Before the

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Case No. 231 of 2022

Case of Adani Electricity Mumbai Limited (Distribution Business) 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

Coram

Sanjay Kumar, Chairperson I. M. Bohari, Member Mukesh Khullar, Member

Date: 31 March, 2023

ORDER

In accordance with Regulation 5 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2019 ('MYT Regulations'), Adani Electricity Mumbai Limited (Distribution Business) (AEML-D), has submitted its Petition for approval of truing up of FY 2019-20 to FY 2021-22, provisional truing up of 2022-23 and Revised Aggregate Revenue Requirement (ARR) for FY 2023-24 and FY 2024-25. The original Petition was filed on 30 November 2022 and AEML-D submitted the revised Petition on 13 January 2023.

The Commission, in exercise of the powers vested in it under Sections 61,62 and 86 of the Electricity Act (EA) 2003 and all other powers enabling it in this behalf and after taking into consideration the submissions made by AEML-D and the suggestions and comments received through the Public Consultation Process and after considering all other relevant material, has approved the Truing -up of ARR for FY 2019-20 to FY 2021-22, provisional truing up of 2022-23 and Revised ARR for FY 2023-24 and FY 2024-25.

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List of Abbreviations

A&G	Administrative and General
AAD	Advance Against Depreciation
ABR	Average Billing Rate
ACoS	Average Cost of Supply
ADTPS	Adani Dahanu Thermal Power Station
AEML	Adani Electricity Mumbai Limited
AEML-D	Adani Electricity Mumbai Limited – Distribution
AEML-G	Adani Electricity Mumbai Limited – Generation
AEML-T	Adani Electricity Mumbai Limited – Transmission
AIH	All-in-Hire
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
ATL	Adani Transmission Limited
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BIS	Bureau of Indian Standards
BPL	Below Poverty Line
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditure
CBA	Cost Benefit Analysis
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CPD	Coincident Peak Demand
CPI	Consumer Price Index
CSD	Consumer Security Deposit
CSS	Cross Subsidy Surcharge
DERC	Delhi Electricity Regulatory Commission
DGCEI	Directorate General of Central Excise Intelligence
DISCOM	Distribution Company
DMRC	Delhi Metro Rail Corporation
DPC	Delayed Payment Charge
DPR	Detailed Project Report

DSM	Demand Side Management
DSPPL	Dhursar Solar Power Plant Ltd.
DSS	Distribution Sub-station
EA, 2003	Electricity Act, 2003
ECS	Electronic Clearing System
EPA	Energy Purchase Agreement
FAC	Fuel Adjustment Cost
FBSM	Final Balancing and Settlement Mechanism
FCR	Fixed Cost Reconciliation
FY	Financial Year
G, T & D	Generation, Transmission and Distribution
G<>T	Generation - Transmission Interface
GFA	Gross Fixed Assets
GoM	Government of Maharashtra
GST	Goods and Services Tax
HT	High Tension
IDC	Interest During Construction
IEX	Indian Energy Exchange
InSTS	Intra-State Transmission System
IoWC	Interest on Working Capital
IT	Income Tax
IT/ITeS	Information Technology / Information Technology enabled
11/1165	Services
kVA	kilo Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt hour
KYC	Know Your Customer
LCC	Load Control Centre
LMC	Load Management Charges
LT	Low Tension
MAT	Minimum Alternate Tax
MCGM	Municipal Corporation of Greater Mumbai

MCLR	Marginal Cost of Lending Rate
MD	Maximum Demand
MD Charges	Maximum Demand Charges
MERC/Commission	Maharashtra Electricity Regulatory Commission
MMOPL	Mumbai Metro One Private Limited
MOD	Merit Order Dispatch
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MSLDC	Maharashtra State Load Despatch Centre
MSME	Micro Small and Medium Enterprises
MTR	Mid-Term Review
MU	Million Units
MVA	Mega-Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff
MYT (First Amendment)	Maharashtra Electricity Regulatory Commission (Multi
Regulations, 2017	Year Tariff) (First Amendment) Regulations, 2017
MYT Regulations, 2015	MERC (Multi Year Tariff) Regulations, 2015
MYT Regulations, 2019	MERC (Multi Year Tariff) Regulations, 2019
NCD	Non-convertible Debentures
NCPD	Non-Coincident Peak Demand
NTI	Non-Tariff Income
O&M	Operation and Maintenance
OA	Open Access
PBT	Profit Before Tax
PPA	Power Purchase Agreement
PS	Public Services
PV	Photo Voltaic
R&M	Repair and Maintenance
RE	Renewable Energy
REC	Renewable Energy Certificate
REGSL	Reliance Electric Generation and Supply Pvt. Ltd.
RInfra	Reliance Infrastructure Limited

RInfra-D	Reliance Infrastructure Limited- Distribution Business
RInfra-G	Reliance Infrastructure Limited- Generation Business
RInfra-T	Reliance Infrastructure Limited- Transmission Business
RoC	Registrar of Companies
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RPO Regulations, 2016	MERC (Renewable Purchase Obligation, its Compliance
	and implementation of REC framework) Regulations, 2016
RPO Regulations, 2019	MERC (Renewable Purchase Obligation, its Compliance
Ki O Regulations, 2019	and implementation of REC framework) Regulations, 2019
RTC	Round the Clock
RTS	Roof Top Solar
SAIDI	System Average Interruption Duration Index
SCADA	Supervisory Control and Data Acquisition
SLDC	State Load Despatch Centre
SoC	Schedule of Charges
T<>D	Transmission - Distribution Interface
TBIA	Thane Belapur Industries Association
TL	Transmission Loss
TOD	Time of Day
TOSE	Tax on Sale of Electricity
TPC-D	The Tata Power Company-Distribution
TSU	Transmission System User
TVS	Technical Validation Session
UI	Unscheduled Interchange
VCoS	Voltage-wise Cost of Supply
VIPL	Vidarbha Industries Private Limited
WL	Wheeling Loss
WPI	Wholesale Price Index

1 BACKGROUND AND BRIEF HISTORY

1.1 BACKGROUND

Adani Electricity Mumbai Limited (AEML) is an integrated Utility engaged in Generation, Transmission and Distribution of electricity.

The Distribution Business of AEML, i.e., AEML-D, has a Distribution Licence for the distribution and supply of electricity in parts of Mumbai, for a period of 25 years with effect from 16 August, 2011.

1.2 MYT ORDER FOR 3RD CONTROL PERIOD FROM FY 2016-17 TO 2019-20

In its Order dated 21 October, 2016 in Case No. 34 of 2016 ('MYT Order'), the Commission carried out the true-up for FY 2014-15, provisional true up for FY 2015-16 and approved the ARR for FY 2016-17 to FY 2019-20 and retail Tariff and Wheeling Charges for FY 2016-17 to FY 2019-20, in accordance with the MERC (Multi-Year Tariff) Regulations, 2015 (MYT Regulations, 2015).

1.3 MID-TERM REVIEW ORDER FOR 3RD CONTROL PERIOD

In its Order dated 12 September, 2018 in Case No. 200 of 2017 ('MTR Order'), the Commission approved the true-up for FY 2015-16 and FY 2016-17, provisional true-up for FY 2017-18, and revised ARR and Tariff for FY 2018-19 and FY 2019-20.

1.4 MYT REGULATIONS, 2019

The Commission notified the MERC (Multi-Year Tariff) Regulations, 2019 (MYT Regulations, 2019) on 1 August, 2019 for the 4th Control Period from FY 2020-21 to FY 2024-25.

1.5 MYT ORDER FOR 4th CONTROL PERIOD FROM FY 2020-21 TO 2024-25

In its Order dated 30 March 2020 in Case No. 325 of 2019 ('MYT Order'), the Commission carried out the true-up for FY 2017-18 and FY 2018-19, provisional true up for FY 2019-20 and approved the ARR for FY 2020-21 to FY 2024-25 and retail Tariff and Wheeling Charges for FY 2020-21 to FY 2024-25, in accordance with the MYT Regulations, 2019.

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1.6 PETITION FOR APPROVAL OF MID-TERM REVIEW, ADMISSION OF THE PETITION AND PUBLIC PROCESS

AEML-D filed its Petition for approval of truing up for FY 2019-20, FY 2020-21, and FY 2021-22, provisional truing up for FY 2022-23 and revised ARR and Tariff for FY 2023-24 and FY 2024-25 on 30 November, 2022. The Commission sought replies on the preliminary data gaps raised on 14 December, 2022 and also certain other information from AEML-D, replies to which were submitted by AEML-D on 4 January, 2023.

The Technical Validation Session (TVS) was held on 5 January, 2023. The list of persons who attended the TVS is at **Appendix-1**. On 6 January, 2023, the Commission sought additional information and clarifications on the issues raised during the TVS.

AEML-D submitted its replies and filed its revised MYT Petition on 18 January, 2023, with the following main prayers:

- 1) "Admit the petition as submitted herewith;
- 2) Approve the actual revenue gap/ surplus arising on account of truing-up for FY 2019-20, FY 2020-21 and FY 2021-22 along with the carrying cost as worked out in this petition;
- 3) Approve the provisional ARR and revenue gap/ surplus for FY 2022-23 as worked out in this petition;
- 4) Approve the cumulative revenue gap till FY 2022-23 along with carrying / holding cost as worked out in this petition and allow recovery of the same in the manner as presented in this petition;
- 5) Approve the revised ARR for fourth and fifth year of the Control Period i.e. for FY 2023-24 and FY 2024-25, as projected in this Petition;
- 6) Approve the Retail Tariffs, Wheeling Charges and Cross Subsidy Surcharge as proposed in this Petition for fourth and fifth year of the Control Period i.e. for FY 2023-24 and FY 2024-25, as projected in this Petition;
- 7) Approve the revision in Schedule of Charges as proposed in this petition;
- 8) Allow for specific deviations from the MYT Regulations, 2015 and MYT Regulations. 2019, wherever sought in this petition;
- 9) Grant specific prayers, wherever made in this petition, for reconsideration / relaxation of rulings made in previous Tariff Orders;
- 10) Allow additions/ alterations/ modifications/ changes to the Petition at a future date;
- 11) Allow any other relief, order or direction, which the Hon'ble Commission deems fit to be issued."

The Commission admitted the MTR Petition on 19 January 2023. In accordance with Section 64 (2) of the Electricity Act, 2003 (EA 2003), the Commission directed AEML-D to publish its Petition in the prescribed abridged form and manner so as to ensure adequate public participation, and to reply expeditiously to all the suggestions and objections received. AEML-D issued a Public Notice inviting suggestions and objections from the public on its Petition. The Public Notice was published in the daily newspapers, viz, Times of India and Indian Express (English), on 21 January, 2023 and in Maharashtra Times and Loksatta (Marathi) on 22 January, 2023.

The Petition and its summary were made available for inspection/purchase at AEML-D's offices and on its website (www.adanielectricity.com). The Public Notice and Executive Summary of the Petition were also made available on the websites of the Commission (www.merc.gov.in) in downloadable format. The Public Notice stipulated that the suggestions and objections, in English or Marathi, may be filed with proof of service on AEML-D, latest by 11 February, 2023.

The Commission received written suggestions and objections, as well as oral submissions on various issues at the e-Public Hearing held on 16 February, 2023. The list of persons who attended the Public Hearing is at **Appendix-2**.

The Commission has ensured that the due process contemplated under the law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all the concerned/stakeholder to file their say.

The suggestions and objections made in writing as well as during the Public Hearing, along with AEML-D's responses and the Commission's rulings, have been summarised in Chapter 2 of this Order.

1.7 ORGANISATION OF THE ORDER

This Order consists of the following chapters as outlined below:

- Chapter 1 provides a brief history of the due regulatory process undertaken by the Commission. A list of abbreviations with their expanded forms has been included.
- Chapter 2 lists out the suggestions and objections received in writing as well as during the Public Hearing. These have been summarized issue-wise, followed by the response of AEML-D and the rulings of the Commission.
- Chapter 3 details the Truing-up of FY 2019-20, FY 2020-21, and FY 2021-22.
- Chapter 4 details the Provisional Truing up of FY 2022-23

- Chapter 5 details the approval of revised ARR for FY 2023-24 and FY 2024-25.
- Chapter 6 details the Cumulative Revenue Gap/(Surplus), Tariff Philosophy and category-wise Tariffs for FY 2023-24 and FY 2024-25.
- **Chapter 7** details the changes approved in the Schedule of Charges
- **Chapter 8** details the Applicability of the Order
- **Annexure I** details the revenue from revised tariffs for FY 2023-24 and FY 2024-25
- Annexure II details the approved Tariff Schedule for FY 2023-24 and FY 2024-25
- Appendix-1: List of persons who attended Technical Validation Session (TVS) dated
 5 January, 2023

Appendix-2: List of persons who attended Public Hearing dated 16 February, 2023

2 SUGGESTIONS/OBJECTIONS, AEML-D'S RESPONSES AND COMMISSION'S RULING

2.1 SALES PROJECTION

The Tata Power Company Limited (Distribution) [TPC-D] submitted that AEML-D has projected sales to HT industries with growth of more than 45% during FY 2023-24 and FY 2024-25 without providing the details of the load, which is supposed to be added during these years. Therefore, AEML may be directed to submit the details of their projection and consider the sales with realistic estimate.

AEML-D's Response

AEML-D submitted that it has projected sales considering the existing consumer base and the estimated load considering the correspondence with prospective consumers.

Commission's Ruling

The Commission has projected the sales for AEML-D for FY 2023-24 and FY 2024-25 based on a holistic approach, adopted in previous Tariff Orders also, as elaborated in Chapter 5 of this Order. In regard to the increase in EHT sales due to projected addition of EHT consumers, the Commission has accepted AEML-D's projections.

2.2 DISTRIBUTION LOSS

TPC-D submitted that AEML-D has requested to consider different level of Distribution Loss for projection of power purchase cost and target for Distribution Loss for FY 2023-24 and FY 2024-25. TPC-D requested the Commission to consider uniform level of Distribution Loss for the purpose of projection of power purchase cost as well as for the purpose of claim of incentive computation.

AEML-D's Response

AEML-D submitted that TPC-D has requested the Commission to consider uniform level of distribution losses for power purchase as well as for computation of efficiency gains. In this regard, AEML-D has stated that it has already submitted its response to the Commission vide letter dated 16 January, 2023 and the same is part of the Petition available in public domain. It has been quantitatively demonstrated therein that the approach adopted by AEML-D is beneficial for the customers, as compared to the existing approach of considering normative distribution losses.

Commission's Ruling

The Commission has considered the Distribution Loss levels approved in the MYT Order for the purpose of computing the energy requirement for FY 2023-24 and FY 2024-25, based on the rationale elaborated in Chapter 5 of this Order. The same level of Distribution Losses shall be considered for computation of efficiency gains/losses also, at the time of true-up for the respective years.

2.3 RATE OF POWER PROCUREMENT UNDER MEDIUM TERM ARRANGEMENT

TPC-D submitted that AEML-D has considered the rate of Rs. 5.25/kWh as against the Commission adopted rate of Rs. 5.98/kWh in Order dated 29-08-2022 in Case No. 149 of 2022 for Medium Term Power Procurement for the period from September 2022 to March 2023 in FY 2022-23, FY 2023-24 and from April 2024 to October 2024 in FY 2024-25. It is not clear why a lower rate has been considered by AEML-D as compared to the rate approved by the Commission. The Commission is requested to consider the adopted cost of power procurement as approved by the Commission in Case No. 149 of 2022 from this source.

AEML-D's Response

AEML-D submitted that TPC-D has sought clarity on the rate of MTPP power @ Rs. 5.25 per unit and has requested the Commission to consider the adopted rate of power procurement only. In this regard, AEML-D submitted that similar query was raised by the Commission and AEML-D has already submitted its response to the Commission vide letter dated 27 December, 2022 and the same is part of the Petition available in public domain.

Commission's Ruling

The Commission has considered the rate for purchase of MTPP power as Rs. 5.25 per kWh based on the explanation provided by AEML-D, and based on the actual rate of purchase in FY 2022-23, as elaborated in Chapter 5 of this Order.

2.4 BANKING TRANSACTION

TPC-D submitted that AEML-D has suppressed its power purchase cost by indicating procurement of power under banking arrangement in FY 2023-24 and FY 2024-25. It is observed that AEML-D was able to enter into banking transaction for maximum of 251.28 MUs during last four years. However, it has projected power to be procured under banking arrangement more than three times of maximum it was able to achieve through this arrangement to avoid the tariff increase of the consumer during FY 2023- 24 and FY 2024-25.

Further, AEML-D has not disclosed the source of power procurement with rates for returning the banked power during last four years. Therefore, the Commission is requested to direct AEML-D to provide the reconciliation of banking energy taken vis-a-vis when it was returned, source of power procured with rates for returning the banked energy and mode of procurement for the quantum of power returned under banking arrangement during FY 2019- 20 to FY 2022-23.

Further, the Commission is requested to reject the deferment of power purchase cost through banking arrangement and cost of power procurement proposed from banking arrangement may be considered at average power purchase cost of AEML-D, as the power to be returned under banking arrangement shall have to purchased / procured by AEML-D from any source. If the same is not done, the cost of banking power for FY 2024-25 of 1326 MU would be payable in FY 2025-26 and would not be a correct reflection of the power purchase cost.

AEML-D's Response

AEML-D submitted that w.r.t Banking transaction undertaken for the trued-up years, the details have been provided in the relevant sections in the Petition. The details of the energy banked, and energy returned, and the benefits of the banking transaction have been submitted as part of the Petition.

Further, AEML-D has submitted its response to the data gap related to Banking transaction and the same is part of the Petition available in public domain. As regards the contention that AEML-D has not disclosed the source of power procurement for Banking, the same has been submitted as part of response to the data gaps wherein, AEML-D has submitted the Banking Offers as Annexures and the same is part of the Petition available in public domain.

AEML-D submitted that Banking is a legitimate way of power procurement management. It produces benefits in as much as providing energy from the baking partner to meet the high demand from consumers in summer months and returning the same to the banking partner at the time of low demand, thereby avoiding higher cost of purchase from external sources during summer months and incurring lower of purchase for returning the power during monsoon months. AEML-D has been undertaking Banking Transaction for past several years and has already demonstrated its benefit to consumers through reduction in overall power purchase cost.

Commission's Ruling

The Commission recognises Banking as a valid power purchase arrangement. According, the Commission has considered the banking transactions as proposed by AEML-D, based on the documents submitted by AEML-D. The same is discussed and elaborated in Chapter 5 of this Order.

2.5 STANDBY CHARGES

Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) has objected to the proposed unilateral discontinuation of the Standby arrangement by AEML-D.

MSEDCL submitted that in 1998, the Government of Maharashtra (GoM) acknowledged the Standby arrangement and issued certain directives about sharing of Standby Charges. As it is very necessary to provide uninterrupted supply to Mumbai and accordingly as per various orders of the Commission, Standby arrangement has been continued till date. In case of eventualities, embedded generation in Mumbai is not sufficient enough to provide uninterrupted supply to Mumbai consumers. By way of the Standby arrangement, MSEDCL is providing guaranteed supply up to 550 MVA/ 500 MW to Mumbai Distribution Licensees during tripping of their generating unit to ensure that the consumers in Mumbai area will get uninterrupted power supply.

MSEDCL submitted that the Commission in its Order dated 31 May, 2004 in Case No. 7 of 2000 has referred the CEA's comments regarding the requirement of Standby and held that Standby Charges are akin to insurance premium and need to be paid irrespective of whether the Standby facility is availed or not.

MSEDCL submitted that the Commission vide abovesaid Order has mentioned that Standby is to be activated occasionally under emergent conditions, i.e., planned or forced closures or outages in power plants, so as to provide uninterrupted power supply in Mumbai.

MSEDCL further submitted that AEML-D has asked Standby support against STOA generator / ST bilateral tripping during real-time operation, and reduction in REMC schedule, which cannot be an emergent condition. MSEDCL has provided Standby support against tripping of its Dahanu plant, whenever requested by AEML-D. Accordingly, MSEDCL has clearly conveyed to AEML-D that it will not provide Standby support against short term/RE/Power Exchange power or in cases when there is lesser or no generation due to fuel shortage.

Further, MSEDCL vide letter dated 27 January, 2021 has communicated to the Commission that Standby request shall only be considered for contracted Generator under LTA and MTOA, excluding RE and Short-Term sources.

However, AEML-D has interpreted that Stand-by support is not meant for any specific source but is for managing the demand of the Distribution Licensee.

MSEDCL further submitted that the directives given by the Commission vide Order dated 16 March, 2018 in Case No. 72 of 2016 were given in the background to consider tripping/outage of VIPL, which was a thermal generator contracted by AEML (erstwhile R-Infra) on long-term basis for the Standby support, as the same was not part of embedded generation and accordingly the Commission has mentioned that Standby support should not be limited to outages or failure of the embedded generation Units alone. MSEDCL submitted that it is clear that AEML (erstwhile RInfra-D) has itself stated that if MSEDCL accepts that VIPL generation is also part of the Standby support to be provided by MSEDCL limited up to 500 MW, there would not be any requirement for changing the existing procedure for calculation of Standby Charges. As per directives of the Commission, MSEDCL has provided the Standby support against the tripping of VIPL Unit, whenever requested.

MSEDCL submitted that interpretation of the term 'any generation' as mentioned by the Commission vide Order dated 16 March, 2018 in Case No. 72 of 2016 cannot include shortfall in short term/RE/Power Exchange power or in cases when there is lesser or no generation due to fuel shortage for providing Standby support. AEML-D has tried to take undue advantage of the wordings used in the Order by the Commission and asked for Standby support for 'load generation balance', which is against the true spirit of the Standby mechanism, which is to be activated occasionally to maintain uninterrupted power supply to Mumbai consumers.

MSEDCL submitted that it is pertinent to mention that as per the Standard Bidding Document for short-term power, there is a provision of alternate power to be provided by the seller, i.e., there is an obligation on supplier to provide the required power by making use of alternate source. Hence, as such there is no impact on contracted Distribution Licensee due to short-term power.

MSEDCL further submitted that RE sources are infirm in nature and revision of the same is given by RE Wind/Solar source in accordance with MERC (Wind & Solar Generators Forecasting &Scheduling) Regulations, 2018, wherein RE generators are allowed 16 revisions in a day. If any generation schedule of RE Wind/Solar is revised, same is

applicable from 4th time block. So, the concerned contracted DISCOM can also act upon before said 4th time block to arrange alternate power, as there is sufficient time for action. Further, RE generator itself is paying for its deviations between scheduled and injection energy. Revisions of RE or short-term power cannot be treated as emergency condition. Hence, Standby Power cannot be allowed in case of RE Power revision or against STOA transactions.

MSEDCL submitted that AEML-D has stopped making payments towards Standby bills raised by MSEDCL from Oct-21 onwards, i.e., when MERC DSM Regulations were implemented with effect from 11 October 21. MSEDCL submitted that AEML-D wants to make use of Standby arrangement to control the deviation charges under DSM, which is against the basis of Standby arrangement, which is meant to be provided occasionally in emergent conditions such as tripping of conventional long term contracted sources to provide uninterrupted supply to Mumbai.

MSEDCL has observed that there were multiple revisions done by AEML-D in standby requisition in real time as and when required on the same day. Further, it is observed that on some occasions, Standby request was revised to zero for 13.00 to 19.00 hrs on the day of tripping and later after gap of 4 days, again Standby support was sought that too selectively in specific time blocks only. This clearly shows that there was not any emergent situation for activation of Standby and AEML is using Standby arrangement in real time to save the Power Purchase cost, which implies that Standby arrangement is being used by AEML-D for commercial gain.

MSEDCL submitted that AEML-D has unilaterally decided to discontinue the Standby arrangement from December 2021, however, it has stopped making payments against Standby bills from October 2021. MSEDCL added that the Standby arrangement and the Standby charges thereof have been decided by the Commission and hence neither MSEDCL nor any Licensee in Mumbai distribution area can take unilateral decision to discontinue the Standby arrangement.

MSEDCL submitted that after the unilateral decision of AEML-D to opt out from Standby arrangement, there have been some instances wherein the contracted resources of AEML-D could not provide sufficient power to meet its demand, such as tripping of its contracted generator and inter-REMC curtailment by NLDC due to system constraints, etc. During such instances, MSEDCL's contracted sources such as Koyna Hydro Generation was picked up by MSLDC.

During above mentioned events, there was neither any additional power managed by AEML-D nor any load shedding instructed by MSLDC in AEML-D area. MSLDC has directly utilized resources of MSEDCL to manage the State UI, i.e., demand of AEML-D. This eventually shows that AEML-D after unilateral decision to opt out from Standby arrangement, has relied on the grid and has eventually utilised MSEDCL's contracted resources.

MSEDCL submitted that Standby Charge bills are being raised by MSEDCL in accordance with the Commission's MYT Order dated 30 March, 2020 in Case No. 322 of 2019 and AEML-D is liable to pay these bills. Accordingly, the total outstanding Standby charges of AEML-D excluding DPC/interest is Rs 230.85 Crore from October 2021 till December 2022.

In view of the above, MSEDCL submitted that the Commission may direct AEML-D to make the payment of outstanding Standby Charges along with applicable DPC. Further, the Commission is requested to clarify that shortfall in short term/RE/Power Exchange power or the cases when there is lesser or no generation due to fuel shortage, are not eligible for Standby support.

MSEDCL submitted that AEML vide letter dated 30 November, 2022, has alleged that MSEDCL has provided partial and selective Standby support, and hence, MSEDCL is not entitled to full Standby charges. Further, AEML has submitted details of charges allegedly refundable from MSEDCL proportionately from the Standby Charges recovered by MSEDCL without providing the Standby support. The total amount claimed by AEML is Rs. 217.37 Crore inclusive of applicable DPC. This baseless claim of AEML is not acceptable to MSEDCL.

MSEDCL has further submitted that there is no provision to calculate the Standby Charges on proportionate basis for the occasions for which Standby support is availed. In fact, Commission vide Order dated 31.05.2004 in Case No. 7 of 2000 has held that Standby Charges are akin to insurance premium and needs to be paid irrespective of whether the Standby facility is availed or not.

Therefore, MSEDCL requested the Commission to disallow the claim of AEML-D asking MSEDCL to refund Rs. 217.37 Crore.

MSEDCL further submitted that any methodology adopted in the MYT Order has to be continued in the MTR Order. Changing the methodology at the time of MTR is not

appropriate. The Hon'ble Supreme Court has also ruled accordingly in Civil Appeal No. 4324 of 2015, 4323 of 2015 vide Order dated 18 October, 2022.

TPC-D submitted that AEML-D has not considered any cost on account of power procured under Standby arrangement for FY 2021-22.

AEML-D's Response

AEML-D replied that MSEDCL ought to realise that Mumbai's demand is not met just by embedded sources of power, and is met by various other contracts that the Mumbai Distribution Licensees have entered into and therefore the facility of Standby provided by MSEDCL, which itself is demand based, cannot distinguish between embedded / long-term sources or other contracts. It is required to be provided for eventualities in meeting demand, regardless of which generator / contracted source's tripping causes that eventuality.

AEML-D submitted that the CEA's observation in the referred Order itself states that "Standby facility can be used to ensure any type of system failure". However, MSEDCL has been providing Standby facility on its own whims and fancies.

AEML-D submitted that insurance is voluntary, and not mandatory. As far as reliability of supply for Mumbai is concerned, AEML-D has been managing the same without any issues, since the time it exited the Standby arrangement, which shows that reliability is not an issue and therefore, no insurance for the same, which comes at such a heavy cost, is required. Even if, in future, a need for instantaneous demand support is felt, AEML-D is at liberty to make its own arrangements for procuring such Standby support / spinning reserve, by following transparent process of competitive bidding as per the Rules and Regulations, to ensure most efficient cost for the same.

AEML-D submitted that Standby support has been availed occasionally only. On the one hand, MSEDCL wants to charge for Standby support, while on the other, it wants to provide Standby support at its own wish. In view of directions of the Commission in Case No. 72 of 2016, such discretion is not available with MSEDCL.

AEML-D submitted that in this regard, the Commission's directions in Case No. 72 of 2016 are clear that the context is not confined to VIPL. VIPL is only used as an example to show that AEML (then RInfra) is sourcing substantial power from other than embedded generation also. Furthermore, the use of the word "any" is absolutely clear and there can be no two interpretations of it. Lastly, the whole reference to CPD/NCPD is to amplify the point that the fact that the Standby charges are demand-based, and the support is required to be provided for any eventuality in meeting demand, regardless of the type of source –

being long-term, medium-term, short-term, Power Exchange, etc. It is reiterated that when AEML-D was seeking Standby support, it was being provided by MSEDCL at its own whims and fancies, without assigning any reason and, in any case, there can be no reason for denial of request in view of the above Order.

In any event and without prejudice, AEML-D submitted that the Standby arrangement is a commercial arrangement, which can be exited any time by either Party. AEML-D wishes to shield its consumers from this unnecessary cost and, in case, it feels the need for instantaneous demand support in future, it will make its own arrangement, as per the Rules and Regulations, and with approval of the Commission.

AEML-D submitted that under the DSM regime, any revision by RE/ST supplier would be effected by MSLDC through DSM portal and Licensee would have to arrange / reschedule power to meet its demand. If, as per MSEDCL, Standby support cannot be sought for such interim period, Licensee shall be forced to depend on overdrawal from the grid. Therefore, such Licensee's consumers will be subjected to grid conditions and bear the risk of uncertainties even though the Standby power is contracted to take care of such contingencies. It cannot be that on one hand the Distribution Licensee overdraws from the grid due to outage/ reduction in generation/ non-availability of any of its contracted source and on the other hand it pays the fixed charges to MSEDCL for Standby support as well. Further, in the past, AEML consumers were deprived of Standby services even after paying annual charges of ~ Rs 180 Crore. It is submitted that MSEDCL's contentions are not consistent with the existing Regulatory Framework on scheduling of the Short Term or RE transactions. In case of any tripping /downward revision of the transaction under STOA, SLDC will undertake revision as advised by Supplier during real time and AEML will be required to draw from pool / arrange alternate power, etc., even if arranged may be after a gap of few hours/ few days. For supply from intra-State RE transactions, generators have the facility to revise schedule 16 times in a day. Under such scenarios, AEML availability schedule gets automatically revised, hence, for such transactions also AEML has to arrange alternate power.

AEML-D has submitted that AEML has regularly made payment of Standby Charges to MSEDCL till September 2021. However, AEML was not getting requisite Standby facility/support from MSEDCL, which was impacting its consumers as the consumers have to pay fixed cost and also pay for the overdrawal from system as Standby was not provided by MSEDCL.

AEML-D has submitted that Standby was scheduled on particular dates, as ADTPS Unit I was under outage and Standby schedule was requested only as per AEML-D's shortfall. It

is to be noted that the Standby Facility will kick in once the Generator/source fails or revises the schedule downward; however, the power will be scheduled only as per requirement, and it should not be linked to capacity of source. If power is scheduled as per capacity, it may result in surplus, and this impacts the consumers. During the referred outage, the Standby schedule was revised during the day due to change in surplus/shortfall position, which was primarily due to demand variation. Distribution Licensee is required to maintain Load Generation balance by revising the schedule upward or downward from all the available contracted sources including Standby based on variation in demand in real-time. AEML-D undertakes the scheduling based on the above principles only. Therefore, there is no commercial gain in the process. In fact, if AEML does not revise Standby requisition, it will burden its consumers.

AEML-D submitted that as regards unilaterally exiting the Standby arrangement, there is no formal contract of Standby support between MSEDCL and AEML (then BSES) and there is no regulatory approval for the same. There is only a recognition of the fact from the Commission that such an arrangement exists and therefore the ARRs of the Licensee provides for the corresponding charges. Hence, AEML cannot be forced to continue with the Standby arrangement. Standby arrangement is not a regulatory necessity, which is mandated by any Regulations or specific regulatory directions. It is a commercial arrangement, which either party could have exited at any time, with due notice to other Party, which notice AEML-D has provided to MSEDCL.

AEML-D submitted that in case of generator tripping, as per the provisions of Scheduling & Despatch code, the generator schedule gets revised from 4th time block and the Distribution Licensee receives power for the first 3-time blocks as per schedule only. For any generator tripping, SLDC undertakes the grid management by drawing power from the Regional Grid or by increasing the Intra-State resources as defined under the DSM Regulations. On similar lines, whenever any of the contracted Generator/source trips or revises the schedule downward, AEML gets the supply from the Generator for first 3-time blocks as per schedule. As soon as the information is available, AEML-D initiates the intra-day purchase through bilateral or RTM sources and ensures that power is made available. During intervening period, the Grid Management is undertaken by SLDC as per the principles defined under the DSM Regulations/ MEGC 2020 and same are applicable for all Licensees and not specifically to AEML-D.

It can be seen from the past events that SLDC has increased the ADTPS generation when State is overdrawing without looking into whether AEML-D is in shortfall or not. Hence, the phenomenon cited by MSEDCL is general practice followed by SLDC for grid management and not specific to AEML-D. Without prejudice to the above, it can be seen

in the past that MSEDCL has not provided Standby for all events and AEML was as such managing such events by drawing power from Regional / State Grid. Today also the similar situation persists - AEML is drawing from the grid however MSEDCL is objecting to it, which clearly indicates that MSEDCL is interested in its payment and the objections are not related to over drawal / grid management, etc. Over a period of time, power markets have matured with sufficient liquidity, hence, AEML-D is arranging the power seamlessly through RTM/Bilateral/IDT, etc. Implementation of the MERC DSM Regulations 2019 has also facilitated the Licensees in Maharashtra to draw from the Intra-State / Inter-State Grid to the extent possible by payment of applicable charges. Therefore, AEML-D is well within its right to manage the variations in demand supply position by drawal through State/Regional Grid to the extent allowed and cannot be forced to enter in to Standby arrangement.

AEML-D submitted that it has in December 2021 itself, intimated MSEDCL that it has exited the Standby arrangement and hence, any bills for Standby charges being raised by MSEDCL are not valid and not payable. Accordingly, the question of DPC does not arise, as the principal amount is itself not payable. AEML-D has not recognised Standby charges as cost in its books and accordingly the Revenue Gap / Surplus presented for individual years in the MTR Petition consider the effect of non-payment of Standby Charges, i.e., the Standby charges considered in the MYT Order in the tariffs during FY 2021-22 (partially) and FY 2022-23 are being refunded to the consumers by way of adjustment in Revenue Gap.

AEML-D submitted that it is only seeking legitimate refund from MSEDCL in view of the directions in the Order in Case No. 72 of 2016. By not providing Standby support on the various occasions that it was sought, MSEDCL has violated the said directions and is therefore, liable to refund Standby charges on a proportionate basis.

AEML-D submitted that Standby Charges are not a regulatory or tariff determination principle, which cannot be changed mid-way in the Control Period. AEML-D has exited the Standby arrangement and hence, the charges are not payable anymore. Commercial arrangements / contracts such as these are recognised based on their existence or otherwise, at different points in time – start of Control Period or mid-way, as the case may be.

AEML-D submitted that it has clearly stated in the Petition that the cost of power drawal under Standby arrangement has not been considered, as bills are yet to be received from MSEDCL for the same.

Commission's Ruling

The Commission's ruling the payment of Standby Charges by AEML-D to MSEDCL for FY 2021-22 are elaborated in Chapter 3 of this Order, while the payment of Standby Charges for FY 2022-23 and AEML-D's claim for refund of Standby Charges are elaborated in Chapter 4 of this Order. The Commission's ruling regarding continuation of the Standby arrangement for FY 2023-24 and FY 2024-25 has been elaborated in Chapter 5 of this Order.

2.6 CAPEX AND CAPITALISATION

TPC-D submitted that AEML in its Petition has given the details of assets installed by AEML-D in the period from FY 2019- 20 to FY 2022-23. Further, TPC-D has also verified the installation of DSS as indicated in the Form 4.1 submitted by AEML with MTR Petition and it is observed that AEML is creating spare capacity in its distribution network by augmenting on account of reliability and increase in existing load in the area. It is to be noted that due to COVID in FY 2020-21 and FY 2021-22, there was decrease in load and corresponding consumption demand across Mumbai and same is indicated in the sales true up of FY 2020-21 and FY 2021-22. Therefore, it does not justify the installation of new transformers for existing consumer load.

TPC-D requested the Commission to examine the justification for commissioning all the DSS by AEML-D in FY 2019-20 to FY 2022-23 before allowing any cost.

AEML-D's Response

AEML-D submitted that the actual cost incurred for the trued-up years is based on the DPRs / schemes approved by the Commission and the details thereof have been submitted to the Commission in the Petition as well as response to the data gaps forming part of the Petition. AEML-D has only incurred capex for creation of assets as per its approved DPRs. It is submitted that unlike TPC-D, no distribution assets have been created deliberately with spare capacity, with a view to switchover consumers and there is no violation of the regulatory framework as approved vide Order in Case No. 182 of 2014.

Commission's Ruling

The Commission has approved the capitalisation incurred by AEML-D for the true-up years after due prudence check, as elaborated in Chapter 3 of this Order.

2.7 FBSM

TPC-D submitted that it has observed that AEML has not considered any cost for the quantum of power procured through UI during first half of FY 2022-23, whereas it has

indicated that it has procured 177.37 MU in first half of FY 2022-23. Therefore, cost of 177.37 MU should be considered in power purchase cost of same period. Further, it has not submitted the reconciliation of units procured with corresponding cost for each year under FBSM mechanism. AEML may be directed to submit the year-wise reconciliation of FBSM quantum with corresponding cost. The Commission is requested to consider the cost of power procured through FBSM during the respective financial year in order to avoid deferment of power purchase cost.

AEML-D's Response

AEML-D submitted that it has shown the cost of Rs. 6.90 Crore as DSM cost for H1 of FY 2022-23, which has been elaborated in the Petition. Also, AEML-D has categorically submitted in the Petition that for the truing up years and for H1 of FY 2022-23, AEML-D has derived the energy decrement from Pool by considering the total energy input at T-D, energy at T-D for changeover and open access consumers, quantum of energy procured from different sources (as per the bills raised by generators) and the actual transmission loss. Also, the rationale for the difference in the quantum as claimed in the petition vs. bills issued by MSLDC has been elaborated. As far as cost is considered, the same has been considered as per SLDC bills. Hence, the submission of TPC-D that AEML-D has not considered any cost for the quantum of power procured under UI for H1 of FY 2022-23 is factually incorrect.

Commission's Ruling

The Commission has considered the quantum and cost of UI for H1 of FY 2022-23 as per the submissions of AEML-D, as elaborated in Chapter 4 of this Order. The same will be trued-up based on actuals at the time of final truing up for FY 2022-23.

2.8 RATE OF SALE OF SURPLUS POWER

TPC-D submitted that AEML has projected short-term power procurement and surplus sale of power at the same rate of Rs. 5.00/kWh in its MTR Petition. As per the MTR Petition, it is observed that there was negligible sale of surplus power by AEML during FY 2019-20 to FY 2021-22. Further, it has sold surplus power during FY 2022-23 in first half at Rs. 4.06/kWh for the quantum of 90.40 MU. However, for the projection for second half it has projected 170 MU at the rate of Rs.5.00/kWh without any basis.

In this regard, Distribution Licensee will typically sell surplus power during the time period when it has surplus tied up power available as compared to the demand. Similarly, a Distribution Licensee typically procures power from the market during peak period to meet the demand of the consumers in its area of supply, when its tied up capacity is not enough

to meet its demand. Considering this, generally cost of power procurement will be higher in comparison to other time slot when it will have surplus power. The same can be observed even from the AEML Petition as well by comparing the rate of sale of surplus power at Rs. 4.06/kWh, which is approximately 50% of the rate of short-term power procurement at Rs. 7.64/kWh during first half of FY 2022-23.

In view of the above, the Commission is requested to consider the rate of sale of surplus power by applying a similar ratio of rate of power projected under short term procurement for the purpose of projection of power purchase cost for FY 2023-24 and FY 2024-25.

AEML-D's Response

AEML-D submitted that TPC-D has alleged that AEML-D has projected sale of 170 MU without any basis. AEML-D has provided a detailed model containing the hourly load profiles and surplus/ shortfall position, which shows the projected sale of 170 MU. As regards the rate for sale of surplus power, in the latest months of Dec-22, Jan-23 and Feb-23 till date, the rate realised for surplus power is in the range of Rs. 5.21/kWh to 5.59/kWh. Therefore, for H2 for FY 2022-23, the rate of Rs.5 per unit as considered in the Petition is reasonable.

Commission's Ruling

AEML-D has been selling surplus power every year, based on the surplus quantum available at different hours of the day, due to the mismatch between demand and supply at that point in time. The Commission has considered the sale of surplus quantum power based on the energy balance and the available surplus projected for FY 2023-24 and FY 2024-25, and the rate for sale of surplus power has been considered the same as the rate for purchase of short-term power, i.e., Rs. 5.13/kWh. This rate has been uniformly considered for all the Licensees in the State.

2.9 ENERGY CHARGE RATE PROJECTION FROM ADTPS FOR FY 2022-23 TO FY 2024-25

TPC-D submitted that AEML has considered the rate of energy charges for procurement from ADTPS at Rs.5.00/kWh for first half based on actual cost of generation and Rs. 3.85/kWh for second half in its projection for the provisional true up of ARR for FY 2022-23. It is observed that AEML has reduced the energy charges from ADTPS from October 2022 to September 2023 by ignoring the direction of Ministry of Power vide. File No: FU-21/2020-FSC(Vol-IV) dated 9th January, 2023 wherein all the Generating Companies have been directed to blend minimum 6% of imported coal for generation of power.

Hence, the Commission is requested to seek clarification regarding implementation of the MoP direction with regard to mandatory use of imported coal.

AEML-D's Response

AEML-D submitted that TPC-D has requested the Commission to seek clarification from AEML regarding the implementation of the MoP direction with regards to mandatory use of imported coal. AEML-D submitted that the present Petition is pertaining to the Distribution Business of AEML-D and not the Generation Business. Further, AEML-D has considered the variable charge as estimated/ projected by AEML-G in its Petition. However, for the information of TPC-D, AEML-G as part of its Petition, has submitted its response to the Commission on the said matter.

Commission's Ruling

The Commission has considered the cost of power purchase from AEML-G as approved in the MTR Order for AEML-G dated 31st March 2023 in Case No. 229 of 2022.

2.10 WHEELING CHARGES

The Captive Power Producers Association (CPPA) submitted that the proposal for revised Wheeling Charges for HT and LT Category of consumers for FY 2023-24 and FY 2024-25 are almost double than those approved by the Commission in the MYT Order. The proposed increase in Wheeling Charges will be additional burden on the consumers. Hence, CPPA requested the Commission to not allow the proposed increased in Wheeling Charges and the Wheeling Charges may be limited to that approved in the MYT Order.

Mrs. Heeloni Gada and Mrs. Vimla Chheda raised questions about the levy of Wheeling charges and its concept.

AEML-D's Response

AEML-D submitted that the increase in wheeling charges is largely on account of under-recovery of wheeling charges from FY 2019-20 to FY 2022-23 (estimated), which is mainly on account of revenue shortfall due to COVID induced crash in energy sales. Other reasons include increase in capital expenditure as a result of works undertaken on DPRs approved post the MYT Order. The cumulative gap in Wires Business till FY 2022-23 is Rs. 2,227.22 Crore, detailed explanation, and justification for which is provided in relevant sections of the Petition.

AEML-D submitted that Wheeling Charges and Transmission Charges are different from each other. Wheeling Charges represent the costs to build, operate and maintain the

electricity distribution network, whereas Transmission Charges represent the same costs for electricity transmission network. The lines from Dahanu to Mumbai are Transmission Lines, not distribution lines and their cost is thus, included in transmission system cost. The Transmission Charges are borne by AEML-D as part of its power purchase costs, representing usage of transmission system by AEML-D. It is clarified that Wheeling Charges are composed of costs related to not just operating and maintaining the network, but those related to capital expenditure for creation of network as well, i.e., the costs pertaining to depreciation and cost of capital. All elements of ARR presented by AEML-D for its Wires Business and for its Supply Business are as per the relevant MYT Regulations.

Commission's Ruling

The Commission has determined the Wheeling Charges for FY 2023-24 and FY 2024-25 in accordance with the provisions of the MYT Regulations, 2019, the ARR approved for the Wires Business including past Gaps/(Surplus), and the methodology adopted in the MYT Order, as elaborated in Chapter 6 of this Order.

2.11 TARIFF HIKE

Mrs. Heeloni Gada and Mrs. Vimla Chheda submitted that AEML-D has proposed tariff hike for residential consumers as 2%, 2%, 7% and 7% for the four slabs, viz., 0 to 100 units, 101 to 300 units, 301 to 500 units, 501 and above units, respectively.

Mrs. Heeloni Gada and Mrs. Vimla Chheda submitted that the electricity tariff in many other cities of India is much lower, and has given the examples of Delhi and Kolkata. They added that multiple entities are booking profits at the costs of the consumers.

Mrs. Heeloni Gada and Mrs. Vimla Chheda submitted that Uniform Tariff needs to be introduced.

AEML-D's Response

AEML-D submitted that the objector has shown the proposed hike by comparing the proposed tariffs for FY 2023-24 vis-à-vis the existing tariffs for FY 2022-23. The objector has however, ignored the fact that AEML-D has proposed reduction in Wheeling Charges as well as Energy Charges in FY 2024-25 for the residential category. Also, the residential consumers will have the slab benefits accruing to them as the consumption increases. Over the period of two years, the net increase in tariffs is marginal.

AEML-D submitted that the mandate of the Electricity Act is to charge cost reflective tariffs. However, in States such as Delhi, the State Government provides direct subsidy to

reduce the tariffs of certain slabs of residential consumers. The consumers of Mumbai Licensees are not provided any subsidy by the Government of Maharashtra. The decision to provide subsidy is the sole prerogative of the concerned State Government. Furthermore, tariffs depend upon cost structure and consumer mix, and it is therefore, not possible to directly compare tariffs in different cities as operating conditions, type of network, consumer mix, etc., are very different from one another.

AEML-D submitted that all details with respect to costs and revenues are disclosed in the Petition in detail, along with the audited financial statements. AEML-D only receives regulated RoE from its Distribution Business, as approved by the Commission, in addition to approved efficiency incentives, if any. There are no other profits in regulated business.

AEML-D submitted that tariffs are required to be cost reflective and each Distribution Licensee's costs and cost structures are different, and their tariffs are reflective of their own cost. The Commission in Order dated 04-06-2008 in Case No. 66 of 2007 has clarified that it is not feasible to have uniform tariffs across Distribution Licensees.

Commission's Ruling

The tariff philosophy adopted by the Commission and the category-wise and slab-wise tariffs approved by the Commission for FY 2023-24 and FY 2024-25 are elaborated in Chapter 6 of this Order.

The Commission has approved the ARR of AEML-D for its Wires Business and Supply Business, in accordance with the provisions of the MYT Regulations, 2019, and only the costs attributable to the regulated business are allowed to be recovered through the tariff levied to the consumers.

The issue of Uniform Tariff across different Distribution Licensees and the issue of tariff comparison across different cities in the country have already been addressed by the Commission in earlier Order and in advice given to the Government of Maharashtra, and is not being repeated here.

2.12 Fixed/Demand Charges

Mr. Blase D'Souza submitted that Fixed Charge is that component of the Electricity Tariff designed to recover the basic cost of electric service. However, when AEML-D is rendering poor service without maintaining Safety Standards and the safety of the residents, AEML-D should not ask consumers to pay higher charges.

Further, with India very quickly adapting digital payments, the cost of the Distribution Companies on collection management has come down significantly. Customer base has increased allowing the Distribution Company to recover their costs over many more consumers. The Generation Companies are claiming that their costs of power generation are coming down. Under these circumstances, AEML-D should negotiate correctly, rather than asking the consumer to pay higher charges. The benefits from the Roof Top Solar Plants are also not being passed to the consumers.

Mrs. Heeloni Gada and Mrs. Vimla Chheda submitted that Fixed Charges have to be uniform, similar to the uniform Wheeling Charges.

