. 0.37/kWh in APPC for the month of June 2024. Fixed cost variation is contributing to increase of Rs. 0.36/kWh and variable cost variation is contributing Rs. 0.08/kWh to the decrease.



Approval of FAC Charges for the month of June 2024

Sr. No.	Source	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
				<ul style="list-style-type: none"> The fixed charges are higher due to lower generation as compared to the approved generation.
2	RE Sources	3.84	3.37	<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 2024. As GCNs for June 2024 are not issued by MSEDCL, energy bills are not yet submitted by the generators and hence cost against this purchase is estimated at Rs. 2.97/kWh. Further, certain invoices were received in June 2024 for power procured in July 2024 and from December 2023 to February 2024 and the cost pertaining to these invoices has been considered in the FAC of June 2024.
3	AEL-MTPP	5.25	5.68	<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	Bilateral purchase	5.13	7.87	<ul style="list-style-type: none"> Market discovered rate; Higher cost purchase of short-term power from Power Exchange (IEX, HPX and PXIL), through day ahead exchange linked bilateral contracts and inter discom trade.
5	RE-Thermal RTC (Conventional portion)	4.90	-	<ul style="list-style-type: none"> No power was purchased from RE + Thermal RTC source in June 2024 as the power is expected to be available from October 2024 onwards as per AEML-D submission in MTR proceedings.
6	Sale of surplus power	5.13	3.76	<ul style="list-style-type: none"> Market discovered rate;
	Total	4.35	4.82*	Variation due to above reasons

*Includes impact of the power banked under the banking arrangement with MPL-RUNVL, and MPL (source-BYPL). Accordingly, net banking quantum of 53.79 MU has been considered by AEML-D in June 2024.

5.88 Considering the above, the Commission allows the actual average power purchase cost of Rs. 4.82/kWh for the month of June 2024 as shown in Table 15 above as compared to approved average power purchase cost of Rs. 4.35/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 2024 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 2024 is positive as shown in the Table 16 below.

Table 16: FAC on account of Power Purchase Cost

Sr. No.	Particulars	Units	June 2024
1	Average power purchase cost approved by the Commission	Rs./ kWh	4.35
2	Actual average power purchase cost	Rs. /kWh	4.82
3	Change in average power purchase cost (= 2-1)	Rs./ kWh	0.47
4	Net Power Purchase	MU	1,013.00
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	47.57

7. Adjustment of 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 The Commission in its May 2024 FAC approval has allowed recovery of FAC leviable for the period January 2024 to May 2024 from September 2024 to November 2024. Details of the actual recovery will be available once the actual recovery is done. Hence, the deferred over-recovery/under-recovery at the end of May 2024 to be adjusted in June 2024 is 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 one-year SBI MCLR + 150 basis points. There is no carrying cost worked out for June 2024 as there is no over/under-recovery considered in para 7.2 above.

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 annual sliding 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 2024	Cumulative up to June 2024	Annual Sliding Distribution Loss up to June 2024
1	Net Energy input at Distribution Voltages	MU	866.26	1009.61	3090.32	10,567.44
2	Energy sales at Distribution voltages	MU	809.51	1033.54	2894.23	10,028.28
3	Distribution Loss (1 - 2)	MU	56.74	(23.93)	196.09	539.16
4	Distribution Loss as % (3/1)	%	6.55%	-2.37%	6.35%	5.10%
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 2024 is (2.37)% which is lower than the approved distribution loss of 6.55% in the MTR Order dated 31 March, 2023. Further, the annual sliding distribution loss up-to June 2024 is 5.10 % 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 2024-25	FY 2023-24
Approved	6.55%	6.80%
Actual – April	12.77%	9.72%
Actual – May	8.62%	10.80%
Actual – June	-2.37%	1.14%
Actual - Cumulative till June	6.35%	7.24%

- 9.5 As seen from above Table 18, disallowance of FAC due to excess distribution loss for the month of June 2024 is nil. Though the standalone FAC for the month of June 2024 is positive, as the annual sliding distribution loss is lower than approved distribution loss by the Commission, there is no disallowance of FAC due to excessive distribution loss.

10. Summary of Allowable Z_{FAC}

- 10.1 The summary of the FAC amount as approved by the Commission for the month of June 2024 as shown in the Table 19 below.