AEML-D's Response

AEML-D submitted that it categorically denies any allegations of poor service or of not maintaining safety standards. The issues raised by the objector are outside the purview of the present proceedings. The objector it at liberty to raise grievance through the right channels and the same shall be looked into.

AEML-D submitted that Fixed Charges are for recovery of fixed costs of the Supply Business. AEML-D, in the Petition, has submitted the detailed rationale for the proposed increase in Fixed / Demand Charges.

The Fixed Charges, if kept at the same level as existing, would only recover 35% of the Fixed Cost of Supply Business in FY 2023-24, which is extremely poor and hence, Fixed Charges are required to be increased. This approach is in line with the Commission's own approach in the past Tariff Orders.

AEML-D submitted that the Wheeling Charges are for recovery of cost relating to distribution infrastructure (Wires Business), whereas the fixed charges are for recovery of fixed costs of the Supply Business. Also, there are certain consumer categories whose consumption is demand based and thus Demand Charges are applicable to those categories and not Fixed Charges. Thus, there cannot be uniform Fixed Charges levied for all.

Commission's Ruling

The tariff philosophy adopted by the Commission and the category-wise and slab-wise Fixed/Demand approved by the Commission for FY 2023-24 and FY 2024-25 are elaborated in Chapter 6 of this Order.

The recovery of fixed costs through Fixed/Demand Charges have been steadily increased over the years by the Commission, so that a reasonable proportion of the fixed costs are

recovered through Fixed/Demand Charges. The recovery of fixed costs from existing and revised tariffs are elaborated in Chapter 6 of this Order. A significant portion of the fixed costs are still being recovered through energy charges, which are variable in nature, though the costs are fixed in nature.

The Commission has determined uniform Fixed/Demand Charges for the Distribution Licensees in Mumbai. However, it is not feasible to have uniform Fixed/Demand Charges for all consumer categories.

2.13 TAX ON SALE OF ELECTRICITY AND ELECTRICITY DUTY

Mrs. Heeloni Gada and Mrs. Vimla Chheda submitted that Electricity Duty and Tax on Sale of Electricity are being collected, which amounts to double taxation of the same commodity.

AEML-D's Response

AEML-D submitted that these levies are by the Government of Maharashtra as per respective Acts. AEML-D only collects the charges and remits to the Government as per the Statute.

Commission's Ruling

Levy of Electricity Duty and Tax on Sale of Electricity are outside of the purview of the Commission and fall within the jurisdiction of the State Government.

2.14 REBATES ON PAYMENT THROUGH DIGITAL NETWORK

Mr. Blase D'Souza and Eugenie Co-operative Housing Society Ltd. submitted that rebates must be given to those consumers who make payment through digital mode apart from the overall cost reduction being passed on through a reduction in Fixed Charge. In order to support the Central Government's mission of moving towards digital payment, the Distribution Companies should be mandated to give a minimum 3% rebate when payments are made through digital network.

AEML-D's Response

AEML-D submitted that in the MYT Order for AEML-D issued in Case No. 325 of 2019 on March 30, 2020, discount on digital payment has been approved by the Commission. Further, enhancing the discount through tariff determination is the prerogative of the Commission.

Commission's Ruling

The Commission has retained the discount for payment through digital modes at the same level as approved in the MYT Order.

2.15 TARIFF FOR EV CHARGING STATIONS

Mr. Blase D'Souza, Mr. Sheshadri Iyer, Mr. Nilesh Chavan, Mr. Pinal Nandola, Mrs. Juliana D' Souza and several others submitted that the tariff for EV Charging Stations should be reduced and there should only be a single-part tariff.

The objectors submitted that the category of EV Charging Station exists under Low Tension (LT) Category but the same is not extended to individuals who install their own electric Charging Station within their premises. However, with the common aim to save the planet for a better tomorrow, this is a very important facilitation which should be given to individuals who take such green Initiatives.

AEML-D's Response

AEML-D submitted that the tariff to be levied is as per the tariff approved by the Commission. As per the applicable Tariff Schedule approved in Case No. 325 of 2019, the tariff applicable for a consumer who uses the electricity supply for charging his own electric vehicle at his premises, shall be as per the category of such premises and not the public EV charging tariff.

In the present Petition, AEML-D has requested the Commission to remove the distinction between public EV charging station and that used for charging own vehicle at its premises. Further, AEML-D has in the present Petition, also proposed a single-part tariff for EV charging stations without any Fixed Charges.

Commission's Ruling

The tariff philosophy adopted by the Commission, including the tariff applicable for EV Charging Stations for FY 2023-24 and FY 2024-25 are elaborated in Chapter 6 of this Order.

In the MYT Order, the Commission has already clarified that the tariff applicable for EV Charging Stations shall not be applicable for other categories, and the respective categorywise tariff shall be applicable for charging EVs through their existing connections.

2.16 CROSS SUBSIDY SURCHARGE (CSS)

Mr. Blase D'Souza and Eugenie Co-operative Housing Society Ltd. submitted that a new Tariff head is being proposed in the form of a Cross Subsidy Surcharge. Moreover, a 50% increase is proposed in FY 2024-25 over FY 2023-24.

AEML-D's Response

AEML-D submitted that the CSS is not a new tariff head and the concept of levy of CSS has been introduced vide Order of the Commission dated 29-07-2011 in Case No. 72 of 2010. CSS is a charge payable by only those consumers who are on AEML-D's network but not availing supply from it, i.e., either availing supply of power from TPC-D or under open access. CSS is not levied on own consumers of AEML-D. Therefore, consumers on AEML-D's own supply and network do not pay CSS. As the objector is apparently own consumer of AEML-D, there will be no levy of CSS.

Further, because CSS is payable to AEML-D by TPC-D changeover customers (i.e., customers who have shifted to TPC-D, but are connected to AEML-D network), it is the tariff of AEML-D and hence, will be part of AEML-D's Tariff Petition.

Further, the CSS is computed as per the Formula specified in the Tariff Policy, which is also approved by the Commission in the past Tariff Orders.

Commission's Ruling

The CSS for changeover and Open Access consumers is not a new levy and has been in force for several years, and has also been upheld by the Hon'ble APTEL. The Commission has determined the CSS in accordance with the Formula stipulated under the Tariff Policy, as elaborated in Chapter 6 of this Order.

2.17 TARIFF DISCOUNT FOR PREPAID METERING

Mr. Mahaveer Kumar Jain submitted that the Commission has not provided tariff discount for prepaid metering in case of AEML-D, though such discount has been approved for MSEDCL. He requested the Commission to maintain parity between all the four DISCOMs, viz., BEST, TPC-D, AEML-D, and MSEDCL.

Alternatively, the Commission may consider giving the option for advance payment system with discount of 5% as provided under prepaid metering. This should be kept same for all the four DISCOMs under MERC.

AEML-D's Response

AEML-D submitted that the Metering DPR for the period from FY 2022-23 to FY 2024-25 has been submitted before the Commission for release of new connections with smart meters and replacement of existing meters with smart meters. These Smart meters have prepaid facility as well. AEML-D has in the Petition requested the Commission to provide 5% discount on the tariff to be approved, so that the consumers are incentivised to adopt prepaid meters.

Commission's Ruling

The Commission notes that 5% rebate on pre-paid meter was introduced for consumers of some of the Distribution Licensees in the State when there was need to introduce and promote prepaid metering concept with a very small number of consumers with pre-paid meter. However, when as per Government's policy directives, all LT consumers are to be installed with Smart Meter with pre-paid facility, continuing with such rebate of 5% in monthly energy bill would have huge impact on ARR of Distribution Licensee, which ultimately has to be funded through increase in tariff of the consumers. Therefore, the Commission has decided to rationalise the rebate available for pre-payment meter, as elaborated in Chapter 6 of this Order.

2.18 TARIFF

Eugenie Co-operative Housing Society Ltd. submitted that the population of Mumbai Metropolitan area is increasing and so the subscriber base has been increasing, which provides the Company a wider audience to spread over the cost. Thus, ideally the per person cost of electricity distribution needs to be decreased or be stagnant.

AEML-D's Response

AEML-D submitted that it has projected its energy sales considering the growth in demand and addition of new consumers. The per unit Average Cost of Supply (ACoS) of electricity on a stand-alone basis (i.e., not considering past revenue gap) for both FY 2023-24 and FY 2024-25 is lower than the ACoS approved in the MYT Order. This shows that the increase in cost of supply is only on account of past revenue gap, which has accumulated mainly due to significant reduction in sales volume and revenues due to COVID pandemic during FY 2020-21 and FY 2021-22. However, AEML-D has proposed reduction in average tariff (on an overall level) by 1.34% in FY 2023-24 and 5.42% in FY 2024-25.

Commission's Ruling

The tariff philosophy adopted by the Commission, including the category-wise and slab-wise tariffs applicable for FY 2023-24 and FY 2024-25 are elaborated in Chapter 6 of this Order.

As regards the submission that increase in consumer base should result in reduction of per consumer cost of supply, the same is not necessarily true, as the costs for providing connections to the new consumers, and cost of incremental power purchase also have to be considered.

2.19 RENEWABLE ENERGY

Eugenie Co-operative Housing Society Ltd. submitted that cost of production of Renewable Energy is decreasing and stated that MSEDCL has got record low rate of Rs.2.42 per unit from RE power. They added that solar power procurement has not been considered in the cost projections. Also, electricity generated through solar energy means that there is zero distribution loss, which itself is significant cost subsidiser.

AEML-D's Response

AEML-D submitted that it is a well-known fact that cost of electricity generation and also market rates of electricity for short-term and Day Ahead power significantly increased during FY 2022-23 due to geo-political situation. The market prices of power are still much higher than business as usual and so is the price of imported coal. However, AEML-D has considered prudent and low-cost power procurement, including Renewable Energy, for projecting the ARR of FY 2023-24 and FY 2024-25.

AEML-D submitted that the power procurement plan of AEML-D as presented in the Petition includes the approved RE procurement, including procurement of solar power. AEML-D is already buying about 390 MW of solar power (considering 350 MW Solar out of Hybrid power) and has further got the Commission's approval for procurement of 1500 MW of power, out of which at least 750 MW will be from RE. Further, AEML-D is also buying surplus energy from Rooftop solar installations in its area, as per MERC Regulations. Therefore, all such procurement has been considered in the Petition and the corresponding projections of costs and tariff.

Commission's Ruling

The details of quantum and cost of power purchase approved by the Commission for FY 2023-24 and FY 2024-25 are elaborated in Chapter 5 of this Order.

2.20 INTRODUCTION OF VIRTUAL NET METERING AND GROUP NET METERING FOR ROOF-TOP SOLAR

Eugenie Co-operative Housing Society Ltd. submitted that introduction of Virtual Net Metering (VNM) and Group Net Metering (GNM) for Roof Top Solar Systems has been

approved by Ministry of New & Renewable Energy (MNRE). This has been implemented in many States including Delhi, which adopted the same in January 2023.

AEML-D's Response

AEML-D submitted that these issues are not within the purview of ARR and tariff proceedings.

Commission's Ruling

The issue raised by the objector does not pertain to the present MTR proceedings.

2.21 LOYALTY PROGRAM DISCOUNT

TPC-D submitted that it had provided the details of loyalty benefits offered by AEML-D to its consumers for retaining the consumers before the Learned Committee formed to examine the claim of TPC-D and AEML-D in their respective Petitions in Case No. 82 of 2021 and Case No. 135 of 2021. However, the Ld. Committee has not given any observation on the same.

In this regard, TPC-D submitted that AEML-D has been selectively offering discounts / rebate to consumers in the monthly electricity bill equivalent to tariff differential between TPC-D and AEML-D for retaining the consumer and avoid switchover of these consumers to TPC-D. It is pertinent to state that AEML-D is offering this loyalty scheme to only those consumers who approach TPC-D for switching over, and consumer is compensated under head of "Adjustment" in the electricity bill every month.

The 'loyalty program' offered by AEML-D is contrary to the applicable regulatory framework. In terms of the applicable framework, a Distribution Licensee is required to charge tariff to the consumers as determined by the Commission vide its Tariff Orders from time to time. AEML-D is permitted to offer rebate/ discount on tariff determined by this Commission in accordance with MYT Regulations, 2019.

TPC-D requested the Commission to direct AEML to provide the following information:

- a) Whether AEML has sought approval from this Commission regarding selective offering of loyalty program discount / rebate to consumers since, Regulations do not allow for selective offering of loyalty program?
- b) Whether AEML has submitted the quarterly report of such discount / rebate to Commission as mandated under the MYT Regulations, 2019?

- c) AEML should share the complete details of total consumers to whom they have offered this loyalty program and total discount / rebate given to consumer for FY 2020-21, FY 2021-22 and FY 2022-23?
- d) Whether the impact of such rebates is adjusted in the ARR of the respective financial years?
- e) In case same has not been adjusted in the ARR of respective financial years then AEML should submit the reconciliation of ARR and revenue with audited expenses as well as revenue with detail item-wise wherein these loyalty expenses have been booked.

AEML-D's Response

AEML-D submitted that it has submitted its response to the query from the Commission in this regard and the said response is part of the Petition available in public domain.

Commission's Ruling

The Commission has taken a very serious view regarding the selective loyalty rebates provided by AEML-D to selected consumers, which is not in accordance with the provisions of the MYT Regulations, 2019. The Commission's decision in this regard is elaborated in Chapter 5 of this Order.

2.22 LEVY OF SERVICE CONNECTION CHARGES

TPC-D submitted that AEML has requested for waiver of service connection charges for the consumers who want to migrate back to AEML-D network. TPC-D submitted that this is against the principles approved by the Commission in applicable Regulations as at the time of switchover, consumer is required to submit new connection application form to the new licensee and all the processes for new connection is required to be performed as per new connection. Therefore, the Commission is requested to reject the request in this regard to safeguard the interest of other consumers at the cost of those consumers.

AEML-D's Response

AEML-D submitted that TPC-D has requested the Commission to reject AEML-D's proposal in this matter. In this regard, AEML-D has already provided rationale for its proposal in its Petition. It is based on the principle of not charging the consumer twice for the same service. That is a fair and legitimate principle, and the Commission is therefore, requested to accept and approve the same.

Commission's Ruling

The Commission notes that switchover consumer is treated as new consumer and hence required to comply with all necessary formality mandated for new connection. Hence, as like in case of new connection application, switchover consumer has to pay service connection charges.

3 TRUING UP FOR FY 2019-20, FY 2020-21 and FY 2021-22

AEML-D submitted that it has filed the Petition for final truing up of expenditure and revenue for FY 2019-20, FY 2020-21 and FY 2021-22 based on actual and audited costs and revenue, vis-à-vis the amounts approved by the Commission in the MYT Order dated 30 March, 2020 in Case No. 325 of 2019, and provided the justification for the deviations.

In this Chapter, the Commission has analysed all the elements of actual expenditure and revenue of AEML-D for FY 2019-20, FY 2020-21 and FY 2021-22 and has approved the truing up of expenses and revenue after prudence check and based on the provided audited statements/documents.

3.1 SALES FOR FY 2019-20, FY 2020-21 and FY 2021-22

AEML-D's Submission

AEML-D has submitted the category-wise breakup of actual sales in FY 2019-20, FY 2020-21 and FY 2021-22 in its Petition. It has submitted the sales of HT category in kVAh also from FY 2020-21 onwards as the Commission in the MYT Order has allowed levy of kVAh based tariff to HT consumers.

AEML-D submitted the category-wise comparison of own and change-over sales with that approved in the MYT Order as shown in the Table below:

Table 3-1 : Own sales and Change-over sales for FY 2019-20 as submitted by AEML-D (MU)

LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category TI kV Category - - - HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Commercial 333.31 426.79 3.48 4.12 HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - <t< th=""><th colspan="9">AEML-D (MU)</th></t<>	AEML-D (MU)								
Critical Content Critical Co			Sales						
LT Below Poverty Line 0.01 0.01	Particulars		Actual		Actual				
Color	LT Category								
0-100 1,974.73 1,646.47 567.08 514.86 101-300 1,515.95 1,083.29 540.27 446.06 301-500 398.68 180.17 128.54 68.87 500 and above 476.8 63.88 90.3 16.83 LT-I Residential (Three Phase)	LT I - Below Poverty Line	0.01	0.01						
101-300	LT -I Residential (Single Phase)								
391-500 398.68 180.17 128.54 68.87 500 and above	0-100	1,974.73	1,646.47	567.08	514.86				
500 and above 476.8 63.88 90.3 16.83 LT - Residential (Three Phase) 270.13 89.11 0-100 395.45 133.04 301-500 202.23 61.25 500 and above 409.06 65.81 LT II (a) - 0-20 kW 1,824.38 1,802.36 95.64 85.68 LT II (b) - 20-50 kW 233.53 238.31 23.09 21.52 LT III (a) - 1. Industrial up to 20 kW 178.15 167.60 14.02 15.40 LT III (b) - LT Industrial above 20 kW 392.59 375.57 6.36 10.87 LT IV - Public Water Works 12.77 13.08 - - LT-VI L-Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VII (A): LT -Temporary Supply Religious 1.86 1.87 - - LT-VII (B): LT -Temporary Supply Religious 1.86 1.87 - - LT-VII (B): LT -Temporary Supply Others 10.43 11.08 0.02 0.03 LT IX (b): PS - Others 142.23	101-300	1,515.95	1,083.29	540.27	446.06				
CT - I Residential (Three Phase) 0-100 270.13 89.11	301-500	398.68	180.17	128.54	68.87				
0-100	500 and above	476.8	63.88	90.3	16.83				
101-300 395.45 133.04 301-500 202.23 61.25 500 and above 409.06 65.81 LT II (a) - 0-20 kW 1,824.38 1,802.36 95.64 85.68 LT II (b) - 20-50 kW 233.53 238.31 23.09 21.52 LT III (c) - above 50 kW 537.37 561.00 32.9 23.89 LT III (a) - LT Industrial up to 20 kW 178.15 167.60 14.02 15.40 LT III (b) - LT Industrial above 20 kW 392.59 375.57 6.36 10.87 LT IV - Public Water Works 12.77 13.08 LT - VIL - Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VI: LT - Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VII (B): LT - Temporary Supply Religious 1.86 1.87 - - LT - VII (B): LT - Temporary Supply Others 10.43 11.08 0.02 0.03 LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Oott. EI & Hospitals 27.12 25.14 - - - LT X (b): Agriculture - Pump sets 0.07 0.03 - - - LT X (b): Agriculture - Pump sets 0.07 0.03 - - - LT X (b): Agriculture - Others 0.24 0.19 - - - LT X (b): Agriculture - Others 0.24 0.19 - - - -	LT -I Residential (Three Phase)								
301-500 202.23 61.25	0-100		270.13		89.11				
Sol and above	101-300		395.45		133.04				
LT II (a) - 0-20 kW	301-500		202.23		61.25				
LT II (b) - 20-50 kW 233.53 238.31 23.09 21.52 LT II (c) - above 50 kW 537.37 561.00 32.9 23.89 LT III (a) - LT Industrial up to 20 kW 178.15 167.60 14.02 15.40 LT III (b) - LT Industrial above 20 kW 392.59 375.57 6.36 10.87 LT IV - Public Water Works 12.77 13.08 -	500 and above		409.06		65.81				
LT II (c) - above 50 kW	LT II (a) - 0-20 kW	1,824.38	1,802.36	95.64	85.68				
LT II (c) - above 50 kW	LT II (b) - 20-50 kW	233.53	238.31	23.09	21.52				
LT III (b) - LT Industrial above 20 kW 392.59 375.57 6.36 10.87 LT IV - Public Water Works 12.77 13.08 - LT-V: LT- Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VI: LT - Street Lights 54.19 48.37 - LT-VII (A): LT - Temporary Supply Religious 1.86 1.87 - LT-VII (B): LT - Temporary Supply Others 10.43 11.08 0.02 0.03 LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - LT X (b): Agriculture - Others 0.24 0.19 - LT XI: EV Charging Stations 0.06 - LT XI: EV Charging Stations 0.06 - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 1 kV Category		537.37	561.00	32.9	23.89				
LT III (b) - LT Industrial above 20 kW 392.59 375.57 6.36 10.87 LT IV - Public Water Works 12.77 13.08 - LT-V: LT- Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VI: LT - Street Lights 54.19 48.37 - LT-VII (A): LT - Temporary Supply Religious 1.86 1.87 - LT-VII (B): LT - Temporary Supply Others 10.43 11.08 0.02 0.03 LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - LT X (b): Agriculture - Others 0.24 0.19 - LT XI: EV Charging Stations 0.06 - LT XI: EV Charging Stations 0.06 - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 1 kV Category	LT III (a) - LT Industrial up to 20 kW	178.15	167.60	14.02	15.40				
LT-V: LT- Advertisements and Hoardings 3.13 2.53 0.02 0.01 LT VI: LT - Street Lights 54.19 48.37 - - LT-VII (A): LT - Temporary Supply Religious 1.86 1.87 - LT-VII (B): LT - Temporary Supply Others 10.43 11.08 0.02 0.03 LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category TI: HT-Industry 305.56 237.49 0.16 0.17 HT III: HT-Croup Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a): PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b): PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - HT VIII: EV Charging Stations - - - Total HT 836.50 833.99 3.63 4.29		392.59	375.57	6.36	10.87				
LT VI: LT - Street Lights 54.19 48.37 - - LT-VII (A): LT - Temporary Supply Religious 1.86 1.87 - - LT-VII (B): LT - Temporary Supply Others 10.43 11.08 0.02 0.03 LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category TH II: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI	LT IV - Public Water Works	12.77	13.08	-	-				
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LT VIII: LT - Crematorium & Burial Grounds 1.32 1.30 0.35 0.26 LT IX (a): PS - Govt. EI & Hospitals 27.12 25.14 - - LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category TI IX: HT-Industry 305.56 237.49 0.16 0.17 HTI: HT-Commercial 333.31 426.79 3.48 4.12 HT IV: HT-Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.5		10.43	11.08	0.02	0.03				
LT IX (b): PS - Others 142.23 118.93 3.72 2.37 LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category - - - - - HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT V: HT -Public Water Works 8.13 8.84 - - HT V- HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 <td< td=""><td>LT VIII: LT - Crematorium & Burial Grounds</td><td>1.32</td><td>1.30</td><td>0.35</td><td>0.26</td></td<>	LT VIII: LT - Crematorium & Burial Grounds	1.32	1.30	0.35	0.26				
LT X (a): Agriculture - Pump sets 0.07 0.03 - - LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V-HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VII (b):PS - Others 100.04 86.02 - - HT VIII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	LT IX (a): PS - Govt. EI & Hospitals	27.12	25.14	-	-				
LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V- HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	LT IX (b): PS - Others	142.23	118.93	3.72	2.37				
LT X (b): Agriculture - Others 0.24 0.19 - - LT XI: EV Charging Stations 0.06 - - Total LT 7,785.54 7,618.10 1,502.31 1,555.89 11 kV Category HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT-Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V- HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	LT X (a): Agriculture - Pump sets	0.07	0.03	_	-				
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11 kV Category HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT- Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29		7,785.54	7,618.10	1,502.31	1,555.89				
HT I: HT-Industry 305.56 237.49 0.16 0.17 HTII: HT- Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V- HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	11 kV Category	,	,	Ź					
HTII: HT- Commercial 333.31 426.79 3.48 4.12 HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29		305.56	237.49	0.16	0.17				
HT III: HT-Group Housing Society 36.84 38.15 - - HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29									
HT IV: HT -Public Water Works 8.13 8.84 - - HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	HT III: HT-Group Housing Society	36.84	38.15	-	-				
HT V - HT Metro & Monorail 30.51 29.92 - - HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29				-	-				
HT VI (a):PS - Govt. EI & Hospitals 6.68 5.71 - - HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29				-	-				
HT VI (b):PS - Others 100.04 86.02 - - HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29				-	-				
HT VII: Temporary Supply 15.41 1.07 - - HT VIII: EV Charging Stations - - - - Total HT 836.50 833.99 3.63 4.29	. ,	100.04		-	-				
HT VIII: EV Charging Stations - - - Total HT 836.50 833.99 3.63 4.29	HT VII: Temporary Supply			-	-				
Total HT 836.50 833.99 3.63 4.29	A V AA V	-	-	-	-				
	5 5	836.50	833.99	3.63	4.29				
10181 3,022,04 3,432,09 1,303,94 1,300.13	Total	8,622.04	8,452.09	1,505.94	1,560.18				

Table 3-2 : Own sales and Change-over sales for FY 2020-21 as submitted by $AEML-D\ (MU)$

Particulars	AEN	<u>1L-D (MU)</u>			CI.	C 1	
Corder			Own Sales				
LT Category	Particulars Particulars						
LT Residential (Single Phase)		Order	(MU)	(KVAn)*	Order	(MU)	
LT - I Residential (Single Phase)							
0-100		0.01	0.004				
101-300							
301-500 196.90 203.65 68.93 67.65			·			516.84	
S00 and above						445.92	
LT -I Residential (Three Phase)						67.62	
0-100		68.03	76.68		18.28	15.01	
101-300	` /						
301-500 213.66 220.87 59.61 64.4						87.21	
S00 and above						137.40	
LT II (a) - 0-20 kW						64.41	
LT II (b) - 20-50 kW						60.61	
LT III (c) - above 50 kW	` '					46.91	
LT III (a) - LT Industrial up to 20 kW 182.89 255.00 10.99 9.3 LT III (b) - LT Industrial above 20 kW 388.81 273.45 3.87 7.3 LT IV - Public Water Works	LT II (b) - 20-50 kW	233.40	132.16		23.09	12.18	
LT III (b) - LT Industrial above 20 kW 388.81 273.45 3.87 7.3.	LT II (c) - above 50 kW	531.48	346.09		32.90	15.41	
LT IV - Public Water Works LT-V: LT- Advertisements and Hoardings LT VI: LT - Street Lights LT-VII (A): LT - Temporary Supply Religious LT-VII (B): LT - Temporary Supply Others LT-VIII: LT - Crematorium & Burial Grounds LT IX (a): PS - Govt. EI & Hospitals 30.85	LT III (a) - LT Industrial up to 20 kW	182.89	255.00		10.99	9.32	
LT-V: LT- Advertisements and Hoardings LT VI: LT -Street Lights LT-VII (A): LT -Temporary Supply Religious LT-VII (B): LT -Temporary Supply Others LT VIII: LT - Crematorium & Burial Grounds LT IX (a): PS - Govt. EI & Hospitals 30.85 24.71 LT IX (b): PS - Others 236.69 127.65 4.64 0.8 LT IX (a): Agriculture - Pump sets 0.09 0.07 LT X (b): Agriculture - Others 0.30 0.19 LT XI: EV Charging Stations - 0.05 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 Total LT 1 kV Category T I: HT-Industry 339.76 263.11 268.29 0.06 0.00 HTII: HT-Group Housing Society 34.70 36.81 37.45 HT IV: HT -Public Water Works HT V- HT Metro & Monorail 30.84 12.93 14.43 HT VI (a): PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b): PS - Others 106.80 76.58 78.76 HT VIII: EV Charging Stations - - - Total HT Total HT 842.12 726.88 747.92 1.64 1.73 Total HT 1.73 1.73 1.73 1.75	LT III (b) - LT Industrial above 20 kW	388.81	273.45		3.87	7.35	
LT VI: LT -Street Lights	LT IV - Public Water Works						
LT-VII (A): LT -Temporary Supply Religious LT-VII (B): LT -Temporary Supply Others	LT-V: LT- Advertisements and Hoardings						
Religious LT-VII (B): LT -Temporary Supply Others LT VIII: LT - Crematorium & Burial Grounds 30.85 24.71 4.64 0.8 LT IX (a): PS - Govt. EI & Hospitals 30.85 24.71 4.64 0.8 LT IX (b): PS - Others 236.69 127.65 4.64 0.8 LT X (a): Agriculture - Pump sets 0.09 0.07 4.64 0.8 LT XI: EV Charging Stations - 0.05 4.64 0.8 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 11 kV Category 7,992.17 6,443.94 1,497.72 1,487.00 HTI: HT-Industry 339.76 263.11 268.29 0.06 0.0 HTII: HT-Commercial 323.56 332.50 343.78 1.58 1.60 HT IV: HT -Public Water Works 4.95 37.45 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95 5.20 4.95	LT VI: LT -Street Lights						
LT-VII (B): LT -Temporary Supply Others LT VIII: LT - Crematorium & Burial Grounds 30.85 24.71 24.71 24.64 0.88 0.98 0.09 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <t< td=""><td>LT-VII (A): LT -Temporary Supply</td><td></td><td></td><td></td><td></td><td></td></t<>	LT-VII (A): LT -Temporary Supply						
LT VIII: LT - Crematorium & Burial Grounds Surial Grounds CT IX (a): PS - Govt. EI & Hospitals 30.85 24.71 CT IX (b): PS - Others 236.69 127.65 4.64 0.8 CT X (a): Agriculture - Pump sets 0.09 0.07 CT X (b): Agriculture - Others 0.30 0.19 CT XI: EV Charging Stations - 0.05 CT XI: EV XI: EV XI: EV XI: EV XI: EV Charging Stations - 0.05 CT XI: EV	Religious						
Grounds James 1 James 2 James 2 <t< td=""><td>LT-VII (B): LT -Temporary Supply Others</td><td></td><td></td><td></td><td></td><td></td></t<>	LT-VII (B): LT -Temporary Supply Others						
LT IX (a): PS - Govt. EI & Hospitals 30.85 24.71 LT IX (b): PS - Others 236.69 127.65 4.64 0.8 LT X (a): Agriculture - Pump sets 0.09 0.07 .	LT VIII: LT - Crematorium & Burial						
LT IX (b): PS - Others 236.69 127.65 4.64 0.8° LT X (a): Agriculture - Pump sets 0.09 0.07 LT X (b): Agriculture - Others 0.30 0.19 LT XI: EV Charging Stations - 0.05 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 11 kV Category 0.06 0.0°	Grounds						
LT X (a): Agriculture - Pump sets 0.09 0.07 LT X (b): Agriculture - Others 0.30 0.19 LT XI: EV Charging Stations - 0.05 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 11 kV Category - 0.05 - 0.06 0.00 HT I: HT-Industry 339.76 263.11 268.29 0.06 0.00 HT III: HT-Commercial 323.56 332.50 343.78 1.58 1.60 HT IV: HT -Public Water Works - 0.05 -	LT IX (a): PS - Govt. EI & Hospitals	30.85	24.71				
LT X (b): Agriculture - Others 0.30 0.19 1 LT XI: EV Charging Stations - 0.05 1,497.72 1,487.00 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 11 kV Category - - - 0.06 0.00 HT I: HT-Industry 339.76 263.11 268.29 0.06 0.00 HT III: HT-Commercial 323.56 332.50 343.78 1.58 1.60 HT III: HT-Group Housing Society 34.70 36.81 37.45 </td <td>LT IX (b): PS - Others</td> <td>236.69</td> <td>127.65</td> <td></td> <td>4.64</td> <td>0.87</td>	LT IX (b): PS - Others	236.69	127.65		4.64	0.87	
LT XI: EV Charging Stations - 0.05 Total LT 7,992.17 6,443.94 1,497.72 1,487.00 11 kV Category -	LT X (a): Agriculture - Pump sets	0.09	0.07				
Total LT 7,992.17 6,443.94 1,497.72 1,487.06 11 kV Category 339.76 263.11 268.29 0.06 0.07 HTII: HT-Gommercial 323.56 332.50 343.78 1.58 1.66 HT III: HT-Group Housing Society 34.70 36.81 37.45 37.45 HT IV: HT -Public Water Works 40.00	LT X (b): Agriculture - Others	0.30	0.19				
11 kV Category HT I: HT-Industry 339.76 263.11 268.29 0.06 0.00 HTII: HT- Commercial 323.56 332.50 343.78 1.58 1.60 HT III: HT-Group Housing Society 34.70 36.81 37.45	LT XI: EV Charging Stations	-	0.05				
HT I: HT-Industry 339.76 263.11 268.29 0.06 0.0 HT III: HT- Commercial 323.56 332.50 343.78 1.58 1.60 HT III: HT-Group Housing Society 34.70 36.81 37.45 37.45 36.81 37.45 <td>Total LT</td> <td>7,992.17</td> <td>6,443.94</td> <td></td> <td>1,497.72</td> <td>1,487.06</td>	Total LT	7,992.17	6,443.94		1,497.72	1,487.06	
HT I: HT-Industry 339.76 263.11 268.29 0.06 0.0 HT III: HT- Commercial 323.56 332.50 343.78 1.58 1.60 HT III: HT-Group Housing Society 34.70 36.81 37.45 37.45 36.81 37.45 <td>11 kV Category</td> <td></td> <td></td> <td></td> <td></td> <td></td>	11 kV Category						
HT III: HT-Group Housing Society 34.70 36.81 37.45 HT IV: HT -Public Water Works HT V - HT Metro & Monorail 30.84 12.93 14.43 HT VI (a):PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply HT VIII: EV Charging Stations Total HT 842.12 726.88 747.92 1.64 1.73		339.76	263.11	268.29	0.06	0.07	
HT IV: HT -Public Water Works 30.84 12.93 14.43 HT VI (a):PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply - - HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73		323.56	332.50	343.78	1.58	1.66	
HT IV: HT -Public Water Works 30.84 12.93 14.43 HT VI (a):PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply - - HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73	HT III: HT-Group Housing Society	34.70	36.81	37.45			
HT VI (a):PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply - - HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73							
HT VI (a):PS - Govt. EI & Hospitals 6.45 4.95 5.20 HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply - - HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73	HT V - HT Metro & Monorail	30.84	12.93	14.43			
HT VI (b):PS - Others 106.80 76.58 78.76 HT VII: Temporary Supply - - HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73							
HT VII: Temporary Supply - - - - HT VIII: EV Charging Stations - - - - - Total HT 842.12 726.88 747.92 1.64 1.73	•			78.76			
HT VIII: EV Charging Stations - - - Total HT 842.12 726.88 747.92 1.64 1.73							
Total HT 842.12 726.88 747.92 1.64 1.73		-	-	-			
	5 5	842.12	726.88	747.92	1.64	1.73	
Total 8,834.29 7,170.83 7,191.86 1,499.36 1,488.79	Total	8,834.29	7,170.83	7,191.86	1,499.36	1,488.79	

^{*} kVAh billing is for HT consumers only

Table 3-3: Own sales and Change-over sales for FY 2021-22 as submitted by AEML- $D\ (MU)$

		Own Sales		Changeover Sales	
Particulars	MYT	Actual	Actual	MYT	Actual
	Order	(MU)	(kVAh)*	Order	(MU)
LT Category					
LT I - Below Poverty Line	0.01	0.004			
LT -I Residential (Single Phase)					
0-100	1,817.31	1,594.19		484.36	494.24
101-300	1,189.56	1,075.71		418.98	434.76
301-500	201.65	192.62		70.00	77.41
500 and above	68.36	69.95		18.64	20.50
LT -I Residential (Three Phase)					
0-100	303.08	286.08		83.08	86.29
101-300	433.89	418.35		121.29	127.52
301-500	220.38	221.73		58.54	61.33
500 and above	413.25	432.44		71.66	62.29
LT II (a) - 0-20 kW	1,917.68	1,413.68		95.68	60.41
LT II (b) - 20-50 kW	231.98	169.16		23.09	11.34
LT II (c) - above 50 kW	525.16	448.32		32.90	14.81
LT III (a) - LT Industrial up to 20 kW	186.97	304.13		8.61	13.16
LT III (b) - LT Industrial above 20 kW	383.85	340.21		2.35	7.38
LT IV - Public Water Works					
LT-V: LT- Advertisements and Hoardings					
LT VI: LT -Street Lights					
LT-VII (A): LT -Temporary Supply					
Religious					
LT-VII (B): LT -Temporary Supply Others					
LT VIII: LT - Crematorium & Burial					
Grounds					
LT IX (a): PS - Govt. EI & Hospitals	35.09	26.95			1.23
LT IX (b): PS - Others	269.88	147.59		5.81	0.85
LT X (a): Agriculture - Pump sets	0.11	0.07			
LT X (b): Agriculture - Others	0.38	0.14			
LT XI: EV Charging Stations	- 0.100.70	0.26	5 1 41 50	1 407 00	1 450 51
Total LT	8,198.58	7,141.58	7,141.58	1,495.00	1,473.51
33 kV Category	275 11	201.42	206.20	0.02	
HT I: HT-Industry	375.11	291.43	296.39	0.03	0.22
HTII: HT- Commercial	300.40	367.51	377.73	0.72	0.33
HT III: HT-Group Housing Society	32.24	24.33	24.93		
HT IV: HT -Public Water Works	21 04	20.41	22.47		
HT V - HT Metro & Monorail	31.04	20.41	22.47		
HT VI (a):PS - Govt. EI & Hospitals HT VI (b):PS - Others	6.21	6.05	6.31		
· · · · · · · · · · · · · · · · · · ·	105.33	105.38	107.78		
HT VII: Temporary Supply HT VIII: EV Charging Stations					
Total HT	850.33	815.11	835.61	Λ 75	0.22
Total	9.048.91	7,956.69	7,977.19	0.75 1,495.74	0.33 1,473.83
1 บเลา	7.048.71	7,930.09	1,911.19	1,475./4	1,4/3.83

^{*} kVAh billing is for HT consumers only

The Petitioner has submitted that the actual own sales in FY 2019-20 has reduced by 169.94 MU as compared to the sales approved in the MYT Order dated 30 March, 2020. Out of 169.94 MU, the majority reduction is in residential category (115.50 MU) which is because the growth rate considered in residential sales while approving the sales for FY 2019-20 was on the higher side as compared to the actual growth rate.

The energy assessed during FY 2019-20, FY 2020-21, and FY 2021-22 in cases of theft and pilferage, for AEML-D own consumers is 7.39 MU, 4.09 MU and 14.92 MU, respectively. In accordance with the Judgment of the Hon'ble ATE in Appeal No. 85 of 2012, AEML-D has included this assessed sales in the actual sales to own consumers in respective years. However, revenue from such assessment is included in Non-Tariff Income, instead of sales revenue in accordance with the direction of the Commission in its Order in Case No. 126 of 2011. AEML-D requested the Commission to approve the actual sales for FY 2019-20, FY 2020-21 and FY 2021-22 as presented above.

The impact of COVID-19 pandemic reflected in the sales for FY 2020-21

AEML-D submitted that the actual sales for FY 2020-21 is much lower than the actual sales for FY 2019-20 in almost all the categories. Further, the reduction in sales has a two-fold effect, viz., first - reduced recovery from wheeling charges, when almost all the wires ARR cost is fixed in nature, leading to large Revenue Gap in Wires ARR and secondly, as majority of impact of pandemic was on business customers, the resulting loss of energy sales is mostly observed in subsidising categories, which again leads to a large Revenue Gap.

For FY 2021-22, the COVID pandemic has continued to impact sales to certain consumer categories, primarily Residential sales, and LT-Commercial sales. Both these categories have shown lower sales vis-à-vis that approved in the MYT Order by approximately 1,000 MU. The reduction in sales has an effect of reduction in wheeling charges as well as reduction in the energy charges, effect of which is seen in lower revenue recovery vis-à-vis that approved in the MYT Order.

Changeover sales on AEML-D network

AEML-D submitted that not too much impact of the pandemic has been observed in changeover sales as most change-over sales is from residential category, which actually saw increase in energy consumption due to work from home. In case of direct sales, however, AEML-D has experienced reduction in residential sales as well. This underscores the point of residential consumer mix disparity between TPC-D and AEML-D consumers. While all change-over sales come from residential housing societies, AEML-D's own residential sales comes, in large part, from slum consumers as well, who migrated to their native places due to the pandemic, leading to reduction in energy consumption.

Commission's Analysis and Ruling

The Commission has compared the change-over sales data for FY 2019-20, FY 2020-21 and FY 2021-22 submitted by AEML-D and the Tata Power Company Ltd. - Distribution Business (TPC-D). TPC-D's change-over sales figure of 1702.88 MU does not tally with AEML-D's sale figures of 1560.18 MU for FY 2019-20. For FY 2020-21, TPC-D's change-over sales figure is 1587.51 MU, as compared to 1488.79 MU of AEML-D. For FY 2021-22, Similarly, TPC-D's change-over sales figure is 1561.76 MU, as compared to 1473.83 MU of AEML-D. The Commission had sought clarification from both AEML-D and TPC-D in this regard.

In its reply, AEML-D submitted that it does not have the category-wise change-over sales reported by TPC-D. Hence, category wise reconciliation of changeover consumers was not possible. However, as a general practice, sales provided by TPC-D is at T<>D interface level. Hence, the comparison of change-over sales as reported by AEML-D and TPC-D is after grossing up the HT and LT sales reported by AEML-D with the HT and LT wheeling losses for respective years. Based on the comparison, AEML-D submitted that the difference between overall changeover sales as reported by AEML-D and by TPC-D is not significant. The minor difference could be because of the 15-day adjustment done by TPC-D while presenting sales at the time of truing-up.

TPC-D has submitted that the changeover sales are duly reconciled with AEML-D. Based on the above explanation and reconciliation provided by TPC-D, the Commission has approved the actual sales to own consumers and Changeover Sales for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by AEML-D. The Commission notes that COVID-19 pandemic and consequent restrictions has impacted direct sales of AEML-D during FY 2020-21 and FY 2021-22. The sales approved by the Commission after truing up for FY 2019-20, FY 2020-21 and FY 2021-22 is summarised in the Table below:

Table 3-4: Own Sales and Change-over Sales for FY 2019-20 as approved by the Commission (MU)

		Own Sal	es	Changeover Sales			
Particulars			True-up Approved after Petition truing up		True-up Petition	Approved after truing up	
Total LT	7,785.55		7,618.10	Order 1,502.31	1,555.89	1,555.89	
Total HT	836.5	833.99	833.99	3.63	4.29	4.29	
Total	8,622.04	8,452.09	8,452.09	1,505.94	1,560.18	1,560.18	

Table 3-5: Own Sales and Change-over Sales for FY 2020-21 as approved by the Commission (MU)

	Own Sales			Changeover Sales			
Particulars	MYT True-up				True-up	Approved after	
	Order	Petition	truing up	Order	Petition	truing up	
Total LT	7,992.17	6,443.94	6,443.94	1,497.72	1,487.06	1,487.06	
Total HT	842.12	726.88	726.88	1.64	1.73	1.73	
Total	8,834.29	7,170.83	7,170.83	1,499.36	1,488.79	1,488.79	

Table 3-6: Own Sales and Change-over Sales for FY 2021-22 as approved by the Commission (MU)

		Own Sal	es	Changeover Sales			
Particulars	MYT	True-up Approved after		MYT	True-up	Approved after	
	Order	Petition	truing up	Order	Petition	truing up	
Total LT	8,198.59	7,141.58	7,141.58	1,495.00	1,473.51	1,473.51	
Total HT	850.33	815.11	815.11	0.75	0.33	0.33	
Total	9,048.92	7,956.69	7,956.69	1,495.75	1,473.83	1473.83	

3.2 OPEN ACCESS CONSUMPTION

AEML-D's Submission

AEML-D submitted the Open Access (OA) consumption in its licence area for FY 2019-20, FY 2020-21 and FY 2021-22, as shown in the Table below:

Table 3-7: OA Consumption for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by AEML-D(MU)

	FY 2019-20		FY 2020-21		FY 2021-22	
Particulars	MYT	True-up	MYT	True-up	MYT	True-up
	Order	Petition	Order	Petition	Order	Petition
OA Consumption	235.25	314.99	235.25	230.26	235.25	292.80

Commission's Analysis and Ruling

The Commission notes that actual Open Access sales during FY 2019-20 and FY 2021-22 is higher than that approved in MYT Order. During FY 2020-21, which was impacted by COVID-19 pandemic, Open Access sales was marginally lower than approved sales. The Commission has approved the actual OA consumption in AEML-D's licence area for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by AEML-D in the Petition, as shown in the Table below:

Table 3-8: Open Access Consumption for FY 2019-20 in AEML-D licence area as approved by the Commission (MU)

upproved by the commission (112)					
Particulars	MYT Order	True-up Petition	Approved after truing up		
OA Consumption	235.25	314.99	314.99		

Table 3-9: Open Access Consumption for FY 2020-21 in AEML-D licence area as approved by the Commission (MU)

Particulars	MYT Order	True-up Petition	Approved after truing up
OA Consumption	235.25	230.26	230.26

Table 3-10: Open Access Consumption for FY 2021-22 in AEML-D licence area as approved by the Commission (MU)

Particulars	MYT Order	True-up Petition	Approved after truing up
OA Consumption	235.25	292.80	292.80

3.3 DEMAND-SIDE MANAGEMENT (DSM) MEASURES

AEML-D's Submission

AEML-D submitted that it undertakes various DSM schemes for reduction of system demand and energy consumption after obtaining the Commission's approval. As to the estimated reduction in sales due to these schemes in FY 2019-20, FY 2020-21 and FY 2021-22, AEML-D clarified that the figures for own sales in MU are net of reduction through DSM measures. The total energy savings in FY 2019-20, FY 2020-21 and FY 2021-22 from DSM activities as shown in the Table below:

Table 3-11: Energy Saving due to DSM Programmes as submitted by AEML-D (MU)

Programme	Consumer Category	Savings (MU) in FY 2019-20	Savings (MU) in FY 2020- 21	Savings (MU) in FY 2021-22
Solar rooftop PV plants	Internal Installations	0.052	0.054	0.038
Five Star Refrigerators – Ph I	Residential	2.7	2.70	2.70
Five Star Fans – Ph II	Residential	1.57	1.57	1.57
Five Star Split A/C – Ph II	Commercial	1.87	1.87	1.87
Five Star Split A/C	Residential	1.14	1.14	1.10
Large Scale Ceiling Fan	Residential	0.07	0.09	0.160
Large Scale Refrigerator	Residential	0.49	0.613	0.706
Total		7.892	8.037	8.144

Commission's Analysis and Ruling

The Commission has noted the efforts of AEML-D for saving of electricity consumption through Demand Side Management schemes. The sales quantum submitted by AEML-D and approved by the Commission for FY 2019-20, FY 2020-21 and FY 2021-22 in earlier part of this Order are inclusive of reduction in sales due to DSM activities.

3.4 DISTRIBUTION LOSSES AND ENERGY BALANCE

AEML-D's Submission

AEML-D's Distribution Loss in FY 2019-20, FY 2020-21, and FY 2021-22 was 7.37%, 7.81%, and 6.52%, respectively, as against 8.36% for FY 2019-20 approved in the MYT Order in Case No. 34 of 2016 and 7.55% and 7.30% approved for FY 2020-21 and FY 2021-22, respectively. AEML-D has thus, achieved a reduction of 0.99% and 0.78% in FY 2019-20 and FY 2021-22, respectively, over and above the target, and is hence, entitled to claim efficiency gains for its efforts.

For FY 2020-21, AEML-D has submitted that considering the pandemic situation, various non-essential services, which required visiting consumer premises for disconnection, reconnection, vigilance activities involving visiting consumers inspection of premises, etc. were discontinued by AEML. Further, during the pandemic, some areas were declared by the Authorities as containment zone/ red zone, where services of disconnection, vigilance activities could not be carried out. Due to this, AEML-D has been constrained in its ability to carry out vigilance activities to control theft and control other commercial losses due to meter inaccuracies and other reasons. Thus, taking advantage of the situation, habitual offenders have indulged in even more pilferage, resulting in higher distribution losses.

AEML-D added that due to the pandemic, there has been a significant reduction in energy sales as shown above. Therefore, less energy has flown over the network in comparison to previous years. The no-load losses of transformers, however, is irrespective of the energy flow and hence, they remain the same and correspondingly the percentage contribution of such losses increases with lower volume of energy flowing over the network. This has also contributed to increase in distribution losses in FY 2020-21. Hence, AEML-D requested the Commission to exercise its Power to Relax as per Regulation 105 of the MYT Regulations, 2019 and approve the actual distribution loss for FY 2020-21, without considering any efficiency loss on the same.

The Distribution Loss for FY 2019-20, FY 2020-21 and FY 2021-22 is shown in the Tables below, along with the Distribution Loss approved by the Commission in the MYT Order:

Table 3-12: Distribution Loss for FY 2019-20 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Energy Sold by AEML-D	MU	8,622.04	8,452.09
Consumption by Change-over	MU	1,505.94	1,560.18
Consumers			
Consumption by OA Consumers	MU	235.25	314.99

Particulars	UoM	MYT Order	True-up Petition
Total	MU	10,363.23	10,327.26
Distribution Loss	%	7.80%	7.37%
Energy Input at T<>D interface	MU	11,240.02	11,149.47

Table 3-13: Distribution Loss for FY 2020-21 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Energy Sold by AEML-D	MU	8,834.29	7,170.08
Consumption by Change-over	MU	1,499.36	1,488.79
Consumers			
Consumption by OA Consumers	MU	235.25	230.26
Total	MU	10,568.90	8,889.12
Distribution Loss	%	7.55%	7.81%
Energy Input at T<>D interface	MU	11,432.10	9,642.69

Table 3-14: Distribution Loss for FY 2021-22 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Energy Sold by AEML-D	MU	9,048.92	7,956.69
Consumption by Change-over	MU	1,495.74	1,473.83
Consumers			
Consumption by OA Consumers	MU	235.25	292.80
Total	MU	10,779.92	9,723.32
Distribution Loss	%	7.30%	6.52%
Energy Input at T<>D interface	MU	11,628.90	10,401.58

The energy requirement of AEML-D for its own consumers has been submitted by AEML-D from the Energy Balance of FY 2019-20, FY 2020-21 and FY 2021-22, as shown in the Tables below:

Table 3-11: Energy Balance for FY 2019-20 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Migrated HT Sales + OA	MU	238.88	319.28
consumption			
HT Loss	%	1.71%	1.71%
HT grossed up energy at T<>D	MU	243.04	324.83
Migrated LT Sale	MU	1502.31	1555.89
LT Loss	%	8.08%	8.08%
LT grossed up energy at T<>D	MU	1634.36	1692.66

Particulars	UoM	MYT Order	True-up Petition
Total T<>D energy attributable to	MU	1877.4	2017.49
TPC-D sale & OA consumption	WIC		
Net T<>D energy attributable to	MU	9351.51	9131.98
AEML-D sale	MIC		
InSTS Loss %	%	3.18%	3.16%
Total requirement of AEML-D	MU	9658.6	9430.11
(MU) at G-T			

Table 3-13: Energy Balance for FY 2020-21 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Own Sales (MU)		8,834.29	
Distribution loss in %		7.55%	
Transmission loss in %		3.18%	
Migrated HT Sales + OA consumption	MU		231.99
HT Loss	%		1.59%
HT grossed up energy at T<>D	MU		235.74
Migrated LT Sale	MU		1,487.06
LT Loss	%		6.43%
LT grossed up energy at T<>D	MU		1,589.25
Total T<>D energy attributable to	MU		1,824.98
TPC-D sale & OA consumption	MO		
Net T<>D energy attributable to	MU		7,817.70
AEML-D sale (A)	IVIU		
T-D energy attributable to AEML-D			0.75
C/O sale (metered sales grossed up	MU		
approved TPC-D wheeling losses) (B)			
Total T<>D energy attributable to	MU		7,818.46
AEML-D sale $(MU) - (A+B)$			
InSTS Loss %	%		2.94%
Total requirement of AEML-D	MU	9,869.67	8,054.90
(MU) at G-T	IVIU	<i>7</i> ,007.07	

Table 3-14: Energy Balance for FY 2021-22 as submitted by AEML-D

Particulars	UoM	MYT Order	True-up Petition
Own Sales (MU)		9,048.92	
Distribution loss in %		7.30%	
Transmission loss in %		3.18%	
Migrated HT Sales + OA consumption	MU		293.13
HT Loss	%		1.59%
HT grossed up energy at T<>D	MU		297.87
Migrated LT Sale	MU		1,473.51
LT Loss	%		6.43%
LT grossed up energy at T<>D	MU		1,574.76
Total T<>D energy attributable to	MU		1,872.63
TPC-D sale & OA consumption	MIU		
Net T<>D energy attributable to	MU		8,528.95
AEML-D sale (A)	IVIO		
T-D energy attributable to AEML-D			1.71
C/O sale (metered sales grossed up	MU		
approved TPC-D wheeling losses) (B)			
Total T<>D energy attributable to	MU		8,530.65
AEML-D sale $(MU) - (A+B)$			
InSTS Loss %	%		3.19%
Total requirement of AEML-D (MU) at G-T	MU	10,082.19	8,811.75

The Petitioner has submitted that the Commission in the MYT Order has grossed up the own sales by approved distribution loss and transmission loss to arrive at the G<>T requirement of AEML-D for the MYT Control Period, which is incorrect methodology. The correct method is to gross up metered OA and change-over sales by the approved wheeling loss and subtract such grossed-up energy from total T<>D input to arrive at T<>D input attributable to AEML-D's own consumers. The same should be grossed up by transmission losses to arrive at the energy requirement at G<>T interface, to be purchased for supply to own consumers (including those being supplied by AEML-D on TPC-D network). The supply by AEML-D on TPC-D network is also added after grossing up the same with approved wheeling losses of TPC-D network. This is the correct method, which has been followed for approving energy balance since the approval of change-over mechanism, in all Orders prior to the MYT Order.

Commission's Analysis and Ruling

The Commission has considered the actual Transmission Losses of 3.16% for FY 2019-20,

2.93% for FY 2020-21 and 3.19% for FY 2021-22 based on inputs from the Maharashtra State Load Despatch Centre (MSLDC). The change-over sales have been considered as approved earlier in this Chapter. The Commission has considered the HT and LT losses as 1.71% and 8.08%, respectively for FY 2019-20, 1.59% and 6.43% respectively for FY 2020-21 and FY 2021-22, as approved by the Commission in the MYT Order. The Commission has considered the energy drawn by AEML-D at T<>D interface as 11,149.47 MU for FY 2019-20, 9,642.69 MU for FY 2020-21 and 10,401.58 MU for FY 2021-22, based on State-wide DISCOM-wise energy drawal data provided by MSLDC, as per usual practice. Accordingly, the Distribution Losses and Energy Balance approved by the Commission after final true-up for FY 2019-20, FY 2020-21 and FY 2021-22, are shown in the Tables below:

Table 3-15: Energy Balance approved by the Commission for FY 2019-20

Particulars		MYT Order	True-up Petition	Approved after truing up
Sales (Own)	MU	8,622.04	8,452.09	8,452.09
Sales (change-over)	MU	1,505.94	1,560.18	1,560.18
Consumption by OA Consumers	MU	235.25	314.99	314.99
Total	MU	10,363.23	10,327.26	10,327.26
Distribution Loss	%	7.80%	7.37%	7.37%
Energy input to Distribution System	MU	11,240.02	11,149.47	11,149.47

Table 3-16: Energy Balance approved by the Commission for FY 2020-21

Particulars	UoM	MYT Order	True-up Petition	Approved after truing up
Sales (Own)	MU	8,834.29	7,170.08	7,170.83
Sales (change-over)	MU	1,499.36	1,488.79	1,488.79
Consumption by OA Consumers	MU	235.25	230.26	230.26
Total	MU	10,568.90	8,889.12	8,889.87
Distribution Loss	%	7.55%	7.81%	7.81%
Energy input to Distribution System	MU	11,432.10	9,642.69	9,642.69

Table 3-17: Energy Balance approved by the Commission for FY 2021-22

Particulars	UoM	MYT Order	True-up Petition	Approved after truing up
Sales (Own)	MU	9,048.92	7,956.69	7,956.69
Sales (change-over)	MU	1,495.74	1,473.83	1,473.83
Consumption by OA Consumers	MU	235.25	292.80	292.80
Total	MU	10,779.92	9,723.32	9,723.32
Distribution Loss	%	7.30%	6.52%	6.52%
Energy input to Distribution System	MU	11,628.90	10,401.58	10,401.58

Distribution Loss approved by the Commission by considering the energy drawn by AEML-D at T<>D interface based on MSLDC data, works out to 7.37% for FY 2019-20, 7.81% for FY 2020-21 and 6.52% for FY 2021-22, which is same as that submitted by AEML-D in the True-up Petition. The approved loss trajectory for AEML-D for FY 2019-20, FY 2020-21 and FY 2021-22 was 7.80%, 7.55%, and 7.30%, respectively. The efficiency gain on account of Distribution Losses being lower than target loss levels for FY 2019-20 and FY 2021-22, has been computed subsequently in this Chapter.

As regards FY 2020-21, the Commission has adopted a uniform approach of sharing of gains and losses and has not accepted AEML-D's request to approve the higher than target Distribution Loss levels at actuals without sharing of losses. It is very difficult to assess the impact of COVID on the Distribution Losses. The sales have been affected on account of COVID in FY 2020-21 as well as in FY 2021-22; however, AEML-D has managed to achieve the losses lower than the target losses in FY 2021-22, and has also sought pass through of the efficiency gain. The sharing of losses on account of the Distribution Losses being higher than target loss levels for FY 2020-21 has been computed subsequently in this Chapter.

The Commission has accepted AEML-D's submission regarding the method to arrive at the G<>T requirement of AEML-D, as the same approach has been followed for approving energy balance since the approval of change-over mechanism, in all Orders prior to the MYT Order.

The Energy Requirement approved by the Commission after truing up for FY 2019-20, FY 2020-21 and FY 2021-22 is given in the Tables below:

Table 3-18: Energy Requirement approved by the Commission for FY 2019-20

Particulars	UoM	Legend	MYT Order	True-up Petition	Approved after truing up
Migrated HT Sales + OA consumption (MU)	MU	A	238.88	319.28	316.59
HT Loss (%)	%	В	1.71%	1.71%	1.71%
HT grossed up energy at T<>D (MU)	MU	C = A/(1- B)	243.04	324.83	322.10
Migrated LT Sale (MU)	MU	D	1,502.31	1,555.89	1,563.82
LT Loss (%)	%	Е	8.08%	8.08%	8.08%
LT grossed up energy at T<>D (MU)	MU	F = D/(1- E)	1,634.36	1,692.66	1,701.28
Total T<>D energy attributable to TPC-D sale & OA consumption (MU)	MU	G = C + F	1,877.40	2,017.49	2,023.38
Energy drawn at T<>D by AEML-D	MU	Н	11,240.02	11,149.47	11,149.47
Net T<>D energy attributable to AEML-D sale (MU)	MU	I = H - G	9,351.51	9,131.98	9,126.09
InSTS Loss (%)	%	J	3.18%	3.16%	3.16%
Total requirement of AEML-D (MU) at G-T (MU)	MU	K = I/(1-J)	9,658.60	9,430.11	9,423.89

Table 3-19: Energy Requirement approved by the Commission for FY 2020-21

Particulars	UoM	Legend	MYT Order	True-up Petition	Approved after truing up
Own Sales	MU		8,834.29	-	-
Distribution Loss	%		7.55%	-	-
Migrated HT Sales + OA consumption (MU)	MU	A	-	231.99	230.94
HT Loss (%)	%	В	-	1.59%	1.59%
HT grossed up energy at T<>D (MU)	MU	C = A/(1- B)	-	235.74	234.67
Migrated LT Sale (MU)	MU	D	-	1,487.06	1,480.21
LT Loss (%)	%	Е	-	6.43%	6.43%
LT grossed up energy at T<>D (MU)	MU	F = D/(1- E)	-	1,589.25	1,581.93
Total T<>D energy attributable to TPC-D sale & OA consumption (MU)	MU	G = C + F	-	1,824.98	1,816.59

Particulars	UoM	Legend	MYT Order	True-up Petition	Approved after truing up
Energy drawn at T<>D by AEML-D	MU	Н	11,432.10	9,642.69	9,642.69
Net T<>D energy attributable to AEML-D sale (MU)	MU	I = H - G	-	7,817.70	7,826.10
T<>D energy attributable to AEML-D c/o sale	MU	J	-	0.75	0.75
EHT Sales	MU	K	-	=	-
Total T<>D energy attributable to AEML-D sale (MU)	MU	L = I + J + K	-	7,818.46	7,826.85
InSTS Loss (%)	%	M	3.18%	2.94%	2.93%
Total requirement of AEML-D (MU) at G-T (MU)	MU	N = L/(1- M)	9,869.67	8,054.90	8,063.09

Table 3-20: Energy Requirement approved by the Commission for FY 2021-22

Particulars	UoM	Legend	MYT Order	True-up Petition	Approved after truing up
Own Sales	MU		9,048.92	-	-
Distribution Loss	%		7.30%	-	-
Migrated HT Sales + OA consumption (MU)	MU	A	-	293.13	292.80
HT Loss (%)	%	В	-	1.59%	1.59%
HT grossed up energy at T<>D (MU)	MU	C = A/(1- B)	-	297.87	297.54
Migrated LT Sale (MU)	MU	D	-	1,473.51	1,462.68
LT Loss (%)	%	Е		6.43%	6.43%
LT grossed up energy at T<>D (MU)	MU	F = D/(1- E)	-	1,574.76	1,563.20
Total T<>D energy attributable to TPC-D sale & OA consumption (MU)	MU	G = C + F	-	1,872.63	1,860.73
Energy drawn at T<>D by AEML-D	MU	Н	11,628.90	10,401.58	10,401.58

Particulars	UoM	Legend	MYT Order	True-up Petition	Approved after truing up
Net T<>D energy attributable to AEML-D sale (MU)	MU	I = H - G	1	8,528.95	8,540.85
T<>D energy attributable to AEML-D c/o sale	MU	J	-	1.71	1.71
EHT Sales	MU	K	-	-	1
xTotal T<>D energy attributable to AEML-D sale (MU)	MU	L = I + J + K	-	8,530.65	8,542.56
InSTS Loss (%)	%	M	3.18%	3.19%	3.19%
Total requirement of AEML-D (MU) at G-T (MU)	MU	N = L/(1- M)	10,082.19	8,811.75	8,824.05

3.5 POWER PROCUREMENT

AEML-D's Submission

During FY 2019-20 to FY 2021-22, AEML-D has procured power under its long-term Power Purchase Arrangement with ADTPS. After accounting for the availability from long-term sources, the shortfall in power requirement was met by purchase from contracted short-term sources and from the Power Exchanges. AEML-D has also contracted Renewable Energy (RE) power from different sources for meeting a part of Renewable Purchase Obligation (RPO) specified by the Commission for FY 2019-20 to FY 2021-22. The surplus power available at different times was sold outside its Licence area through the Power Exchanges. Further, there was offtake (decrement) from the Imbalance Pool as per real time deviation.

3.5.1 AEML-G (ADTPS)

AEML-D submitted that it has a PPA with ADTPS for supply of power till 22nd February 2023 (as approved by the Commission vide Order dated 8th February 2018 in Case No. 5 of 2017). AEML-D has considered the Fixed Charge as approved in respective Tariff Order of the Commission for ADTPS and actual Variable Charge including FAC.

The summary of power purchase from ADTPS in FY 2019-20 to FY 2021-22 is summarized in the Table below:

Table 3-21: Power Purchase Cost from ADTPS for FY 2019-20 as submitted by AEML-D

Source - DTPS	Purchase (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. Crore)	Incentive (Rs. Crore)	Total Cost (Rs. Crore)	Rate (Rs. /kWh)
MYT Order	3,290.05			1	1,573.45	4.78
Actual	3,026.69	346.62	1,123.30	1	1,469.92	4.86

Table 3-22: Power Purchase Cost from ADTPS for FY 2020-21 as submitted by AEML-D

Source - DTPS	Purchase (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. Crore)	Incentive (Rs. Crore)	Total Cost (Rs. Crore)	Rate (Rs. /kWh)
MYT Order	3,733.00	313.81	1414.81	1	1728.62	4.63
Actual	2,897.45	312.99	1,043.98	-	1,356.97	4.68

Table 3-23: Power Purchase Cost from ADTPS for FY 2021-22 as submitted by AEML-D

Source - DTPS	Purchase (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. Crore)	Incentive (Rs. Crore)	Total Cost (Rs. Crore)	Rate (Rs. /kWh)
MYT Order	3,733.00	326.87	1456.99	-	1783.86	4.78
Actual	2,974.87	326.03	1,130.71	-	1,456.74	4.90

Commission's Analysis and Ruling

The cost of power purchase from ADTPS claimed by AEML-D is in line with the Fixed Charges and Variable Charges approved by the Commission for AEML-G for FY 2019-20, FY 2020-21 and FY 2021-22, as well as the revenue considered by ADTPS from sale of power in FY 2019-20, FY 2020-21 and FY 2021-22. Hence, the Commission has approved the actual quantum and cost of power purchase from ADTPS for FY 2019-20, FY 2020-21 and FY 2021-22, as follows:

Table 3-24: Power Purchase from ADTPS approved by Commission after truing up for FY 2019-20, FY 2020-21 and FY 2021-22

MYT Order				True	e-up Petition	n	Approved after truing up			
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	
FY 2019- 20	3,290.05	1,573.45	4.78	3,026.69	1,469.92	4.86	3,026.69	1,469.92	4.86	
FY 2020- 21	3,733.00	1,728.62	4.63	2,897.45	1,356.97	4.68	2,897.45	1,356.97	4.68	

	M	YT Order		True	e-up Petition	n	Approved after truing up		
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2021- 22	3,733.00	1,783.86	4.78	2,974.87	1,456.74	4.90	2,974.87	1,456.74	4.90

3.5.2 Vidarbha Industries Power Ltd. (VIPL-G)

AEML-D's Submission

AEML-D submitted that it has issued a termination letter to VIPL-G on 20 April, 2019 for termination of PPA between AEML-D and VIPL-G. VIPL-G has drawn power from grid for its auxiliary operations during FY 2019-20 and for the same AEML-D has charged VIPL at the rate of energy charge for HT – I (Industry) as approved in the MTR Order dated 12th September 2018 in Case No. 200 of 2017, for this energy. The Petitioner has further submitted that VIPL-G has filed a Petition (Case No. 232 of 2019) seeking a clarification on netting off the energy drawn by it with the energy injected into the grid for supply to AEML-D. The Commission in the Order dated 17th October 2019 in Case No. 232 of 2019 has ruled that for the period till October 2019, energy drawn by VIPL-G from the grid has to be settled with AEML-D at the energy charge rate of AEML-D as approved in the MTR Order dated 12th September 2018 in Case No. 200 of 2017. Accordingly, the revenue corresponding to the energy drawn from grid by VIPL-G till October 2019 has been adjusted by AEML-D in the power purchase expense of FY 2019-20.

Considering the above, the summary of power purchase from VIPL-G in FY 2019-20 is shown in table below:

Table 3-25: Power Purchase Cost from VIPL-G for FY 2019-20 as submitted by AEML-D

Source - VIPL	Purchase (MU)	Total Cost (Rs. Crore)	Rate (Rs. /kWh)
MYT Order	(2.23)	(1.73)	7.75
Actual	(3.71)	(3.35)	9.03

Commission Analysis and Ruling

AEML-D has terminated its PPA with VIPL-G on 20 April 2019. VIPL-G had filed a Petition before the Commission regarding the validity and legality of the Termination Letter issued by AEML-D in which the Commission has upheld the termination of PPA. Subsequently, Hon'ble ATE has upheld the decision of the Commission.

VIPL-G has consumed power for its auxiliary consumption during FY 2019-20. In its Order in Case No. 232 of 2019, the Commission has clarified that for the period till October 2019, energy drawn by VIPL from the grid must be settled with AEML-D at the energy charge rate of AEML-D as approved in the MTR Order dated 12 September 2018 in Case No. 200 of 2017.

Accordingly, for FY 2019-20, the Commission has considered the revenue corresponding to the energy drawn from grid by VIPL-G till October 2019 as adjustment in the power purchase expense of FY 2019-20 as submitted by AEML-D in its Petition. The following Table shows the cost and quantum approved for purchase from VIPL-G after truing up for FY 2019-20:

Table 3-26: Power Purchase from VIPL-G for FY 2019-20 approved by Commission.

	M	YT Order		Tru	e-up Peti	ition	Approved after truing up		
Source	MU	Rs. crore	Rate (Rs./ kWh)	MU	Rs.	Rate (Rs./ kWh)	MU	Rs. crore	Rate (Rs./ kWh)
FY 2019- 20	(2.23)	(1.73)	7.76	(3.71)	(3.35)	9.03	(3.71)	(3.35)	9.03

3.5.3 Renewable Energy Procurement

3.5.3.1 Hybrid RE Power

AEML-D's Submission

In the MYT Order, the Commission has considered availability power from Hybrid RE source of 3,066 MU in FY 2021-22 at the rate of Rs. 3.24/kWh on the basis that the power is available from the beginning of the financial year. The Commission vide Order dated 8 January, 2020 in Case No. 281 of 2019 has accorded approval of power purchase from Wind Solar Hybrid source. As part of the RFS, the SCOD is 18 months from signing of the PPA. The PPA was signed on 11 February, 2020, accordingly, the SCOD was 11 August, 2021. Thus, entire generation from the Hybrid source could not possibly have been available for the full financial year (FY 2021-22). Hence, 3,066 MU as considered in the MYT Order would not have been practically feasible in any case.

AEML-D has submitted that the Hybrid Generator has commissioned part capacity of 99.84 MW and 50.08 MW Solar on 27 October, 2021 and 3 December, 2021, respectively. However, the Hybrid capacity has gradually came on-stream and 100% capacity was commissioned by October 2022. Therefore, AEML-D has been able to procure only a

portion of Hybrid RE power in FY 2021-22, i.e., 292.25 MU at Rs. 3.24 per unit approved Tariff as per PPA. AEML-D has requested the Commission to consider the same.

Commission's Analysis and Ruling

The Commission has accorded approval for the power purchase from Wind Solar Hybrid Source vide Order dated 8 January 2020 (Case No. 281 of 2019) and has approved the Tariff of Rs. 3.24 per unit. The Commission notes that the Hybrid Generator has been commissioned under part capacity and AEML-D has only been able to partly commission the Hybrid Generator during FY 2021-22 and cumulative procurement from this hybrid power source is 292.25 MU, for which Power purchase cost comes out to be Rs. 94.91 Crore at PPA Tariff of Rs. 3.24 per unit. The following Table shows the cost and quantum approved for purchase from Hybrid Power Source after truing up for FY 2021-22:

Table 3-27: Power Purchase from RE Hybrid for FY 2021-22 approved by Commission

	М	YT Order		True	e-up Peti	tion	Approv	ved after up	truing
Source	MU	Rs.	Rate (Rs./ kWh)	MU	Rs.	Rate (Rs./ kWh)	MU	Rs.	Rate (Rs./ kWh)
FY 2021- 22	3,066.00	993.38	3.24	292.95	94.91	3.24	292.95	94.91	3.24

3.5.3.2 Solar RPO

AEML-D's Submission

AEML-D signed an Energy Purchase Agreement (EPA) dated 28 March, 2011, for purchase of energy generated from the 40 MW Solar PV plant of Dhursar Solar Power Pvt. Ltd. (DSPPL) with effect from 2 September, 2013. The actual power purchase rate from DSPPL for FY 17-18 was Rs 17.91/kWh, which was restricted to Rs. 10.30/kWh for FY 2019-20 by the Commission in AEML-D's MYT Order in Case No. 34 of 2016 dated 21st October 2016. The Commission in the MYT Order dated 30 March, 2020 in Case No. 325 of 2019 has approved the rate of Rs. 10.30/kWh for FY 2020-21 and FY 2021-22, as considered for FY 2019-20 on provisional basis. Accordingly, AEML-D, for the purpose of this Petition has claimed the cost of DSPPL for FY 2019-20 to FY 2021-22 using the rate derived by the Commission's methodology.

The cost of purchase from Roof Top Solar generators in AEML-D licence area in FY 2018-19 (0.48 MU at consumer end) of Rs. 0.20 Crore is accounted for in power purchase cost of FY 2019-20. Similarly, the cost of purchase from Roof Top Solar generators in AEML-

D licence area in FY 2019-20 (0.91 MU at consumer end) of Rs. 0.40 Crore is accounted in the power purchase cost of FY 2020-21 and the cost of purchase from Roof Top Solar generators in AEML-D license area in FY 2020-21 (3.32 MU at consumer end) of Rs. 1.28 Crore is accounted in the power purchase cost of FY 2021-22.

Table 3-28: Cost of Solar Power Purchase in FY 2019-20 to FY 2021-22, as submitted by AEML-D

	FY 2019-20]	FY 2020-2	1	F	FY 2021-22	
	Quan	Rate	Cost	Quant	Rate	Cost	Quant	Rate	Cost
	tum	(Rs./	(Rs.	um	(Rs./	(Rs.	um	(Rs./	(Rs.
Particulars	(MU)	kWh)	Crore)	(MU)	kWh)	Crore)	(MU)	kWh)	Crore)
MYT Order	62.12	10.30	63.99	66.19	10.30	68.17	66.19	10.30	68.17
DSPPL	56.33	10.30	58.02	56.67	10.30	58.37	52.00	10.30	53.56
Purchase from									1.28
RTS			0.20			0.40			
Generators									
Total	56.33	10.33	58.21	56.67	10.37	58.77	52.00	10.55	54.84

AEML-D has purchased 0.66 MU, 1.54 MU and 1.02 MU of solar power from Open Access (OA) consumers in FY 2019-20, FY 2020-21 and FY 2021-22, respectively.

Further for FY 2021-22, AEML-D has purchased 159.09 MU of RE power through short term sources / exchange from August 2021 onwards and the details for the same have been submitted as part of monthly FAC submissions for FY 2021-22. AEML-D had requested in the monthly FAC submissions that this purchase may be considered towards meeting its RPO target and the Commission has approved the same while approving the FAC. Also, AEML-D has purchased 292.95 MU from Hybrid RE plant, out of which 227.26 MU is from Solar, which is also considered as part of the solar RPO.

AEML-D submitted that there has been 12.93 MU, 17.17 MU and 24.32 MU of Roof Top Solar generation in its licence area during FY 2019-20, FY 2020-21, and FY 2021-22, respectively, which is considered for meeting a part of the solar RPO, as all the generation pertains to consumers, who themselves are not 'Obligated Entities'.

Thus, the total solar quantum to be considered for meeting a part of solar RPO in FY 2019-20, FY 2020-21 and FY 2021-22 is 69.92 MU, 75.51 MU and 463.69 MU, respectively.

Table 3-29: Cumulative Shortfall in Solar RPO Target till FY 2019-20

Particulars	Approved till FY 2018-19	FY 2	019-20	Cumulative till FY 2019-20	
	MU	%	MU	MU	
Gross Energy Consumption			9430.11		
RPO Target	721.62	3.50%	330.05	1051.67	
Achievement	476.27	0.74%	69.92	546.19	
Shortfall / (Surplus)	245.35	2.76%	260.14	505.49	

Table 3-30: Cumulative Shortfall in Solar RPO Target till FY 2020-21

	Cumulative till	FY 2	020-21	Cumulative till
Particulars	FY 2019-20			FY 2020-21
	MU	%	MU	MU
Gross Energy Consumption			8,054.90	
RPO Target	1,051.67	4.50%	362.47	1,414.14
Achievement	546.19	0.94%	75.51	621.69
Shortfall / (Surplus)	505.49	3.56%	286.96	792.45

Table 3-31: Cumulative Shortfall in Solar RPO Target till FY 2021-22

Particulars	Cumulative shortfall/excess till FY 2020-21	FY	2021-22	Cumulative shortfall/excess till FY 2021-22
	MU	%	MU	MU
Gross Energy Consumption			8,811.75	
RPO Target		6.00%	528.71	
Achievement		5.26%	463.69	
Shortfall / (Surplus)	792.45	0.74%	65.02	857.47

Commission's Analysis and Ruling

The Commission has considered the Solar RPO requirement of AEML-D for FY 2019-20, FY 2020-21, and FY 2021-22 at 3.5%, 4.5%, and 6%, respectively, of the Gross Energy Requirement approved in this Order, in accordance with Solar RPO target for FY 2019-20, FY 2020-21 and FY 2021-22, respectively, as specified in the MERC RPO-REC Regulations.

The Commission has approved the Solar power purchase cost as submitted by AEML-D for FY 2019-20, FY 2020-21, and FY 2021-22 to meet the RPO requirement as per the methodology followed by it in the MYT Order, as shown in the Table below:

Table 3-32: Solar Power Procurement Cost for FY 2019-20, FY 2020-21 and FY

2021-22 as approved by the Commission.

	FY 2019-20			FY	2020-21		FY	2021-22	
Particulars	Quantum (MU)	Rate (Rs./ kWh)	Cost (Rs. Crore)	Quantum (MU)	Rate (Rs./ kWh)	Cost (Rs. Crore)	Quantum (MU)	Rate (Rs./ kWh)	Cost (Rs. Crore)
MYT Order	62.12	10.30	63.99	66.19	10.30	68.17	66.19	10.30	68.17
Actual	56.33	10.30	58.02	56.67	10.30	58.37	52.00	10.30	53.56
Purchase from RTS Generators			0.2			0.4			1.28
Total	56.33	10.33	58.21	56.67	10.37	58.77	52.00	10.55	54.84
Approved after truing up	56.33	10.33	58.21	56.67	10.37	58.77	52.00	10.55	54.84

Further, the rate for purchase from DSPPL has been considered as approved in the MYT Order.

AEML-D has considered 12.93 MU, 17.17 MU, and 24.32 MU of Roof Top Solar generation in its licence area for meeting a part of solar RPO for FY 2019-20, FY 2020-21, and FY 2021-22, respectively. AEML-D has further considered 0.66 MU, 1.54 MU and 1.02 MU solar power from open access consumers in FY 2019-20, FY 2020-21, and FY 2021-22 respectively. AEML-D has also purchased Solar power through short term Power purchase of 159.09 MU in FY 2021-22 and through its new Solar wind Hybrid PPA of 227.26 MU. Therefore, the Commission, considers the total solar quantum of 69.92 MU, 75.38 MU and 463.69 MU for meeting solar RPO for FY 2019-20, FY 2020-21, and FY 2021-22 respectively, as per MERC Net Metering Regulations, 2019. The total solar quantum procured by AEML-D in FY 2019-20 to FY 2021-22 is provided as below:

Table 3-33: Solar Power Procurement quantum for FY 2019-20, FY 2020-21 and FY 2021-22 as approved by the Commission (MII)

	2021-22 as approved by the Commission (WC)									
	Al	EML-D Petition	on	Approved in this Order						
Sources	FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2019- 20	FY 2020- 21	FY 2021- 22				
Sources	20	41	44	20	41	22				
DSPPL	56.33	56.67	52.00	56.33	56.67	52.00				
RoofTop Solar	12.93	17.17	24.32	12.93	17.17	24.32				
OA Consumer	0.66	1.54	1.02	0.66	1.54	1.02				
STPP			159.09	1	1	159.09				
Hybrid			227.26	1	1	227.26				
Total	69.92	75.38	463.69	69.92	75.38	463.69				

Accordingly, the Commission has considered the revised Cumulative Shortfall in Solar RPO after final truing up for FY 2019-20, FY 2020-21 and FY 2021-22, as shown in the Tables below:

Table 3-34: Cumulative Shortfall in Solar RPO for FY 2019-20 as approved by Commission

Particulars	AEML-D	Approved			
Energy Input at G<>T	9430.11	9423.89			
% Obligation Solar	3.50%	3.50%			
Requirement	330.05	329.84			
Previous year Shortfall/(Surplus)	245.35	245.35			
RE Purchase for RPO	69.92	57.24			
Solar Shortfall/(Surplus)	505.48	517.95			

Table 3-35: Cumulative Shortfall in Solar RPO for FY 2020-21 as approved by Commission

Particulars	AEML-D	Approved
Energy Input at G<>T	8054.90	8063.09
% Obligation Solar	4.50%	4.50%
Requirement	362.47	362.84
Previous year Shortfall/(Surplus)	505.48	517.95
RE Purchase for RPO	75.51	76.29
Solar Shortfall/(Surplus)	792.44	804.50

Table 3-36: Cumulative Shortfall in Solar RPO for FY 2021-22 as approved by Commission

		
Particulars	AEML-D	Approved
Energy Input at G<>T	8811.75	8824.05
% Obligation Solar	6.00%	6.00%
Requirement	528.71	529.44
Previous year Shortfall/(Surplus)	792.44	804.50
RE Purchase for RPO	463.69	463.69
Solar Shortfall/(Surplus)	857.46	870.26

For the purpose of arriving at cost implications, the Commission has considered that AEML-D shall meet the cumulative shortfall of Solar RPO up to FY 2021-22 during FY 2023-24 and FY 2024-25 and subsequent years in the ratio of the contracted power of Wind-Solar Hybrid RE and Short-term power purchase.

3.5.4 Non-Solar RPO

AEML-D's Submission

AEML-D has procured Non-Solar RE power from its contracted sources for meeting its Non-Solar RPO in FY 2019-20 to FY 2021-22, as shown in the Table below:

Table 3-37: Power Purchase Cost from Non-Solar Sources for FY 2019-20 to FY 2021-22 as submitted by AEML-D

Source	F	Y 2019-20		FY	7 2020-21		FY	7 2021-22	
	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)
MYT Order	207.74	109.97	5.29	214.08	112.33	5.25	214.08	112.33	5.25
AEML-D Petition									
Reliance Innoventures	78.55	39.27	5.00	55.08	28.37	5.15	60.67	32.16	5.30
AAA Sons Enterprise	2.21	1.07	4.86	1.75	0.90	5.15	2.40	1.27	5.30
Vector Green Energy	37.43	18.71	5.00	28.26	14.55	5.15	32.86	17.42	5.30
Pvt. Ltd. – 1									
Vector Green Energy	11.15	5.65	5.07	8.30	4.21	5.07	10.92	5.54	5.07
Pvt. Ltd 2									
Tembhu Power Pvt.	3.78	1.61	4.26	5.65	2.41	4.26	2.97	1.27	4.26
Limited									
Reliance Clean Power	85.73	49.81	5.81	63.16	36.70	5.81	67.92	39.46	5.81
Pvt. Ltd.									
Total	218.84	116.13	5.31	162.20	87.13	5.37	177.75	97.11	5.46
Diff. in bill amounts					(0.05)				
Total	218.84	116.13	5.31	162.20	87.08	5.37	177.75	97.11	5.46

AEML-D has purchased 2.45 MU, 3.55 MU and 4.13 MU non-solar power from OA consumers in FY 2019-20, FY 2020-21, and FY 2021-22, respectively. As per the Distribution Open Access (First Amendment) Regulations, 2019, such energy shall be counted towards meeting the RPO of the Distribution Licensee. Hence, AEML-D has considered the same towards meeting a part of the non-solar RPO.

AEML-D has submitted that as per MERC DOA Regulations, 2019 (First amendment), deemed purchase of RE OA surplus limited up to 10% of generation was allowed to be claimed towards RPO of DISCOM. Hence, AEML-D had only claimed deemed RE OA Purchase towards RPO of AEML in the RPO Verification in Case No. 51 of 2021. However, the Commission in its Order in Case No. 52 of 2021 (RPO compliance for TPC-D), has

approved TPC-D's RPO claim for FY 2019-20, which includes Banking Fee and Unutilized (lapsed) banked energy also. For FY 2019-20, AEML-D has considered the Banking Fee (1.09 MU), Banking purchase (5.97 MU) and Non-firm lapsed energy (9.44 MU) for meeting its RPO and the same was not considered against the above heads during the RPO verification in Case No. 51 of 2021. For FY 2020-21, the Banking fee (1.00 MU), Banking purchase (2.33 MU) and Non-firm lapsed energy (17.62 MU) is being considered as part of RPO. For FY 2021-22, the Banking fee (0.85 MU), Banking purchase (1.21 MU) and Non-firm lapsed energy (11.82 MU) is being considered as part of RPO.

For FY 2020-21, as per the PPA with Reliance Innoventures, AAA Sons Enterprise and Vector Green Energy Pvt Ltd, AEML-D has considered the rate of power purchase as Rs. 5.15/kWh, which comes with an annual escalation of 3% on approved MYT Order rate of Rs. 5.00/kWh for provisional true-up of FY 2019-20. Similarly, for FY 2021-22 the rate considered is Rs. 5.30/kWh.

AEML-D has submitted that name of "AAA and Sons Enterprises Pvt. Ltd." is changed to "Triumvirate Sons Enterprises Pvt. Ltd." w.e.f. 06-12-2019'. Further, it is submitted that the bills have been received from AAA & Sons only till Nov-2020. From Dec-2020 onwards, no bill has been received. For the purpose of power purchase cost, the quantum from Dec-2020 to Mar-2021 and Apr-2021 to Mar-2022 is considered as per provisional quantum provided for in the financial books. Accordingly, the cost for such period is worked out provisionally as per the PPA rate. AEML-D has informed the Commission in the monthly FAC being filed and the Commission has also considered and approved the same. Thus, for the purpose of truing-up, quantum and cost for the period Dec-2020 to Mar-2021 and FY 2021-22 is considered as per above. Once the actual bills are received, adjustments in cost terms will be considered in the financial year in which the bills are received.

For FY 2021-22, 35.19 MU of non-solar power has been purchased from short-term/ exchange and the same is considered as part of meeting the RPO obligation. Also, AEML-D has purchased 292.95 MU from Hybrid RE, out of which 65.69 MU is from Non-Solar, which is also considered as part of the Non-Solar RPO.

Thus, the total non-solar quantum to be considered for meeting Non-solar RPO in FY 2019-20, FY 2020-21 and FY 2021-22 is 237.78 MU, 186.69 MU, and 296.64 MU, respectively.

The cumulative shortfall in Non-solar RPO till FY 2019-20 to FY 2021-22 is shown in the Tables below:

Table 3-38: Cumulative Shortfall in Non-Solar RPO Target till FY 2019-20

Particulars	Approved Till FY 2018-19	FY 2019-20		Cumulative Till FY 2019-20
	MU	%	MU	MU
Gross Energy Consumption			9,430.11	
Non-Solar RPO				
Target	6,650.64	11.50%	1,084.46	7,735.10
Achievement	4,834.41	2.52%	237.78	5,072.19
Shortfall / (Surplus)	1,816.23	8.98%	846.68	2,662.91
Mini / Micro RPO				
Target	11.73	0.20%	2.17	13.90
Achievement	5.91	-	-	5.91
Shortfall / (Surplus)	5.82	0.02%	2.17	7.99

Table 3-39: Cumulative Shortfall in Non-Solar RPO Target till FY 2020-21

Tuote e est ounidante sitor	Till FY		2020-21	Till FY
Particulars	2019-20			2020-21
	MU	%	MU	MU
Gross Energy Consumption			8,054.90	
Non-Solar RPO				
Target	7,735.10	11.50%	926.31	8,661.42
Achievement	5,072.19	2.06%	186.69	5,258.88
Shortfall / (Surplus)	2,662.91	9.44%	739.62	3,402.53
Mini / Micro RPO				
Target	13.90			13.90
Achievement	5.91			5.91
Shortfall / (Surplus)	7.99			7.99

Table 3-40: Cumulative Shortfall in Non-Solar RPO Target till FY 2021-22

Particulars	Till FY 2020-21	FY 2021-22		Till FY 2021-22
	MU	%	MU	MU
Gross Energy Consumption			8,811.75	
Non-Solar RPO				
Target		11.50%	1,013.35	
Achievement		3.37%	296.64	
Shortfall / (Surplus)	3,402.53	8.13%	716.71	4,119.24
Mini / Micro RPO				
Target				
Achievement				
Shortfall / (Surplus)	7.99			7.99

Commission's Analysis and Ruling

The Commission has computed the quantum of Non-solar RPO for FY 2019-20, FY 2020-21 and FY 2021-22 at 11.50% every year, of the Gross Energy Requirement approved in this Order, in accordance with Non-Solar RPO target for FY 2019-20, FY 2020-21 and FY 2021-22 specified in the MERC RPO-REC Regulations, 2019. The Commission has not considered any purchase of Non-Solar RECs during FY 2019-20, FY 2020-21 and FY 2021-22, as submitted by AEML-D. The following Table shows the summary of Non-Solar RE purchase approved by the Commission in the truing up for FY FY 2019-20, FY 2020-21 and FY 2021-22:

Table 3-41: Non-Solar RE Purchase for FY 2019-20, FY 2020-21, and FY 2021-22 as approved by the Commission

	М	YT Order		True-up Petition			Approv	ved after up	truing
Source	MU	Rs. crore	Rate (Rs./ kWh)	MU	Rs.	Rate (Rs./ kWh)	MU	Rs.	Rate (Rs./ kWh)
FY 2019-20	207.74	109.97	5.29	218.84	116.13	5.31	218.84	116.13	5.31
FY 2020-21	214.08	112.33	5.25	162.2	87.08	5.37	162.2	87.18	5.37
FY 2021-22	214.08	112.33	5.25	177.75	97.11	5.46	177.75	97.11	5.46

The total non-solar quantum procured by AEML-D in FY 2019-20 to FY 2021-22 is provided as below:

Table 3-42: Solar RPO Procurement quantum for FY 2019-20, FY 2020-21 and FY 2021-22 as approved by the Commission (MU)

	A	EML-D Petition	on	Аррі	oved in this C	Order
Sources	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
Non-Solar purchase	218.84	162.2	177.75	218.84	162.2	177.75
OA Purchase	2.45	3.55	4.13	2.45	3.55	4.13
Banking Fee	1.09	1	0.85	1.09	1	0.85
Banking Purchase	5.97	2.33	1.21	5.97	2.33	1.21
Non-Firm Lapsed Energy	9.44	17.62	11.82	9.44	17.62	11.82
STPP			35.19			35.19
Wind solar hybrid			65.69			65.69
Total	237.78	186.69	296.64	237.78	186.69	296.64

The Commission has computed the revised Cumulative Shortfall in Non-Solar RPO till FY 2019-20, FY 2020-21 and FY 2021-22, as shown in the Tables below:

Table 3-43: Cumulative Shortfall in Non-Solar RPO for FY 2019-20 as approved by Commission

Particulars	AEML-D	Approved
Energy Input at G<>T	9430.11	9423.89
% Obligation Non-Solar other than Mini/Micro Hydro	11.48%	11.48%
% Obligation Mini/Micro Hydro	0.02%	0.02%
Requirement @InSTS - Non-Solar other Mini/Micro Hydro	1084.46	1081.86
Requirement @InSTS - Mini/Micro Hydro	2.17	1.88
Total Non-Solar Obligation	1086.62	1083.75
Past Shortfall of Non-Solar	1822.05	1822.05
RE Purchase for RPO	237.78	237.79
Non-Solar Shortfall/(Surplus)	2670.89	2668.01

Table 3-44: Cumulative Shortfall in Non-Solar RPO for FY 2020-21 as approved by Commission.

Particulars	AEML-D	Approved
Energy Input at G<>T	8054.90	8063.09
% Obligation Non-Solar other than Mini/Micro Hydro	11.50%	11.50%
% Obligation Mini/Micro Hydro		
Requirement @InSTS - Non-Solar other Mini/Micro Hydro	926.31	927.26
Requirement @InSTS - Mini/Micro Hydro		
Total Non-Solar Obligation	926.31	927.26
Past Shortfall of Non-Solar	2670.89	2668.01
RE Purchase for RPO	186.69	186.70
Non-Solar Shortfall/(Surplus)	3410.52	3408.57

Table 3-45: Cumulative Shortfall in Non-Solar RPO for FY 2021-22 as approved by Commission.

Particulars	AEML-D	Approved
Energy Input at G<>T	8811.75	8824.05
% Obligation Non-Solar other than Mini/Micro Hydro	11.50%	11.50%
% Obligation Mini/Micro Hydro		
Requirement @InSTS - Non-Solar other Mini/Micro Hydro	1013.35	1014.77

Particulars	AEML-D	Approved
Requirement @InSTS - Mini/Micro Hydro		
Total Non-Solar Obligation	1013.35	1014.77
Past Shortfall of Non-Solar	3410.52	3408.57
RE Purchase for RPO	296.64	296.64
Non-Solar Shortfall/(Surplus)	4127.23	4126.70

For the purpose of arriving at cost implications, the Commission has considered that AEML-D shall meet the cumulative shortfall of Non-Solar RPO up to FY 2021-22 in the subsequent years in the ratio of the contracted power of Wind-Solar Hybrid RE.

3.5.5 Short-Term Power Purchase

AEML-D's Submission

After considering procurement from long-term sources and renewable sources, AEML-D has purchased its balance power requirement through purchase of power from short term sources. AEML-D has procured power from Power Exchanges on day-ahead basis as well as from firm short-term sources at Exchange-linked prices.

FY 2019-20

AEML-D had submitted that in the MTR Order dated 12th September 2018, the Commission after considering power available from other sources had not approved short-term power purchase quantum for FY 2019-20. Considering shortfall in projected RE sources, AEML-D had filed a Petition (Case No. 335 of 2018) praying for approval of procurement of short-term power in FY 2018-19 and FY 2019-20 in accordance with Regulation 21 of the MYT Regulations, 2015. The Commission issued the Order in Case No. 335 of 2018 on 1 January 2019, in which the Commission approved the procurement of short-term power in FY 2018-19 and FY 2019-20 with a ceiling rate of Rs. 5/kWh. As seen from the below table, the rate of short-term power in FY 2019-20 is well within the ceiling approved by the Commission in the Order in Case No. 335 of 2018.

Table 3-46: Short-term power purchase in FY 2019-20

Particulars	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
Power Exchange (IEX)	2,471.53	882.50	3.57
Bilateral	2,571.47	955.16	3.71

Particulars	Quantum	Cost (Rs. Crore)	Rate (Rs./kWh)
	(MU)		
Total	5,043.00	1,837.66	3.64

AEML-D submitted that it had entered into banking transaction in FY 2018-19 under which it received 470.41 MU energy in FY 2018-19. The same was returned in FY 2019-20. Hence, the corresponding cost (Rs. 190.26 Crore) has been claimed in FY 2019-20. This cost was also allowed by the Commission at the time of provisional truing up of FY 2019-20 in the MYT Order dated 30.03.2020. The Commission has also concluded that banking transaction made in FY 2018-19 was beneficial, since the average cost of returned energy in FY 2019-20 (for 470.41 MU) works out to Rs. 4.04/kWh, whereas the average cost of short-term power procured from IEX in FY 2018-19 worked out to Rs. 4.60/kWh. Apart from the cost of banking return, AEML-D has also incurred the OA charges and trading margin for this banking return in FY 2019-20, which has been claimed in the power purchase cost for FY 2019-20.

Further, AEML-D has entered into banking transaction in FY 2019-20 under which it banked 223.56 MU of energy in FY 2019-20. The same was returned to AEML-D during FY 2020-21. Hence, the corresponding cost (for 223.56 MU) has been claimed in the power purchase cost of FY 2020-21. However, AEML-D has incurred the OA charges and trading margin for this banking transaction in FY 2019-20, which has been claimed in the power purchase cost for FY 2019-20.