Table 19: Summary of Allowable Z_{FAC} for June 2024

Sr. No.	Particulars	Units	As Claimed June 2024	As Approved June 2024
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	51.37	47.57
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	51.37	47.57
2	Calculation of FAC Charge			
2.1	Energy Sales within the License Area	MU	1,033.54	1,033.54
2.2	Excess Distribution Loss	MU	-	-
2.3	Z_{FAC} per kWh	Rs./kWh	0.5	0.46
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	51.37	47.57



Sr. No.	Particulars	Units	As Claimed June 2024	As Approved June 2024
4	Utilization of FAC Fund			
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-
4.2	Carrying cost on FAC Fund	Rs. Crore	-	-
4.3	Z _{FAC} for the month (Sr. No. 3.2)	Rs. Crore	51.37	47.57
4.6	Closing Balance of FAC Fund	Rs. Crore	51.37	47.57
4.7	Z_{FAC} leviable/refundable to consumer	Rs. Crore	-	-
5	Total FAC based on category wise and slab wise allowed to be recovered in future billing months	Rs. Crore	-	-
6	Carried forward FAC for recovery during future period (4.7-5)	Rs. Crore	51.37	47.57

10.2 It can be seen from the above Table 19 that opening FAC fund for month of June 2024 is NIL and standalone FAC for the month of June 2024 approved by the Commission is Rs. 47.57 Crore. Accordingly, the FAC amount leviable on the consumer for the month of June 2024 is Rs. 47.57 Crore. However, due to the reasons discussed earlier, the Commission has decided to carry forward and accumulate the FAC for a two-month period, along with the applicable carrying cost (excluding the period of delay). The accumulated FAC amount shall be recovered in the future billing months.

10.3 The variation in the Z_{FAC} leviable as claimed by AEML-D and as approved by the Commission is primarily on account of the variation in the approach adopted by the Commission for considering the GCV for washed coal vis-à-vis the approach adopted by AEML-D in its submission.

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



$k = \text{Average Billing Rate} / \text{ACOS};$

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. 47.57 Crore for the month of June 2024.
- 11.3 In its FAC submission for July 2024, AEML-D has requested the Commission to allow cumulative recovery of FAC for the period June 2024 to July 2024 in November 2024 and December 2024 at FAC ceiling rate (20% of category energy charge) to ensure that accumulated revenue gap can be mopped up to the maximum possible and avoiding the impact of carrying cost on the accumulated amount. In this regard, AEML-D has also submitted that the Commission vide letter dated 30th August 2024, has approved the FAC for the period up to May 2024 and also has approved the category wise FAC for recovery for the billing months from September 2024 to October 2024 at the ceiling rate (20% of category energy charges) and considered the balance FAC amount of Rs. 47.96 crore to be recovered in the month of November 2024. AEML-D has suggested that the amount allowed to be recovered in November 2024 (Rs. 47.96 Crore) should be clubbed with the FAC accumulated for the period June 2024 to July 2024 and allowed for recovery in the months of November 2024 and December 2024 at the ceiling rate (20% of category energy charges). Accordingly, as the billing for the month of November 2024 has not commenced, AEML-D has requested the Commission to revise the FAC allowed for recovery in November 2024 to 20% of category energy charge and allow recovery of the total accumulated FAC for the period June 2024 to July 2024 including the recovery allowed earlier in November 2024 (Rs. 47.96 Crore) over the billing period of November 2024 and December 2024. The portion of the accumulated FAC not recovered over the period November 2024 and December 2024 is proposed to be carried forward for recovery in future period.



- 11.4 Similar situation was prevailing earlier as well, and this situation could have been envisaged well in advance by AEML-D and they could have ensured time submission of FAC proposals and response to data gaps raised by the Commission presently and in the past as well.
- 11.5 As highlighted by the Commission in the past FAC approval reports, variation in FAC amounts over different months lead to variation in Tariff for end consumers on a monthly basis thereby defeating the objective of creating FAC stabilization fund. In similar situations in the past, the Commission has taken an approach to accumulate the FAC leviable and allowing the recovery of such accumulated amounts in ensuing billing months. Similar approach was also adopted by the Commission for the period January 2024 to May 2024 wherein the recovery was allowed over the period September 2024 to October 2024 at the ceiling rate (20% of category energy charge). Accordingly, considering the accumulated FAC over the period June 2024 and July 2024, the Commission deems it appropriate to adopt a similar approach of accumulating the FAC for June 2024 to July 2024 and allowing recovery at the ceiling limit of the FAC charge (20% of category energy charge) which would ensure that the accumulated FAC gets passed through via the FAC mechanism to the maximum extent possible in the remaining period and thus avoiding the impact of carrying cost on the accumulated FAC and the revenue gap to be carried forward to the new Multi Year Tariff control period will be minimal, thus minimising the carrying cost impact on the consumers to that extent. Accordingly, the Commission considers it appropriate to accumulate the FAC for the period of June 2024 and July 2024 and allow its recovery in the ensuing billing months at ceiling tariff. The recovery will start from November 2024 and the overall period of recovery will be decided in the Commission's approval on the FAC submission for July 2024.
- 11.6 In view of the above, per unit ZFAC for the month of June 2024 will be levied on the consumers of AEML-D starting from the billing month of November 2024 along with the FAC for the July 2024. The details will be provided in the Commission's approval on the FAC submission for June 2024.