Further, under the stand-by arrangement, AEML-D has procured power from MSEDCL to meet its contingency requirements. AEML-D has procured stand-by power of 30.17 MU in FY 2019-20, for which no bill has been received from MSEDCL and no amount has been paid in FY 2019-20. However, AEML-D has received four bills pertaining to past period in FY 2019-20 (for the stand-by energy availed in the months of March 2016, April 2016, May 2017 and June 2017). Since AEML-D has claimed the cost of stand-by energy for FY 2015-16 and FY 2016-17 (in the MTR Petition in Case No. 200 of 2017) on provisional basis and the Commission had allowed the same in the MTR Order in Case No. 200 of 2017 dated 12.09.2018, AEML-D, based on the bills received, is now claiming the difference between amount booked on provisional basis and the actual amount paid for the months of March 2016 and April 2016. For May 2017 and June 2017, as the same are part of FY 2017-18, for which no cost towards energy received under standby has ever been allowed to AEML-D, AEML-D has now claimed the actual amount paid for the cost of standby energy as per the bills received. The summary of cost of stand-by energy claimed in FY 2019-20 is as under:

Table 3-47: FY 2019-20 Standby cost

Particulars	Rs. Crore
Difference between provisional amounts and actual amount (for Mar	-0.08
16 and Apr 16)	
Actual amount paid (for May 17 and Jun 17)	0.53
Total	0.45

AEML-D has also drawn power from the State Imbalance Pool in FY 2019-20. MSLDC has issued the provisional FBSM bills only up for FY 2019-20, and it is, thus, not possible to submit the energy decrement from Pool from the provisional FBSM statements. Hence, AEML-D has derived the energy decrement from Pool by considering the total energy input at T-D, energy at T-D for changeover and open access consumers, quantum of energy procured from different sources (as per the bills raised by generators) and the actual transmission loss of 3.16% for FY 2019-20 as per MSLDC. Also, since no amount has been paid for energy decrement from the Pool in FY 2019-20, the cost of the Pool decrement has not been claimed in the power purchase cost of FY 2019-20. The cost of such Pool decrement has been incurred in FY 2020-21 in response to the bills raised by MSLDC (on provisional basis) in this regard. Hence the cost has been claimed in the power purchase expense for FY 2020-21.

AEML-D submitted that the surplus energy of OA consumers is also available to it, which included in its power purchase quantum. This includes 4.14 MU of lapsed energy from firm OA consumers, 1.09 MU of banking fee (banking charges in kind) for non-firm OA consumers, 9.07 MU of purchase from non-firm OA consumers and 9.44 MU of lapsed energy from non-firm OA consumers. The cost of purchase of power from Non-firm OA consumers is Rs. 5.07 Crore and has been claimed in FY 2019-20.

The summary of short-term power purchase for FY 2019-20 as submitted by AEML-D is shown in the Table below:

Table 3-48: Power Purchase from Short Term Sources for FY 2019-20 as submitted by AEML-D

	_	MYT		Actuals			
Source	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	
Bilateral/ Power Exchange	5,369.61	2,013.15	3.75	5,043.00	1,837.66	3.64	
Banking return cost for FY 2018-19		190.26			190.26		

		MYT		Actuals			
Source	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	
OA Charges for banking return for FY 2018-19		11.59			11.79		
Banking in FY 2019-20	226.80			223.56			
OA Charges for banking in FY 2019-20		8.36			8.36		
Purchase under stand-by arrangement	4.40			30.17	0.45		
Imbalance Pool	500.17			811.48			
Lapsed Energy from Firm OA consumers				4.14			
Banking Fee-OA				1.09			
Purchase from Non firm OA consumers				9.07	5.08	5.60	
Lapsed Energy from Non firm OA consumers				9.44			
Total	6,100.98	2,223.36	3.64	6,131.97	2,053.60	3.35	

FY 2020-21

AEML-D has submitted that the Commission, in the MYT Order, has approved short-term power purchase (STPP) of 5,856.40 MU at Rs. 2,049.74 crore. Actual STPP details is as follows:

Table 3-49: FY 2020-21 STPP purchase

Particulars	Quantum	Cost (Rs. Crore)	Rate
	(MU)		(Rs./kWh)
Power Exchange	3,354.96	1,044.43	3.11
Bilateral	1,041.95	370.12	3.55
Total	4,396.91	1,414.55	3.22
MYT approved	5,856.40	2,049.74	3.50

AEML-D had entered into banking transaction under which it received 223.56 MU in FY 2019-20. The same was returned in FY 2020-21. Hence, the corresponding cost (Rs. 67.45 Crore) has been claimed in FY 2020-21.

Standby Purchase

AEML-D has procured stand-by power of 9.12 MU in FY 2020-21, for which no bill has been received from MSEDCL and no amount towards the same has been paid in FY 2020-

21. Accordingly, no cost towards standby charges is being claimed in FY 2020-21 as well. AEML-D has submitted that as and when the actual bill is received, AEML-D will claim the cost in that respective financial year. However, the quantum procured in FY 2020-21 is considered as part of power purchase.

However, AEML-D has received four bills pertaining to past period in FY 2020-21 (for the stand-by energy availed in the months of September 2017, November 2017, January 2018 and February 2018). AEML-D has disputed the bills and paid a lower amount. As mentioned above, since no cost was claimed earlier for FY 2017-18, AEML-D has now claimed the standby charges as follows to the extent of amount paid of Rs. 3.60 crore:

	FY 17-18			
From	То	Rs. Cr.	Rs. Cr.	
19-09-2017	28-09-2017	1.06	1.04	
29-11-2017	29-11-2017	0.26	0.26	
13-01-2018	31-01-2018	0.73	0.72	
01-02-2017	07-02-2018	1.61	1.58	
	Total	3.66	3.60	

Table 3-50: FY 2020-21 Standby Power purchase

Imbalance Pool

For FY 2020-21, AEML-D has derived the energy decrement from Pool by considering the total energy input at T<>D, energy at T<>D for changeover and open access consumers, quantum of energy procured from different sources and the actual transmission loss of 2.94% for FY 2020-21 as per MSLDC and the same amounts to 505.56 MU.

MSLDC has issued the provisional FBSM bills for FY 2020-21 amounting to Rs. 138.22 crore in FY 2021-22 and the payment has been made in FY 2021-22. Accordingly, the cost has been claimed in FY 2021-22. The quantum as per the bills issued by MSLDC and that being claimed in the Petition will vary on account of two factors, i.e., firstly changeover sales are considered by AEML-D is on actual basis, whereas MSLDC issues bills considering changeover sales on scheduled basis and secondly AEML-D has considered power sourcing from RE on actual basis, whereas MSLDC issues bills considering RE purchase on scheduled basis.

The surplus energy of OA consumers is also available to AEML-D and is thus included in its power purchase quantum. This includes 0.96 MU of lapsed energy from firm OA consumers, 17.62 MU of lapsed energy from Non-firm OA consumers. 1.00 MU of banking fee for non-firm OA consumers, 2.33 MU of banking purchase, 5.09 MU of purchase from

OA consumers. The cost of purchase of power from Non-firm OA consumers is Rs. 4.12 Crore and has been claimed in FY 2020-21. As can be seen from above, around 17.62 MU of OA energy is lapsed in FY 2020-21, which has been accounted in the energy balance of AEML-D.

The summary of short-term power purchase for FY 2020-21 is shown in the Table below:

Table 3-51: FY 2020-21 STPP purchase summary

	N	IYT Order			Actuals				
Source	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)			
Bilateral/ Power Exchange	5,856.40	2,049.74	3.50	4,396.91	1,414.55	3.22			
Banking return cost for energy banked during FY 2019-20		84.50			67.45				
OA Charges for banking for FY 2019-20		8.36							
Standby purchase for FY 2020-21				9.12					
Payment for energy purchase through stand-by during FY 2017-18					3.60				
Imbalance Pool				505.56					
Lapsed Energy from Firm OA consumers				0.96					
Banking Fee-OA				1.00					
Banking purchase				2.33					
Purchase from Non firm OA consumers				5.09	3.71				
Purchase from RTS in FY 19- 20, cost accounted in FY 20- 21					0.40				
Lapsed Energy from Non firm OA consumers				17.62					
Total				4,938.59	1,489.72	3.02			

FY 2021-22

The Commission, in the MYT Order, has approved STPP of 3,002.93 MU at Rs. 1,051.02 crore. The increase in short-term purchase vis-à-vis that approved is primarily on account of Hybrid power plant not coming on-stream fully. However, even if the said plant was commissioned fully by 11 August, 2021 (SCOD), it would still not have supplied the whole power as considered in the MYT Order, resulting in additional purchase from short-term sources. Further, short-term purchases are demand-driven and are managed on day-ahead

basis, whereas the short-term purchase considered in the Tariff Order is simply the balancing amount of energy required after considering all other sources of power. Therefore, in any case, the quantum of short-term power bought in any given year cannot be compared with the approved quantum. The increase in short term rate is on account of increase in the prices, which has been discovered on IEX. The summary of purchase from power exchange and bilateral sources is shown in the table below:

Particulars Cost (Rs. Crore) **Ouantum** Rate (Rs./kWh) (MU) **MYT Order** 3.002.93 3.50 1.051.02 2,719.02 Power Exchange 961.36 3.54 Bilateral 2,230,86 1.285.68 5.76 Total 4,949.88 2,247.04 4.54

Table 3-52: FY 2021-22 STPP purchase

Bilateral Sale:

During FY 2021-22, AEML-D has sold about 1.85 MU outside licence area on bilateral basis and has earned a revenue of Rs. 0.96 cr.

Standby Purchase

MSEDCL has raised a bill for the standby energy for 8 April, 2018 amounting to Rs. 4,33,940. AEML has pointed out the discrepancy in bill to MSEDCL and has made payment of Rs. 4,29,756. Accordingly, the said paid amount is considered as part of power purchase cost for FY 2021-22. AEML-D has procured stand-by power of 15.72 MU in FY 2021-22, for which no bill has been received from MSEDCL and no amount towards the same has been paid in FY 2021-22. Accordingly, no cost towards standby charges is being claimed in FY 2021-22 as well. As and when the actual bill is received, AEML-D will claim the cost in that respective financial year. However, the quantum procured in FY 2021-22 is considered as part of power purchase as the energy is actually consumed by consumers in AEML-D licence area.

Imbalance Pool

For FY 2021-22, for the purpose of imbalance pool, the financial year is required to be segregated into two parts. The first part being from 1st April to 10th Oct and the second part being from 11th Oct to 31st March. This is required on account of the commencement of the commercial arrangement as per MERC (Deviation Settlement Mechanism and related matters) Regulations, 2019.

The quantum as per the bills issued by MSLDC and that being claimed in the Petition will be different on account of power sourcing from RE because AEML-D has considered power

sourcing from RE on actual basis, whereas MSLDC issues bills considering RE purchase on scheduled basis.

AEML-D has derived the energy decrement from Pool by considering the total energy input at T<>D, energy at T<>D for changeover and open access consumers, quantum of energy procured from different sources and the actual transmission loss of 3.19% for FY 2021-22 as per MSLDC and the same amounts to 79.81 MU.

For cost purposes, the following has been considered:

- For the period from April 2021 to September 2021: cost is as per provisional bills raised by SLDC.
- For the period from 1st October to 10th October 2021: no cost is considered since no provisional bill has been raised by SLDC.
- For the period from 11th October 2021 to 31st March 2022, cost is as per DSM bills as raised by MSLDC.

The surplus energy of OA consumers is also available to AEML-D and is thus included in its power purchase quantum. This includes 0.28 MU of lapsed energy from firm OA consumers, 0.85 MU of banking fee for non-firm OA consumers, 1.21 MU of banking OA purchase, 11.82 MU of lapsed energy from non-firm OA consumers and 5.18 MU of purchase OA purchase. The cost of purchase of power from Non-firm OA consumers is Rs. 2.30 Crore and has been claimed in FY 2021-22.

Banking

Bilateral/ Power Exchange

AEML-D had entered into banking transaction for the period Feb-22 to Arp-22, under which it received 251.28 MU in Feb-22 and Mar-22 (FY 2021-22). AEML-D has incurred OA charges and trading margin for this banking transaction in FY 2021-22, which have been claimed in the power purchase cost for FY 2021-22. This was also allowed by the Commission at the time of prior approval of FAC for Feb-22 and Mar-22. The power is returned in FY 2022-23, for which the corresponding cost has been claimed in FY 2022-23.

The summary of short-term power purchase for FY 2021-22 is shown in the Table below:

MYT Order Actuals Cost Rate Cost Rate Source **Purchase** Purchase (Rs. (Rs. (Rs. (Rs. (MU) (MU) crore) /kWh) crore) /kWh)

1,051.02

3.50

4,949.88

Table 3-53: FY 2021-22 STPP purchase summary

3,002.93

2,247.04

4.54

	N	IYT Order		Actuals				
Source	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchase (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)		
Cost for energy banked during FY 2021-22				251.28	0.55			
Standby purchase for FY 2020-21				15.72				
Payment for energy purchase through stand-by during April 2018					0.04			
Bilateral Sale				(1.85)	(0.96)			
Imbalance Pool				79.81	(2.89)			
RTS Purchase					1.28			
Lapsed Energy from Firm OA consumers				0.28				
Banking OA purchase				1.21				
Banking Fee-OA				0.85				
Purchase from Non firm OA consumers				5.18	2.30			
Lapsed Energy from Non firm OA consumers				11.82				
Total				5,314.19	2,247.37	4.23		

Commission's Analysis and Ruling

The details of actual short-term power purchase in FY 2019-20, FY 2020-21 and FY 2021-22 submitted by AEML-D have been analysed.

The Commission notes that the quantum of power procured through short-term Power sources is over 60% of total power procured in all three years of True-up. However, the Commission also notes that in all 3 years, short-term procurement has been advantageous for AEML-D. The Commission also notes that from FY 2021-22, it has started procurement of power from its Wind Solar Hybrid Plant, which drastically reduced the quantum of short-term power procurement from FY 2022-23 onwards.

The Commission also notes that AEML-D has procured power through Banking transaction in FY 2019-20 and FY 2021-22 for 223.56 MU and 134.95 MU which cost Rs. 67.45 Crore and 167.57 Crore when it needed to return the power in FY 2020-21 and FY 2022-23 respectively. AEML-D has also provided the computations by which it has proved that there have been net savings in power purchase through these Banking Transactions. The Commission also notes that in FY 2019-20, AEML-D had to return 470.41 MU which cost the Licensee Rs. 190.26 Crore at an average Power purchase rate of Rs.4.04/unit.

Aside from Banking, there has been surplus energy from its OA consumers which has been included in its power purchase quantum in the head of lapsed energy from firm OA consumers, banking fee for non-firm OA consumers, banking OA purchase, lapsed energy from non-firm OA consumers and purchase from non-firm OA consumers. AEML-D has procured 23.74 MU, 24.67 MU, 19.34 MU in FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

FY 2019-20

The Commission approved the ceiling rate of Rs. 3.64 per unit for purchase from short-term sources for FY 2019-20 in the MYT Order dated 31 March, 2020. Against this, the actual rate for short-term purchase has been Rs. 3.35 per unit.

The Commission based on the justification submitted by AEML-D, considers the actual rate of purchase from Short-term Sources as submitted in its Petition.

FY 2020-21

The Commission at the time of MYT had approved the average power purchase rate of Rs. 3.50 per unit for purchase from Bilateral Sources. AEML-D has procured the same at Rs. 3.22 per unit. AEML-D has also returned its banked power from FY 2019-20 in FY 2020-21, which cost AEML-D for Rs. 67.45 Crore at an average power purchase cost of Rs. 3.02 per unit. These rates have been accepted by the Commission.

FY 2021-22

For FY 2021-22 also, the Commission at the time of MYT Order had approved the average power purchase rate of Rs. 3.50 per unit for purchase from Bilateral Sources. AEML-D has procured power from bilateral sources and Power exchanges at Rs. 5.76 per unit and Rs. 3.54 per unit.

The Commission has also verified the submission made by AEML-D for procurement through Power Exchanges during FY 2019-20, FY 2020-21 and FY 2021-22. The Commission accordingly approves the quantum and cost submitted by AEML-D for procurement through Power Exchanges.

Sale of Surplus Power

The Commission notes that AEML-D has revenue earned through Bilateral Sale in FY 2021-22 of Rs. 0.96 Crore for exporting 1.85 MU. Hence, the Commission has approved the actual revenue earned by AEML-D from sale of surplus power in the truing up for FY 2021-22.

The quantum and cost of short-term power purchase approved by the Commission after truing up for FY 2019-20, FY 2020-21, and FY 2021-22 is shown in the Tables below:

Table 3-54: Short Term Power Purchase for FY 2019-20 as approved by the Commission

		MYT Order	•	Tr	ue-up Petiti	ion	Approved after Truing up		
Source	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)
Bilateral/ Power Exchange	5,369.61	2,013.15	3.75	5,043.00	1,837.66	3.64	5,043.00	1,837.66	3.64
Banking return cost for FY 2018- 19		190.26			190.26			190.26	4.04
OA Charges for banking return for FY 2018-19		11.59			11.79			11.79	
Banking in FY 2019-20	226.8			223.56			223.56		
OA Charges for banking in FY 2019-20		8.36			8.36			8.36	
Purchase under stand-by arrangement	4.4			30.17	0.45		30.17	0.45	
Imbalance Pool	500.17			811.48			811.48		
Lapsed Energy from Firm OA consumers				4.14			4.14		
Banking Fee-OA				1.09			1.09		
Purchase from Non firm OA consumers				9.07	5.08	5.6	9.07	5.08	5.60
Lapsed Energy from Non firm OA consumers				9.44			9.44		
Total	6,100.98	2,223.36	3.64	6,131.97	2,053.60	3.35	6,131.97	2,053.60	3.35

Table 3-55: Short-Term Power Purchase for FY 2020-21 as approved by the Commission

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	MYT Order			True-up Petition			Approved after Truing up		
Source	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)
Bilateral/ Power Exchange	5,856.40	2,049.74	3.5	4,396.91	1,414.55	3.22	4,396.91	1,414.55	3.22
Banking return cost for energy banked during FY 2019-20		84.5			67.45			67.45	
OA Charges for banking for FY 2019-20		8.36							

	MYT Order			Tr	True-up Petition			Approved after Truing up		
Source	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	
Standby purchase for FY 2020-21				9.12			9.12			
Payment for energy purchase through stand-by during FY 2017-18					3.6			3.60		
Imbalance Pool				505.56			505.56			
Lapsed Energy from Firm OA consumers				0.96			0.96			
Banking Fee-OA				1.00			1.00			
Banking purchase				2.33			2.33			
Purchase from Non firm OA consumers				5.09	4.09		5.09	4.09		
Purchase from RTS in FY 19-20, cost accounted in FY 20-21					0.40			0.40		
Lapsed Energy from Non firm OA consumers				17.62			17.62			
Total				4,938.59	1,489.72	3.02	4,938.59	1,490.10	3.02	

Table 3-56: Short-Term Power Purchase for FY 2021-22 as approved by the Commission

	MYT Order			Tr	True-up Petition			Approved after Truing up		
Source	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	
Bilateral/ Power Exchange	3,002.93	1,051.02	3.5	4,949.88	2,247.04	4.54	4,949.88	2,247.04	4.54	
Cost for energy banked during FY 2021-22				251.28	0.55		251.28	0.55	0.02	
Standby purchase for FY 2020-21				15.72			15.72			
Payment for energy purchase through stand-by during April 2018					0.04			0.04		
Bilateral Sale				-1.85	-0.96		-1.85	-0.96		
Imbalance Pool				79.81	-2.89		79.81	-2.89	(0.36)	
RTS Purchase					1.28			1.28		
Lapsed Energy from Firm OA consumers				0.28			0.28			

Source	MYT Order			True-up Petition			Approved after Truing up		
	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)	Purchas e (MU)	Cost (Rs. crore)	Rate (Rs. /kWh)
Banking OA purchase				1.21			1.21		
Banking Fee-OA				0.85			0.85		
Purchase from Non firm OA consumers				5.18	2.3		5.18	2.3	4.44
Lapsed Energy from Non firm OA consumers				11.82			11.82		
Total				5,316.03	2,248.32	4.23	5,316.03	2,248.32	4.23

3.5.6 FBSM and FCR payments for FY 2020-21

AEML-D's Submission

MSLDC had earlier raised a bill for Rs. 226 Crore in FY 2017-18 for FBSM Variable Cost payment, which was claimed in the truing-up for FY 2017-18. Now MSLDC has raised a revised bill of Rs. 235.82 crore as the final bill for the said year in FY 2020-21. Accordingly, the differential of Rs. 9.82 crore is being claimed in FY 2020-21.

The Commission vide order dated 26 September, 2019 in Case No. 297 of 2018 has held as follows:

"Maharashtra State Load Despatch Centre is directed to follow methodology and principles (as mentioned at Para 80 to Para 98) as approved under this Order for computation of the Fixed Cost Reconciliation (FCR) Pool Volume and FCR Pool Value for the period from FY 2011-12 to FY 2017-18 and accordingly MSLDC shall ssue the final bills for settlement of fixed charge reconciliation pool amongst SPPs."

In accordance with the above, MSLDC has raised additional bill of Rs. 52.97 crore and the same is considered as part of power purchase cost in FY 2020-21.

MSLDC has issued revised bill for FBSM Variable Cost for FY 2013-14 and the differential of Rs. (0.92) crore is considered as part of power purchase cost in FY 2020-21

MSLDC has raised FCR bill for FY 2018-19 and FY 2019-20 for Rs. 25.49 crore and Rs. 13.79 crore respectively in FY 2020-21 and the same is considered as part of power purchase cost in FY 2020-21.

Commission's Analysis and Ruling

The Commission has verified the FBSM bills and FCR pool bills and approves the same for consideration in Power purchase cost of FY 2020-21.

3.5.7 FBSM Provisional Fixed Cost

AEML-D's Submission

MSLDC has raised monthly provisional bills for FY 2021-22 with annual total amounting to Rs. 138.22 crore in FY 2021-22. The same has been paid in June-21 and July-21 and has accordingly been considered as part of power purchase cost in FY 2021-22.

Commission's Analysis and Ruling

The Commission has verified the bills raised by MSLDC for FY 2021-22. As the final FBSM bill for FY 2021-22 would be raised later, the Commission would allow adjustment on this account when placed before the Commission. Hence, the Commission approves FBSM provisional cost for FY 2021-22 as part of Power purchase cost of FY 2021-22.

3.5.8 WRPC DSM Bills

AEML-D's Submission

AEML-D submitted that the FBSM billing is delayed by almost 2 years whereas the WRPC billing is happening with just 2 weeks' delay. Whenever WRPC bill is payable, MSLDC does not have sufficient funds as the FBSM bills are not in sync. This matter was discussed in MSPC meeting dated 25 March, 2019. It was decided that MSLDC will raise provisional bill for payment towards the WRPC bills. Since billing data is not available, it was decided that each DISCOM will pay 25% share in the interim. Accordingly, AEML-D pays the WRPC bills as per the provisional bills raised by MSLDC. The actual payment made in FY 2019-20 is Rs. 11.16 Crore, which is included in the power purchase cost for FY 2019-20.

Commission's Analysis and Ruling

The Commission has considered the actual payment made by AEML-D against WRPC DSM bills in the power purchase cost of FY 2019-20.

3.5.9 Other Payments

AEML-D's Submission

FY 2020-21

Following payments are being considered as part of power purchase cost in FY 2020-21:

- In the month of May 2020, WRPC has refunded Rs. 5.03 crore towards DSM bill. The refund is on account of provisional bill amount collected towards payment of WRPC from MSPC UI Account.
- AEML-D had paid Rs. 11.76 crore against provisional bill of WRPC (corpus amount) to MSDLC (MSPC) during FY 2018-19 and FY 2019-20, which has been considered in power purchase cost in the past. Out of the said amount, MSLDC had refunded Rs. 5.03 crore to AEML-D in the month of May 2020. Thereafter, based on the Commission's Order dated 20-07-2020, in Case No. 90 of 2020, MSLDC raised provisional FBSM bill of Rs. 104.86 crore on AEML-D in December 2020 for first six months of FY 2019-20 and, in the said bill, the adjustment of the remaining Rs. 6.73 crore out of the earlier provisional WRPC bill was also done (Rs. 11.76 crore minus Rs. 5.03 crore). Accordingly, refund of Rs. 6.73 crore is being passed on to the consumers.
- In the month of May 2020, payment of Rs. 3.32 crore has been made to MSLDC towards corpus payment and Rs. 0.02 crore towards one-time registration fee for DSM implementation. The payment is towards Corpus charges as demanded by MSLDC considering DSM Procedure approved by the Commission and Registration fees for registration at MSLDC.
- MSPC administrative cost towards book-keeping, audit, website, etc., need to be shared by the MPSC members including AEML. For this purpose, MSPC has raised the invoice, for which AEML has paid an amount of Rs. 3 lakhs in November 2020.
- Expenditure of WRPC Secretariat is to be reimbursed by each constituent consisting of 37 members equally, including AEML-D. For this purpose, WRPC has raised the invoice, for which AEML-D has paid an amount of Rs. 10,01,700 (being its share) in December 2020.
- AEML-D had purchased power from Dhariwal in FY 2019-20, for which an additional bill of Rs. 1,125 was raised in Oct-2020. The same is considered as part of power purchase in FY 2020-21.

FY 2021-22

- WRPC members have to contribute Rs. 50,000 annually towards incidental charges
 to contingency fund of WRPC for every financial year. Accordingly, WRPC has
 raised the invoice for FY 2020-21 in FY 2021-22, for which AEML-D has paid an
 amount of Rs. 50,000 in August 2021.
- STU in accordance with the Commission's Order dated 18 October, 2020 in Case No. 52 of 2020, has levied Rs. 13,065 as additional transmission charges.

Commission's Analysis and Ruling

The Commission has considered the amount claimed by AEML-D towards payment as WRPC DSM bills in the power purchase cost of FY 2019-20, FY 2020-21 and FY 2021-22.

3.5.10 Impact of Hon'ble SC Judgment regarding Additional Energy Charges (AEC) - FY 2019-20

AEML-D's Submission

As per the Judgment of the Hon'ble Supreme Court in Civil Appeal No. 4161 of 2008 and 4423 of 2008, 23.07.2019, TPC raised a demand of Rs. 41.92 Crore towards Additional Energy Charges (AEC) in September 2019, after adjusting for Rs. 25 Crore already deposited by AEML (then RInfra) as per the earlier interim Judgment of the Hon'ble SC. The said amount of Rs. 41.92 Crore have been paid by AEML-D to TPC-D and included in the estimated power purchase cost of FY 2019-20. The Commission had also approved Rs. 41.92 Crore as payment towards AEC at the time of provisional truing up of FY 2019-20 in the MYT Order dated 30 March, 2020.

Commission's Analysis and Ruling

The Commission has considered the amount claimed by AEML-D against the payment towards AEC of Rs. 41.92 Crore in the power purchase cost of FY 2019-20.

3.5.11 Impact of Hon'ble SC Judgment regarding 'Take or Pay' – FY 2019-20

AEML-D's Submission

The Commission, in its Order dated 12 December, 2007 in Case No. 7 of 2002, had adjudicated the dispute between AEML and TPC regarding the minimum guaranteed offtake of energy from TPC and the 'take or pay' issue. AEML had preferred appeal against the said order. The Hon'ble ATE, in its Judgment dated 12 May, 2008 in Appeal No. 3 of 2008 had stated that the issue relating to 'take or pay' shall be examined afresh after giving opportunity to the parties of hearing and after decision of the Supreme Court in Civil Appeal No. 2898 of 2006 and 3101 of 2006 relating to the issues, as to whether or not TPC is a distribution licensee and whether or not REL's offer of rebate to its consumers to prevent them from moving away from it is tenable in law. Both AEML and TPC approached the Hon'ble Supreme Court against the ATE Judgment (CA No 4161 of 2008 and 4423 of 2008). The Hon'ble Supreme Court disposed off the two appeals vide its Order dated 23 July, 2019, in which the matter was remanded back to the Commission for fresh hearing and decision. Thereafter TPC filed an application (MA 39 of 2019 in Case No. 7 of 2002), in which TPC prayed for examination of Take or Pay issue afresh as per the directives of

Hon'ble ATE and Hon'ble SC. The Commission issued its Order on 22nd January 2020, in which mechanism for computation of Take or pay amount was framed by the Commission.

In accordance with the said Order, AEML-D has paid Rs. 40.49 Crore to TPC-D in FY 2019-20 and the same has been included in the power purchase cost for FY 2019-20. It is submitted that AEML-D has preferred an Appeal (Appeal No. 124 of 2022) before the Hon'ble ATE against the Order of the Commission, which is pending for decision. The impact of Hon'ble ATE Judgment, if any, will be claimed in future Tariff Petition.

Commission's Analysis and Ruling

The Commission has considered the actual amount of Rs. 40.49 Crore paid by AEML-D to TPC-D on account of take of pay, in the power purchase cost of FY 2019-20.

3.5.12 Transmission Charges, Additional Transmission Charges, SLDC Charges and Standby Charges

3.5.12.1 Transmission Charges

AEML-D's Submission

FY 2019-20: The actual transmission charges paid by AEML-D in FY 2019-20 was Rs. 398.76 Cr. as against Rs. 398.72 Cr. approved by the Commission in the InSTS Order dated 12.09.2018 in Case No. 265 of 2018. Annual approved value translated to monthly amount of Rs. 33.2267 Cr. STU has raised the monthly bill at Rs. 33.23 Cr. and hence, the annual transmission charges paid amounts to Rs. 398.76 Cr.

FY 2020-21: The transmission charges as approved in the InSTS Order dated 30 March, 2023 in Case No. 327 of 2019 are Rs. 472.95 Cr. as against Rs. 476.65 Cr. approved by the Commission in the MYT Order. AEML-D had filed a Review Petition No. 103 of 2020 reviewing the discrepancy in the amounts approved in InSTS Order and MYT Order. The Commission, in the order dated 21 July, 2020, allowed the review and held as follows:

"Prayer regarding correction of Transmission Charges payable by AEML-D from FY 2020-21 to FY 2024-25 to be considered as approved in the InSTS Order in Case No. 327 of 2019 dated 30 March 2020 is allowed. Impact of the same shall be claimed during upcoming MTR proceeding."

The actual transmission charges paid by AEML-D in FY 2020-21 was Rs. 472.92 Cr. as against Rs. 472.95 Cr. approved by the Commission in the InSTS Order dated 30 March, 2020 in Case No. 327 of 2019. Annual approved value translated to monthly amount of Rs.

39.4125 Cr. STU has raised the monthly bill at Rs. 39.41 Cr. and hence, the annual transmission charges paid amounts to Rs. 472.92 Cr.

FY 2021-22: The transmission charges as approved in the InSTS Order dated 30 March, 2020 in Case No. 327 of 2019 are Rs. 477.90 Cr. as against Rs. 480.59 Cr. approved by the Commission in the MYT Order. As stated earlier, in the Review Order, the Commission held that the Transmission Charges payable by AEML-D shall be as approved in the InSTS Order in Case No. 327 of 2019.

The actual transmission charges paid by AEML-D in FY 2021-22 was Rs. 477.84 Cr. as against Rs. 477.90 Cr. approved by the Commission in the InSTS Order dated 30 March, 2020 in Case No. 327 of 2019. Annual approved value translated to monthly amount of Rs. 39.825 Cr. STU has raised the monthly bill at Rs. 39.82 Cr. and hence, the annual transmission charges paid amounts to Rs. 477.84 Cr.

The summary of Transmission Charges for FY 2019-20 to FY 2021-22 is shown in the Table below:

Table 3-57: Transmission Charges for FY 2019-20 to FY 2021-22 as submitted by AEML-D (Rs Crore)

	FY 20	19-20	FY 20	020-21	FY 2021-22		
Particulars	MYT Order	True-up Petition	MYT Order	True-up Petition	MYT Order	True-up Petition	
Transmission Charges	398.72	398.76	476.65	472.92	480.59	477.84	

Commission's Analysis and Ruling

The Commission has approved the actual Transmission Charges paid by AEML-D for FY 2019-20, FY 2020-21, and FY 2021-22, which are as per relevant InSTS Orders issued by the Commission, as shown in the Table below:

Table 3-58: Transmission Charges for FY 2019-20 to FY 2021-22 as approved by the Commission (Rs. Crore).

Particula rs	FY 2019-20]	FY 2020-21		FY 2021-22		
	MYT Order	True-up Petition	Approv ed after truing up	MYT Order	True-up Petition	Approv ed after truing up	MYT Order	True-up Petition	Approv ed after truing up
Transmiss ion Charges	398.72	398.76	398.76	476.65	472.92	472.92	480.59	477.84	477.84

3.5.12.2 Additional Transmission Charges

AEML-D's Submission

FY 2019-20: STU had billed Additional Transmission Charges of Rs. 4.40 Cr. to AEML for Nov-19, in the monthly bill of December 2019. AEML-D had paid the said amount in January 2020 under protest. STU had separately approached the Commission on this issue along with some other issues in Case No. 52 of 2020. The Commission issued its Order in Case No. 52 of 2020 on 18 October 2020 and held as follows:

"6) Issue No. 5: Recovery of additional transmission charges as per Regulation 66 of the MYT Regulations, 2019 shall be levied, if any, prospectively from 1 April, 2020.

...

8) Further, the amount already paid by the TSUs against the Additional Transmission/Regulatory Charges levied by State Transmission Utility from the month of December, 2019 as per Section 63 of MYT Regulations 2015 shall be adjusted in the future bills of the Transmission System Users (i.e April 2020 onwards) without any carrying cost /holding cost."

AEML-D has submitted that since it has paid the said amount in FY 2019-20, it has been included in the power purchase cost for FY 2019-20.

FY 2020-21: As elaborated above, additional transmission charges of Rs. 4.40 Cr. was paid for in FY 2019-20. Pursuant to the Commission Order in Case No. 52 of 2020 dated 15 October, 2020, the said amount has been adjusted by STU in the future bill in FY 2020-21. Hence, the reversal of the said amount has been considered in FY 2020-21.

Commission's Analysis and Ruling

The Commission has approved the additional Transmission Charges paid by AEML-D in FY 2019-20 to STU and the reversal of it considered by AEML-D during FY 2020-21 as per AEML-D claim, as a part of Power Purchase cost.

3.5.12.3 MSLDC Charges

AEML-D's Submission

FY 2019-20

The actual SLDC charges paid by AEML-D in FY 2019-20 was Rs. 2.00 Cr. The Commission had also approved SLDC charges of Rs. 2.00 Cr. for AEML-D in the SLDC MTR Order dated 12 September, 2018 in Case No. 171 of 2017.

FY 2020-21 and FY 2021-22

The SLDC charges as approved in the SLDC Order dated 30 March, 2020 in Case No. 291 of 2019 for FY 2020-21 and FY 2021-22 are Rs. 2.36 Cr. and 2.22 Cr., respectively. However, the Commission considered SLDC charges for FY 2020-21 and FY 2021-22 are Rs. 1.65 Cr. and Rs. 1.82 Cr. while approving the ARR of AEML-D MYT Order. AEML-D filed a review petition No. 103 of 2020 reviewing the discrepancy in the amounts approved in InSTS Order and MYT Order. The Commission in the Order dated 21 July, 2020 allowed the review and held as follows:

"Prayer regarding correction of MSLDC Charges payable by AEML-D from FY 2020-21 to FY 2024-25 to be considered as approved in the Order in Case No. 291 of 2019 dated 30 March 2020 is allowed. Impact of the same shall be claimed during upcoming MTR proceeding."

The actual SLDC charges paid by AEML-D in FY 2020-21 and FY 2021-22 was Rs. 2.36 Cr. and Rs. 2.22 Cr., respectively.

The summary of SLDC charges for FY 2019-20 to FY 2021-22 is shown in the Table below:

Table 3-59: MSLDC Charges for FY 2019-20 to FY 2021-22 as submitted by AEML-D (Rs. Crore)

	FY 2	019-20	FY 2	020-21	FY 2021-22		
Particulars	MYT True-up		MYT	True-up	MYT	True-up	
	Order	Petition	Order	Petition	Order	Petition	
MSLDC Charges	2.00	2.00	1.65	2.36	1.82	2.22	

Commission's Analysis and Ruling

The Commission has approved the actual MSLDC Charges paid by AEML-D in the truing up for FY 2019-20, as the same are in accordance with the MSLDC Charges approved by the Commission. However, the Commission notes that SLDC charges would be different compared to approved in MYT Order as in Review Order, the Commission has allowed SLDC charges to be charged as per Case No. 291 of 2019 and the difference in amount is due to adjustment of impact of revised SLDC charges. Hence, the Commission approves the SLDC charges for FY 2019-20, FY 2020-21 and FY 2021-22 as shown in the Table below:

Table 3-60: MSLDC Charges for FY 2019-20 to FY 2021-22 as approved by Commission (Rs. Crore)

Particulars	FY 2019-20				FY 2020-	-21	FY 2021-22		
	MYT Order	True- up Petition	Approved after truing up	MYT Order	True- up Petition	Approved after truing up	MYT Order	True- up Petition	Approved after truing up
MSLDC Charges	2.00	2.00	2.00	1.65	2.36	2.36	1.82	2.22	2.22

3.5.12.4 Standby Charges

AEML-D's Submission

FY 2019-20 and FY 2020-21

The actual standby charges paid by AEML-D in FY 2019-20 and FY 2020-21 was Rs. 182.32 Cr and Rs. 183.25 Cr. respectively. The Commission had also approved standby charges of Rs. 182.32 Cr. and Rs. 183.25 Cr. for FY 2019-20 and FY 2020-21, respectively in the MYT Order dated 30 March, 2020.

FY 2021-22

The Commission had approved Standby Charges of Rs. 184.15 Cr. for FY 2021-22 for AEML-D in MYT Order dated 30.03.2020 in Case No. 325 of 2019.

AEML-D submitted that it had requested for standby power from MSEDCL during the months of Oct-21, Nov-21 and Dec-21 on account of STOA generator / ST bilateral tripping during real-time operation, reduction in REMC schedule, etc., however, MSEDCL did not approve the same, despite clear directions from the Commission, vide Order dated 16 March, 2018 in Case No. 72 of 2016 that stand-by power support should be available for outages of all contracted sources and it is not specific to outage of any particular long-term source(s). AEML consumers, despite paying for standby support, have been deprived of benefits of scheduled power and are instead made to bear the burden of Unscheduled over drawal. In view of the same, AEML has not paid the fixed standby charges as approved in the MYT Order for the months of Oct- 21, Nov-21 & Dec-21 and has communicated to MSEDCL about the same. Further, AEML has since stopped availing the standby facility from MSEDCL, and hence, AEML has also not paid the fixed standby charges for the months of Jan-22, Feb-22 and Mar-22. AEML has on regular basis communicated about the same to MSEDCL.

AEML-D has paid the standby charges to MSEDCL for the period from Apr-21 to Sept-21, i.e., for a period of six months amounting to Rs. 92.07 Cr. Thus, AEML-D has considered Rs. 92.07 Cr. as standby charges for FY 2021-22, being the actual payment made.

Also, as AEML-D is not seeking any stand-by support from MSEDCL anymore, it is not liable to make payment of fixed stand-by charges to MSEDCL. Despite not availing stand-by support from MSEDCL, payment of stand-by charges to MSEDCL, if directed, would amount to subsidising the consumers of MSEDCL by AEML-D's consumers. Therefore, AEML-D requested the Commission to consider the same and approve Stand-by charges for FY 2021-22 only for the period for which payment is made.

The summary of Standby Charges for FY 2019-20 to FY 2021-22 is shown in Table below:

Table 3-61: Stand-by Charges for FY 2019-20 to FY 2021-22 as submitted by AEML-D (Rs. Crore)

			(
	FY 2	2019-20	FY	2020-21	FY 2021-22		
Particulars	MYT	True-up	MYT	True-up	MYT	True-up	
	Order	Petition	Order	Petition	Order	Petition	
Stand-by Charges	182.32	182.32	183.25	183.25	184.15	92.07	

Commission's Analysis and Ruling

The Commission has approved the actual Standby Charges paid by AEML-D in the truing up for FY 2019-20 and FY 2020-21, as the same are in accordance with the Standby Charges approved by the Commission in respective Tariff Orders.

The Commission has approved the share of Standby Charges for the concerned Distribution Licensees in the MYT Orders and had included the payment towards Standby Charges in the power purchase cost of AEML-D for the Control Period. The Commission is of the view that merely sending a letter to MSEDCL seeking discontinuance of the Standby Arrangement does not relieve AEML-D oof its obligation to pay the Standby Charges to MSEDCL. The Standby arrangement is a very old arrangement, and any decision to discontinue the same, if at all acceptable, has to be arrived at only after consultation of all the Parties concerned with the Commission. During the Public Hearing and in its written objections, MSEDCL has strongly objected to the proposed discontinuance of the Standby arrangement by AEML-D, and the non-payment of Standby Charges for 6 months of FY 2021-22.

Hence, the Commission rules that AEML-D cannot unilaterally discontinue the payment of Standby Charges and the same needs to be paid as per the relevant Order of the

Commission. The Commission has considered AEML-D's share of the Standby Charges (which needs to be mandatorily paid) for FY 2019-20, FY 2020-21, and FY 2021-22 as approved in MSEDCL's MYT Order dated 30th March 2020, as shown in the following Table:

Table 3-62: Standby Charges approved by the Commission for FY 2019-20 to FY 2021-22 (Rs. Crore)

FY 2019-20					FY 2020-21		FY 2021-22			
Particula rs	MYT Order	True-up Petition	Approv ed after truing up	MYT Order	True-up Petition	Approv ed after truing up	MYT Order	True-up Petition	Approv ed after truing up	
Standby Charges	182.32	182.32	182.32	183.25	183.25	183.25	184.15	92.07	184.15	

3.5.13 Summary of Power Purchase Cost for FY 2019-20 to FY 2021-22

AEML-D's Submission

The actual power purchase quantum and cost for FY 2019-20 to FY 2021-22, as against that approved in the MYT Order, is summarised in the Table below:

Table 3-63: Power Purchase Quantum and Cost for FY 2019-20 as submitted by AEML-D

	M	YT Order		Tru	e-up Petition	n
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)
ADTPS	3,290.05	1,573.45	4.78	3,026.69	1,469.92	4.86
VIPL-G	(2.23)	(1.73)	7.76	(3.71)	(3.35)	9.03
Renewable-Solar	62.12	63.99	10.30	56.33	58.21	10.33
Renewable-Non-Solar	207.74	109.97	5.29	218.84	116.13	5.31
Short-term Purchase	6,100.97	2,223.36	3.64	6,131.97	2,053.60	3.35
Impact of SC Judgment (AEC matter)		41.92			41.92	
Impact of SC Judgment (Take or Pay)					40.49	
WRPC DSM Bills		11.16			11.16	
Addnl. Transmission charges					4.40	
Sub-Total	9,658.65	4,022.12	4.16	9,430.11	3,792.49	4.02
Transmission Charges		398.72			398.76	
MSLDC Charges		2.00			2.00	

Source	M	YT Order		True-up Petition				
	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)		
Standby Charges		182.32			182.32			
Total	9,658.65	4,605.16	4.77	9,430.11	4,375.57	4.64		

Table 3-64 : Power Purchase Quantum and Cost for FY 2020-21 as submitted by ${\bf AEML\text{-}D}$

	M	YT Order		Tru	e-up Petitio	n
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)
ADTPS	3,733.00	1,728.62	4.63	2,897.45	1,356.97	4.68
Renewable-Solar	66.19	68.17	10.30	56.67	58.37	10.30
RTS generators					0.40	
Renewable-Non-Solar	214.08	112.32	5.25	162.20	87.08	5.37
Short-term Purchase	5,856.40	2,049.74	3.50	4,433.03	1,422.27	3.21
Banking		84.50			67.45	
OA charges		8.36				
Imbalance pool				505.56		
Reversal of additional transmission charges					(4.40)	
Other payments					(8.29)	
Sub-Total	9,869.67	4,051.72	4.11	8,054.90	2,979.83	3.70
FBSM & FCR Payments					101.16	
Sub-Total	9,869.67	4,051.72	4.11	8,054.90	3,080.99	3.82
Transmission Charges		476.65			472.92	
MSLDC Charges		2.36			2.36	
Standby Charges		183.25			183.25	
Total	9,869.67	4,713.98	4.78	8,054.90	3,739.53	4.64

Table 3-65 : Power Purchase Quantum and Cost for FY 2021-22 as submitted by ${\bf AEML\text{-}D}$

	M	YT Order		True-up Petition				
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)		
ADTPS	3,733.00	1,783.86	4.78	2,974.87	1,456.74	4.90		
Renewable-Solar	66.19	68.17	10.30	52.00	53.56	10.30		
RTS generators								
Renewable-Non-Solar	214.08	112.33	5.25	177.75	97.11	5.46		

	M	YT Order		Tru	e-up Petitio	n
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. /kWh)
Wind-Solar Hybrid	3,066.00	993.38	3.24	292.95	94.91	3.24
Short-term Purchase	3,002.93	1,051.02	3.50	5,234.37	2,250.25	4.30
Imbalance pool				79.81	(2.89)	
Other payments					0.01	
Sub-Total	10,082.20	4,008.76	3.98	8,811.75	3,949.69	4.48
FBSM Payments					138.22	
Sub-Total	10,082.20	4,008.76	3.98	8,811.75	4,087.92	4.64
Transmission Charges		480.59			477.84	
MSLDC Charges		2.22			2.22	
Standby Charges		184.15			92.07	
Total	10,082.20	4,675.71	4.64	8,811.75	4,660.05	5.29

Commission's Analysis and Ruling

Based on the source-wise approval of power purchase as discussed above, the power purchase quantum and cost approved after truing-up for FY 2019-20 to FY 2021-22 is shown in the following Tables:

Table 3-66: Power Purchase approved by the Commission for FY 2019-20

	N	MYT Orde	r	Tr	ue-up Petit	ion	Approved after truing up			
Particulars	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate	
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	
ADTPS	3,290.05	1,573.45	4.78	3,026.69	1,469.92	4.86	3,026.69	1,469.92	4.86	
VIPL-G	(2.23)	(1.73)	7.76	(3.71)	(3.35)	9.03	(3.71)	(3.35)	9.03	
Renewable- Solar	62.12	63.99	10.3	56.33	58.21	10.33	56.33	58.21	10.33	
Renewable- Non-Solar	207.74	109.97	5.29	218.84	116.13	5.31	218.84	116.13	5.31	
Short-term Purchase	6,100.97	2,223.36	3.64	6,131.97	2,053.60	3.35	6,131.97	2,053.60	3.35	
Impact of SC Judgment (AEC matter)		41.92			41.92			41.92		
Impact of SC Judgment (Take or Pay)					40.49			40.49		

	ľ	MYT Orde	r	Tr	ue-up Petit	ion	Approved after truing up			
Particulars	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate	
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	
WRPC DSM Bills		11.16			11.16			11.16		
Addnl. Transmission charges					4.4			4.40		
Sub-Total	9,658.65	4,022.12	4.16	9,430.11	3,792.49	4.02	9,430.11	3,792.49	4.02	
Transmission Charges		398.72			398.76			398.76		
MSLDC Charges		2			2			2.00		
Standby Charges		182.32			182.32			182.32		
Total	9,658.65	4,605.16	4.77	9,430.11	4,375.57	4.64	9,430.11	4,375.57	4.64	

Table 3-67: Power Purchase approved by the Commission for FY 2020-21

	N	IYT Order		Tru	e-up Petitio	n	Approved after truing up			
Particular	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate	
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	
ADTPS	3,733.00	1,728.62	4.63	2,897.45	1,356.97	4.68	2,897.45	1,356.97	4.68	
Renewable- Solar	66.19	68.17	10.30	56.67	58.37	10.30	56.67	58.37	10.30	
RTS generators					0.40			0.40		
Renewable- Non-Solar	214.08	112.32	5.25	162.20	87.08	5.37	162.20	87.08	5.37	
Short-term Purchase	5,856.40	2,049.74	3.50	4,433.03	1,422.27	3.21	4,433.03	1,489.70	3.36	
Banking		84.50			67.45					
OA charges		8.36								
Imbalance pool				505.56			505.56	-		
Reversal of additional transmission charges					(4.40)			(4.40)		
Other payments					(8.29)			(8.29)		
Sub-Total	9,869.67	4,051.72	4.11	8,054.90	2,979.83	3.70	8,054.90	2,979.83	3.70	

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	MYT Order			Tru	True-up Petition			Approved after truing up		
Particular	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate	
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	
FBSM &										
FCR					101.16			101.16		
Payments										
Sub-Total	9,869.67	4,051.72	4.11	8,054.90	3,080.99	3.82	8,054.90	3,080.99	3.82	
Transmission		476.65			472.92			472.92		
Charges		470.03			472.92			472.92		
MSLDC		2.36			2.36			2.36		
Charges		2.30			2.30			2.30		
Standby		183.25			183.25			183.25		
Charges		165.25			103.23			103.23		
Total	9,869.67	4,713.98	4.78	8,054.90	3,739.53	4.64	8,054.90	3,739.53	4.64	

Table 3-68: Power Purchase approved by the Commission for FY 2021-22

MYT Order			True-up Petition			Approved after truing up			
		TT Oruci			c-up i cum			and the	ing up
Particular	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)
ADTPS	3,733.00	1,783.86	4.78	2,974.87	1,456.74	4.90	2,974.87	1,456.74	4.90
Renewable- Solar	66.19	68.17	10.30	52.00	53.56	10.30	52.00	53.56	10.30
RTS generators									
Renewable- Non-Solar	214.08	112.33	5.25	177.75	97.11	5.46	177.75	97.11	5.46
Wind-Solar Hybrid	3,066.00	993.38	3.24	292.95	94.91	3.24	292.95	94.91	3.24
Short-term Purchase	3,002.93	1,051.02	3.50	5,234.37	2,250.25	4.30	5,234.37	2,250.25	4.30
Imbalance pool				79.81	(2.89)		79.81	(2.89)	
Other payments					0.01			0.01	
Sub-Total	10,082.20	4,008.76	3.98	8,811.75	3,949.69	4.48	8,811.75	3,949.69	4.48
FBSM Payments					138.22			138.22	
Sub-Total	10,082.20	4,008.76	3.98	8,811.75	4,087.92	4.64	8,811.75	4,087.92	4.64
Transmission Charges		480.59			477.84			477.84	

	MYT Order		True-up Petition		Approved after truing up				
Particular	Quantu m	Cost	Rate	Quantu m	Cost	Rate	Quantu m	Cost	Rate
	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)	(MU)	(Rs. Crore)	(Rs. /kWh)
MSLDC Charges		2.22			2.22			2.22	
Standby Charges		184.15			92.07			184.15	
Total	10,082.20	4,675.71	4.64	8,811.75	4,660.05	5.29	8,811.75	4,752.13	5.39

3.6 OPERATION AND MAINTENANCE (O&M) EXPENSES

3.6.1 Allowable O&M Expenses for FY 2019-20 to FY 2021-22

AEML-D's Submission

The Commission approved the following O&M expenses for FY 2019-20 to FY 2021-22 for AEML-D in the MYT Order (Case No. 325 of 2019)

Table 3-69: O&M Expenses approved in MYT Order for FY 2019-20 to FY 2021-22 (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Wires Business	850.72	875.50	904.96
Supply Business	419.68	430.09	444.45
Total	1270.41	1305.60	1349.41

FY 2019-20

For the purpose of truing up of FY 2019-20, AEML-D has calculated the normative expense for FY 2019-20 considering the revised normative expense approved for FY 2018-19 in the MYT Order. Based on the above, the permissible O&M expenses for FY 2019-20 has been worked out as shown in the Table below:

Table 3-70: Normative O&M Expenses for FY 2019-20 (Rs. Crore)

Particulars / (Rs. Crore)	Approved O&M Expense for FY 2018-19	Inflation Factor (%)	Normative O&M Expense for FY 2019-20
Wires Business	825.38	3.22%	851.95
Supply Business	407.18	3.22%	420.29
Total	1232.56	3.22%	1,272.24

AEML has identified the costs pertaining to shared resources and IT services/software, etc. which require allocation. As shown above, in the MYT Order, the Commission has already

held that the asset base is a more reasonable parameter for allocation of cost, as O&M costs will be incurred corresponding to the asset base / asset handling. Therefore, AEML has used the GFA ratio (average value for the given year as per Financials) of different business segments to allocate the costs of shared resources. For allocating the costs of shared IT resources, AEML has considered sharing between Distribution Wires and Distribution Supply only, as Generation and Transmission segments have their respective user specific licences, services, service cost, etc., which is already directly considered under Generation and Transmission cost centres.

The actual O&M expenses presented by AEML-D for Wires Business and Supply Business for FY 2019-20 and thereafter is after considering re-allocation of AEML shared services cost among the three segments based on the GFA of the respective segments. Further, the normative O&M expense for FY 2019-20 as derived above also needs to be revised by adjusting for the cost of shared services allocated in actual O&M expense. It is necessary to do so as the normative O&M expense for the year should be on the same basis as the actuals for that year. The revised normative O&M expense for FY 2019-20 is as under:

Table 3-71: Revised Normative O&M Expenses for FY 2019-20 (Rs. Crore)

Particulars / (Rs. Crore)	Normative O&M Expense for FY 2019-20	Allocation from shared services	Revised Normative
Wires Business	851.95	(17.15)	834.80
Supply Business	420.29		420.29
Total	1,272.24		1255.09

Actual O&M Expense for FY 2019-20

The actual O&M expenses for FY 2019-20 are as under:

Table 3-72: Actual O&M Expenses for FY 2019-20 (Rs. Crore)

Particulars	Rs. Crore
Wires Business	858.34
Supply Business	446.02
Total	1,304.36

AEML-D submitted that the wage revision of Unionized employees and contract labour is done in FY 2021-22, which was effective from July 2018. Therefore, AEML-D had made wage revision provisions in its books of accounts for FY 2019-20, both in employee expense and in R&M expense (as the cost of contract labours is considered in R&M expense). The same has not been included in the actual expenses shown above, in line with

the approach adopted by the Commission in its earlier Orders, wherein actual pay-outs due to wage revisions were allowed in O&M expenses (in the year in which they are incurred) and not provisions.

The above O&M expense is inclusive of Corporate Expense of Rs. 92.98 Cr. for FY 2019-20, for AEML-D. The total corporate expense for FY 2019-20 for all the three businesses (generation, transmission and distribution) of AEML is Rs. 114.73 Cr. The Corporate Expense for FY 2019-20 segregated between generation, transmission and distribution business of AEML on the basis of turnover of different businesses is as under:

Table 3-73: Corporate Expenses in FY 2019-20

Particulars/ (Rs. Crore)	AEML-G	AEML-T	AEML-D	Total
Corporate Expenses	17.88	3.87	92.98	114.73

AEML-D submitted that the expenses allocated to AEML-D from the Adani Group, which is termed as Corporate Expense allocation, keeps varying year on year based on the need of services / expertise required by AEML in order to undertake various financial, HR related, IT related or such other initiatives for improving organisational efficiency, employee productivity and customer service experience.

FY 2019-20 was the first year of independent operations for AEML, after acquisition of RInfra's business. AEML has had to institute several new systems and processes at various levels with the objective of improving employee productivity, bringing about greater efficiency in operations and service delivery, all of which have a direct impact on AEML's services towards its consumers.

Corporate expenses cannot be captured or confined to inflationary increases only, as is being permitted by the Commission. The Commission is requested to therefore, consider and approve the total O&M expenses of AEML as a whole, instead of separately assessing Corporate allocation as has been done in FY 2018-19 truing-up. It is submitted that Corporate expenses allocated to AEML are also against services procured by AEML to run its businesses and they are thus, in no manner different from the other O&M expenses. Therefore, there is no reason to separately assess Corporate expenses from the actual O&M expenses of AEML.

However, without prejudice to the same, as the Corporate expenses of AEML-D have been allowed separately till FY 2019-20, AEML-D has considered the same separately for FY 2019-20 truing-up. AEML-D requested the Commission to allow its actual allocated Corporate expenses, as the same have been incurred towards setting up various new

processes and systems at AEML level and have resulted in corresponding improvements along the value chain of AEML, on an on-going basis.

AEML-D has not claimed the impact of GST on the O&M expense for FY 2019-20 separately, in line with the Commission's decision in this regard.

Also, during provisional truing up of FY 2019-20 in the MYT proceedings, AEML-D had stated that the Hon'ble Supreme Court had issued a Judgment on 28th February 2019 on the issue of deduction and contribution of amounts to the provident fund accounts of the employees. As per this Judgment, calculation of amount towards provident fund should be on all components of wages (basic, dearness allowance, house rent allowance, special allowance etc.) rather than only basic pay. Till the issue of Judgment, AEML-D used to calculate and pay the provident fund contribution on basic pay, dearness allowance and special allowance. Post this Judgment, AEML-D has had to pay the provident fund contribution on all allowances including basic pay. Accordingly, AEML-D had claimed the impact of the Supreme Court Judgment from FY 2019-20 onwards in the MYT Petition. The Commission had stated in the MYT Order that though these are legitimate expenses, which are bound to be incurred in FY 2019-20, it would be appropriate to consider these expenses on the basis of actual pay-out at the time of Truing-up of FY 2019-20, rather than on estimation basis.

Accordingly, AEML-D has identified incremental impact of the said Judgment for FY 2019-20 and the same is Rs. 3.17 Cr., which is the actual additional pay-out. In line with the MTR Order, the same is being claimed separately, being uncontrollable expenses on account of change in law.

The actual O&M expense for the purpose of computing net entitlement, excluding the impact of SC Judgment on PF is as follows:

Particulars Wires **Total** Supply 415.72 **Employee** 297.41 713.13 A&G 165.13 136.84 301.97 R&M 274.45 11.65 286.09 855.30 445.89 **Total** 1,301.19

Table 3-74: FY 2019-20 Actual O&M expense for net entitlement

Thus, the net entitlement of O&M expenses as per the MYT Regulations, 2015 for FY 2019-20 are shown in the table below:

Particulars/ (Rs. Crore) Notation Wires Supply **Business Business** Normative O&M Expense 834.80 420.29 В 858.34 446.02 Actual O&M Expense Impact on PF due to SC Judgment 3.04 0.13 c Net actual O&M Expense d = b - c855.30 445.89 Net Entitlement 841.64 428.82 e **O&M** Expense claimed in this Petition f = e + c844.67 428.95

Table 3-75: FY 2019-20 O&M net entitlement

FY 2020-21

AEML-D submitted that truing up of O&M expenses have been claimed in accordance with Regulations 75.2, 75.3, 84.2, and 84.3 of the MYT Regulations, 2019. The inflation factor based on 30% of WPI inflation and 70% of CPI inflation of past 5 years (including FY 2020-21), works out to 4.19%.

Regulation 75.3 and 84.3 of the MYT Regulations, 2019 provides for reduction of efficiency factor considering the increase in number of consumers including OA consumers connected to Distribution Wires of at least 2% annually over the last 3 years and efficiency factor shall be considered on pro-rata basis, if increase is lower than 2%.

The Commission in the MYT Order in Case No. 325 of 2019 has considered the reduction in efficiency factor by separately considering Wire consumers and Supply consumers. In accordance with the above Order, the growth in number of consumers and the proportionate reduction in efficiency factor is as follows:

Table 3-76: Efficiency Factor for FY 2020-21

	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Average	Efficiency Factor
Network	30,08,917	30,30,462	30,45,029	30,40,271		
Consumer No.	30,06,917	30,30,402	30,43,029	30,40,271		
Growth		0.72%	0.48%	(0.16%)	0.35%	0.83%
Retail	24,45,684	24,66,482	24,75,498	24,98,074		
Consumer No.	24,43,064	24,00,462	24,73,496	24,96,074		
Growth		0.85%	0.37%	0.91%	0.71%	0.65%

Thus, the escalation rate considering the efficiency factor is as follows:

Table 3-77: Escalation Factor for FY 2020-21

Year	WPI Inflation	CPI Inflation
Escalation (%)	4.19%	4.19%
Efficiency factor (%)	(0.83%)	(0.65%)
Escalation (%) considered	3.36%	3.54%

Based on the above, the permissible O&M expenses for FY 2020-21 has been worked out as shown in the Table below:

Table 3-78: Normative O&M expenses for FY 2020-21

Particulars / (Rs. Crore)	O&M Net Entitlement for FY 2019-20	Escalation Rate	Normative O&M Expense for FY 2020-21
Wires Business	841.64	3.36%	869.93
Supply Business	428.82	3.54%	444.01

Actual O&M Expenses for FY 2020-21

The O&M expenses pertaining to shared services have been re-allocated among the four business segments of AEML – Generation, Transmission, Distribution-Wires and Distribution-Supply – to achieve a correct reflection of expenses pertaining to each segment and to ensure there is no cross-subsidisation from one segment to another. The actual O&M expenses of FY 2020-21 have been accounted accordingly.

The actual O&M expenses for FY 2020-21 are as under:

Table 3-79: Actual O&M expenses for FY 2020-21

Particulars	Wires	Supply	Total
Employee	389.76	265.08	654.85
A&G	149.92	133.43	283.35
R&M	241.82	18.95	260.78
Total	781.51	417.46	1,198.98

The above O&M expense is inclusive of Corporate expenses, which have been segregated between generation, transmission and distribution business of AEML on the basis of turnover of different businesses and are as under:

Table 3-80: Corporate expenses for FY 2020-21

Particulars/ (Rs. Crore)	AEML-G	AEML-T	AEML-D	Total
Corporate Expense	17.83	4.14	73.23	95.20

AEML-D submitted that FY 2020-21 was affected by COVID pandemic. As a result, total expenses incurred at Corporate level by the Adani Group itself were lower, coupled with the fact that due to business slow-down, no additional activities, which required services or resources available at Corporate level, were undertaken by AEML. As a result, the allocation of Corporate expenses to AEML were much lower this year compared to FY 2019-20 and only related to on-going services and resources as utilised by AEML. AEML-D submitted that Corporate expenses of FY 2020-21 were thus, significantly lower and do not represent a normal, business as usual year and hence, cannot be used as a yardstick for assessment or incurrence of future corporate expenses as allocated to AEML.

AEML-D has worked out the incremental payment made in FY 2020-21 on account of higher provident fund contribution pursuant to the Hon'ble SC Judgment and the same is Rs. 2.36 Crore. Accordingly, the same has been claimed separately, being uncontrollable expenses on account of change in law.

Thus, the net entitlement of O&M expense as per the MYT Regulations, 2019 for FY 2020-21 are shown in the table below:

Particulars/ (Rs. Crore) Notation Wires Supply **Business Business** Normative O&M Expense 869.93 444.01 a Actual O&M Expense b 781.51 417.46 Impact on PF due to SC Judgment 2.18 0.17 Net actual O&M Expense d = b - c779.33 417.29 Net Entitlement 809.53 426.20 **O&M** Expense claimed in this Petition f = e + c811.71 426.37

Table 3-81: O&M net entitlement for FY 2020-21

FY 2021-22

The applicable escalation factor for FY 2021-22 based on 30% of WPI inflation and 70% of CPI inflation of past 5 years works out to 4.97%.

The reduction in efficiency factor due to the growth in number of consumers for FY 2021-22 is as follows:

FY 18-19 FY 19-20 FY 20-21 FY 21-22 Average **Efficiency Factor** Network Consumer 30,30,462 30,45,029 30,40,271 30,72,729 No. Growth 0.48% (0.16%)1.07% 0.46% 0.77% Retail Consumer No. 24,66,482 24,75,498 24,98,074 25,06,910 0.37% 0.35% 0.54% Growth 0.91% 0.73%

Table 3-82: Efficiency factor for FY 2021-22

The escalation rate considering reduction by the efficiency factor, is as follows:

Table 3-83: Escalation factor for FY 2021-22

Year	WPI Inflation	CPI Inflation
Escalation (%)	4.97%	4.97%
Efficiency factor (%)	(0.77%)	(0.73%)
Escalation (%) considered	4.20%	4.24%

Based on the above, the permissible normative O&M expense for FY 2021-22 have been worked out as shown in the table below:

Table 3-84: Normative O&M expenses for FY 2021-22

Particulars / (Rs. Crore)	Normative O&M Expense for FY 2020- 21	Escalation Rate	Normative O&M Expense for FY 2021-22
Wires Business	869.93	4.20%	906.46
Supply Business	444.01	4.24%	462.83
Total	1,313.94		1,369.29

Actual O&M Expense for FY 2021-22

The actual O&M expenses for FY 2021-22 are as under:

Table 3-85: Actual O&M expense for FY 2021-22

Particulars	Wires	Supply	Total
Employee	369.44	256.56	626.00
A&G	172.02	143.68	315.70
R&M	347.86	10.34	358.21
Total	889.33	410.58	1,299.91 *

^{*}Without wage revision impact

The Corporate Expenses for FY 2021-22 segregated between generation, transmission and distribution business of AEML on the basis of turnover of different businesses is as under:

Table 3-86: Corporate expenses for FY 2021-22

Particulars/ (Rs. Crore)	AEML-G	AEML-T	AEML-D	Total
Corporate Expense	19.73	4.59	85.69	110.02

In FY 2021-22, the operations of AEML were largely normalized, except for some slow-down experienced during COVID second wave. Similarly, normalcy was also restored at Group level, resulting in incurrence of regular, business as usual expenses, which are allocable to AEML and other businesses in the umbrella. Therefore, Corporate expenses sprang back to normal levels in this year and total expenses thus incurred were very similar to FY 2019-20, which was the normal year of operations.

AEML-D requested the Commission to consider and approve the total O&M expenses of AEML as a whole, instead of separately assessing Corporate expenses allocation as has been done in FY 2018-19 truing-up.

Wage Revision

AEML-D submitted that the wage revision of Unionized employees and contract labour has happened in FY 2021-22, which is effective from July 2018 and the wage revision amount paid is Rs. 151.67 crore (Rs. 78.94 crore for unionized employees and Rs. 72.73 crore for contract labour) as follows:

Table 3-87: Wage revision for FY 2021-22

Particulars/ (Rs. Crore)	FY 18-19	FY 19-20	FY 20-21	FY 21-22	Total
Employee	16.38	21.93	21.40	19.23	78.94
R&M	11.08	17.76	21.38	22.50	72.73
Total	27.46	39.69	42.78	41.73	151.67

The wage revision pertaining to unionized employees is allocated between Wires and Supply business in proportion to the employee cost and wage revision pertaining to contract labour is allocated between Wires and Supply business in proportion to the R&M cost (inclusive of PF impact), as contract labour cost is accounted under R&M cost.

Regulations 75.4, 75.5 (and 84.4 and 84.5) of the MYT Regulations, 2019 specify as follows:

"75.4 The impact of Wage Revision, if any, may be considered at the time of true-up for any Year, based on documentary evidence and justification to be submitted by the Petitioner:

Provided that if actual employee expenses are higher than normative expenses on this account, then no sharing of efficiency losses shall be done to that extent:

Provided further that efficiency gains shall not be allowed by deducting the impact of Wage Revision and comparison of such reduced value with normative value.

75.5 Provisioning of wage revision expenses shall not be considered as actual expenses at the time of true-up, and only expenses as actually incurred shall be considered."

In accordance with Regulations 75.5 and 85.5 of the MYT Regulations, 2019, AEML-D has claimed wage revision impact on actual payment basis and not on provision basis. However, AEML-D has submitted that the total Wage revision amount paid in FY 2021-22 includes arrears of FY 2018-19 to FY 2020-21, in addition to the impact of wage revision on FY 2021-22 O&M cost. AEML-D submitted that in the regulatory regime till FY 2019-20, wage revision allowance was being considered outside the computation of efficiency gains and hence, allowed on actuals over and above, unlike the provision from FY 2020-21 onwards as shown above. Therefore, MYT Regulations, 2019 should apply only on the wage revision amounts pertaining to the years on which the said Regulation is applicable. For amounts pertaining to previous years, earlier regulatory regime should prevail. Hence, AEML-D has claimed the wage revision impact of FY 2018-19 and FY 2019-20 on actual basis, outside the computation of efficiency gains, and for FY 2020-21 and FY 2021-22, it is being considered as per the MYT Regulations, 2019.

AEML-D has worked out the incremental payment made in FY 2021-22 on account of higher provident fund contribution pursuant to the Hon'ble Supreme Court Judgment and the same is Rs. 2.35 Crore. Accordingly, the same has been claimed separately, being uncontrollable expenses on account of change in law.

Thus, the net entitlement of O&M expense as per the MYT Regulations, 2019 for FY 2021-22 is shown in the table below:

Particulars/ (Rs. Crore) Notation Wires Supply **Business** Business Normative O&M Expense 906.46 462.83 Α Actual O&M Expense В 887.05 410.51 (excluding SC judgment impact of PF) Difference (19.41)(52.32)c = b-aImpact of wage revision for FY 21 & FY 22 d 66.60 17.92 Net entitlement 953.64 439.90 e

Table 3-88: O&M Net Entitlement for FY 2021-22

Particulars/ (Rs. Crore)	Notation	Wires Business	Supply Business
Impact on PF due to SC Judgment	f	2.28	0.07
Impact of wage revision for FY 19 & FY 20	g	50.62	16.53
O&M Expense claimed in this Petition	$\mathbf{h} = \mathbf{e} + \mathbf{f} + \mathbf{g}$	1,006.54	456.50

Commission's Analysis and Ruling

Regulation 72 and Regulation 81 of MERC MYT Regulations, 2015, as amended from time to time, provides for determination of O&M expenses for Wire Business and Supply Business respectively for each year of the Control Period. The relevant extracts for Wire Business are as follows:

"72.2 The Operation and Maintenance expenses shall be derived on the basis of the average of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of efficiency gains/losses, for the three years ending March 31, 2016, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses.

72.3 The Operation and Maintenance expenses for each subsequent year shall be determined by escalating these Base Year expenses for FY 2015-16 by an inflation factor with 30% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the past five financial years as per the Office of Economic Advisor of Government of India and 70% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, to arrive at the permissible Operation and Maintenance expenses for each year of the Control Period:

Provided that, in the Truing-up of the Operation and Maintenance expenses for any particular year of the Control Period, an inflation factor with 30% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the past five financial years (including the year of Truing-up) and 70% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years (including the year of Truing-up), as reduced by an efficiency factor of 1% or as may be stipulated by

the Commission from time to time, shall be applied to arrive at the permissible Operation and Maintenance Expenses for that year"

The Commission has therefore, considered the O&M expenses approved in the Truing-up for FY 2018-19 as base O&M expenses for arriving at normative O&M expenses for FY 2019-20.

Regulation 75.2 of the MYT Regulations, 2019 specifies as under regarding the base O&M expenses for the Wires Business (and similarly Regulation 84.2 of the MYT Regulations, 2019 for the Supply Business):

"75.2 The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-up Operation and Maintenance expenses after adding/deducting the share of efficiency gains/losses, for the three Years ending March 31, 2019, excluding abnormal Operation and Maintenance expenses, if any, subject to prudence check by the Commission:

Provided that the average of such Operation and Maintenance expenses shall be considered as Operation and Maintenance expenses for the Year ended March 31, 2018, and shall be escalated at the respective escalation rate for FY 2018-19 and FY 2019-20, to arrive at the Operation and Maintenance expenses for the base year ending March 31, 2020:

Provided further that the escalation rate for FY 2018-19 and FY 2019-20 shall be computed by considering 30% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 70% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past five financial years as per the Labour Bureau, Government of India:

Provided also that at the time of true-up for each Year of this Control Period, the Operation and Maintenance expenses shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of efficiency gains/losses, for the base year ending March 31, 2020, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expense." (emphasis added)

Accordingly, the Commission has considered the Base O&M expenses for FY 2019-20 for the purpose of allowing the normative O&M expenses for FY 2020-21 in accordance with

Regulations 75.2 and 84.2 of the MYT Regulations, 2019 for the Wires Business and Supply Business, respectively."

Escalation Factor

In accordance with Regulations 72.3 and 81.3 of the MYT Regulations (First Amendment), 2017, the Escalation Factor for O&M Expenses for FY 2019-20 has been computed considering 30% and 70% weightage for average yearly inflation derived based on the monthly WPI and CPI, respectively, in the previous five years reduced by the Efficiency Factor of 1%.

The Commission has analysed the WPI and CPI data for the previous five years. By applying 30% and 70% weightage to average yearly inflation derived based on the monthly WPI and CPI from FY 2015-16 to FY 2019-20, the Escalation Factor for FY 2019-20 works out to 4.22%. After applying the Efficiency Factor of 1%, the Escalation Factor to be considered for projecting O&M expenses for FY 2019-20 works out to 3.22%.

Similarly, the escalation factor for FY 2020-21 and FY 2021-22 works out to 4.24% and 5.06%. As the actual growth in the number of consumers of the Wires Business and Supply Business is less than 2% for FY 2020-21 and FY 2021-22, the Efficiency Factor has been proportionately reduced. The reduction in efficiency factor works out to 0.83% and 0.65% for the Wires Business and Supply Business, respectively, for FY 2020-21. Similarly, the reduction in efficiency factor works out to 0.77% and 0.73% for the Wires Business and Supply Business, respectively, for FY 2021-22. Accordingly, the effective escalation rate for the Wires Business and Supply Business works out to 3.41% and 3.59% for FY 2020-21. For FY 2021-22, the effective escalation rate for the Wires Business and Supply Business works out to 4.29% and 4.33%.

The following Table shows the Escalation rates derived for Wires and Supply considering the Efficiency Factor based on the consumer growth of past 3 years.

Table 3-89: Escalation rate for FY 2020-21 and FY 2021-22

	FY 20	20-21	FY 2021-22	
Particulars	Wire Business	Supply Business	Wire Business	Supply Business
Escalation (%)	4.24%	4.24%	5.06%	5.06%
Efficiency factor (%)	-0.83%	-0.65%	-0.77%	-0.73%
Escalation (%) considered	3.41%	3.59%	4.29%	4.33%

Normative O&M Expenses

The Commission has escalated the normative O&M expenses approved in the truing up for FY 2018-19 with the escalation rate determined above to compute normative O&M expenses for FY 2019-20, as shown in the Table below:

Table 3-90: Normative O&M Expenses of FY 2019-20 approved by the Commission

Particulars / (Rs. Crore)	Approved O&M expense for FY 2018-19	Escalation Rate	Normative O&M Expense for FY 2019-20
Wires Business	825.38	3.22%	851.95
Supply Business	407.18	3.22%	420.29
Total	1232.56	3.22%	1,272.24

Further, as proposed by AEML-D, the normative O&M expense for FY 2019-20 needs to be revised by adjusting for the cost of shared services of Rs. 17.15 Crore allocated in actual O&M expense, due to reallocation of O&M Expense between its functional business segments. Thus, the normative O&M expenses of the Wires Business for FY 2019-20 works out to Rs. 834.81 Crore.

The Commission has worked out the Normative O&M expenses for FY 2020-21 and FY 2021-22 based on the above escalation rates as shown in the Table below:

Table 3-91: Normative O&M Expenses for FY 2020-21 and FY 2021-22

Particulars	Wires Business	Supply Business
Base Normative O&M Expense approved for FY 2019-20	836.58	415.69
Escalation Rate	3.41%	3.59%
Normative O&M Expense for FY 2020-21	865.13	430.62
Escalation Rate	4.29%	4.33%
Normative O&M Expense for FY 2021-22	902.22	449.25

As regards the other impacts considered by AEML-D as uncontrollable, the Commission is of the view as under:

Impact on PF due to SC Judgment: As submitted by AEML-D, the Hon'ble Supreme Court has ruled that computation of amount payable to Provident Fund should be based on all components of wages (basic, dearness allowance, house rent allowance, special allowance etc.) rather than only basic pay. The Commission in provisional true up of FY 2019-20 directed AEML-D to consider the impact based on actual pay out instead of estimation. Hence, the impact of the Supreme Court Judgment on O&M expenses from FY 2019-20 onwards has been claimed as an uncontrollable Change in Law event. AEML-D has submitted the detailed workings of the incremental payment in FY 2019-20 to FY 2021-

22. The Commission has approved the incremental payment due to PF payment as claimed by AEML-D, as detailed in following Table:

Table 3-92: Impact on PF due to SC judgement for FY 2019-20 to FY 2021-22 (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Wires Business	3.04	2.18	2.28
Supply Business	0.13	0.17	0.07

Wage Revision: As submitted by AEML-D, the wage revision of Unionised employees and contract labours has happened in FY 2021-22, which is effective from July 2018 and the wage revision amount is cumulatively Rs. 151.67 Crore (Rs. 78.94 crore for unionized employees and Rs. 72.73 crore for contract labour). The wage revision pertaining to unionized employees is allocated between Wires and Supply business in proportion to the employee cost and wage revision pertaining to contract labour is allocated between Wires and Supply business in proportion to the R&M cost (inclusive of PF impact), as contract labour cost is accounted under R&M cost. In accordance with Regulations 75.5 and 85.5 of the MYT Regulations, 2019, AEML-D has claimed the wage revision impact on actual payment basis and not on provision basis. Further, AEML-D has claimed the wage revision impact of FY 2018-19 and FY 2019-20 on actual basis, outside the computation of efficiency gains, and for FY 2020-21 and FY 2021-22, it is being considered as per the MYT Regulations, 2019.

The Commission has considered wage revision impact for FY 2018-19 and FY 2019-20 on actual basis, outside the computation of efficiency gains. The wage revision impact for FY 2020-21 and FY 2021-22 has been considered inside the computation of efficiency gains as per the MYT Regulations, 2019.

The details of approved wage revision are given below:

Table 3-93: Wage revision allowed for FY 2021-22 (Rs.Crore)

Particulars		True Up Petition		Approved by the Commission	
	Wires	Supply	Wires	Supply	
Wage Revision impact inside the purview for computation of efficiency gain/loss (wage revision impact for FY 2020-21 and FY 2021-22)	66.60	17.92	66.60	17.92	
Wage Revision impact outside the purview for computation of efficiency gain/loss (wage revision impact for FY 2018-19 and FY 2019-20)	50.62	16.53	50.62	16.53	

Actual O&M Expenses

The Commission has verified the actual O&M expenses submitted by AEML-D for FY 2019-20, FY 2020-21 and FY 2021-22 in line with the audited accounts for the respective year and reconciliation statement of regulated businesses submitted by AEML-D. The Commission has undertaken prudence check of the actual O&M expenses claimed by AEML-D and disallowed certain O&M expenses in the truing up for FY 2019-20, FY 2020-21, and FY 2021-22, as discussed below:

The Commission observed that there was significant increase in some heads of actual O&M expenses claimed by AEML-D in FY 2019-20, FY 2020-21, and FY 2021-22, as compared to actuals of FY 2018-19. The Commission sought justification on the following heads of O&M expenses, where significant increase was observed:

- Other Allowances, which have increased from Rs. 113.23 Crore in FY 2018-19 to Rs. 146.15 Crore in FY 2019-20, Rs. 187.81 Crore in FY 2020-21 and Rs. 134.74 Crore in FY 2021-22;
- 2. Corporate Expenses in FY 2019-20 to FY 2021-22.

AEML-D submitted that for maintaining the network under pandemic, employee and staff were compensated commensurately, and hence, the Other Allowances are higher.

The Commission is of the view that though Other Allowances are highest in FY 2020-21, they cannot be allowed at the levels claimed by AEML-D. Further, Other Allowances in FY 2019-20 and FY 2021-22 are also much higher than what was approved for FY 2018-19. The Commission is of the view that despite repeated queries, AEML-D has not been able to justify the steep increase in Other Allowances for FY 2019-20 to FY 2021-22. Therefore, the Commission has allowed Other Allowances by escalating the actual expenses of FY 2018-19 with the applicable escalation for these years. The following Table shows the disallowed Other Allowances for FY 2019-20 to FY 2021-22:

Table 3-94: Disallowed Other Allowances for FY 2019-20 to FY 2021-22 (Rs. Crore)

Particulars	Allowable Other Allowances for Wires	Allowable Other Allowances for Supply	Actual Other Allowances for Wires	Actual Other Allowances for Supply	Disallowed Other Allowances - Wires	Disallowed Other Allowances - Supply
FY 2018-19	78.42	34.81				
Escalation rate	3.22%	3.22%				
FY 2019-20	80.95	35.93	84.79	61.35	3.85	25.42
Escalation rate	3.41%	3.59%				
FY 2020-21	83.71	37.22	131.54	56.27	47.83	19.05

Particulars	Allowable Other Allowances for Wires	Allowable Other Allowances for Supply	Actual Other Allowances for Wires	Actual Other Allowances for Supply	Disallowed Other Allowances - Wires	Disallowed Other Allowances - Supply
Escalation rate	4.29%	4.33%				
FY 2021-22	87.30	38.83	76.10	58.64	0.00	19.80

Corporate Expenses: Corporate Expense have increased from Rs. 72.24 Crore approved for FY 2018-19 to Rs. 114.73 Crore, Rs. 95.20 Crore, and Rs. 110.02 Crore in FY 2019-20, FY 2020-21, and FY 2021-22, respectively. On account of reallocation of Corporate Expenses between all the businesses of AEML, the Corporate Expenses of the Distribution Business (Wires and Supply combined) has been stated as Rs. 92.98 Crore, Rs. 73.23 Crore, and Rs. 85.69 Crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

In response to the Commission's query regarding head-wise breakup of corporate expenses, AEML-D failed to submit the head-wise breakup of Corporate Expenses. On the Commission's query regarding details of total expenses incurred against 'Karnavati Aviation Pvt. Ltd.', AEML-D submitted that it is only one of the Group Companies whose services AEML-D has opted for and represents expenses related to travel of Group resources.

In this regard, in the MYT Order, the Commission has held as under:

"The Commission is of the view that Corporate expenses allowed to Regulated Entities cannot be exorbitantly high even though the same is certified by the Statutory Auditor. There needs to be a cap on the expenses which are allowed under Corporate Allocation. The Commission is of the view that taking over of Business by AEML from RInfra should not result in increase in Corporate Expenses and Corporate Allocation for the Regulated entities. Moreover, RInfra and AEML, while seeking the Commission's approval for the transfer of assets and licence from RInfra to AEML in Case No. 139 of 2017, confirmed that there would not be any tariff impact on the consumers on account of the Transaction. The relevant extracts of the Commission's Order in Case No. 139 of 2017 are as follows.

"78 RInfra and ATL have confirmed that the transaction shall not have any adverse impact on tariff payable by the consumers, as the tariff shall continue to be determined on the basis of regulated books of accounts."

The Commission also confirmed that there would not be any adverse impact of the Transaction on the consumers. The relevant extracts are as follows.

"79 The Commission confirms that the transaction shall not have any adverse impact on tariff payable by the consumers, as the tariff shall continue to be determined on the basis of regulated books of accounts.

...

80 The Commission is of the view that the Petitioners' proposals for assignment of licence and transfer of assets can be approved only if it is ensured that the same shall not have any adverse impact on the tariff payable by the consumers. Hence, the Commission directs that REGSL/ATL shall not claim any amount from the consumers on account of the proposed transaction, including inter-alia, any interest/penalty payable by REGSL/ATL to RInfra as per the terms and conditions of the Scheme of Arrangement and the SPA. The Commission further directs that the approval to RInfra to assign the Transmission Licence to REGSL and transfer transmission assets to REGSL, and sale of 100% shareholding in REGSL to ATL, is conditional and subject to the above restriction...."(emphasis added)

However, as seen from the above submissions of AEML-D, the takeover of Distribution Business from RInfra to AEML-D has increased the Corporate Allocation expenses in FY 2018-19 and thereby the cost proposed to be passed on to the consumers. Thus, the Corporate expenses booked/claimed in FY 2018-19 is against the intent of the approval given for the transaction in Case No. 139 of 2017.

The Commission has therefore, considered the Corporate Expenses of FY 2017-18 and escalated the same by the inflation rate considered for escalation of normative O&M expenses in FY 2018-19, i.e., 3.07% and approved Corporate expenses for FY 2018-19."

The Commission has continued the same approach and escalated the Corporate Expenses allowed for FY 2018-19 with the escalation rate approved for escalation of normative O&M expenses in FY 2019-20, FY 2020-21 and FY 2021-22. The following Table shows the disallowed Corporate Expenses for AEML-D:

Table 3-95: Disallowed Corporate Expenses for FY 2019-20 to FY 2021-22 (Rs. Crore)

Particulars	Allowable Corporate Expenses Allocation - Wires	Allowable Corporate Expenses Allocation - Supply	Actual Corporate Expenses - Wires	Actual Corporate Expenses - Supply	Disallowed Corporate Expenses - Wires	Disallowed Corporate Expenses - Supply
FY 2018-19	44.43	27.81				
Escalation rate	3.22%	3.22%				
FY 2019-20	45.86	28.71	57.19	35.79	11.32	7.09
Escalation rate	3.41%	3.59%				_

Particulars	Allowable Corporate Expenses Allocation - Wires	Allowable Corporate Expenses Allocation - Supply	Actual Corporate Expenses - Wires	Actual Corporate Expenses - Supply	Disallowed Corporate Expenses - Wires	Disallowed Corporate Expenses - Supply
FY 2020-21	47.43	29.74	45.04	28.19	0.00	0.00
Escalation rate	4.29%	4.33%				_
FY 2021-22	49.46	31.02	52.70	32.99	3.24	1.96

Table 3-96: O&M expenses Disallowed for FY 2019-20 to FY 2021-22 for Wires & Supply (Rs. Crore)

Particulars	Actual Expense claimed by AEML-D			Approved in this Order			Disallowance		
	Wires	Supply	Total	Wires	Supply	Total	Wires	Supply	Total
Other Allowance									
FY 2019-20	84.79	61.35	146.15	80.95	35.93	116.88	3.85	25.42	29.27
FY 2020-21	131.54	56.27	187.81	83.71	37.22	120.93	47.83	19.05	66.88
FY 2021-22	76.10	58.64	134.74	87.30	38.83	126.13	0.00	19.80	19.80
Corporate Ex	pense All	ocation							
FY 2019-20	57.19	35.79	92.98	45.86	28.71	74.57	11.32	7.09	18.41
FY 2020-21	45.04	28.19	73.23	47.43	29.74	77.16	0.00	0.00	0.00
FY 2021-22	52.70	32.99	85.69	49.46	31.02	80.48	3.24	1.96	5.21

The Commission has also verified that the actual R&M expenses in FY 2020-21 and FY 2021-22 are more than 20% of the O&M expenses for the combined Wires Business and Supply Business in accordance with Regulation 75.6 of the MYT Regulations, 2019, though on a standalone basis, the R&M expenses of the Supply Business are lower than 20% of the respective O&M expenses.

The net entitlement of O&M Expenses, after sharing of efficiency gains and losses, approved by the Commission after true up for FY 2019-20, FY 2020-21 and FY 2021-22 are summarised in the Tables below:

Table 3-97: O&M Expenses allowed by the Commission after truing up for FY 2019-20, FY 2020-21 and FY 2021-22 for Wires Business (Rs. Crore)

Particulars	FY 2019-20		FY 20	020-21	FY 2020-21	
	AEML- D Petition	Approve d after truing up	AEML- D Petition	Approv ed after truing up	AEML- D Petition	Approv ed after truing up
Normative O&M Expense	834.80	834.81	869.93	865.13	906.46	902.22
Actual O&M Expense	858.34	858.34	781.51	781.51	889.33	889.33

	FY 20	019-20	FY 20	020-21	FY 2020-21	
Particulars	AEML- D Petition	Approve d after truing up	AEML- D Petition	Approv ed after truing up	AEML- D Petition	Approv ed after truing up
Less: Disallowed Other Allowances		3.85		47.83		1
Less: Disallowed Corporate Expenses Allocation		11.32		-		3.24
Less: Impact on PF due to SC Judgment	3.04	3.04	2.18	2.18	2.28	2.28
Net actual O&M Expense	855.30	840.13	779.33	731.50	887.05	883.80
Wage revision impact for FY 20-21 and FY 21-22					66.60	66.60
Net Entitlement	841.64	836.58	809.53	776.04	953.64	950.40
Wage revision impact for FY 18-19 and FY 19-20					50.62	50.62
Net entitlement	841.64	836.58	809.53	776.04	1004.26	1001.02
Add back PF amount	3.04	3.04	2.18	2.18	2.28	2.28
O&M Expense allowed in this Order	844.67	839.62	811.71	778.23	1,006.54	1003.30

Table 3-98: O&M Expenses allowed by the Commission after truing up FY 2019-20, FY 2020-21 and FY 2021-22 for Supply Business (Rs. Crore)

		019-20	_	020-21	FY 20	20-21
Particulars	AEML- D Petition	Approve d after truing up	AEML- D Petition	Approv ed after truing up	AEML- D Petition	Approv ed after truing up
Normative O&M Expense	420.29	420.29	444.01	430.62	462.83	449.25
Actual O&M Expense	446.02	446.02	417.46	417.46	410.58	410.58
Less: Disallowed Other Allowances		25.42		19.05		19.80
Less: Disallowed Corporate Expenses Allocation		7.09		0.00		1.96
Less: Impact on PF due to SC Judgment	0.13	0.13	0.17	0.17	0.07	0.07
Net actual O&M Expense	445.89	413.38	417.29	398.25	410.51	388.75
Wage revision impact for FY 20-21 and FY 21-22					17.92	17.92
Net Entitlement	428.82	415.69	426.20	409.04	439.90	420.86
Wage revision impact for FY 18-19 and FY 19-20					16.53	16.53
Net entitlement	428.82	415.69	426.20	409.04	456.43	437.39
Add back PF amount	0.13	0.13	0.17	0.17	0.07	0.07

	FY 2019-20		FY 20	020-21	FY 2020-21	
Particulars	AEML- D Petition	Approve d after truing up	AEML- D Petition	Approv ed after truing up	AEML- D Petition	Approv ed after truing up
O&M Expense allowed in this Order	428.95	415.81	426.37	409.21	456.50	437.46

3.7 CAPITALISATION

AEML-D's Submission

AEML-D stated it has carried out capital expenditure against the schemes that were approved in-principle by the Commission, along with minor works for which DPR submission is not required as per the Capital Expenditure Guidelines of the Commission.

The summary of actual Capitalisation for the Wires Business and Supply Business as against the capitalization considered in AEML-D's MYT Order for FY 2019-20 to FY 2021-22 is shown in the Table below:

Table 3-99: Capitalisation for Wires Business and Supply Business as submitted by AEML-D for FY 2019-20 (Rs. Crore)

Particulars	MYT Order			AEML-D Petition			
	Wires	Supply	Total	Wires	Supply	Total	
DPR	660.75	22.00	682.75	616.25 66.16	30.30	646.55	
Non DPR	000.73	22.00	062.73		0.71	66.87	
Total	660.75	22.00	682.75	682.42	31.01	713.43	

Table 3-100: Capitalisation for Wires Business and Supply Business as submitted by AEML-D for FY 2020-21 (Rs. Crore)

1121/12 2 101 1 1 2020 21 (115)								
Particulars	MYT Order			AEML-D Petition				
	Wires	Supply	Total	Wires	Supply	Total		
DPR	629.83	130.49	760.32	860.67	860.67 43.05	903.72		
Non DPR	029.03	130.49	700.32	96.54	0.65	97.19		
Total	629.83	130.49	760.32	957.21	43.70	1000.91		

Table 3-101: Capitalisation for Wires Business and Supply Business as submitted by AEML-D for FY 2021-22 (Rs. Crore)

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Particulars	MYT Order			AEML-D Petition					
	Wires	Supply	Total	Wires	Supply	Total			
DPR	388.45	218.57	607.02	907.36 38.14 98.45 2.78	945.5				
Non DPR	300.43	218.57	007.02		2.78	101.23			

Particulars	MYT Order			AEML-D Petition		
	Wires	Supply	Total	Wires	Supply	Total
Total	388.45	218.57	607.02	1005.81	40.92	1046.73

Brief description of Works carried out in FY 2019-20 to FY 2021-22

- a. 33/11kV Distribution Sub-Station (DSS)
- b. 11kV Mains Network Strengthening
- c. Low Tension Mains
- d. Low Tension Services
- e. Street Lights
- f. Metering
- g. Security (FY 2020-21 & FY 2021-22)
- h. IT Infrastructure Revamping
- i. Information Technology (SAP Hana migration)
- j. Instruments (Non-DPR)
- k. Information Technology (IT) Infrastructure (Non-DPR)
- 1. Others (Non-DPR)
- m. Civil (Non-DPR)
- n. R&D, Safety and DSM (Non-DPR)
- o. Meter Cabin Improvement (Non-DPR)
- p. Vehicles (Non-DPR)
- q. System Modernization (Non-DPR)

AEML-D submitted justification for the following works for which capitalization was restricted by the Commission in MYT Order in Case No. 325 of 2019:

- a. Services New Supply DPR for FY 2016-17
- b. Services Improvement DPR for FY 2017-18
- c. Services New Supply DPR for FY 2017-18

AEML-D submitted that all other schemes related to 11 kV network – new supply and improvement, LT mains – New supply and improvement, Services – new supply against which capex has been incurred in FY 2019-20 were in progress in FY 2019-20 and their competition reports shall be submitted after the completion of the schemes.

Metering DPR for FY 2019-20

The Commission had approved Rs. 9.92 Crore capex towards new supply in FY 2019-20. The actual capex in FY 2019-20 towards new supply was Rs. 9.23 Crore. The Commission had approved Rs. 12.08 Crore capex towards replacement (of old defective meters) in FY 2019-20. The actual capex in FY 2019-20 towards replacement was Rs. 21.07 Crore. The

Commission had considered 1,18,559 no. of meters while allowing Rs. 12.08 Crore capex towards replacement in FY 2019-20. However, the actual no. of meters used for replacement in FY 2019-20 was 1,59,736. Hence, the higher actual cost was due to higher no. of actual meters used for replacement in FY 2019-20. AEML-D had to replace higher no. of display defective meters in actual as compared to the number of meters considered in DPR for accurate reading of meters and to avoid consumer dissatisfaction. Hence, the capex towards replacement in FY 2019-20 was higher than the DPR approved cost. The above capitalization includes Interest During Construction (IDC), for which interest rates for FY 2019-20, and for each intervening year till FY 2019-20 till the jobs remained in progress, have been considered as approved by the Commission. AEML-D submitted that IDC has been calculated for assets capitalized in Wires Business only and not in Supply Business. Further, it is submitted that IDC has not been calculated on works, which were started and completed in FY 2019-20 itself.

AEML-D submitted justification for increase in capitalization of LT Mains (FY 2018-19) TGS and LT Mains (FY 2019-20) TGS. The following were the reasons for escalation in capitalization as compared to that approved by the Commission:

- a. Increase in RI charges
- b. Increase in quantity of cable laid
- c. Obligatory in nature (USO)

Commission's Analysis and Ruling

The Commission has undertaken scheme-wise prudence check, and has accordingly approved the capitalisation in the truing-up, based on the in-principle approval for the schemes undertaken by AEML-D. It has approved capitalisation only for those schemes that have been completed and put to use, based on the addition to GFA reported in the Accounts, and the half-yearly Reports of progress and status of projects, and the Cost-Benefit-Analysis reports submitted by AEML-D. The Commission has primarily analysed the Schemes, Ih have incurred cost overrun with respect to the approved DPR cost.

The Commission has observed cost overrun in the following Schemes:

Services (16-17) New Supply

The approved DPR cost is Rs. 45.13 Crore. AEML-D has claimed cumulative capitalization upto FY 2019-20 of Rs. 70.96 Crore. The Commission in the MTR Order in Case No. 200 of 2017 had approved capitalisation of Rs. 41.93 Crore for FY 2016-17 and provisionally approved capitalization of Rs. 3.20 Crore for FY 2017-18 as against the actual capitalization

of Rs. 23.20 Crore, thereby limited the capitalisation to the approved Scheme Cost of Rs 45.13 Crore.

Further, the Commission in MYT Order in Case No. 325 of 2019 had approved the capitalisation of Rs 3.20 Crore and IDC of Rs 0.09 Crore for FY 2017-18 and disallowed the capitalisation claimed by AEML-D for FY 2018-19 and FY 2019-20.

AEML-D, in its justification, has stated that increase in the actual capital expenditure is due to the higher RI charges actually paid to MCGM and increase in labour charges due to Wage Revision. AEML-D has raised this issue in Appeal No. 106 of 2019 filed before Ho'ble ATE against the Commission's MTR Order in Case No. 200 of 2017. As the matter is pending before Hon'ble ATE, the Commission will revisit the issue depending on the outcome of the Appeal.

Hence, for FY 2019-20, the Commission has disallowed the capitalization of Rs. 1.31 Cr. and IDC of Rs 0.11 Cr. claimed by AEML-D.

LT Mains (17-18) New Supply

The approved DPR cost is Rs. 9.38 Crore. AEML-D has claimed cumulative capitalization of Rs 10.64 Crore up to FY 2019-20. The Commission in MYT Order in Case No. 325 of 2019 has provided detailed explanation for the cost overrun and accepted the justification provided by AEML-D. The Commission had allowed the capitalisation claimed by AEML-D for FY 2017-18, FY 2018-19 and FY 2019-20.

AEML-D has claimed capitalisation of Rs 0.68 Crore for FY 2019-20 in this MTR Petition as against allowed Rs. 0.46 Crore in MYT Order. AEML-D in its justification has stated that the capitalisation was projected on provisional basis. The scheme got completed at the end of FY 2019-20 and the actual capitalization post completion is Rs 0.68 Crore. AEML-D has requested to consider the actual capitalisation for FY 2019-20.

The Commission notes that in MYT Order in Case No 325 of 2019, detailed analysis for the cost overrun of the scheme has been carried out and in view of that, the Commission allows actual capitalisation for FY 2019-20 as Rs 0.68 Crore.

LT Mains (17-18) Improvement

The approved DPR cost is Rs. 13.94 Crore. AEML-D has claimed cumulative capitalization up to FY 2019-20 of Rs. 16.66 Crore. The Commission in MYT Order in Case No. 325 of

2019 has provided detailed explanation for the cost overrun and accepted the justification provided by AEML-D. The Commission had allowed the capitalisation claimed by AEML-D for FY 2017-18, FY 2018-19 and FY 2019-20.

AEML-D has claimed capitalisation of Rs 1.12 Crore for FY 2019-20 in this MTR Petition as against allowed Rs. 0.39 Crore in MYT Order. AEML-D in its justification has stated that the capitalisation was projected on provisional basis. The scheme got completed at the end of FY 2019-20 and the actual capitalization post completion is Rs 1.12 Crore. AEML-D has requested to consider the actual capitalisation for FY 2019-20.

The Commission notes that in MYT Order in Case No 325 of 2019, detailed analysis for the cost overrun of the scheme has been carried out and in view of that, the Commission allows actual capitalisation for FY 2019-20 as Rs 1.12 Crore.

Services (17-18) New Supply

The approved DPR cost is Rs. 42.70 Crore. AEML-D has claimed cumulative capitalization of Rs. 62.27 Crore upto FY 2019-20. The Commission in the MTR Order in Case No. 200 of 2017 had approved capitalisation of Rs. 31.22 Crore for FY 2017-18 and provisionally approved capitalization of Rs. 11.48 Crore in FY 2018-19 as against the actual capitalization of Rs. 17.07 Crore, thereby limiting the capitalisation to the approved Scheme Cost of Rs 42.70 Crore.

Further, the Commission in MYT Order in Case No. 325 of 2019 had disallowed the capitalisation of Rs. 5.35 Crore and IDC of Rs 0.08 Crore for FY 2019-20. AEML-D in its justification stated that increase in the actual capital expenditure is due to the higher RI charges actually paid to MCGM and increase in labour charges due to wage Revision. AEML-D in the MTR Petition has claimed capitalisation amount of Rs 5.53 Crore for FY 2019-20 along with Rs 0.37 Crore IDC, thereby cumulatively claiming Rs 62.27 Crore. AEML-D has raised this issue in Appeal No 106 of 2019 filed before ATE against the Commission's MTR Order in Case No. 200 of 2017. As the matter is pending in ATE, the Commission will revisit the issue depending on the outcome of the Appeal.

Hence, for FY 2019-20, the Commission has disallowed the capitalization of Rs. 5.53 Cr. and IDC of Rs 0.37 Cr. claimed by AEML-D.

Services (17-18) Improvement

The approved DPR cost is. Rs. 0.86 Crore. AEML-D has claimed cumulative capitalization of Rs.1.21 Crore up to FY 2019-20. The Commission in the MTR Order in Case No. 200 of 2017 had approved provisional capitalization of Rs.0.86 Cr for FY 2017-18 against claim of Rs 1.49 Crore and disapproved capitalization of Rs. 0.86 Crore for FY 2018-19, thereby limited the capitalization to the approved Scheme Cost of Rs 0.86 Crore.

Further, the Commission in MYT Order in Case No. 325 of 2019 had disallowed the capitalisation of Rs. 1.11 Crore and IDC of Rs 0.02 Crore for FY 2019-20.

AEML-D in its justification stated that increase in the actual capital expenditure is due to the higher RI charges actually paid to MCGM and increase in labour charges due to wage Revision. AEML-D has raised this issue in Appeal No. 106 of 2019 filed before ATE against the Commission's MTR Order in Case No 200 of 2017. As the matter is pending in ATE, the Commission will revisit the issue depending on the outcome of the Appeal.

Hence, for FY 2019-20, the Commission has disallowed the capitalization of Rs. 0.04 Crore claimed by AEML-D.

Street Light Schemes

The Commission has observed cost overrun in the following street light schemes. AEML-D has provided similar justification for the cost overrun of these schemes. Therefore, instead of providing separate write up for each scheme, the Commission has analysed in a consolidated manner. Further, as AEML-D has claimed some amount of capitalisation against Street Light Schemes of FY 2016-17, FY 2017-18 and FY 2018-19 in FY 2019-20, the Commission has scrutinised the schemes as follows:-

Scheme Details: -

a. Street Light (16-17) New Supply

The approved DPR cost is. Rs. 8.27 Crore. AEML-D has claimed cumulative capitalization of Rs.9.37 Crore up to FY 2019-20. The Commission in the MTR Order in Case No. 200 of 2017 had approved additional capitalization of 1 Crore capitalization for FY 2018-19. Thus, there is Rs 0.1 Crore cost overrun in this scheme. The cost overrun is 1% of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 0.01 Crore for FY 2019-20.

b. Street light (16-17) Improvement

The approved DPR cost is Rs. 10.07 Crore. AEML-D has claimed cumulative capitalization of Rs.10.13 Crore up to FY 2019-20. Thus, there is Rs 0.06 Crore cost overrun in this scheme. The cost overrun is 0.6 % of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 0.49 Crore for FY 2019-20 under this scheme.

c. Street Light (17-18) New Supply

The approved DPR cost is Rs. 8.27 Crore. AEML-D has claimed cumulative capitalization of Rs.8.41 Crore up to FY 2019-20. Thus, there is Rs 0.14 Crore cost overrun in this scheme. The cost overrun is 1.69% of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 1.47 Crore and Rs 0.03 IDC for FY 2019-20 under this scheme.

d. Street light (17-18) Improvement

The approved DPR cost is Rs. 10.07 Crore. AEML-D has claimed cumulative capitalization of Rs.10.27 Crore up to FY 2019-20. Thus, there is Rs 0.20 Crore cost overrun in this scheme. The cost overrun is 1.69% of the approved cost of DPR. AEML- D has claimed the capitalization of Rs 1.22 Crore and Rs 0.02 IDC for FY 2019-20 under this scheme.

e. Street Light (18-19) New Supply

The approved DPR cost is Rs. 12.53 Crore. AEML-D has claimed cumulative capitalization of Rs.13.23 Crore up to FY 2020-21. Thus, there is Rs 0.70 Crore cost overrun in this scheme. The cost overrun is 5.58% of the approved cost of DPR. AEML- D has claimed the capitalization of Rs 5.63 Crore and Rs 0.07 IDC for FY 2019-20 and Rs 2.89 Crore and Rs 0.04 IDC for FY 2020-21 under this scheme.

Common Justification from AEML-D for all the above schemes (a, b, c, d, e):-

AEML-D in its justification for all above schemes of Street Light for FY 2016-17 and FY 2017-18 for new supply and improvement and Street Light (18-19) New Supply has submitted that Street lighting projects are executed as per the requirement and Work Orders received from MCGM/MBMC authorities. The projects carried out are commissioning of new Street lights for providing illumination on public roads considering the safety of persons using the roads as well as vehicles plying on the roads. The projects include commissioning of new streetlights on new/redevelopment/expansion of roads. The projects also include replacement of corroded poles for public safety. During execution of the projects and as per requirement of authority, considering the illumination level required at

the main road junction, road crossing and sensitive locations, additional illumination is carried out as per requirement of the authorities considering the overall safety hazards due to darkness in the area. While preparing the DPR, requirement is considered based on past trends and orders in hand, however, the actual requirement of MCGM/MBMC varies.

The minor cost over-run in these DPRs is due to works carried out as per requirement of MCGM/MBMC, which cannot be estimated with precise accuracy at the time of submission of DPR.

Name of Scheme	DPR Approval Reference	Total approved Value (Rs Crs)	Scheme Status	Capitali zation (Rs Crs)	Remark / Justification for cost overrun
Street Light 2016- 17 Improvement	MERC/CAPEX/20 17-18/0154 dated 31/01/2018	10.07	Closed in 2019-20	10.13	The minor cost over-run of Rs 0.06 Crore is due to works carried out as per requirement of MCGM/MBMC.
Street Light 2016- 17 New Supply	MERC/CAPEX/20 17-18/0154 dated 31/01/2018	8.27	Closed in 2019-20	9.37	The original Approval was for Rs. 8.27 Crore. Further, additional Rs. 1 Crore was approved in provisional truing up of FY 2017-18 (Case No. 200 of 2017). Thus, the minor cost overrun difference of Rs. 0.10 Crore is due to works carried out as per requirement of MCGM/MBMC.
Street Light 2017- 18 Improvement	MERC/CAPEX/20 17-18/0154 dated 31/01/2018	10.07	Closed in 2019-20	10.27	The minor cost over-run of Rs 0.20 Crore is due to works carried out as per requirement of MCGM/MBMC.
Street Light 2018- 19 New Supply	MERC/CAPEX/20 18-19/108 dated 05/04/2019	12.53	Closed in 2020-21	13.24	It is submitted that in the scheme closure report submitted, the cost was inadvertently provided at Rs. 12.50 Crore. However, the scheme was closed at Rs. 13.24 Crore as provided in the instant MTR Petition. The same may kindly be considered. The minor cost overrun of Rs 0.71 Crore is due to works carried out as per requirement of MCGM/MBMC.

The Commission notes that the AEML-D has not submitted the item-wise the detailed bifurcation of cost overrun in comparison with the approved values. However, considering the nature of work as obligatory for safety of pedestrians as well as vehicles, the Commission allows the cost overrun in the above schemes but disallows the IDC cost for such cost overrun. The Commission also notes that the above schemes are closed and closure report has been submitted by AEML-D to the Commission.

Accordingly, approval of the schemes is as follows: -

Street Light (16-17) New Supply

In FY 2019-20, AEML-D has claimed capitalization of Rs 0.01 Crore with Nil IDC. The Commission approves the capitalization of Rs 0.01 Cr.

Street light (16-17) Improvement

In FY 2019-20, AEML-D has claimed capitalization of Rs 0.49 Crore with Nil IDC. The Commission approves the capitalization of Rs 0.49 Cr.

Street Light (17-18) New Supply

In FY 2019-20, AEML-D has claimed capitalization of Rs 1.47 Crore with Rs 0.03 Crore IDC. The Commission approves the capitalization of Rs 1.47 Crore and disallows the IDC of Rs 0.03 Crore.

Street light (17-18) Improvement

In FY 2019-20, AEML-D has claimed capitalization of Rs 1.22 Crore with Rs 0.02 Crore IDC. The Commission approves the capitalization of Rs 1.22 Crore and disallows the IDC of Rs 0.02 Crore.

Street Light (18-19) New Supply

In FY 2019-20, AEML-D has claimed capitalization of Rs 5.63 Crore with Rs 0.07 Crore IDC. The Commission approves the capitalization of Rs 5.63 Crore and disallows the IDC of Rs 0.07 Crore.

In FY 2020-21, AEML-D has claimed capitalization of Rs 2.89 Crore with Rs 0.04 Crore IDC. The Commission approves the capitalization of Rs 2.89 Crore and disallows the IDC of Rs 0.04 Crore.

LT mains and Services Schemes

The Commission has observed the cost overrun in the following LT mains and services schemes. AEML-D has provided similar justification for the cost overrun of these schemes. Therefore, instead of providing separate write up for each scheme, the Commission has analysed in consolidated manner.

a. LT mains (18-19) New Supply

The approved DPR cost is. Rs. 24.01 Crore. AEML-D has claimed cumulative capitalization of Rs. 29.35 Crore up to FY 2021-22. Thus, there is Rs 5.34 Crore cost overrun in this scheme. The cost overrun is 22 % of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 20.87 Crore and Rs 0.03 Crore IDC for FY 2019-20, Rs 0.2 Crore capitalization and Rs 0.05 Crore IDC for FY 2020-21, and Rs 1.25 Crore capitalization and Rs 0.01 Crore IDC for FY 2021-22 under this scheme.

b. LT mains (18-19) improvement

The approved DPR cost is. Rs. 31.14 Crore. AEML-D has claimed cumulative capitalization of Rs.31.76 Crore up to FY 2021-22. Thus, there is Rs 0.62 Crore cost overrun in this scheme. The cost overrun is 1.9 % of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 2.78 Crore and Rs 0.1 Crore IDC for FY 2019-20, Rs 1.01 Crore capitalization and Rs 0.08 Crore IDC for FY 2020-21, and Rs 0.06 Crore capitalization for FY 2021-22 under this scheme.

c. LT mains (19-20) New supply

The approved DPR cost is. Rs. 23.32 Crore. AEML-D has claimed cumulative capitalization of Rs.32.05 Crore up to FY 2021-22. Thus, there is Rs 8,73 Crore cost overrun in this scheme. The cost overrun is 37.44% of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 28.76 Crore and Nil IDC for FY 2019-20, Rs 3.02 Crore capitalization and Rs 0.21 Crore IDC for FY 2020-21, and Rs 0.28 Crore capitalization and Rs 0.01 Crore IDC for FY 2021-22 under this scheme.

d. LT mains (19-20) Improvement

The approved DPR cost is. Rs. 84.82 Crore. AEML-D has claimed cumulative capitalization of Rs.85.54 Crore up to FY 2021-22. Thus, there is Rs 0.72 Crore cost overrun in this scheme. The cost overrun is 0.84 % of the approved cost of DPR. AEML-D has claimed the capitalization of Rs 76.86 Crore and Nil IDC for FY 2019-20, Rs 7.64 Crore capitalization and Rs 0.52 Crore IDC for FY 2020-21, and Rs 1.04 Crore capitalization and Rs 0.05 Crore IDC for FY 2021-22 under this scheme.

e. Services (18-19) New supply;

The approved DPR cost is. Rs. 60.95 Crore. AEML-D has claimed cumulative capitalization of Rs.87.85 Crore up to FY 2021-22. Thus, there is Rs 26.90 Crore cost overrun in this scheme. The cost overrun is 44% of the approved cost of DPR. AEML-D

has claimed the capitalization of Rs 31 Crore and Rs. 1.35 Crore IDC for FY 2019-20, and Rs 2.91 Crore capitalization and Rs 0.09 Crore IDC for FY 2020-21 under this scheme.

Common Justification from AEML-D for all the above schemes (a, b, c, d, e):-

AEML-D in its justification of all above schemes stated that the Cost overrun is primarily due to higher RI Charges paid to the authorities. Also, length of cables laid under the DPR are more than estimated.

AEML-D has submitted the bifurcation for the cost overrun of the scheme component as follows:

Name of Scheme	Total approved	Scheme	Capitalizatio	Remark / Justification
Traine of Scheme	Value (Rs Crs)	Status	n (Rs Crs)	for cost overrun
LT Mains 2018-19 New Supply	24.01	Closed in 2021-22	29.35	Cost overrun is primarily due to higher RI Charges paid to authorities. About Rs. 15.93 Crore RI paid against Rs.9.02 Crore approved (pro rata basis). Nearly 55% of the total expenses under the DPR is of RI Charges. Also, about 12 km more cable laid for release of new supply as compared to approved quantity.
LT Mains 2018-19 Improvement	31.14	Closed in 2021-22	31.76	Cost overrun is primarily due to higher RI Charges paid to authorities. About Rs. 13.10 Crore RI paid against Rs.6.08 Crore approved (pro rata basis). Nearly 39% of the total expenses under the DPR is of RI Charges.
LT Mains 2019-20 New Supply	23.92	Closed in 2021-22	32.05	Cost overrun is primarily due to higher RI Charges paid to authorities. About Rs. 13.1 Crore RI paid against Rs. 7.5 Crore approved (pro rata basis). Nearly 41% of the total expenses under the DPR is of RI Charges. Also, Cable

Name of Scheme	Total approved Value (Rs Crs)	Scheme Status	Capitalizatio n (Rs Crs)	Remark / Justification for cost overrun laid is 79 km against approved 51 km.
LT Mains 2019-20 Improvement & Extension	84.82	Closed in 2021-22	85.54	Cost overrun is primarily due to higher cable consumption than actually approved. Cable laid is 300kM against approved 284kM.
Services 2018-19 New Supply	60.95	Closed in 2020-21	87.85	Cost overrun is primarily due to higher RI Charges paid to authorities. About Rs. 35 Crore RI paid against Rs. 20 Crore approved (pro rata basis). Nearly 39% of the total expenses under the DPR is of RI Charges. Also, cables laid under the DPR for release of new supply was about 13 kms more than estimated.

AEML-D has also submitted the bifurcation of the various costs claimed in DPR vis-à-vis actual expenses as follows:-

Table 3-102: Approved amount in DPR vs Actual Expenses (Rs. Crore)

DPR Description (in Rs. Cr.)	n (in Rs. Submitted in DPR			Approved amount (Rs Cr.)		Actua	l expenses (l	Rs Crs)			
22.,	Material	RI	Labour	Expenses	Total	Total	Material	RI	Labour	Expenses	Total
LT New Supply 2018-19	8.13	13.09	3.91	5.28	30.42	24.01	8.32	15.93	2.77	2.33	29.35
LT Improvement 2018-19	21.60	9.87	11.07	8.93	51.46	31.14	10.44	13.06	5.02	3.24	31.76
LT New Supply 2019-20	9.05	13.13	4.06	5.51	31.75	23.92	10.60	13.17	5.01	3.27	32.05
LT Improvement 2019-20 & Extension	31.90	41.38	17.59	12.43	103.30	84.82	25.51	35.62	15.75	8.66	85.54
Services New Supply 2018- 19	23.80	19.32	15.95	12.41	71.48	60.95	26.13	36.60	16.23	8.89	87.85
						22.3	2.28	21.66	(29.16)	(55.88)	(3.52)
						2	(51.66)	32.35	(54.65)	(63.72)	(38.28)
% increase						34	17.11	0.33	23.39	(40.67)	0.96
						0.8	(20.03)	(13.91)	(10.48)	(30.31)	(17.20)
						44	9.79	89.46	1.76	(28.33)	22.91

30.00

36.60

AEML-D has further provided break up of the RI charges paid to the MCGM authorities under these schemes as follows: -

GST Access Reinstatement **Grand Total** (Rs Cr) (Rs Cr) Charges Charges (Rs Cr) (Rs Cr) LT New Supply 2018-19 2.67 0.22 13.04 15.93 LT Improvement 2018-19 2.13 0.17 10.76 13.06 LT New Supply 2019-20 1.95 0.18 11.04 13.17 LT Improvement 2019-20 5.13 0.79 29.70 35.62 Extension

0.53

6.07

Table 3-103: Details of Scheme-wise RI (Rs. Crore)

Analysis:-

Services New Supply 2018-19

The Commission notes that while approving the DPR, the Commission has not given separate approval for each item such as RI, Labour, taxes, etc., but it has approved consolidated unit rate. From the above table, it is observed that RI charges contributes to 40-50% of DPR value. The Commission has verified the RI charges paid by AEML-D. The Commission observes that the cost overrun (compared to the in-principle approval) is primarily due to increase in the quantum of cables and due to higher payment of RI to various authorities.

The Commission notes that the capex incurred in the above schemes is for releasing new supply connection under USO and for maintaining reliability and safety as per relevant Supply Code Regulations being obligatory for AEML-D as a Distribution Licensee.

. The Commission also notes that the above schemes are closed and closure report has been submitted by AEML-D to the Commission.

Accordingly, approval of the schemes are as follows: -

a. LT mains (18-19) New Supply

In FY 2019-20, AEML- D claimed the capitalization of Rs 20.87 Crore and Rs 0.03 Crore IDC. The Commission approves the same.

In FY 2020-21, AEML-D claimed capitalization of Rs 0.2 Crore and Rs 0.05 Crore IDC. The Commission approves the same.

In FY 2021-22, AEML-D claimed capitalization of Rs 1.25 Crore and Rs 0.01 Crore IDC The Commission approves the same.

b. LT mains (18-19) improvement

In FY 2019-20, AEML- D claimed the capitalization of Rs 2.78 Crore and Rs 0.1 Crore IDC The Commission approves the same.

In FY 2020-21, AEML-D claimed capitalization of Rs 1.01 Crore and Rs 0.08 Crore IDC The Commission approves the same.

In FY 2021-22, AEML-D claimed capitalization of Rs 0.06 Crore and Rs Nil Crore IDC The Commission approves the same.

c. LT mains (19-20) New supply

In FY 2019-20, AEML- D claimed the capitalization of Rs 28.76 Crore and Rs Nil Crore IDC. The Commission approves the same.

In FY 2020-21, AEML-D claimed capitalization of Rs 3.02 Crore and Rs 0.21 Crore IDC The Commission approves the same.

In FY 2021-22, AEML-D claimed capitalization of Rs 0.28 Crore and Rs 0.01 Crore IDC The Commission approves the same.

d. LT mains (19-20) Improvement

In FY 2019-20, AEML- D claimed the capitalization of Rs 78.86 Crore and Rs Nil Crore IDC The Commission approves the same.

In FY 2020-21, AEML-D claimed capitalization of Rs 7.64 Crore and Rs 0.52 Crore IDC, The Commission approves the same.

In FY 2021-22, AEML-D claimed capitalization of Rs 1.04 Crore and Rs 0.05 Crore IDC, The Commission approves the same.

e. Services (18-19) New supply;

In FY 2019-20, AEML- D claimed the capitalization of Rs 31 Crore and Rs 1.35 Crore IDC The Commission approves the same.

In FY 2020-21, AEML-D claimed capitalization of Rs 2.91 Crore and Rs 0.09 Crore IDC, The Commission approves the same.

3.8 OPENING GROSS BLOCK FOR FY 2019-20

AEML-D's Submission

AEML-D submitted that it has considered the opening GFA as considered by the Commission in the MYT Order in Case No. 325 of 2019 as shown in the table below:

Table 3-104 : Opening GFA for Wires and Supply Business for FY 2019-20 as submitted by AEML-D (Rs Crore)

Particulars	MYT Order	True-up Petition
Wires Business		5953.54
Supply Business		505.99
TOTAL		6459.54

Commission's Analysis and Ruling

The Commission has considered the Opening Balance of GFA of AEML-D for FY 2019-20 equal to the Closing Balance of GFA for FY 2018-19, as approved in the MYT Order at the time of Truing-up.

Table 3-105: Opening GFA for Wires and Supply Business for FY 2019-20 as approved by Commission (Rs Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Wire Business	5,547.17	5,953.54	5547.17*
Supply Business	505.99	505.96	505.99

^{*}Opening GFA considered without considering Consumer Contribution as submitted by AEML-D, as discussed subsequently under 'Depreciation'

3.9 DEPRECIATION

AEML-D's Submission

AEML-D submitted that it has calculated the Depreciation on assets for FY 2019-20 in accordance with the rates specified in the MYT Regulations, 2015 and for FY 2020-21 and FY 2021-22 in accordance with the rates specified in the MYT Regulations, 2019.

The effect of retirement of assets and withdrawal of corresponding accumulated depreciation has been considered while computing depreciation for FY 2019-20 to FY

2021-22. The Depreciation calculation for Wires Business of AEML-D for FY 2019-20 to FY 2021-22 is shown in the Tables below:

Table 3-106: Depreciation for Wires Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

			True-up Petition	
Particulars	MYT Order	With Consumer Contribution	Consumer Contribution	Without Consumer Contribution
Opening GFA	5547.17	5953.54	232.26	5721.28
Addition	613.59	682.42	20.19	662.23
Retirement	8.55	12.04		
Closing GFA	6152.21	6623.92	252.45	6371.47
Depreciation	256.27	262.91	8.49	254.42
Depreciation (as % average balance)	4.38%	4.18%		4.18%

AEML-D has submitted that the actual depreciation provided above is inclusive of depreciation on consumer contribution, which is Rs. 8.49 Crore. After subtracting the same, the depreciation for Wires Business for FY 2019-20 as claimed in ARR is Rs. 254.42 Crore. With regard to Consumer Contribution, it is submitted that there was an error in the value of Consumer Contribution till FY 2018-19 provided in the last MYT Petition (Case No. 325 of 2019). AEML-D had inadvertently provided the total Consumer Contribution received from the commencement of distribution business (Since 1932) till FY 2018-19 in the MYT Petition (Case No. 325 of 2019) amounting to Rs. 406.36 Crore. However, certain assets have been retired over the years and hence, the corresponding Consumer Contribution has also to be set off correspondingly. The closing balance of Consumer Contribution in FY 2018-19 was Rs. 232.26 Crore.

Table 3-107: Depreciation for Wires Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars	MTR Order	Actuals
Opening GFA	6152.20	6,623.92
Addition	584.88	957.21
Retirement	-	10.34
Closing GFA	6737.08	7,570.78
Depreciation	282.33	316.02
Depreciation (as % average balance)	4.38%	4.45%

Table 3-108 : Depreciation for Wires Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	Actuals
Opening GFA	6,737.08	7,570.78
Addition	360.72	1,005.81
Retirement	-	20.54
Closing GFA	7,097.80	8,556.05
Depreciation	303.04	357.97
Depreciation (as % average balance)	4.38%	4.44%

The Tables below shows the depreciation for Supply Business of AEML-D for FY 2019-20 to FY 2021-22:

Table 3-109: Depreciation for Supply Business for FY 2019-20 to FY 2021-22 as submitted by AEML-D (Rs. Crore)

	FY 2019-20		FY 20	20-21	FY 2021-22	
Particulars	MYT Order	True-up Petition	MYT Order	True-up Petition	MYT Order	True-up Petition
Opening GFA	505.99	505.99	522.11	501.75	652.60	537.06
Addition	22.00	31.01	130.49	43.70	218.57	40.92
Retirement	5.88	35.25	-	8.39	-	34.20
Closing GFA	522.11	501.75	652.60	537.06	871.17	543.80
Depreciation	26.00	26.22	29.71	85.48	38.53	23.48
Depreciation (as % average balance)	5.06%	5.20%	5.06%	16.46%	5.06%	4.34%

AEML-D has submitted that as per the MYT Regulations, 2019, there has been a significant drop in the life of the asset from approx. 17 years to 5 years for Batteries and 10 years for meters.

In compliance to the MYT Regulations, the Useful Life of Batteries and Meters has been reset to 5 years and 10 years, respectively. Accordingly, the balance depreciable value of these assets as on 1 April, 2020 has been spread over the balance useful life, considering total useful life as 5 years and 10 years, respectively. Further, as on 1 April2020, whichever such assets had already crossed the said Useful Life, the entire remaining depreciation has been claimed in FY 2020-21 itself.

Thus, the depreciation for FY 2020-21 is considerably higher as shown in the table above when compared with the approved value for FY 2020-21. Approx. Rs. 70 crore is the one-

time increase in depreciation for FY 2020-21 attributable to batteries and meters to comply with the requirement of MYT Regulations, 2019.

AEML-D submitted that the actual depreciation has been calculated on the assets added during the year proportionately based on actual date of addition.

Commission's Analysis and Ruling

The Commission is unable to accept AEML-D's submission that there was an error in the value of Consumer Contribution till FY 2018-19 and that the total Consumer Contribution of Rs. 406.36 Crore received from the commencement of distribution business (Since 1932) till FY 2018-19 should be added to the Opening GFA of FY 2019-20. AEML-D has also not placed any evidence to explain how the error, if any, has happened and in which year the same has happened, if at all. Merely making such a big statement is not sufficient and has to be backed up by all the necessary documents.

Further, in the MYT Order, the Commission had trued-up the ARR for FY 2017-18 and FY 2018-19. The closing GFA of FY 2016-17 was considered as the Opening GFA for FY 2017-18 and so on. This has been the standard approach of the Commission in all the previous Orders. It does not fit AEML-D's contention that the submission for FY 2019-20 in the MYT Petition was incorrect. If AEML-D's contentions are to be accepted, it would mean that the GFA has been considered since the beginning of the regulatory Orders issued by the Commission. Commission cannot now reopen all the earlier Orders issued by the Commission to analyse whether the submissions of AEML-D have any merit. Hence, the Commission does not accept AEML-D's request for restating the Opening GFA of the Wires Business for FY 2019-20.

For computation of Depreciation for FY 2019-20, FY 2020-21 and FY 2021-22, the Commission has considered the opening balance of GFA for Wires Business and Supply Business as approved in the final truing-up of FY 2018-19 in the MYT Order. The Commission has considered asset addition for FY 2019-20, FY 2020-21 and FY 2021-22 in line with the approved capitalisation. As regards asset retirement, it has accepted the submission of AEML-D.

The Commission has considered the weighted average depreciation rate of 4.18% for Wires Business and 5.20% for Supply Business for FY 2019-20 based on the actual depreciation and the average GFA as per audited accounts of FY 2019-20. Similarly, the Commission has considered the weighted average depreciation rate of 4.45% for Wires Business and 16.46% for Supply Business for FY 2020-21 based on the actual depreciation and the average GFA as per audited accounts of FY 2020-21. The Commission notes that huge

increase in Depreciation rate because of claim of Battery and Meter in which useful life has reduced according to MYT Regulations, 2019 and allowed the same. In FY 2021-22, the Commission has considered the weighted average depreciation rate of 4.44% for Wires Business and 4.34% for Supply Business for FY 2021-22 based on the actual depreciation and the average GFA as per audited accounts of FY 2021-22. Based on the average depreciation rate, the Commission has worked out Depreciation for Wires Business and Supply Business for the above years. The Commission has not reduced the depreciation on the Consumer Contribution, as proposed by AEML-D, as the amount of Consumer Contribution has not been added to the GFA, and as per the usual method of computing depreciation.

The Commission has approved depreciation for Wires Business and Supply Business of AEML-D after final truing up for FY 2019-20, FY 2020-21 and FY 2021-22, as shown in the Tables below:

Table 3-110: Depreciation for Wires Business for FY 2019-20 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Opening GFA	5,547.17	5,953.54	5,547.17
Addition	613.59	682.42	674.94
Retirement	8.55	12.04	12.04
Closing GFA	6,152.20	6,623.92	6,210.07
Depreciation	256.27	262.91	245.76
Depreciation (as % of GFA)	4.38%	4.18%	4.18%

Table 3-111: Depreciation for Supply Business for FY 2019-20 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Opening GFA	505.99	505.99	505.99
Addition	22.00	31.01	31.01
Retirement	5.88	35.25	35.25
Closing GFA	522.11	501.75	501.75
Depreciation	26.00	26.22	26.22
Depreciation (as % of GFA)	5.06%	5.20%	5.20%%

Table 3-112: Depreciation for Wires Business for FY 2020-21 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up	
Opening GFA	6,152.20	6,623.92	6,210.07	

Particulars	MYT Order	True-up Petition	Approved after truing up
Addition	584.88	957.21	957.19
Retirement	-	10.34	10.34
Closing GFA	6,737.08	7,570.78	7,156.92
Depreciation	282.33	316.02	297.60
Depreciation (as % of GFA)	4.38%	4.45%	4.45%

Table 3-113: Depreciation for Supply Business for FY 2020-21 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Opening GFA	522.11	501.75	501.75
Addition	130.49	43.70	43.70
Retirement	-	8.39	8.39
Closing GFA	652.60	537.06	537.06
Depreciation	29.71	85.48	85.48
Depreciation (as % of GFA)	5.06%	16.46%	16.46%

Table 3-114: Depreciation for Wires Business for FY 2021-22 as approved by the Commission (Rs. Crore)

Particulars	MYT Order True-up Petition		Approved after truing up
Opening GFA	6,737.08	7,570.78	7,156.92
Addition	360.72	1,005.81	1,005.69
Retirement	-	20.54	20.54
Closing GFA	7,097.80	8,556.05	8,142.07
Depreciation	303.04	357.97	339.60
Depreciation (as % of GFA)	4.38%	4.44%	4.44%

Table 3-115: Depreciation for Supply Business for FY 2021-22 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Opening GFA	652.60	537.06	537.06
Addition	218.57	40.92	2.78
Retirement	-	34.20	34.20
Closing GFA	871.17	543.80	502.86
Depreciation	38.53	23.48	22.59
Depreciation (as % of GFA)	5.06%	4.34%	4.34%

3.10 FINANCING PLAN AND INTEREST EXPENSES

AEML-D's Submission

FY 2019-20

AEML-D submitted that for financing the capital expenditure for FY 2019-20 for all three Divisions of the Company, AEML has raised new capex loans from banks / financial institutions in FY 2019-20. Further, in February 2020, AEML has raised \$ 70 million (Rs. 503.44 Crore) for new capex purposes through External Commercial Borrowing (ECB) route. The new loans effectively used for funding the above capex in FY 2019-20 are as under:

Table 3-116: FY 2019-20 New capex loans

Particulars/ (Rs. Crore)	For AEML-G, AEML-T and AEML-D	Used for WC purpose / kept in FD
Loans addition in FY 2019-20	868.87	366.84

The amount utilized for the purpose of meeting the capex in FY 2019-20 is Rs. 868.87 Crore, which is 68% of the capex made in FY 2019-20. Since, the debt used in capex is 68%, the debt used in capitalization in FY 2019-20 also needs to be considered as 68%. Since, the actual debt percentage is less than 70%, AEML has considered 70% of capitalization deemed to be funded through debt and 30% through equity, in accordance with MYT Regulations, 2015.

Refinancing of loans and Refinancing charges

AEML took over Mumbai Generation, Transmission and Distribution business of RInfra in FY 2018-19 and, in the process, took over the liabilities pertaining to the regulated business. For this purpose, term loans of Rs. 8,500 Crore were drawn from Indian banks and Financial Institutions in FY 2018-19. The above term loans are Rupee Term Loans (RTLs) used for the purpose of financing the transaction for takeover of regulated businesses from RInfra.

In addition, AEML had raised loans from banks/ Financial Institutions in FY 2018-19 and in FY 2019-20 for funding new capex after takeover of business from RInfra. These loans are called the new capex loans for FY 2018-19 and FY 2019-20 respectively.

The opening balance of RTL for FY 2019-20 for AEML as a whole was as under:

Table 3-117: FY 2019-20 Opening Rupee Term loan

Particulars/ (Rs. Cr)	Opening RTL for FY 2019-20
State Bank of India (SBI)	2910.00

Particulars/ (Rs. Cr)	Opening RTL for FY 2019-20
Yes Bank Limited (YBL)	1988.50
Bank of India (BOI)	1939.70
ICICI Bank Limited (ICICI)	727.50
HDFC Bank Limited (HDFC)	196.00
Bank of Baroda (BOB)	485.00
Total	8246.70

During FY 2019-20, RTL from Yes Bank Ltd. has been replaced with RTL from ICICI Bank, Bank of Baroda and Union Bank of India as per the requirement of Yes Bank Ltd. RTL from banks/ Financial Institutions have been refinanced through Bonds and shareholder affiliated debt.

The closing balance of RTL at the time of refinancing in February 2020 was as under:

Table 3-118: FY 2019-20 Rupee Term loan closing balance in Feb 2020

Particulars/ (Rs. Cr)	Opening RTL for FY	Addition in loans	Repayment of loans	Replacement of loans	RTL as in Feb 2020
	2019-20				
State Bank of India (SBI)	2910.00	0	67.57	0.0	2842.43
Yes Bank Limited (YBL)	1988.50	0	4.67	1983.83	0.00
Bank of India (BOI)	1939.70	0	45.00	0	1894.71
ICICI Bank Limited (ICICI)	727.50	499.61	24.66	0	1202.45
HDFC Bank Limited (HDFC)	196.00	0	6.50	0	189.50
Bank of Baroda (BOB)	485.00	999.23	33.67	0	1450.55
Union Bank of India (UBI)	0	485.00	11.25	0	473.75
Total	8246.70	1983.83	193.32	1983.83	8053.38

The above RTLs were refinanced through Bonds and shareholder affiliated debt. The opening balance of new capex loans for FY 2019-20 for AEML as a whole was as under:

Table 3-119: FY 2019-20 Opening balance of new capex loans

Particulars/ (Rs. Cr)	Opening New Capex loans for FY 2019-20
Yes Bank Limited (YBL)	35.66
State Bank of India (SBI)	44.13
Total	79.78

During FY 2019-20, the new capex loans of FY 2018-19 from Yes Bank Ltd. as shown above has been replaced with new capex loan from State Bank of India. Further, AEML has drawn more new capex loans from banks/ financial institutions for funding of new

capex in FY 2019-20. These new capex loans were also refinanced through Bonds and shareholder affiliated debt.

The closing balance of new capex loans at the time of refinancing in February 2020 was as under:

Table 3-120: FY 2019-20 Closing balance of new capex loans in Feb 2020

Particulars/ (Rs.	Opening New	Addition	Repaymen	Replacement	New capex
Cr)	Capex loans for	in loans	t of loans	of loans*	loan as in
	FY 2019-20				Feb 2020
Yes Bank Limited	35.66	155.14	0	190.79	0.00
(YBL)					
State Bank of India	44.13	317.93	7.60	0	354.46
(SBI)					
Aditya Birla Finance		250.00	0	0	250.00
Ltd. (ABFL)					
Axis Bank Limited		200.00	0	0	200.00
(AXIS)					
Total	79.78	923.06	7.60	190.79	804.46

^{*}Entire loan from YBL of Rs. 190.79 Crore has been replaced by new capex loan from SBI. The loan addition of Rs. 317.93 Crore against SBI includes Rs. 190.79 Crore

AEML-D submitted that out of Rs. 200 Crore Axis Bank loan availed in FY 2019-20, Rs. 84.14 Crore has not been utilized for capex. This amount was kept in Fixed Deposits (FD) till February 2020, till the time the entire Rupee Term loans and new capex loans availed from Indian banks were refinanced with Bond and Sub-debt. The FD was subsequently terminated, and the funds were utilized for revenue expenses – towards power purchase and various vendor payments related to R&M and services. This clearly demonstrates the use of funds towards working capital and accordingly, AEML-D has considered the corresponding interest cost towards actual interest on working capital.

The Commission, through the Order dated 29 January 2020 in Case No. 341 of 2019 and 342 of 2019, had approved the proposed changes in shareholding pattern in AEML on account of the then proposed transaction wherein the Qatar Holding LLC would acquire 25.1% of the total equity share capital of AEML from Adani Transmission Ltd. (ATL). The said transaction has been carried out in February 2020. Pursuant to the said transaction, AEML has raised shareholder affiliated debt of \$282 million (Rs. 2009.64 Crore) from Qatar Holding LLC in February 2020. Further, AEML has raised \$ 1000 million (Rs. 7124.58 Crore) senior secured notes (Bonds) from the international market. Thus, the Rupee Term Loans and new capex loans (for FY 2018-19 and FY 2019-20) availed from Indian

banks/Institutions have been refinanced through Bonds and subordinate affiliated debt in February 2020, as seen from table below:

\$ Million Particulars Rs. Crore Bond 1,000 7,124.58 Sub Debt 282 2,009.64 **Total inflow in February 2020** 1,282 9,134.22 RTL balance in February 2020 8,053.38 New Capex loan balance in February 2020 (new capex loans taken 804.46 during FY 18-19 and FY 19-20) Total 8,857.84 Surplus after Refinance 276.38

Table 3-121: FY 2019-20 Refinancing

As stated above, out of the Rs. 200 Crore Axis bank loan availed in FY 2019-20, Rs. 84.14 Cr has not been utilized for capex. Since, the entire loan amount of Rs. 200 Crore was refinanced through bond/sub-debt, the surplus amount after refinancing is Rs. 360.52 Crore (Rs. 276.38 Cr + Rs. 84.14 Cr). It is submitted that Bonds raised from international market were towards meeting the obligation of liability related to fixed assets as well as for general corporate purpose. The Sub-debt availed from Qatar Holding LLC was specifically for meeting the liability related to fixed assets. Hence, the surplus remaining as shown above after refinancing has been considered to be utilized as working capital in the business.

The interest rates of RTL and new capex loans at the time of refinancing in February 2020 was 9.20%, whereas the Bonds and shareholder affiliated debt have been raised at much lower rate of interest as shown in table below:

Interest rate with Particulars Total Hedge Withholding Tax **Premium** Bond 3.90% 8.40% 4.50% Sub-Debt 6.85% 0.91% 7.76% Weighted average 8.25%

Table 3-122: FY 2019-20 Interest rate for Bond and Sub-debt

AEML-D submitted that Regulation 29.10 of the MYT Regulations, 2015 provides the mechanism for computation of gains associated with savings in interest cost in case of refinancing of loans and further sharing of the same with the beneficiaries.

AEML has incurred various charges such as lead manager fees, legal fees, professional fees, rating fees, commitment fees, etc., for raising Bonds and shareholder affiliated debt in FY 2019-20. AEML has also incurred prepayment charges for early repayment of RTL and

new capex loans in FY 2019-20. These charges can be termed as the charges incurred for refinancing of RTL and new capex loans with Bonds and shareholder affiliated debt. There were certain fees related to Bonds, which were paid in FY 2020-21. AEML has considered these charges as part of refinancing charges as well.

Table 3-123: FY 2019-20 Refinancing charges

Particulars	Rs. Crore
Bond Fees	
Lead Manager Fees	41.36
Legal Fees	14.96
Professional Fees	1.61
Rating Fees	22.55
Sub-total - Bond Fees	80.49
Sub Debt Fees	
Commitment fees	7.52
Prof & Legal Fees	31.51
Sub-total - Sub-Debt Fees	39.03
	28.90
Prepayment charges for early repayment of RTL and new capex loans	
Bond Fees paid in FY 2020-21	5.72
Total	154.13

As stated in above section, the Bond surplus after refinancing has been used as working capital in the business. Hence, a part of the refinancing charges incurred for Bonds (derived on proportion basis) has been apportioned as finance charges for working capital loans. Thus, the total refinancing charges incurred is as under:

Table 3-124: FY 2019-20 Refinancing charges after apportioning part of Bond fees to Financing charges.

Particulars	Total	Bond amount used	Bond	Bond fees	Bond Fees	Refinancing
	Refinancing	for refinancing of	amount	considered	considered as	charges
	Charges	loans used for	used for	as	Financing	considered
		transaction / new	general	Refinancing	charges for	in this
		capex (Rs. 7124.58	corporate	charges	availing	Petition
		Crore - Rs. 360.52	purpose		Working	
		Crore)			Capital	
Bond Fees	80.49	6,764.06	360.52	76.42	4.07	76.42
Sub Debt Fees	39.03					39.03

Particulars	Total	Bond amount used	Bond	Bond fees	Bond Fees	Refinancing
	Refinancing	for refinancing of	amount	considered	considered as	charges
	Charges	loans used for	used for	as	Financing	considered
		transaction / new	general	Refinancing	charges for	in this
		capex (Rs. 7124.58	corporate	charges	availing	Petition
		Crore - Rs. 360.52	purpose		Working	
		Crore)			Capital	
Prepayment charges for	28.90					28.90
early repayment of RTL						
and new capex loans						
Bond Fees paid in FY	5.72					5.72
2020-21						
Total	154.13					150.06

The Commission in AEML-D's MYT Order in Case No. 325 of 2019, had allowed the refinancing charges in proportion to the regulatory loans while truing up FY 2018-19. AEML-D, for the purpose of truing up of FY 2019-20 has allocated the refinancing charges to different divisions of the regulated business, by considering the regulatory loans as on date of refinance in FY 2019-20 for different businesses, as shown in table below:

Table 3-125: FY 2019-20 Refinancing charges allocation

Particulars (Rs. Cr)	Total Refinancing charges*	Total Refinancing charges proportionate to regulatory loans#	Refinancing charges for AEML-G#	Refinancing charges for AEML-T#	Refinancing charges for AEML-D (Wires)#	Refinancing charges for AEML-D (Supply)#
Loan amounts	8857.84	2046.74	173.61	415.86	1395.50	61.76
Refinancing charges for FY 2019-20	150.06	34.67	2.94	7.05	23.64	1.05

*Loan amount corresponding to total refinancing charges are the RTLs (Rs. 8053.38 Cr) and new capex loans (Rs. 804.46 Cr), totalling Rs. 8857.84 Cr as in February 2020.

#Loan amount corresponding to apportioned refinancing charges are the regulatory loans on the date of refinance (12.02.2020)

Further, the Commission, in AEML-D's MYT Order in Case No. 325 of 2019, calculated the present value of interest cost saving by considering the repayment equal to depreciation for the year, instead of tenure of actual repayment of loan. The discount rate considered by the Commission was the rate of interest after refinancing, instead of the rate of interest

discounted by the tax rate. AEML-D, in this Petition, has calculated the Present Value (PV) of interest cost saving pursuant to refinancing of RTL and new capex loans along with the share of net savings to AEML-D as per the methodology adopted by the Commission in the MYT Order.

The calculations for the Wires Business are shown in table below:

Table 3-126: FY 2019-20 PV of interest cost savings for Wires Business

Particulars (Rs. Crore)	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
Opening Balance of Loan	1523.10	1268.68	1014.26	759.84	505.42	251.00
Repayment	254.42	254.42	254.42	254.42	254.42	251.00
Closing Balance of Loan	1268.68	1014.26	759.84	505.42	251.00	0.00
Average loan balance	1395.89	1141.47	887.05	632.63	378.21	125.50
Interest – Pre refinancing	17.18	104.95	81.56	58.17	34.77	11.54
Interest – Post refinancing	15.42	94.20	73.20	52.21	31.21	10.36
Saving in interest	1.76	10.75	8.36	5.96	3.56	1.18
NPV of saving	26.91					
Refinancing Cost	23.64					
Net saving	3.27					
1/3 rd for AEML-D	1.09					

Since, the net savings works out to be positive, AEML-D has claimed the refinancing charges for the Wires Business.

The calculations for Supply Business are shown in the table below:

Table 3-127: FY 2019-20 PV of interest cost savings for Supply Business

Particulars (Rs. Crore)	FY 19-20	FY 20-21	FY 21-22
Opening Balance of Loan	70.71	44.49	18.26
Repayment	26.22	26.22	18.26
Closing Balance of Loan	44.49	18.26	0.00
Average loan balance	57.60	31.37	9.13
Interest - Pre refinancing	0.71	2.88	0.84
Interest - Post refinancing	0.64	2.59	0.75
Saving in interest	0.07	0.30	0.09
NPV of saving	0.42		
Refinancing Cost	1.05		
Net saving	-0.63		
1/3rd for AEML-D	-0.21		

The above table shows that the PV of saving in interest expense works out to be less than the refinancing cost.

However, the comparison of total PV of interest cost saving with the refinancing cost for AEML-G, AEML-T and AEML-D is shown in table below:

AEML-T AEML-D(W) Particulars (Rs. Cr) **AEML-G AEML-D(S)** Total 2.48 26.91 39.27 PV of interest cost saving 9.46 0.42 Refinancing Charges 2.94 7.05 23.64 1.05 34.67 2.41 3.27 **Net Saving** (0.46)(0.63)4.60

Table 3-128: FY 2019-20 Net savings for G T D

AEML-D submitted that even though the PV of saving in interest expense works out to be less than the refinancing cost for the Supply Business, the PV of saving in interest expense for AEML as a whole is more than the refinancing cost of AEML as a whole. Since, AEML has carried out refinancing of loans in FY 2019-20 for the organization as a whole, which has resulted in benefit of reduction in interest expense, refinancing charges should be allowed for all divisions of AEML. Hence, AEML-D(S) has claimed both the refinancing charges and net saving (negative) for FY 2019-20. It is pertinent to note that Bond and Subdebt has been availed at a very low coupon rate of 4.5% and 6.85%, respectively, which will remain constant till their tenure ends. This way, the consumers have become immune to the risk of changing interest rate, when loans are availed through Indian Banks. Thus, the benefit of lower interest rate, which will remain constant will remain available to the consumers for future years till their repayment. Hence, AEML-D has requested the Commission to exercise its power to remove difficulties as per MYT Regulations, 2015 and allow refinancing charges to AEML-D as presented above.

Interest on loans

The weighted average interest cost considering all the loans in AEML's portfolio (including the debt raised through bonds, sub-debt and ECB) works out to 9.01%. According AEML-D has calculated the interest on loans for FY 2019-20.

The table below shows the interest on loans calculation for Wires Business.

Table 3-129: FY 2019-20 Interest on loan for Wires Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	1,523.10	1,523.10
Reduction in loans due to retirement in loans		0.76
Addition of new loans	447.82	463.56
Repayment	256.27	254.42
Closing Balance	1,714.65	1,731.48
Interest Rate (%)	9.05%	9.01%
Interest on Loans	146.51	146.69

The table below shows the interest on loans calculation for Supply Business:

Table 3-130: FY 2019-20 Interest on loan for Supply – approved Vs actual

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	70.71	70.71
Reduction in loans due to retirement in loans		4.37
Addition of new loans	15.40	21.71
Repayment	26.00	26.22
Closing Balance	60.11	61.82
Interest Rate (%)	9.05%	9.01%
Interest on Loans	5.92	5.97

Financing charges

AEML-D has raised \$ 70 million (Rs. 503.44 Crore) in February 2020 for new capex purposes through External Commercial Borrowing (ECB) route. The ECB facility limit of \$ 400 million is exclusively for regulated capex with a minimum average maturity of 36 months. The drawdown will be as per capex requirement of the Company. In FY 2019-20, \$ 70 Million of ECB had been drawn. The rate of interest of all new capex loans from banks/ financial institutions in February 2020 was 9.20%, where as the rate of interest for ECB facility was much lower at 8.06%.

Table 3-131: FY 2019-20 Rate of interest for ECB

Particulars	Interest rate with Withholding Tax	Hedge Premium	Total
External Commercial Borrowing	4.45%	3.60%	8.06%

AEML has incurred commitment fees, arrangement fees, legal fees, etc., for raising funds through ECB. These charges have been segregated among different business divisions of AEML in the ratio of average regulatory loans of different businesses in FY 2019-20.

Table 3-132: FY 2019-20 Financing charges allocation

Particulars (Rs. Cr)	Total	Financing	Financing	Financing	Financing
		charges for AEML-G	charges for AEML-T	charges for AEML-D (Wires)	charges for AEML-D (Supply)
Avg Regulatory loans in FY 2019-20		176.85	541.16	1,627.29	66.27

Particulars (Rs. Cr)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Financing charges for new capex loans and Fees for ECB	36.52	2.68	8.19	24.64	1.00

AEML has incurred forex loss of 0.20 Crore on the payment of such financing charges for EDB, Bond and Sub-debt. The same has also been claimed in the ratio of average regulatory loans of all divisions in FY 2019-20 as follows:

Table 3-133: FY 2019-20 Forex loss allocation

Particulars (Rs. Cr)	Total	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)
Forex loss	0.20	0.01	0.04	0.13	0.01

Further, there were certain bank charges incurred in FY 2019-20. Since, these charges correspond to entire loan portfolio, AEML has claimed these charges in proportion to the average regulatory loan of different divisions of AEML.

Table 3-134: FY 2019-20 Bank charges allocation

Particulars (Rs. Cr)	Total charges	Total charges proportionate to Regulatory loans*	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)

^{*}Average regulatory loan for FY 2019-20

Further, AEML has raised working capital loans from banks / financial institutions for meeting the day-to-day cash requirements. AEML has also incurred LC and BG commission for payment to vendors through LC/BG for materials related to capex / opex. As submitted in subsequent paragraphs, the bond surplus after refinancing has been considered to be utilized as working capital in the business. Hence, a part of the refinancing charges incurred for Bonds (derived on proportion basis) has been claimed in the finance charges for working capital loans. All these financing charges corresponding to financing of working capital requirements have been segregated among different regulated Divisions

in the ratio of normative working capital requirement of the different divisions of AEML (except for LC/BG charges which are claimed at actuals for each business segment).

Table 3-135: FY 2019-20 Financing charges for working capital allocation

Particulars (Rs. Cr)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Normative Working Capital Requirement in FY 2019-20		189.62	62.19	319.34	119.86
Financing charges for working capital	10.64	2.26	0.63	6.52	1.22

Thus, the total financing charges claimed for FY 2019-20 is as under:

Table 3-136: FY 2019-20 Total Financing Charges

Particulars (Rs. Cr)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Financing charges	51.14	5.23	9.72	33.86	2.33

Foreign Exchange Rate Variation

AEML submitted that it has contracted various hedging products to mitigate the risks of foreign exchange fluctuation. The hedging instruments and tenures are explained below:

- a. \$ 400 Million of Bond is hedged through 5-year Cross Currency Swap (CCS)—which will be rolled over at the end of 5 years. Through this instrument both principal repayment and interest liability have been hedged.
- b. \$ 300 Million of Bond is hedged through 10-year Principal Only Swap (POS) which will be maturing at the end of the tenure. Through this instrument, liability of principal repayment has been hedged.
- c. Balance Bond of \$ 300 Million is hedged through At The Money Forward (ATMF) Option contract for a period of 5 year. Through this instrument, liability of principal repayment has been hedged beyond Rs./\$ conversion rate of Rs. 91.75/\$.
- d. Interest liability for \$ 600 Million (for Sr. b and Sr. c) is hedged through 5-year Coupon Only Swap (COS), which will be maturing at the end of the tenure.

- e. \$ 70 Million of ECB is hedged through 1-year Cross Currency Swap (CCS) which is being rolled over at the end of the year. Through this instrument both principal repayment and interest liability have been hedged.
- f. \$ 282 Million of Sub-debt is hedged through At The Money Forward (ATMF) Option contract for a period of 5 year. Through this instrument, liability of principal repayment has been hedged beyond Rs./\$ conversion rate of Rs. 91.75/\$.

As seen from above, the principal repayment for \$ 300 million Bond and \$ 282 million Subdebt is hedged beyond Rs./\$ conversion rate of Rs. 91.75/\$. The FERV loss or gain that will be incurred at the time of repayment of these loans shall be claimed by AEML in future. Further, the FERV (loss) accounted in books of the accounts of FY 2019-20 towards timing difference between the rate/\$ considered for loan conversion and the rate/\$ at the time of finalizing hedging contracts is Rs. 1.04 Crore. The same has been segregated among AEML-G, AEML-T and AEML-D in the ratio of regulatory loans for FY 2019-20.

Table 3-137: FY 2019-20 FERV loss allocation

Particulars/ (Rs. Cr)	AEML-G	AEML-T	AEML (D – W)	AEML (D – S)	Total
FERV loss (loans)	0.08	0.23	0.70	0.03	1.04

FY 2020-21

Financing plan of Capital Expenditure

In FY 2020-21, AEML has raised further \$ 105 million (Rs. 767.53 Crore) through ECB for financing new capex in FY 2020-21, out of which Rs. 90 Crore was kept in FD. In addition, AEML has used the fixed deposit of Rs. 150 Crore kept out of the ECB amount of Rs. 503.44 Crore (availed in FY 2019-20) towards meeting the new capex for FY 2020-21. Thus, the total loans used for new capex for FY 2020-21 is Rs. 857.53 Cr., which is 69.52% of the total capex made in FY 2020-21. Since, the debt used in capex is 69.52%, the debt used in capitalization in FY 2019-20 also needs to be considered as 69.52%. Since, the actual debt percentage is less than 70%, AEML has considered 70% of capitalization deemed to be funded through debt and 30% through equity, in accordance with MYT Regulations, 2019.

Interest on loans

AEML-D submitted that it has considered the opening normative loan balance for FY 2020-21 as equal to the closing normative loan balance of FY 2019-20. 70% of the asset addition in FY 2020-21 is considered as normative debt drawl during the year, as the actual debt

deployment as shown above is about 69.52%. The balance 0.48% equity contribution has also been considered as normative debt in accordance with the MYT Regulations, 2019.

As per first proviso of Regulation 30.5 of MYT Regulations, 2019, at the time of Truingup, the weighted average rate of interest based on actual loan portfolio during the concerned year needs to be considered as the rate of interest. The weighted average interest cost for FY 2020-21, considering all the loans in AEML's portfolio (including the debt raised through bonds, sub-debt and ECB) works out to 8.19%. Accordingly, AEML-D has calculated the interest on loans for FY 2020-21.

The table below shows the interest on loans calculation for Wires Business:

Table 3-138: FY 2020-21 Interest on loan for Wires Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	1,714.65	1,731.48
Reduction in loans due to retirement in loans		1.27
Addition of new loans (after netting off consumer contribution)	440.88	660.13
Repayment	282.33	306.80
Closing Balance	1,873.20	2,083.53
Interest Rate (%)	9.05%	8.19%
Interest on Loans	162.35	156.22

The table below shows the interest on loans calculation for Supply Business:

Table 3-139: FY 2020-21 Interest on loan for Supply Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	60.12	61.82
Reduction in loans due to retirement in loans		2.92
Addition of new loans	91.34	30.59
Repayment	29.71	85.48
Closing Balance	121.75	4.01
Interest Rate (%)	9.05%	8.19%
Interest on Loans	8.23	2.70

Financing charges

AEML has paid commitment fees and arrangement fees towards ECB and the same has been segregated amongst generation, transmission and distribution in the ratio of average regulatory loans of the three businesses in FY 2020-21:

Particulars (Rs. Crore)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Avg. Regulatory loans in FY 2020-21		170.35	650.93	1907.51	32.92
Fees for ECB	18.08	1.12	4.26	12.49	0.22

Table 3-140: FY 2020-21 ECB Financing charges allocation

AEML has also incurred FERV (loss) on these finance charges incurred in FY 2020-21, amounting Rs. 0.19 Cr. The same has also been segregated amongst generation, transmission and distribution in the ratio of average regulatory loans of the three businesses.

Table 3-141: FY 2020-21 FERV loss allocation

Particulars (Rs. Crore)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Fees for ECB	0.19	0.01	0.05	0.13	0.00

In addition, there were other fees (annual fees, agency fees etc.) paid with respect to bond and sub-debt in FY 2020-21. Some of the fees earlier paid were refunded in FY 2020-21. The net amount has been considered in proportion to the regulatory loans and has been segregated among the three businesses in the ratio of average regulatory loans for FY 2020-21.

Table 3-142: FY 2020-21 Other financing charges

Particulars (Rs. Crore)	Total charges	Total charges proportionate to Regulatory loans	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Loans in FY 2020-21	10,021.42	2761.70	170.35	650.93	1907.51	32.92
Other financing Charges	(0.36)	(0.10)	(0.01)	(0.02)	(0.07)	(0.00)

Further, AEML has raised working capital loans from banks / financial institutions for meeting the day-to-day cash requirements. AEML has also incurred LC and BG commission for payment to vendors through LC/BG for materials related to capex / opex. All these financing charges corresponding to financing of working capital requirements have been segregated among different regulated divisions in the ratio of normative working

capital requirement of the different divisions of AEML (except for LC/BG charges which are claimed at actuals for each division of business).

Table 3-143: FY 2020-21 Financing charges for working capital loan

Particulars (Rs. Crore)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Normative Working Capital Requirement in FY 2020-21		181.92	63.83	302.89	0
Financing charges for working capital	2.98	1.00	0.03	0.78	1.16

Thus, the total financing charges claimed for FY 2020-21 are as under:

Table 3-144: FY 2020-21 Financing charges

Particulars (Rs. Crore)	Total	Financing charges for AEML-G	Financing charges for AEML-T	Financing charges for AEML-D (Wires)	Financing charges for AEML-D (Supply)
Financing charges	21.15	2.12	4.32	13.33	1.38

Refinancing charges

The amount of refinancing charges claimed in FY 2020-21 are as under:

Table 3-145: FY 2020-21 Refinancing charges

Particulars (Rs. Cr)	Total	Refinancing charges for AEML-G	Refinancing charges for AEML-T	Refinancing charges for AEML- D (Wires)	Refinancing charges for AEML-D (Supply)
Refinancing charges	1.31	0.11	0.27	0.89	0.04

FERV

As submitted in the section on truing up of FY 2019-20, the principal repayment for \$ 300 million Bond and \$ 282 million Sub-debt is hedged beyond Rs./\$ conversion rate of Rs. 91.75/\$. The FERV (loss or gain) that will accrue at the time of repayment of these loans shall be claimed by AEML in future.

FY 2021-22

Financing plan of Capital Expenditure

The capital expenditure for FY 2021-22 for all three divisions of the Company is shown in the table below:

Particulars/ (Rs. Cr)	AEML-G	AEML-T	AEML-D	Total
Capitalization in FY 2021-22 (A)	55.81	38.70	1,046.74	1,141.25
Opening WIP for FY 2021-22 (B)	6.77	26.13	316.13	349.03
Closing WIP for FY 2021-22 (C)	6.74	540.75	240.05	787.54
Capital Expenditure for FY 2021-22 (D	55.78	553.32	970.66	1,579.76
= C-B+A)				
Less: Consumer Contribution			25.38	25.38
Net Capex for FY 2021-22	55.78	553.32	945.28	1,554.38

Table 3-146: FY 2021-22 Capital expenditure

In February 2020, AEML has raised \$ 70 million (Rs. 503.44 Cr.) for new capex purposes through External Commercial Borrowing (ECB). In FY 2020-21, AEML has raised further \$ 105 million (Rs. 767.53 Cr.) through ECB for financing new capex in FY 2020-21. Thus, the total ECB raised till FY 2020-21 was \$ 175 million (Rs. 1,270.97 Cr.). In FY 2021-22, AEML has raised \$ 300 million loans (Rs. 2,231.98 Cr.) through Sustainability Linked Bonds (also known as Global Medium-Term Notes – GMTN), out of which \$ 175 million was for repayment of the loans raised through ECB and the rest was for funding the new capital expenditure in FY 2021-22. The ECB loan on the date of refinance in FY 2021-22 (26/07/2021) including the forex loss was Rs. 1,302.73 Cr. Thus, part of GMTN used for new capex in FY 2021-22 was Rs. 929.26 Cr. (Rs. 2,231.98 Cr. - Rs. 1,302.73 Cr.). Further, out of the FD amount of Rs. 80 Cr. kept in FY 2020-21, an amount of Rs. 20 Cr. was utilized in FY 2021-22. Thus, the total loans used for new capex for FY 2021-22 is Rs. 949.26 Cr., which is 61.07% of the total capex made in FY 2021-22. Since the debt used in capex is 61.07%, the debt used in capitalization in FY 2021-22 also needs to be considered as 61.07%. Since, the actual debt percentage is less than 70%, AEML has considered 70% of capitalization deemed to be funded through debt and 30% through equity, in accordance with MYT Regulations, 2019.

Refinancing charges

The interest rates for ECB and for GMTN in FY 2021-22 are as shown in table below:

Table 3-147: FY 2021-22 RCB and GMTN interest rate

Particulars	Interest rate with Withholding Tax	Hedge Premium	Total
ECB	3.26%	5.85%	9.11%
GMTN	4.13%	4.52%	8.65%

Hence, it was beneficial to refinance the ECB loan with funds raised through GMTN. The ECB facility was at a floating interest rate, which was linked to London Inter-bank Offered Rate (LIBOR). The LIBOR has seen significant increase during FY 2021-22 and FY 2022-23, as compared to the coupon rate of GMTN. Hence, it was beneficial to refinance the ECB loans with funds raised through GMTN. Regulation 30.10 of the MYT Regulations, 2019 provides the mechanism for computation of gains associated with savings in interest cost in case of refinancing of loans and further sharing of the same with the beneficiaries.

For raising GMTN funds of Rs. 300 million, AEML has incurred various charges such as lead manager fees, rating fees, legal charges etc. amounting to Rs. 29.92 crore. Since, out of \$ 300 million, \$ 175 million was for refinancing the ECB loan and rest was for new capex purpose, AEML has bifurcated the fees associated with GMTN towards refinancing and new capex, as shown in table below:

Table 3-148: FY 2021-22 Fees for GMTN

Particulars	Rs. Crore
GMTN Fees – total	29.92
GMTN Fees - towards new capex (\$ 125 million)	12.47
GMTN Fees - towards refinancing (\$ 175 million)	17.45

AEML has segregated the refinancing charges (as derived above) in the ratio of average of regulatory loans (as on date of refinance) among the different business segments as shown in table below:

Table 3-149: FY 2021-22 Refinancing charges allocation

Particulars (Rs. Cr)	Total Refinancing charges	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)
Loan amounts		156.39	660.01	2056.22	5.99
Refinancing charges for FY 2021-22	17.45	0.95	4.00	12.47	0.04

Further, the Commission, in AEML-D's MYT Order dated 30 March, 2020 in Case No. 325 of 2019, calculated the present value of interest cost saving by considering the repayment equal to depreciation for the year, instead of tenure of actual repayment of loan. The discount rate considered by the Commission was the rate of interest after refinancing, instead of the rate of interest discounted by the tax rate. AEML-D, in this Petition, has calculated the present value of interest cost saving pursuant to refinancing of ECB along

with the share of net savings to AEML-D as per the methodology adopted by the Commission in the MYT Order.

The calculation for distribution wires business is shown in the table below:

Table 3-150: FY 2021-22 PV of interest cost savings for Wires Business

Particulars (Rs. Crore)	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Opening Balance of Loan	2083.54	1735.87	1388.19	1040.52	692.84	345.17
Repayment	347.67	347.67	347.67	347.67	347.67	345.17
Closing Balance of Loan	1735.87	1388.19	1040.52	692.84	345.17	0.00
Average loan balance	1909.70	1562.03	1214.35	866.68	519.01	172.58
Interest - Pre refinancing	118.26	142.36	110.67	78.99	47.30	15.73
Interest - Post refinancing	112.25	135.13	105.05	74.97	44.90	14.93
Saving in interest	6.01	7.23	5.62	4.01	2.40	0.80
NPV of saving	22.80					
Refinancing Cost	12.47					
Net saving	10.34					
1/3rd for AEML-D	3.45					

Since the net savings after refinancing works out to be positive, AEML-D has claimed the refinancing charges for FY 2021-22 for the Wires Business.

The calculation for distribution supply business is shown in the table below:

Table 3-151: FY 2021-22 PV of interest cost savings for Supply Business

Particulars (Rs. Crore)	FY 19-20
Opening Balance of Loan	4.01
Repayment	4.01
Closing Balance of Loan	0.00
Average loan balance	2.01
Interest - Pre refinancing	0.12
Interest - Post refinancing	0.12
Saving in interest	0.01
NPV of saving	0.01
Refinancing Cost	0.04
Net saving	-0.03
1/3rd for AEML-D	0.00

The above table shows that the PV of saving in interest expense works out to be less than the refinancing cost in the Supply business.

However, the comparison of total PV of interest cost saving with the refinancing cost for AEML-G, AEML-T and AEML-D is shown in table below:

Particulars (Rs. Cr) **AEML-T AEML-D(W) AEML-G AEML-D(S) Total** 1.30 8.82 22.80 0.01 32.93 PV of interest cost saving 12.47 17.45 Refinancing Charges 0.95 4.00 0.04 15.48 0.35 4.82 10.34 (0.03)Net Saving

Table 3-152: FY 2021-22 Net savings for G T D

Thus, even though the PV of saving in interest expense works out to be less than the refinancing cost for AEML-D (Supply), the PV of saving in interest expense for AEML as a whole is more than the refinancing cost of AEML as a whole. Since, AEML has carried out refinancing of loans in FY 2021-22 for the organization as a whole, which has resulted in benefit of reduction in interest expense, refinancing charges should be allowed for all divisions of AEML. Hence, AEML-D(S) has claimed both the refinancing charges and net saving (negative) for FY 2021-22. This is on the same lines as has been claimed for FY 2019-20. Hence, AEML-D requested the Commission to exercise its power to relax regulations as per MYT Regulations, 2019 and allow refinancing charges to AEML-D as presented above.

Interest on loans

AEML-D has submitted that it has considered the opening normative loan balance for FY 2021-22 as equal to the closing normative loan balance of FY 2020-21. 70% of the asset addition in FY 2021-22 is considered as normative debt drawal during the year, as the actual debt deployment as shown above is less than 70%. The balance equity contribution has also been considered as normative debt in accordance with the MYT Regulations, 2019.

The weighted average interest cost for FY 2021-22, considering all the loans in AEML's portfolio (including the debt raised through bonds, sub-debt, ECB and GMTN) works out to 8.35%.

The table below shows the interest on loans calculation for Wires Business:

Table 3-153: FY 2021-22 Interest on loan for Wires Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	1,873.20	2,083.53
Reduction in loans due to retirement in loans		1.58
Addition of new loans (after netting off consumer contribution)	271.91	686.30

Particulars / (Rs. Crore)	MYT Order	Actuals
Repayment	303.04	347.67
Closing Balance	1,842.07	2,420.58
Interest Rate (%)	9.05%	8.35%
Interest on Loans	168.12	188.05

The table below shows the interest on loans calculation for Supply Business:

Table 3-154: FY 2021-22 Interest on loan for Supply Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Opening Balance	121.75	4.01
Reduction in loans due to retirement in loans		0.10
Addition of new loans	153.00	28.65
Repayment	38.53	23.48
Closing Balance	236.22	9.08
Interest Rate (%)	9.05%	8.35%
Interest on Loans	16.20	0.55

Financing charges

AEML-D submitted that in FY 2021-22, AEML has raised \$ 300 million loans (Rs. 2,231.98 Crore) through Sustainability Linked Bonds (also known as Global Medium Term Notes – GMTN), out of which \$ 175 million was for repayment of the loans raised through ECB and the rest was for funding the new capital expenditure in FY 2021-22. AEML has bifurcated the fees associated with GMTN towards refinancing and new capex, as shown in the table below:

Table 3-155: FY 2021-22 GMTN fees – refinancing and new capex

Particulars	Rs. Crore
GMTN Fees – total	29.92
GMTN Fees - towards new capex (\$ 125 million)	12.47
GMTN Fees - towards refinancing (\$ 175 million)	17.45

AEML has claimed the GMTN fees towards new capex in FY 2021-22 in the ratio of average regulatory loans in different businesses in FY 2021-22. Further, AEML has also incurred commitment fees for ECB in FY 2021-22 till the time of refinance. AEML has also incurred FERV (loss) of Rs. 18,088/- on the finance charges in FY 2021-22. These charges have also been claimed in the ratio of average regulatory loans in different businesses in FY 2021-22.

Financing **Financing Financing charges Financing charges** Particulars (Rs. **Total** charges for charges for for AEML-D for AEML-D Cr) **AEML-G AEML-T** (Wires) (Supply) Avg. Loans in FY 162.00 656.28 2252.07 6.55 2021-22 **GMTN** Fees towards new 12.47 0.66 2.66 9.12 0.03 capex (\$ 125 million) ECB commitment 3.91 2.86 0.01 0.21 0.83 fees FERV (Finance 0.00 0.00 0.00 0.00 0.00 charges)

Table 3-156: FY 2021-22 Financing charges allocation

Further, AEML has incurred Escrow management fees, agency fees, etc., in FY 2021-22 amounting to Rs. 5,92,264/-. These charges have been claimed in proportion to average regulatory loan for FY 2021-22.

Table 3-157: FY 2021-22 Other Fees allocation

Particulars (Rs. Cr)	Total	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)
Other finance charges claimed	0.06	0.00	0.01	0.04	0.00

Also, AEML has incurred financing charges for arranging working capital from banks / financial institutions in FY 2021-22. AEML has also incurred LC and BG charges in FY 2021-22 for payment to vendors through LC/ BG for materials related to capex / opex. These charges have been claimed in the ratio of normative working capital requirement for FY 2021-22 (except for LC/BG charges which have been claimed at actuals for each business segment).

Table 3-158: FY 2021-22 Financing charges for working capital allocation

Particulars (Rs. Cr)	Total	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)
Working capital requirement in FY 2021-22		192.26	69.32	317.86	0

Particulars (Rs. Cr)	Total	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)
Financing charges for working capital in FY 2021-22	1.63	0.08	0.03	1.52	0

Hence, the total financing charges claimed in FY 2021-22 are as under:

Table 3-159: FY 2021-22 Total Financing Charges

Particulars (Rs. Cr)	AEML-G	AEML-T	AEML-D (Wires)	AEML-D (Supply)	Total
Total financing charges	0.95	3.53	13.54	0.03	18.06

FERV

As stated in the section on truing up of FY 2019-20 and FY 2020-21, the principal repayment for \$ 300 million Bond and \$ 282 million Sub-debt is hedged beyond Rs./\$ conversion rate of Rs. 91.75/\$. The FERV (loss or gain) that will accrue at the time of repayment of loans will be claimed in future by AEML. Further, the FERV (loss) accounted in books of the accounts of FY 2020-21 towards timing difference between the rate/\$ considered for loan conversion and the rate/\$ at the time of finalizing hedging contracts for the funds raised through GMTN is Rs. 0.46 Crore. The same has been claimed in the ratio of average regulatory loans for FY 2021-22. The total FERV claimed is summarized as under.

Table 3-160: FY 2021-22 FERV loss allocation

Particulars/ (Rs. Crore)	AEML-G	AEML-T	AEML (D – W)	AEML (D – S)	Total
FERV (loans)	0.02	0.10	0.33	0.00	0.46

Commission's Analysis and Ruling

The Commission asked AEML-D to submit the documentary evidence for the opening balance of loans and the actual interest rates for all outstanding loans on 1 April 2019, 1 April 2020 and 1 April 2021. AEML-D submitted bank certificate of Term Loan of Central Bank of India (CBI) and certificate of the outstanding balance of NCDs as on 1 April 2019, 1 April 2020 and 1 April 2021.

The Commission has considered the rate of interest on long-term loans for FY 2019-20 as 9.01% and for FY 2020-21 as 8.19%. AEML-D has allocated these loans to the Wires Business and the Supply Business. The Commission has considered the same rate of interest for long-term loan for both Wires Business and Supply Business.

The Commission has considered the Closing Balance of Normative Loan for FY 2018-19 as approved in the MYT Order as the Opening Balance of Normative Loan for FY 2019-20. For the assets capitalised in FY 2019-20, the Commission has considered 70% of the additional asset value less Consumer Contribution as normative debt, in accordance with the MYT Regulations, 2015. The repayment of the loan has been considered equal to the Depreciation approved for the year. Accordingly, the Commission has approved the interest on Loan for FY 2019-20, as shown in the Table below:

Table 3-161: Interest Expenses for FY 2019-20 as approved by Commission (Rs. crore)

	MYT	True-up	Approved after truing up	
Particulars	Order	Petition		
Wires Business				
Opening Balance	1,523.10	1,523.10	1,523.10	
Less: Reduction of normative loan due		0.76	0.76	
to retirement of assets				
Addition of new loans	447.82	463.56	458.32	
Repayment	256.27	254.42	245.76	
Closing Balance	1,714.65	1,731.48	1,734.90	
Interest rate	9.05%	9.01%	9.01%	
Interest	146.51	146.69	146.84	
Supply Business				
Opening Balance	70.71	70.71	70.71	
Less: Reduction of normative loan due		4.37	4.37	
to retirement of assets				
Addition of new loans	15.40	21.71	21.71	
Repayment	26.00	26.22	26.22	
Closing Balance	60.11	61.82	61.82	
Interest rate	9.05%	9.01%	9.01%	
Interest	5.92	5.97	5.97	

Similarly, the Commission has considered the Opening Balance of the Normative Loan for FY 2020-21 as equal to the revised Closing Balance of Normative Loan for FY 2019-20, as approved in this Order. For the assets capitalised in FY 2020-21, the Commission has considered 70% of the additional asset value less Consumer Contribution as normative debt,

in accordance with the MYT Regulations, 2019. The repayment of the loan has been considered equal to the Depreciation approved for the year.

Accordingly, the Commission has approved the interest on Loan for FY 2020-21, as shown in the Table below:

Table 3-162: Interest Expenses for FY 2020-21 as approved by Commission (Rs. crore)

crore)								
Particulars	MYT	True-up	Approved in this					
r ar ucular s	Order	Petition	Order					
Wires Business								
Opening Balance	1,714.65	1,731.48	1,734.90					
Less: Reduction of normative loan due to		1.27	1.27					
retirement of assets								
Addition of new loans	440.88	660.13	660.12					
Repayment	282.33	306.80	297.60					
Closing Balance	1,873.20	2,083.53	2,096.15					
Interest rate	9.05%	8.19%	8.19%					
Interest	162.35	156.22	156.88					
Supply Business								
Opening Balance	60.11	61.82	61.82					
Less: Reduction of normative loan due to		2.92	2.92					
retirement of assets								
Addition of new loans	91.34	30.59	30.59					
Repayment	29.71	85.48	85.48					
Closing Balance	121.74	4.01	4.01					
Interest rate	9.05%	8.19%	8.19%					
Interest	8.23	2.70	2.70					

For FY 2021-22, the Commission has considered the Opening Balance of the Normative Loan for FY 2021-22 as equal to the revised Closing Balance of Normative Loan for FY 2020-21, as approved in this Order. For the assets capitalised in FY 2021-22, the Commission has considered 70% of the additional asset value less Consumer Contribution as normative debt, in accordance with the MYT Regulations, 2019. The repayment of the loan has been considered equal to the Depreciation approved for the year.

Table 3-163: Interest Expenses for FY 2021-22 as approved by Commission (Rs. crore)

Particulars	MTR Order	True-up Petition	Approved in this Order
Wires Business			
Opening Balance	1,873.20	2,083.53	2,096.15

Particulars	MTR	True-up	Approved in this
i ai uculai s	Order	Petition	Order
Less: Reduction of normative loan due to		1.58	1.58
retirement of assets			
Addition of new loans	271.91	686.30	686.22
Repayment	303.04	347.67	339.60
Closing Balance	1,842.07	2,420.58	2,441.19
Interest rate	9.05%	8.35%	8.35%
Interest	168.12	188.05	189.43
Supply Business			
Opening Balance	121.74	4.01	4.01
Less: Reduction of normative loan due to		0.10	0.10
retirement of assets			
Addition of new loans	153.00	28.65	1.95
Repayment	38.53	23.48	22.59
Closing Balance	236.21	9.08	0.00
Interest rate	9.05%	8.35%	8.35%
Interest	16.20	0.55	0.17

Refinancing Cost and Savings in Interest Expenses

FY 2019-20

The Commission has noted the submissions of AEML-D. Regulation 29.10 of the MYT Regulations, 2015 provides the mechanism for computation of gains associated with savings in interest cost in case of refinancing of loans and further sharing of the same with the beneficiaries. The relevant extract is reproduced below:

"29.10 The Generating Company or the Licensee or MSLDC, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event, the costs associated with such Re-financing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and them in the ratio of 2:1, subject to prudence check by the Commission:

Provided that the Generating Company or the Licensee or the MSLDC, as the case may be, shall submit documentary evidence of the costs associated with such refinancing:

Provided further that the net savings in interest shall be calculated as an annuity for the term of the loan, and the annual net savings shall be shared between the entity and Beneficiaries in the specified ratio."

As per the provisions of the Regulations, the cost pertaining to the refinancing of loans will be allowed to be recovered by the Licensee if the refinancing transaction results in net savings. The Commission has examined this transaction considering this aspect. It is observed that AEML has refinanced the entire outstanding balance of RTL amounting to Rs. 8,053.38 Crore in February 2020 and new capex loans (availed in FY 2018-19 and FY 2019-20) worth Rs. 804.46 Crore and has incurred the refinance cost of Rs 150.06 crore in FY 2019-20. Part of the refinancing cost of Rs. 5.72 Crore has been incurred in FY 2020-21.

The Commission has analysed the refinance arrangements by AEML during FY 2019-20 based on the supporting documents provided by AEML-D. The Commission has reviewed all the invoices for refinancing fees and other supporting documents in connection with the refinancing activity submitted by AEML in support of its claim.

The Commission has verified the supporting calculations and established that the weighted average rate of interest of the RTL and the new capex loans at the time of refinancing in February 2020 was 9.19%, whereas the weighted average rate of interest for the Bonds and the Shareholder Affiliated Debt was at 8.25%.

The Commission has observed that the refinancing charges allocated to the regulated business have been further allocated to the functions based on the function wise regulatory loans as on 12 February, 2020.

Accordingly, the summary of refinancing charges as approved by the Commission is given in the table below:

Table 3-164: Summary of Refinancing Charges in FY 2019-20, as approved by the Commission (Rs. Crore)

Refinancing Charges	Total Cost for AEML	Allocated cost for Regulated Business as per regulatory Loan	AEML -G	AEML -T	AEML -D-W	AEML -D-S
Sub Debt - Upfront Fees	38.87	8.98	0.76	1.83	6.12	0.27
Prepayment Charges	28.90	6.68	0.57	1.36	4.55	0.20
Bond - Upfront Fees	76.42	17.66	1.50	3.59	12.04	0.53
Sub-total	144.19	33.32	2.83	6.77	22.72	1.01

For FY 2019-20, the above table reflects the overall Refinancing Charges of Rs. 144.19 Crore allowed by the Commission as against Rs. 144.34 Crore as claimed by AEML.

The Commission has deducted an amount of Rs. 15,13,300 appearing under "Sub Debt – Upfront Fees" as Professional & Legal fees towards invoice raised by "The Bank of New York Mellon". This amount has been refunded in the next financial year, i.e., FY 2020-21 and hence, the amount has been deducted from the claim by AEML.

The overall refinancing charges approved for AEML has been further allocated to the Regulatory business in proportion to the average regulatory loans as on the date of refinance. This amount is then further allocated amongst the Generation, Transmission and Distribution business in the ratio of the Regulatory Loan as on the date of refinance of each regulated business. The Commission accordingly approves the Refinancing Charges for AEML-D of Rs. 22.72 Crore and Rs. 1.01 Crore for the Wires Business and Supply Business, respectively, for FY 2019-20.

The Commission has thereafter recalculated the present value of interest cost saving pursuant to refinancing of the RTL and the new capex loans along with the share of net savings to AEML-D as per the accepted methodology.

As can be seen from the Table above, the share of AEML-D in the financing cost is Rs. 22.72 Crore and Rs. 1.01 Crore for the Wires Business and Supply Business, respectively, which does not include the share of AEML-D in the refinancing cost of Rs. 5.72 Crore which was incurred in FY 2020-21. While this cost is claimed by AEML-D for recovery in FY 2020-21, for the purpose of calculation of the net savings from the refinancing transaction, it is necessary to consider the cost of refinancing for the present transaction as part of the overall refinancing cost irrespective of the period when it was actually incurred. Accordingly, the revised calculations for deriving the Refinancing Cost to be used for the net saving computation is given in the table below:

Table 3-165: Revised Calculations for Refinancing Cost for FY 2019-20 to be used for Net Savings Computation, as approved by the Commission (Rs. Crore)

Refinancing Charges	Total Cost	Allocated as per regulatory Loan	AEML -G	AEML -T	AEML -D-W	AEML -D-S
Sub Debt - Upfront Fees	38.87	8.98	0.76	1.83	6.12	0.27
Prepayment Charges	28.90	6.68	0.57	1.36	4.55	0.20
Bond - Upfront Fees	76.42	17.66	1.50	3.59	12.04	0.53
Bond fees paid in FY 21	5.72	1.32	0.11	0.27	0.90	0.04
Total	149.91	34.64	2.94	7.04	23.62	1.05

The Commission has carried out a Cost-Benefit Analysis of the refinancing transaction and resultant savings in interest cost. The Commission has considered opening normative loan for FY 2019-20 as opening loan and the repayment is considered same as the approved

depreciation for FY 2019-20 to compute the closing balance of the loans. The computation has been carried out till the entire existing normative loan is repaid. No additions to the normative loans have been assumed for the purpose of this benefit computation as any new capitalisation proposed by the Licensee during this period will be funded through separate loans to be approved by the Commission. The year wise savings in interest cost has been worked out as a difference between the interest payable considering the existing interest rate of 9.19% and that payable considering the revised interest rate of 8.25%. The saving for FY 2019-20 is considered pro-rata to number of days for which revised rate on loan was applicable and for remaining years, it is considered for full financial year.

To compute the net savings from the transaction, net present value of the year wise savings is worked out using a discounting rate of 8.25%. This net present value is then compared with the cost of refinancing incurred by AEML-D and eligible for recovery through the ARR and the difference between the two is deemed to be the net savings from the transactions and which is to be shared between the consumers and AEML-D in the ratio specified in the MYT Regulations, 2015. The cost of refinancing eligible for recovery from the ARR is allowed for recovery over and above the share of benefit of AEML-D to be recovered through the ARR.

Accordingly, the net savings computation undertaken by the Commission for AEML-D is shown in the Tables below:

Table 3-166: Refinancing Cost and Sharing of Net Saving for the Wires Business for FY 2019-20, as approved by the Commission (Rs. Crore)

	FY	FY	FY	FY	FY	FY	FY
Particulars	2019-	2020-	2021-	2022-	2023-	2024-	2025-
	20	21	22	23	24	25	26
Opening Balance of Loan	1523.10	1268.68	1014.26	759.84	505.42	251.00	0.00
Repayment	254.42	254.42	254.42	254.42	254.42	251.00	0.00
Closing Balance of Loan	1268.68	1014.26	759.84	505.42	251.00	0.00	0.00
Average loan balance	1395.89	1141.47	887.05	632.63	378.21	125.50	0.00
Interest - Pre refinancing							
(@ 9.19%)	17.18	104.95	81.56	58.17	34.77	11.54	0.00
Interest - Post refinancing							
(@ 8.25%)	15.42	94.20	73.20	52.21	31.21	10.36	0.00
Saving in interest	1.76	10.75	8.36	5.96	3.56	1.18	0.00
NPV of saving @ 8.25%	26.91						
Refinancing Cost	23.62						
Net saving	3.30						
1/3 rd for AEML-D Wires	1.10						

Table 3-167: Refinancing Cost and Sharing of Net Saving for the Supply Business for FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Balance of Loan	70.71	44.49	18.26
Repayment	26.22	26.22	18.26
Closing Balance of Loan	44.49	18.26	0.00
Average loan balance	57.60	31.37	9.13
Interest - Pre refinancing (@ 9.19%)	0.71	2.88	0.84
Interest - Post refinancing (@ 8.25%)	0.64	2.59	0.75
Saving in interest	0.07	0.30	0.09
NPV of saving @ 8.25%	0.42		
Refinancing Cost	1.05		
Net saving	-0.63		
1/3 rd for AEML-D Supply	-0.21		

Since the net savings after considering the refinancing cost works out to be positive for the Wires Business, the Commission has approved recovery of the refinancing charges for FY 2019-20 as given in the table above. For the Supply Business, though the net savings works out to be negative, the Commission notes that there is an overall benefit of the refinancing transaction to the Distribution Business as a whole, and hence, the same has been approved for the Supply Business also. However, the net negative saving has been adjusted in the ARR, thereby ensuring that the consumers are not put to any disadvantage.

As discussed earlier, the Regulation 29.10 of MYT Regulations, 2015 specifies that any saving in interest cost due to refinancing of loans is to be shared in the ratio of 2:1 between the beneficiaries and AEML-D.

The Commission approves refinancing cost of Rs. 23.62 Crore (Rs. 22.72 Crore for FY 2019-20 and Rs. 0.90 Crore for FY 2020-21) and sharing of benefits of Rs. 1.10 Crore for FY 2019-20 for the Wires Business. Similarly, the Commission approves refinancing cost of Rs. 1.05 Crore (Rs. 1.01 Crore for FY 2019-20 and Rs. 0.04 Crore for FY 2020-21) and benefits of Rs. (0.63) Crore for FY 2019-20 for the Supply Business.

For FY 2020-21

Based on the detailed calculations and supporting documents provided by AEML-D, the Commission understands that the Refinancing Charges for FY 2020-21 are pertaining to Bond fees paid in FY 2020-21. The overall Bond Fees paid in FY 2020-21 was Rs. 5.72 Crore for the entire refinanced loan portfolio and AEML has apportioned an amount of Rs.

1.31 Crore toward the Regulatory Loan. This amount is further shared between the 3 regulated businesses of AEML in the ratio of the Regulatory loans.

The Commission approves Refinancing Charges of Rs. 0.90 Crore and Rs. 0.04 Crore for the Wires Business and Supply Business, respectively, for FY 2020-21.

For FY 2021-22

The Commission has reviewed the detailed calculations and supporting documents including invoices, submitted by AEML-D in regard to refinancing of the ECB by GMTN.

The entire Refinancing Charges mentioned above are verified and approved by the Commission. The entire amount pertaining to GMTN is approved since it has been used to refinance the ECB, which was availed for funding new capex only as submitted by AEML. However, it is observed that AEML-D has considered one more expense item "ECB Commitment Fees" under "Financing Charges for FY 2021-22" and it pertains to charges paid by AEML-D for early closure of the ECB facility. The Commission is of the view that this expense needs to be re-categorised under Refinancing Charges since this expense is incidental to the refinancing of the ECB with lower rate debt alternative. In absence of the Refinancing activity, such charge would not have been incurred by AEML. The refinancing charges have been allocated between the functions in proportion to the function-wise regulatory loans as on the date of refinancing. Accordingly, the revised Refinancing Charges approved by the Commission is given in the table below:

Table 3-168: Revised Refinancing Charges for FY 2021-22, as approved by the Commission (Rs. Crore)

Refinancing Charges	Total Cost	Allocated as per regulatory Loan	AEML- G	AEML- T	AEML- D-W	AEML- D-S
ECB Commitment Fees	3.91	3.91	0.21	0.90	2.79	0.01
GMTN Fees for Refinancing ECB	17.45	17.45	0.95	4.00	12.47	0.04
Total Refinancing Charges	21.36	21.36	1.16	4.90	15.26	0.04

The Commission has further re-calculated the present value of interest cost saving pursuant to refinancing of the ECB along with the share of net savings to AEML-D as per the methodology laid out in MYT Order dated 30 March, 2020 and as elaborated in the relevant sections of this Order. The Commission confirms that since the net savings after revised refinancing costs works out to be positive for the Wires Business, the Commission approves the refinancing charges for FY 2021-22 as per the Table below:

Table 3-169: Revised Net Saving in Interest Cost in FY 2021-22 for Wires Business,

as approved by the Commission (Rs. Crore)

	FY	FY	FY	FY	FY	FY	FY	FY
Particulars	2021-	2022-	2023-	2024-	2025-	2026-	2027-	2028-
	22	23	24	25	26	27	28	29
Opening Balance of								
Loan	2083.54	1735.87	1388.19	1040.52	692.84	345.17	0.00	0.00
Repayment	347.67	347.67	347.67	347.67	347.67	345.17	0.00	0.00
Closing Balance of								
Loan	1735.87	1388.19	1040.52	692.84	345.17	0.00	0.00	0.00
Average loan balance	1909.70	1562.03	1214.35	866.68	519.01	172.58	0.00	0.00
Interest - Pre								
refinancing (@ 9.11%)	118.26	142.36	110.67	78.99	47.30	15.73	0.00	0.00
Interest - Post								
refinancing (@ 8.65%)	112.25	135.13	105.05	74.97	44.90	14.93	0.00	0.00
Saving in interest	6.01	7.23	5.62	4.01	2.40	0.80	0.00	0.00
NPV of saving @								
8.65%	22.80							
Refinancing Cost	15.26							
Net saving	7.55							
1/3rd for AEML-D	2.52							

The Commission confirms that though the net savings after revised refinancing costs works out to be nominally negative for the Supply Business, the Commission approves the refinancing charges for FY 2021-22, considering that the overall refinancing transaction has been beneficial, as per the Table below:

Table 3-170: Revised Net Saving in Interest Cost in FY 2021-22 for Supply Business, as approved by the Commission (Rs. Crore)

	FY	FY	FY
Particulars	2021-	2022-	2023-
	22	23	24
Opening Balance of Loan	4.01	0.00	0.00
Repayment	4.01	0.00	0.00
Closing Balance of Loan	0.00	0.00	0.00
Average loan balance	2.01	0.00	0.00
Interest - Pre refinancing (@ 9.11%)	0.12	0.00	0.00
Interest - Post refinancing (@ 8.65%)	0.12	0.00	0.00
Saving in interest	0.01	0.00	0.00
NPV of saving @ 8.65%	0.01		
Refinancing Cost	0.04		
Net saving	-0.04		
1/3rd for AEML-D	-0.01		

Based on the above revised calculations and explanations, the Commission approves the refinancing charges of Rs. 12.47 Crore and sharing of benefits of Rs. 2.52 Crore for the Wires Business for FY 2021-22. Similarly, the Commission approves the refinancing charges of Rs. 0.04 Crore and sharing of benefits of Rs. (0.04) Crore for the Supply Business for FY 2021-22.

Financing Charges and Other Related Charges

For FY 2019-20

The Commission has reviewed and analysed the various expenses claimed under Financing Charges for FY 2019-20 by AEML-D based on the supporting documents, invoices and summary of each expense head claimed under Financing Charges as provided by AEML-D. The Commission has found the below mentioned inconsistencies and issues with the allocation of charges to the regulated business of AEML and accordingly has disallowed certain portion of the financing expenses as discussed in the subsequent paragraphs.

Financing Charges for New Capex Loans: Rs. 6.47 Crore

AEML-D has submitted that this amount is towards the down selling of the Yes Bank loan (this was a new capex loan of FY 2018-19 availed from Yes Bank Ltd.) to SBI as per the requirement of Yes Bank Ltd. The Commission notes that that the financing charges on this Yes Bank loan was already allowed to be recovered through the ARR in FY 2018-19 and accordingly, allowing recovery of these financing charges on the same loan through the ARR in FY 2019-20 would be inappropriate and unfair to the consumers. Hence, the entire amount of Rs. 6.47 Crore pertaining to financing charges on new capex loans in FY 2019-20 is disallowed.

Financing Charges for ECB – Upfront Fees: Rs. 30.04 Crore

The Commission has observed that this upfront fee is towards availing the ECB facility limit of USD 400 million exclusively for regulated capex with a minimum average maturity of 36 months. The Commission also notes that in FY 2019-20, USD 70 Million of ECB had been drawn. The ECB drawn amount is equivalent to 17.5% of the total limit available for AEML. AEML has incurred commitment fees, arrangement fees, legal fees etc. for raising funds through ECB for total limit of USD 400 million and claiming the same in toto against the drawl of only 17.5% may not be a prudent practice. Also, additional finance charges have been incurred in FY 2020-21 of Rs. 18.08 Crore by further raising USD 105 million. Hence, the Commission is allowing the Finance charges only till the limit of actual amount drawn, i.e., 17.5% of the Rs. 30.04 Crore as claimed by AEML-D, which amounts to Rs. 5.26 Crore, and the same is considered for apportionment towards the Generation, the

Transmission, and the Distribution businesses of AEML for FY 2019-20. Accordingly, the Commission has allocated the upfront fee paid towards the ECB borrowings for the regulated business and the effective amount is Rs. 3.55 Crore and Rs. 0.14 Crore for the Wires Business and Supply Business, respectively.

Forex Loss / (Gains): Rs. 0.20 Crore

AEML-D has submitted that this expense was towards payment of finance charges for ECB, Bond and Sub-Debt. The Commission notes that the refinancing charges towards ECB, Bond and Sub-Debt were allowed by the Commission only to the extent of the proportion of the regulatory loans in the overall actual loan portfolio of AEML. Hence, similar treatment needs to be considered for Forex Loss / (Gains). Therefore, the Commission has allowed Rs. 0.04 Crore, which is allocated on the basis of the ratio of regulatory loan to the overall refinanced loan. The Commission has therefore disallowed Rs. 0.16 Crore and allowed only Rs. 0.04 Crore, which is further allocated to the functions of AEML in the ratio of the regulatory loans. The share of the Wires Business and Supply Business is Rs. 0.03 Crore and Rs. 0.00 Crore, respectively.

Bank Charges: Rs. 13.92 Crore

AEML-D has submitted that out of the Rs. 13.92 Crore, an amount of Rs. 11.97 Crore was expense towards payment of bank charges levied by the banks that replaced the Yes Bank loan as per the requirement of Yes Bank. As discussed earlier, the down selling charges charged by Yes Bank for loan replacement has already been disallowed by the Commission. The Commission has therefore, also disallowed Rs. 11.97 Crore, which pertain to financing charges paid to banks who have replaced the Yes Bank Loans. Only Rs. 1.94 Crore, which pertains to other financing charges is approved and is further apportioned in the ratio of regulatory loans to the overall loan portfolio. This amount works out to Rs. 0.53 Crore which is further allocated to each of the regulated business of AEML in the ratio of their respective regulatory loans, and the share pertaining to Wires Business and Supply Business is Rs. 0.36 Crore and Rs. 0.01 Crore, respectively.

Financing Charges for Working Capital: Rs. 2.96 Crore

The Commission has reviewed the supporting documents provided by AEML-D in this context and found an issue in recording the details of one of the invoices in its summary calculations. It is found that 2 invoices from SBI towards execution of loan documents had an amount of Rs. 50.15 Lakh (inclusive of GST) each. However, AEML-D in its submission to the Commission, had inadvertently mentioned the amount of Rs. 59.17 Lakh (inclusive of GST) for each of the 2 invoices in the summary calculation excel file. Therefore, there was a discrepancy in the summary calculation excel file to the tune of total Rs. 18.05 Lakh. The Commission has therefore disallowed Rs. 18.05 Lakh and allowed only Rs. 2.78 Crore

(2.96 - 0.18), which is fully apportioned to regulatory loans. This amount of Rs. 2.78 Crore is further allocated to each of the regulated business of AEML in the ratio of their respective regulatory loans, and the share of Wires Business and Supply Business is Rs. 1.29 Crore and Rs. 1.48 Crore, respectively.

Based on the above observations, allowances and disallowances, the Commission approves the Financing Charges for FY 2019-20 as per below table:

Table 3-171: Summary of Financing Charges for Long Term Loans for FY 2019-20,

as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
New Capex Loans	6.47	0.00	0.00	0.00	0.00	0.00
Upfront Fees for ECB	5.26	5.26	0.39	1.18	3.55	0.14
Forex Loss / (Gains)	0.20	0.04	0.00	0.01	0.03	0.00
Bank Charges	1.94	0.53	0.04	0.12	0.36	0.01
Total Financing Charges for Long Term Loans	13.87	5.83	0.43	1.31	3.93	0.16

Table 3-172: Summary of Financing Charges for Long Term Loans for FY 2019-20, as Claimed by Wires Business and as Approved by the Commission (Rs. Crore)

	Claimed by AEML-D Approved in this Order						
	Cla	illied by AEMIL.	שי	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	
New Capex Loans	6.47	6.47	4.37	6.47	0.00	0.00	
Upfront Fees for ECB	30.04	30.04	20.27	5.26	5.26	3.55	
Forex Loss / (Gains)	0.20	0.20	0.13	0.20	0.04	0.03	
Bank Charges	13.92	3.79	2.56	1.94	0.53	0.36	
Total Financing Charges for Long Term Loans	50.63	40.51	27.33	13.87	5.83	3.93	

Table 3-173: Summary of Financing Charges for Long Term Loans for FY 2019-20, as Claimed by Supply Business and as Approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
New Capex Loans	6.47	6.47	0.18	6.47	0.00	0.00	
Upfront Fees for ECB	30.04	30.04	0.83	5.26	5.26	0.14	
Forex Loss / (Gains)	0.20	0.20	0.01	0.20	0.04	0.00	
Bank Charges	13.92	3.79	0.10	1.94	0.53	0.01	
Total Financing Charges for Long Term Loans	50.63	40.51	1.12	13.87	5.83	0.16	

Table 3-174: Summary of Financing Charges for Working Capital Loans for FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
Working Capital	2.78	2.78	0.76	0.25	1.29	0.48
LC & BG COMM	3.60	3.60	0.33	0.00	3.27	0.00
Bond - Upfront Fees	4.07	4.07	1.12	0.37	1.88	0.71
Total Financing Charges for Working Capital Loans	10.46	10.46	2.21	0.62	6.44	1.19

Table 3-175: Summary of Financing Charges for Working Capital Loans for FY 2019-20, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

Crore)								
	Cla	imed by AEML-	·D	Approved in this Order				
Particulars	Total Financing charges	proportionate to Regulatory Loans Wires		Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business		
Working Capital	2.96	2.96	1.37	2.78	2.78	1.29		
LC & BG COMM	3.60	3.60	3.27	3.60	3.60	3.27		
Bond - Upfront Fees	4.07	4.07	1.88	4.07	4.07	1.88		
Total Financing Charges for Working Capital Loans	10.64	10.64	6.52	10.46	10.46	6.44		

Table 3-176: Summary of Financing Charges for Working Capital Loans for FY 2019-20, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
Working Capital	2.96	2.96	0.51	2.78	2.78	0.48	
LC & BG COMM	3.60	3.60	0.00	3.60	3.60	0.00	
Bond - Upfront Fees	4.07	4.07	0.71	4.07	4.07	0.71	
Total Financing Charges for Working Capital Loans	10.64	10.64	1.22	10.46	10.46	1.19	

Table 3-177: Total Financing Charges for FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
On Long Term Loans	13.87	5.83	0.43	1.31	3.93	0.16
On Working Capital Loans	10.46	10.46	2.21	0.62	6.44	1.19
Total Financing Charges	24.32	16.28	2.64	1.93	10.37	1.35

Table 3-178: Summary of Total Financing Charges for FY 2019-20, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	
On Long Term Loans	50.63	40.51	27.33	13.87	5.83	3.93	
On Working Capital Loans	10.64	10.64	6.52	10.46	10.46	6.44	
Total Financing Charges	61.27	51.14	33.85	24.32	16.28	10.37	

Table 3-179: Summary of Total Financing Charges for FY 2019-20, as Claimed by

Supply Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
On Long Term Loans	50.63	40.51	1.12	13.87	5.83	0.16	
On Working Capital Loans	10.64	10.64	1.22	10.46	10.46	1.19	
Total Financing Charges	61.27	51.14	2.34	24.32	16.28	1.35	

The Commission therefore approves Rs. 10.37 Crore and Rs. 1.35 Crore of Financing Charges for the Wires Business and Supply Business, respectively, FY 2019-20.

For FY 2020-21

The Commission has reviewed and analysed the various expenses claimed under Financing Charges for FY 2020-21 based on the supporting documents, invoices and summary of each expense head claimed under Financing Charges as provided by AEML-D.

The Commission has found the below mentioned inconsistencies and issues with the allocation of charges to the regulated business of AEML and has accordingly disallowed certain portion of the below mentioned expenses.

FERV Finance Cost: Rs. 0.19 Crore

This amount is towards the foreign exchange losses pertaining to financing charges for FY 2020-21. This expense was in relation to entire loan portfolio of foreign currency loans and it needs to be in allowed in the proportion of the regulatory loans to the overall actual loan portfolio of AEML. The Commission has allowed Rs. 0.05 Crore, which is allocated based on the ratio of regulatory loan to the overall loan portfolio. The Commission has therefore disallowed Rs. 0.14 Crore and allowed only Rs. 0.05 Crore, which is further allocated to the regulated business of AEML in the ratio of the function wise regulatory loans, and the share pertaining to Wires Business and Supply Business is Rs. 0.04 Crore and Rs. 0.00 Crore, respectively.

Other Fees: Rs. (0.36) Crore

The Commission notes that AEML has received a refund of Rs. 15.13 Lakh from one of the financial advisory service providers who had charged AEML in the previous year (FY 2019-20). This amount has already been adjusted in the section on refinancing charges in FY 2019-20. Therefore, the Commission has deducted Rs. 15.13 Lakh from Other Fees to avoid double counting. The Commission has therefore allowed only Rs. (0.21) Crore, which is further allocated to the regulated business of AEML in the ratio of the regulatory loans, and the share pertaining to Wires Business and Supply Business is Rs. (0.04) Crore and Rs. (0.00) Crore, respectively.

Based on the above observations, allowances and disallowances, the Commission approves the Financing Charges for FY 2020-21 as per below table:

Table 3-180: Summary of Financing Charges for Long Term Loans for FY 2020-21,

as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
ECB Fees	18.08	18.08	1.12	4.26	12.49	0.22
FERV (Finance cost)	0.19	0.05	0.00	0.01	0.04	0.00
Other fees	(0.21)	(0.6)	(0.00)	(0.01)	(0.04)	(0.00)
Total Financing Charges for Long Term Loans	18.06	18.07	1.11	4.26	12.48	0.22

Table 3-181: Summary of Financing Charges for Long Term Loans for FY 2020-21, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

as Claimed by Wifes Business and as approved by the Commission (Rs. Clore)								
	Cla	imed by AEML-	D	Approved in this Order				
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business		
ECB Fees	18.08	18.08	12.49	18.08	18.08	12.49		
FERV (Finance								
cost)	0.19	0.19	0.13	0.19	0.05	0.04		
Other fees	(0.36)	(0.10)	(0.07)	(0.21)	(0.6)	(0.04)		
Total Financing								
Charges for Long	17.91	18.17	12.55	18.06	18.07	12.48		
Term Loans								

Table 3-182: Summary of Financing Charges for Long Term Loans for FY 2020-21, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

		imed by AEML-		Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
ECB Fees	18.08	18.08	0.22	18.08	18.08	0.22	

Term Loans						
Charges for Long	17.91	18.17	0.22	18.06	18.07	0.22
Total Financing						
Other fees	(0.36)	(0.10)	(0.00)	(0.21)	(0.6)	(0.00)
cost)	0.19	0.19	0.00	0.19	0.05	0.00
FERV (Finance						

Table 3-183: Summary of Financing Charges for Working Capital Loans for FY 2020-21, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
Working Capital	0.28	0.28	0.09	0.03	0.15	0.00
LC & BG COMM	2.70	2.70	0.91	0.00	0.63	1.16
Total Financing Charges for Working Capital Loans	2.98	2.98	1.00	0.03	0.78	1.16

Table 3-184: Summary of Financing Charges for Working Capital Loans for FY 2020-21, as Claimed by Wires Business and as Approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	
Working Capital	0.28	0.28	0.15	0.28	0.28	0.15	
LC & BG COMM	2.70	2.70	0.63	2.70	2.70	0.63	
Total Financing Charges for Working Capital Loans	2.98	2.98	0.78	2.98	2.98	0.78	

Table 3-185: Summary of Financing Charges for Working Capital Loans for FY 2020-21, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

	Claimed by AEML-D			Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
Working Capital	0.28	0.28	0.00	0.28	0.28	0.00	
LC & BG COMM	2.70	2.70	1.16	2.70	2.70	1.16	

Total Financing						
Charges for	2.98	2.98	1 16	2.98	2.98	1 16
Working Capital	2.90	2.90	1.16	2.98	2.90	1.16
Loans						

Table 3-186: Total Financing Charges for FY 2020-21, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
On Long Term Loans	18.06	18.07	1.11	4.26	12.48	0.22
On Working Capital Loans	2.98	2.98	1.00	0.03	0.78	1.16
Total Financing Charges	21.04	21.05	2.11	4.29	13.27	1.38

Table 3-187: Summary of Total Financing Charges for FY 2020-21, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	
On Long Term Loans	17.91	18.17	12.55	18.06	18.07	12.48	
On Working Capital Loans	2.98	2.98	0.78	2.98	2.98	0.78	
Total Financing Charges	20.89	21.15	13.34	21.04	21.05	13.27	

Table 3-188: Summary of Total Financing Charges for FY 2020-21, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
On Long Term Loans	17.91	18.17	0.22	18.06	18.07	0.22	
On Working Capital Loans	2.98	2.98	1.16	2.98	2.98	1.16	
Total Financing Charges	20.89	21.15	1.38	21.04	21.05	1.38	

The Commission therefore approves Rs. 13.27 Crore and Rs. 1.38 Crore of Financing Charges for the Wires Business and Supply Business, respectively, for FY 2020-21.

For FY 2021-22

Based on the submissions by AEML-D, the Commission has reviewed and analysed the various expenses claimed under Financing Charges for FY 2021-22. AEML-D has also provided the Commission with the supporting documents, invoices and summaries of each expense head claimed under Financing Charges, which the Commission has reviewed.

The Commission has found the below mentioned inconsistencies and issues with the allocation of charges to the regulated business of AEML and has accordingly disallowed certain portion of the below mentioned expenses:

ECB commitment fees: Rs. 3.91 Crore

This amount was incurred towards the ECB commitment fees in connection with refinancing availed under the GMTN facility. The Commission has already included this fee in the refinancing charges section for FY 2021-22 and therefore, deducted Rs. 3.91 Crore under financing charges.

FERV (Finance cost): Rs. 0.18 Lakh

The Commission notes that the FERV cost is in relation to the foreign exchange losses incurred towards payment of financing fees. The Commission has allocated this expense based on the ratio of regulatory loan to the overall loan portfolio. This expense is further allocated to each of the regulated business of AEML in the ratio of the regulatory loans, and the share pertaining to Wires Business and Supply Business is arrived at as Rs. 0.00 Crore each.

Based on the above observations, allowances and disallowances, the Commission approves the Financing Charges for FY 2021-22 as per below table:

Table 3-189: Summary of Financing Charges for Long Term Loans for FY 2021-22, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
GMTN fees	12.47	12.47	0.66	2.66	9.12	0.03
ECB commitment fees	3.91	-	-	-	-	-
FERV (Finance cost)	0.00	0.00	0.00	0.00	0.00	0.00
Other fees	0.06	0.06	0.00	0.01	0.04	0.00
Total Financing Charges for Long Term Loans	16.43	12.53	0.66	2.67	9.17	0.03

Table 3-190: Summary of Financing Charges for Long Term Loans for FY 2021-22, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	-D	App	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business		
GMTN fees	12.47	12.47	9.12	12.47	12.47	9.12		
ECB commitment fees	3.91	3.91	2.86	3.91	0.00	-		
FERV (Finance cost)	0.00	0.00	0.00	0.00	0.00	0.00		
Other fees	0.06	0.06	0.04	0.06	0.06	0.04		
Total Financing Charges for Long Term Loans	16.43	16.43	12.02	16.43	12.53	9.17		

Table 3-191: Summary of Financing Charges for Long Term Loans for FY 2021-22, as Claimed by Supply Business and as Approved by the Commission (Rs. Crore)

	110	siness and as A imed by AEML-		Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
GMTN fees	12.47	12.47	0.03	12.47	12.47	0.03	
ECB commitment fees	3.91	3.91	0.01	3.91	0.00	-	
FERV (Finance cost)	0.00	0.00	0.00	0.00	0.00	0.00	
Other fees	0.06	0.06	0.00	0.06	0.06	0.00	
Total Financing Charges for Long Term Loans	16.43	16.43	0.04	16.43	12.53	0.03	

Table 3-192: Summary of Financing Charges for Working Capital Loans for FY 2021-22, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
Working Capital	0.24	0.24	0.08	0.03	0.13	0.00
LC & BG COMM	1.39	1.39	0.00	0.00	1.39	0.00

Total Financing						
Charges for Working	1.63	1.63	0.08	0.03	1.52	0.00
Capital Loans						

Table 3-193: Summary of Financing Charges for Working Capital Loans for FY 2021-22, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	imed by AEML-	·D	Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	
Working Capital	0.24	0.24	0.13	0.24	0.24	0.13	
LC & BG COMM	1.39	1.39	1.39	1.39	1.39	1.39	
Total Financing Charges for Working Capital Loans	1.63	1.63	1.52	1.63	1.63	1.52	

Table 3-194: Summary of Financing Charges for Working Capital Loans for FY 2021-22, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

Clote)								
	Cla	Claimed by AEML-D			Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business		
Working Capital	0.24	0.24	0.00	0.24	0.24	0.00		
LC & BG COMM	1.39	1.39	0.00	1.39	1.39	0.00		
Total Financing Charges for Working Capital Loans	1.63	1.63	0.00	1.63	1.63	0.00		

Table 3-195: Total Financing Charges for FY 2021-22, as approved by the Commission (Rs. Crore)

Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	AEML- G	AEML- T	AEML- DW	AEML- DS
On Long Term Loans	16.43	12.53	0.66	2.67	9.17	0.03
On Working Capital Loans	1.63	1.63	0.08	0.03	1.52	0.00
Total Financing Charges	18.06	14.15	0.74	2.70	10.68	0.03

Table 3-196: Summary of Total Financing Charges for FY 2021-22, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	Claimed by AEML-T			Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business	Total Financing charges	Charges proportionate to Regulatory Loans	Wires Business		
On Long Term Loans	16.43	16.43	12.02	16.43	12.53	9.17		
On Working Capital Loans	1.63	1.63	1.52	1.63	1.63	1.52		
Total Financing Charges	18.06	18.06	13.54	18.06	14.15	10.68		

Table 3-197: Summary of Total Financing Charges for FY 2021-22, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

	Claimed by AEML-T			Approved in this Order			
Particulars	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	Total Financing charges	Charges proportionate to Regulatory Loans	Supply Business	
On Long Term Loans	16.43	16.43	0.04	16.43	12.53	0.03	
On Working Capital Loans	1.63	1.63	0.00	1.63	1.63	0.00	
Total Financing Charges	18.06	18.06	0.04	18.06	14.15	0.03	

The Commission therefore approves Rs. 10.68 Crore and Rs. 0.03 Crore of Financing Charges for the Wires Business and Supply Business, respectively, for FY 2021-22.

FERV:

The Commission has noted the information provided for FERV calculations and has approved the same for AEML-D.

With respect to FERV loss of Rs. 1.04 Crore for FY 2019-20 and Rs. 0.46 Crore for FY 2021-22, the same has been incurred for the total loan profile of AEML and it is not prudent to allocate the entire cost to the regulated business alone. Based on the approach as adopted by the Commission for the allocation of refinance charges, the FOREX loss as claimed by AEML will be first allocated proportionately with the total regulatory loan of Generation,

Transmission & Distribution businesses with total loan profile and the amount so segregated to total Regulatory loan will be further segregated to Generation, Transmission & Distribution businesses in proportionate to their respective regulatory loan.

Accordingly, the Commission approves the FERV as per below for FY 2019-20 and FY 2021-22:

Table 3-198: Foreign Exchange Rate Variation on Loans for FY 2019-20 and FY 2021-22, as approved by the Commission (Rs. Crore)

Particulars	FERV	Allocated to Regulatory account	G	Т	D - W	D-S
FY 2019-20	1.04	0.28	0.02	0.06	0.19	0.01
FY 2021-22	0.46	0.13	0.01	0.03	0.09	0.00

Table 3-199: Summary of Foreign Exchange Rate Variation on Loans for FY 2019-20 and FY 2021-22, as Claimed by Wires Business and as approved by the Commission (Rs. Crore)

	Cla	Claimed by AEML-D			Approved in this Order			
Particulars	FERV	Allocated to Regulatory account	Wires Business	FERV	Allocated to Regulatory account	Wires Business		
FY 2019-20	1.04	1.04	0.70	1.04	0.28	0.19		
FY 2021-22	0.46	0.46	0.33	0.46	0.13	0.09		

Table 3-200: Summary of Foreign Exchange Rate Variation on Loans for FY 2019-20 and FY 2021-22, as Claimed by Supply Business and as approved by the Commission (Rs. Crore)

	Cla	Claimed by AEML-D			Approved in this Order			
Particulars	FERV	Allocated to Regulatory account	Supply Business	FERV	Allocated to Regulatory account	Supply Business		
FY 2019-20	1.04	1.04	0.03	1.04	0.28	0.01		
FY 2021-22	0.46	0.46	0.00	0.46	0.13	0.00		

The Commission approves FERV of Rs. 0.19 Crore and Rs. 0.01 Crore for the Wires Business and Supply Business for FY 2019-20, respectively. The Commission approves FERV of Rs. 0.09 Crore and Rs. 0.00 Crore for the Wires Business and Supply Business for FY 2019-20, respectively.

3.11 RETURN ON EQUITY (ROE)

AEML-D's Submission

FY 2019-20

AEML-D submitted that it has computed RoE by applying the rate of return for Wires Business and Retail Supply Business as specified in the MYT Regulations, 2015, and considering the equity portion of new capitalisation in FY 2019-20 as 30% of the capitalisation in that year, after reducing the Consumer Contribution of Rs. 20.19 Cr. The details of the RoE computations for the Wires Business and Supply Business for FY 2019-20 are given in the Table below:

Table 3-201 : Return on Regulatory Equity for Wires Business for FY 2019-20 as submitted by AEML-D (Rs Crore)

	FY 20	19-20
Particulars	MYT Order	True-up Petition
Regulatory Equity at the beginning of year	2,069.89	2,069.89
Capitalisation during the year	660.75	682.42
Consumer Contribution and Grants during the year towards capital works	21.01	20.19
Equity portion of capitalisation during the year	191.92	198.67
Reduction in Equity Capital on account of retirement / replacement of assets	2.38	3.61
Regulatory Equity at the end of year	2,259.43	2,264.94
Return on Regulatory Equity (%)	15.50%	15.50%
Return on Regulatory Equity	335.71	336.23

Table 3-202: Return on Regulatory Equity for Supply Business for FY 2019-20 as submitted by AEML-D (Rs Crore)

	FY 20	19-20
Particulars	MYT Order	True-up Petition
Regulatory Equity at the beginning of year	155.78	155.78
Capitalisation during the year	22.00	31.01
Consumer Contribution and Grants during the year towards	0	0
capital works		
Equity portion of capitalization during the year	6.60	9.30
Reduction in Equity Capital on account of retirement /	1.76	10.58
replacement of assets		
Regulatory Equity at the end of year	160.62	154.51
Return on Regulatory Equity (%)	17.50%	17.50%
Return on Regulatory Equity	27.84	28.08

FY 2020-21 and FY 2021-22

AEML-D has submitted that the MYT Regulations, 2019 provides for allowing RoE in two parts, i.e., Base RoE and additional RoE linked to actual performance. The additional RoE shall be allowed at the time of truing up for respective years based on actual performance. The eligibility for additional RoE in wires business is linked to performance parameter of wires availability.

For FY 2020-21 and FY 2021-22 the SAIDI is 34.58 minutes and 23.63 minutes respectively, considering the monthly values being submitted to the Commission as part of the Quarterly SOP report submission. Thus, Wires Availability for FY 2020-21 is 99.99% (1-(34.58/60)/8760) and for FY 2021-22, it is 99.996% (1-(23.63/60)/8760). Accordingly, AEML-D is entitled to additional RoE of 1.50% for the Wires Business.

The eligibility for additional RoE in Supply Business is linked to performance parameter of assessed billing and collection efficiency. AEML-D has achieved annual Collection Efficiency (CE) in FY 2020-21 of 100.55% and in FY 2021-22 of 103.41%. As the % collection efficiency is well above the required 99%, AEML-D is entitled to additional RoE of 1% for FY 2020-21 and FY 2021-22 for the Supply Business against this parameter.

For assessed billing, the annual value for FY 2020-21 and FY 2021-22 is 16.04% and 0.53%, respectively. The assessed billing was as high as 91.99% and 70.86% in April and May 2020, on account of COVID restrictions, resulting in the higher assessed billing percentage in FY 2020-21.

AEML-D submitted that in FY 2020-21 Lockdown was imposed, all consumer interface activities of distribution licensees were suspended through the Practice Directions of the Commission, buildings and localities were declared as containment zones, allowing no access even to distribution licensee meter readers. As a result, in the months of April and May 2020, most of the bills sent out were on assessed basis only. Even thereafter, due to containment areas and general restrictions on movement of personnel, as also the impact of COVID on AEML-D workforce, the meter reading could not be fully normalised till about Sept 2020. The assessed billing percentage for the period April 2020 to Sept. 2020 was 31%, whereas that for October 2020 till March 2021 was only 1.15%.

AEML-D has also stated that as per the notified Supply Code and SoP Regulations, 2021 "Reading a Consumer's Meter" is a specified performance standard, which also provides for automatic compensation. The said Regulations also provide for exemption from performance against SoP in case of force majeure events and all occurrences beyond control

of Distribution Licensee. The said Regulations also provide that the Commission may exempt Distribution Licensee from performing against any or all SoPs through general or specific Order. In this regard, the Commission itself, vide its Practice Directions dated March 26, 2020, directed Distribution Licensees to, inter alia, suspend consumer interface activities, which naturally includes meter reading.

AEML-D has submitted that the computation of assessed billing % should be done after excluding the period inflicted with the force majeure event and the said period should be considered as April 2020 to Sept. 2020. Therefore, based on the above submissions, the period under consideration for computing assessed billing % for the purpose of RoE should be considered as October 2020 onwards only and for the said period, AEML-D's assessed billing % was only 1.15%, which is less than the 1.5% limit as per MYT Regulations, 2019. AEML-D has requested the Commission to consider the aforesaid submissions, considering the provisions of the MYT Regulations, 2019, in terms of assessed billing and kindly permit AEML-D additional RoE of 1% attributable to assessed billing for FY 2020-21.

For FY 2021-22, as % assessed billing is well below the required 1.5%, AEML-D is entitled to additional RoE of 1% for FY 2021-22.

Accordingly, for FY 2020-21 and FY 2021-22, AEML-D has claimed RoE of 15.5% for Wires Business and 17.5% for Supply Business.

Further MYT Regulations, 2019 specify that the RoE including additional RoE shall be grossed up with the effective tax rate of the respective financial year.

AEML-D submitted that it has already segmented its Company's financials into Generation, Transmission, Distribution and Corporate-treasury segments and is in the process of obtaining statutory auditor's certification for the same as required by the MYT Regulations, 2019. Hence, for AEML-D and its other Regulated businesses, financials are already segmented out. Further, in order to determine the Taxable Income (i.e., Profit Before Tax) for AEML-D exactly as per its Regulated business alone, as required by the second proviso to Regulation 34.4 above, the financial effect of other regulated and un-regulated assets and liabilities is also required to be removed so as to reveal the true taxable income as per the financial values obtained from regulatory books alone.

The above exercise requires that the elements of P&L such as Depreciation (both book depreciation and tax depreciation) and Interest and Finance cost are considered as per the asset values recognized in the Regulatory books of AEML-D. This will reveal the true

Taxable Income of a single Regulated business (i.e., AEML-D, in this case) in isolation of its regulated and non-regulated businesses. The computations are provided as below:

Table 3-203: FY 2020-21 and FY 2021-22 - Income tax on standalone basis (Regulatory PBT)

Particulars	FY 2020-21 (Rs. Cr.)	FY 2021-22 (Rs. Cr.)
Revenue	6,262.17	7,604.03
Own Revenue	5,450.83	6,004.03
Wheeling + CSS	302.61	298.38
NTI	160.09	213.26
FY 20-21 true-up gap	348.64	1,088.36
Expense	5,546.68	6,779.28
Power purchase	3,700.32	4,660.05
Opex actual	1,198.98	1,449.23
Depreciation	392.29	371.15
Interest	158.92	188.59
Finance Re-fin	15.65	29.83
IoWC	26.23	27.06
Int on SD	21.06	18.71
Debts w off	15.42	14.38
Contr to CR	17.81	20.27
PBT	715.49	824.75
ARR Deprn	392.29	371.15
I-Tax Deprn	(550.78)	(672.65)
Other disallowance	332.43	83.73
Other deduction	(166.35)	8.41
Revised PBT	723.07	615.40
Corporate tax rate	34.95%	34.95%
Income Tax as per Corporate Tax	252.71	215.08
Book Profit computation		
PBT	715.49	824.75
Provisions added back	111.79	166.13
Provision reversal	(54.74)	
Book Profit	772.54	990.89
MAT rate	17.47%	17.47%
Income Tax under MAT	134.98	173.13

As seen from above table, income tax applicable for AEML-D on a standalone basis, considering the regulated asset base corresponding cost is payable at Corporate tax rate.

Hence, the Corporate tax rate should be considered as the effective tax rate. Accordingly, AEML-D has grossed up the RoE rate with Corporate Tax rate for claiming RoE for FY 2020-21 and FY 2021-22.

RoE allowed for FY 2020-21 and FY 2021-22 in the MYT Order and RoE being claimed now for the purpose of truing up of FY 2020-21 and FY 2021-22 are shown in the table below:

Table 3-204: FY 2020-21 and FY 2021-22 RoE for Wires Business

Particulars / (Rs. Crore)	FY 2020	0-21	FY 2021-22	
ratuculars / (Rs. Clore)	MYT Order	Actuals	MYT Order	Actuals
Regulatory Equity at the beginning of year	2,259.44	2,264.94	2,434.90	2,544.75
Capitalization during the year	629.83	957.21	388.45	1,005.81
Consumer Contribution and Grants during the year	44.95	14.16	27.73	25.38
Equity portion of capitalization during the year	175.46	282.91	108.22	294.13
Reduction in Equity Capital on account of retirement		3.10		6.16
Regulatory Equity at the end of year	2,434.90	2,544.75	2,543.12	2,832.72
Return on Regulatory Equity (%)	16.964%	23.83%	16.964%	23.83%
Return on Regulatory Equity	398.17	573.39	422.23	641.40

Table 3-205: FY 2020-21 and FY 2021-22 RoE for Supply Business

Particulars / (Rs. Crore)	FY 2020)-21	FY 2021-22	
raruculars / (Rs. Crore)	MYT Order	Actuals	MYT Order	Actuals
Regulatory Equity at the beginning of year	160.62	154.51	199.77	165.10
Capitalization during the year	130.49	43.70	218.57	40.92
Consumer Contribution and Grants during the				
year				
Equity portion of capitalization during the year	39.15	13.11	65.57	12.28
Reduction in Equity Capital on account of retirement		2.52		10.26
Regulatory Equity at the end of year	199.77	165.10	265.34	167.13
Return on Regulatory Equity (%)	18.78%	26.90%	18.78%	26.90%
Return on Regulatory Equity	33.84	43.33	43.68	46.07

Commission's Analysis and Ruling

To determine the equity eligible for returns as per MYT Regulations, 2015, the Commission has considered the Closing Equity for FY 2018-19 as approved in the MYT Order, as the Opening Equity for FY 2019-20. Additional equity has been considered as 30% of the

approved capitalisation in the year after deducting the Consumer Contribution from the Capitalisation. Further, 30% of the asset retirement approved is reduced to arrive at the amount of equity eligible for returns as per the Regulations. The Commission has considered the RoE as 17.50% for Supply Business and 15.50% for the Wires Business for FY 2019-20, in accordance with the MYT Regulations, 2015. Accordingly, the approved RoE for FY 2019-20 is as given in the Table below:

Table 3-206: Return on Equity for FY 2019-20 for Wires and Supply Business as approved by the Commission (Rs. Crore)

Particulars	MTR Order	True-up Petition	Approved after truing up
Wires Business			
Regulatory Equity at the beginning of the year	2,069.89	2,069.89	2,069.89
Capitalisation during the year	660.75	682.42	674.94
Consumer Contribution and Grants	21.01	20.19	20.19
Equity portion of capitalisation during the year	191.92	198.67	196.42
Equity portion of asset retired during the year	2.38	3.61	3.61
Regulatory Equity at the end of the year	2,259.43	2,264.94	2,262.70
Rate of Return (%)	2,069.89	2,069.89	2,069.89
Total RoE	335.71	336.23	335.78
Supply Business			
Regulatory Equity at the beginning of the year	155.78	155.78	155.78
Capitalisation during the year	22	31.01	31.01
Consumer Contribution and Grants	0		
Equity portion of capitalisation during the year	6.60	9.30	9.30
Equity portion of asset retired during the year	1.76	10.58	10.58
Regulatory Equity at the end of the year	160.62	154.51	154.51
Rate of Return (%)	17.50%	17.50%	17.50%
Total RoE	27.84	28.08	27.15

For the 4th Control Period, the Base Rate of RoE has been specified as 14% and 15.5% for the Wires Business and Supply Business, respectively, in the MYT Regulations, 2019.

Regulation 29.8 of the MYT Regulations, 2019 provides an additional rate of return for the Wires Business, as reproduced below:

"29.8 In case of Distribution Wires Business, an additional rate of Return on Equity shall be allowed on Wires Availability at the time of true-up as per the following schedule:

- a) The target Wires Availability for recovery of base rate of return on equity shall be 95 percent for MSEDCL and 98% for other Distribution Licensees;
- b) For every 0.50% over-achievement in Wires Availability, rate of return shall be increased by 0.50%, subject to ceiling of additional rate of Return on Equity of 1.50%;
- c) Wires Availability shall be computed in accordance with the following formula:

Wires Availability = $(1 - (SAIDI / 8760)) \times 100:..$

Similarly, Regulation 29.9 of the MYT Regulations, 2019, provides for an additional Rate of RoE for the Supply Business, as reproduced below:

"29.9 In case of Retail Supply Business, an additional rate of Return on Equity shall be allowed at the time of true-up, as per the following schedule:

- a) If the percentage of assessed bills is less than 1.5% of the total number of bills issued during the year, then rate of return shall be increased by 1%:
- b) If the percentage of assessed bills is more than 1.5% of the total number of bills issued during the year, for every 0.5% reduction in the percentage of assessed billing, rate of return shall be increased by 0.25%, subject to ceiling of additional rate of Return on Equity of 1.00%.
- c) If overall collection efficiency for the year is above 99 %, then rate of return shall be increased by 1%;
- d) If overall collection efficiency for the year is below 99 %, for every 0.5% improvement in the overall collection efficiency, rate of return shall be increased by 0.25%, subject to ceiling of additional rate of Return on Equity of 1.00%."

The Commission has considered the Closing Equity of FY 2019-20 as approved in this Order, as the Opening Equity for FY 2020-21. Additional equity has been considered as 30% of the approved capitalisation in the year after deducting the Consumer Contribution from the Capitalisation. Further, 30% of the asset retirement approved is reduced to arrive at the amount of equity eligible for returns as per the Regulations. The Commission has considered the RoE as 15.50% for the Wires Business (Additional RoE of 1.5% allowed as Wires availability is higher than 99.99%), in accordance with the MYT Regulations, 2019. For the Supply Business, the RoE has been allowed as 17.50%, after allowing additional 1% for higher than normative Collection Efficiency and additional 1% for assessed billing percentage. In this regard, the Commission accepts AEML-D's submission that the

percentage of assessed billing was higher in the initial months of FY 2020-21 due to the impact of COVID and related restrictions, and the relaxations given to the Licensees through Practice Directions regarding issuance of assessed bills.

The RoE rate is grossed up by applicable Income Tax rate. AEML-D has considered Corporate Tax rate of 34.95% for grossing up RoE rate for pretax return on equity rate.

Regulation 34 of the MYT Regulations, 2019 provides for pre-tax RoE to be computed for FY 2020-21 and FY 2021-22, as reproduced below:

"34.1 The Income Tax for the Generating Company or Licensee or MSLDC for the regulated business shall be allowed on Return on Equity, including Additional Return on Equity through the Tariff charged to the Beneficiary/ies, subject to the conditions stipulated in Regulations 34.2 to 34.6:

...

34.2 The rate of Return on Equity, including additional rate of Return on Equity as allowed by the Commission under Regulation 29 of these Regulations shall be grossed up with the effective tax rate of respective financial year.

. . .

34.4 The effective tax rate shall be considered on the basis of actual tax paid in respect of financial year in line with the provisions of the relevant Finance Acts by the concerned Generating Company or Licensee or MSLDC, as the case may be:

Provided that, in case of the Generating Company or Licensee or MSLDC has engaged in any other regulated or unregulated Business or Other Business, the actual tax paid on income from any other regulated or unregulated Business or Other Business shall be excluded for the calculation of effective tax rate:

Provided further that effective tax rate shall be estimated for future year based on actual tax paid as per latest available Audited accounts, subject to prudence check...." (emphasis added)

The Commission has reviewed the actual tax payment details and supporting documents submitted by AEML in this regard and notes that AEML has paid the actual taxes on MAT rate basis for FY 2020-21 and FY 2021-22. In accordance with the MYT Regulations, the effective tax rate has been considered equal to the actual tax rate paid by the Company, hence, the Commission has considered MAT rate for both FY 2020-21 and FY 2021-22 for grossing up of RoE.

The Commission considers MAT rate of 17.47% for grossing up RoE rate as Licensee is liable to pay MAT rate. Accordingly, the approved RoE for FY 2020-21 is as given in the Table below:

Table 3-207: Return on Equity for FY 2020-21 for Wires and Supply Business as

approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Wires Business			
Regulatory Equity at the beginning of the year	2259.44	2,264.94	2,262.70
Capitalisation during the year	629.83	957.21	957.19
Consumer Contribution and Grants	44.95	14.16	14.16
Equity portion of capitalisation during the year	175.46	282.91	282.91
Equity portion of asset retired during the year		3.10	3.10
Regulatory Equity at the end of the year	2,434.90	2,544.75	2,542.51
Base Rate of Return (%)	14%	15.50%	15.50%
Pretax Return on Equity after considering effective Tax rate (%)	16.96%	23.83%	18.78%
Total RoE	398.17	573.39	451.23
Supply Business			
Regulatory Equity at the beginning of the year	160.62	154.51	154.51
Capitalisation during the year	130.49	43.70	43.70
Consumer Contribution and Grants			
Equity portion of capitalisation during the year	39.15	13.11	13.11
Equity portion of asset retired during the year		2.52	2.52
Regulatory Equity at the end of the year	199.77	165.10	165.10
Rate of Return (%)	15.50%	17.50%	17.50%
Pretax Return on Equity after considering effective Tax rate (%)	18.78%	26.90%	21.20%
Total RoE	33.85	43.33	33.89

Similarly, the Commission has considered the Closing Equity of FY 2020-21 as approved in this Order, as the Opening Equity for FY 2021-22. Additional equity has been considered as 30% of the approved capitalisation in the year after deducting the Consumer Contribution from the Capitalisation. Further, 30% of the asset retirement approved is reduced to arrive at the amount of equity eligible for returns as per the Regulations. The Commission has considered the RoE as 15.50% for the Wires Business (Additional RoE of 1.5% allowed as Wires availability is higher than 99.99%), in accordance with the MYT Regulations, 2019. For the Supply Business, the RoE has been allowed as 17.50%, after allowing additional 1% for higher than normative Collection Efficiency and additional 1% for assessed billing percentage being lower than the norm.

Similar to FY 2020-21, the RoE has been grossed up by applicable Income tax rate. AEML-D has considered corporate tax rate of 34.95% for grossing up RoE rate for pretax return on equity rate. However, as explained earlier, the applicable Tax rate for AEML is MAT rate. Hence, the Commission has considered MAT rate of 17.47% for grossing up RoE rate. Accordingly, the approved RoE for FY 2021-22 is as given in the Table below:

Table 3-208: Return on Equity for FY 2021-22 for Wires and Supply Business as

approved by the Commission (Rs. Crore) Approved True-up MYT Order **Particulars** after truing **Petition** up **Wires Business** Regulatory Equity at the beginning of the year 2.544.75 2.542.51 2,434.90 Capitalisation during the year 388.45 1005.80 1005.69 27.73 25.38 25.38 Consumer Contribution and Grants Equity portion of capitalisation during the year 108.22 294.13 294.09 Equity portion of asset retired during the year 6.16 6.16 Regulatory Equity at the end of the year 2.543.12 2,832,72 2,830,44 Base Rate of Return (%) 14% 15.50% 15.50% Pretax Return on Equity after considering 16.96% 23.83% 18.78% effective Tax rate (%) 641.40 **Total RoE** 422,24 504.55 **Supply Business** 199.77 165.10 165.10 Regulatory Equity at the beginning of the year Capitalisation during the year 218.57 40.93 2.78 Consumer Contribution and Grants 12.28 Equity portion of capitalisation during the year 65.57 0.83 10.26 10.26 Equity portion of asset retired during the year Regulatory Equity at the end of the year 265.34 167.12 155.68 Rate of Return (%) 15.50% 17.50% 17.50% Pretax Return on Equity after considering 18.78% 26.90% 21.20% effective Tax rate (%) **Total RoE** 99.12 46.07 34.01

3.12 INTEREST ON WORKING CAPITAL (IoWC)

AEML-D's Submission

FY 2019-20

AEML-D submitted that it has calculated normative Interest on Working Capital (IoWC) for the Wires Business and Supply Business in accordance with Regulation 31.3 and 31.4 of the MYT Regulations, 2015. As per MYT (First Amendment) Regulations, 2017, the Base Rate has been defined as One-year MCLR of SBI plus 150 basis points. Considering

this, the normative interest on working capital for Wires Business for FY 2019-20, is shown in the Table below:

Table 3-209: Interest on Working Capital for Wires Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	FY 2019-20	
raruculars	MYT Order	True-up Petition
O&M Expenses for a month	70.89	69.57
Maintenance spares at 1% of Opening GFA	55.47	59.54
One and half months of revenue from charges for use of Distribution Wires	194.58	190.23
Less:		
Amount of Security Deposit from Distribution System Users	-	-
Total Working Capital	320.94	319.34
Rate of Interest	9.55%	9.66%
Interest on Working Capital	30.49	30.85

The summary of IoWC for Supply Business for FY 2019-20 is shown in the Table below:

Table 3-210: Interest on Working Capital for Supply Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	FY 2019-20		
r ai ucuiai s	MYT Order	True-up Petition	
O&M Expenses for a month	34.97	35.02	
Maintenance spares at 1% of Opening GFA	5.06	5.06	
One and half months of revenue from sale of electricity	801.64	789.97	
including revenue from CSS			
Less:			
Amount of Security Deposit from Supply Consumers	481.57	469.71	
One-month equivalent of cost of power purchased	202.69	240.47	
Total Working Capital	157.41	119.86	
Rate of Interest	9.50%	9.66%	
Interest on Working Capital	14.95	11.58	

AEML-D has submitted that it has incurred actual interest on working capital for the Company as a whole. As stated above, the surplus after refinancing has been used as working capital in the business. Therefore, a part of the interest paid for Bonds has been allocated to interest on working capital (on proportion basis) for FY 2019-20, as the Bonds have, inter alia, been availed by the Company for general corporate purposes.

All the above interest has been segregated between generation, transmission and distribution in the ratio of normative working capital requirement. The actual interest on working capital for FY 2019-20 incurred is shown in table below:

Distribution **Distribution** Generation Total Particulars / (Rs. Crore) Transmission – Wires - Supply Interest on surplus from Bonds used for working 1.12 0.37 1.88 0.71 4.07 capital financing Interest on other working 15.64 4.94 25.34 9.51 55.43 capital loans Import LC bill discounting 1.94 Total 18.69 5.31 27.22 10.22 61.44

Table 3-211: FY 2019-20 Actual IoWC allocation

As per Regulation 31.6 of the MYT Regulations, 2015, the contribution of delay in receipt of payment to the actual interest on working capital has to be deducted from the actual interest on working capital before sharing of the efficiency gain or efficiency loss.

Considering the above provision in the MYT Regulations, 2015, the Commission, while carrying out the truing up of FY 2018-19 in AEML-D MYT Order dated 30.03.2020, had deducted the delayed payment charges (DPC) and interest on delayed payment (IoDP) from the actual interest on working capital for FY 2018-19. AEML-D has carried out the sharing of gains and losses in interest on working capital after deducting DPC and IoDP from the actual interest on working capital. It is submitted that DPC and IoDP recovered from consumers are not available separately for Wires Business and Supply Business. DPC and IoDP are recovered on the outstanding amounts payable by consumers, which include both wheeling charges and retail tariff. Hence, AEML-D has segregated DPC and IoDP between Wires and Supply in the ratio of revenue of Wires Business and Supply Business for FY 2019-20.

Accordingly, the net entitlement in interest on working capital has been shown in table below:

Particulars / (Rs. Crore) **Distribution** Total Distribution - Wires - Supply Normative IoWC 30.85 11.58 42.42 Actual IoWC 27.22 10.22 37.43 DPC & IODP 5.00 24.47 29.47 Actual IoWC less DPC & IODP 22.22 0 25.10 **Net Entitlement** 3.86 28.96

Table 3-212: FY 2019-20 IoWC net entitlement

FY 2020-21

AEML-D has calculated the normative interest on working capital for Wires Business and Supply Business in accordance with Regulation 32.3(a) and 32.4(a) of the MYT Regulations, 2019.

Interest on Working Capital (IoWC) has been considered at a rate equal to the weighted average Base Rate prevailing during the concerned year plus 150 basis points. Base Rate as per Regulation 2.1 (10) of the MYT Regulations, 2019 shall mean the one-year MCLR as declared by the SBI. Thus, the rate considered for computing IoWC is 8.57% (7.07% + 1.50%).

The normative interest on working capital for Wires Business for FY 2020-21 is shown in the table below:

Table 3-213: Interest on Working Capital for Wire Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
O & M Expenses for a month	72.96	72.49
Maintenance spares at 1% of Opening GFA	61.52	66.24
One and half months of revenue from charges for use of	195.95	164.09
Distribution Wires (wheeling charges from all network		
consumers)		
Total Working Capital	330.43	302.83
Rate of Interest (%)	9.50%	8.57%
Interest on Working Capital	31.39	25.95

The normative interest on working capital for Supply Business for FY 2020-21 is shown in the table below:

Table 3-214: Interest on Working Capital for Supply Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
O & M Expenses for a month	35.84	37.00
Maintenance spares at 1% of Opening GFA	5.22	5.02
One and half months of revenue from sale of electricity	797.43	555.94
including revenue from CSS		
Less:		
Amount of Security Deposit from supply consumers	531.27	474.80
One month equivalent of cost of power purchased	248.78	197.69
Total Working Capital	58.45	(74.53)
Rate of Interest (%)	9.50%	8.57%
Interest on Working Capital	5.55	-

AEML has incurred actual interest on working capital for the company as a whole. As stated in previous sections, the bond surplus of Rs. 360.52 Cr after refinancing has been used as

working capital in the business. Therefore, a part of the interest paid for bonds has been allocated to interest on working capital (on proportion basis) for FY 2020-21, as the bonds have, inter alia, been availed by the Company for general corporate purposes.

The actual interest on working capital for FY 2020-21, segregated in the ratio of normative working capital for FY 2020-21 is shown in table below:

Distribution -Distribution Particulars / (Rs. Crore) Total Generation **Transmission** Wires - Supply Interest on surplus from Bonds used for working 10.18 3.57 16.95 0 30.71 capital financing Interest on other working 12.19 4.20 19.90 0 36.29 capital loans Interest on Import LC bill 3.79 discounting 26.16 7.77 36.86 70.78 **Total** 0

Table 3-215: FY 2020-21 Actual IoWC allocation

AEML-D has submitted that as per 1st proviso to Regulation 32.6 of the MYT Regulations, 2019, delayed payment surcharge (DPC for short) and interest on delayed payment (IOA for short) shall be deducted from the actual IoWC, before sharing of efficiency gains or efficiency loss.

It is submitted that DPC and IOA recovered from consumers are not available separately for Wires Business and Supply Business. DPC and IOA are recovered on the outstanding amounts payable by consumers, which include both wheeling charges and retail tariff. Major portion of the outstanding amount pertains to retail tariffs; hence AEML-D has allocated the actual DPC & IOA received for FY 2020-21 between the wires and the supply business in the ratio of the actual revenue for FY 2020-21 (19:81) as follows:

Table 3-216: FY 2020-21 DPC IOA allocation

Particulars / (Rs. Crore)	Total	Wires	Supply
DPC	27.00	5.26	21.73
IOA	27.49	5.36	22.13
Total	54.49	10.62	43.87

Accordingly, the position of interest on working capital has been shown in the table below:

Particulars / (Rs. Crore)	Wires	Supply	Total
Normative IoWC	25.95	0	
Actual IoWC (working as above)	36.86	0	
DPC & IOA (working as above)	10.62	43.87	54.49
Actual IoWC less DPC & IOA	26.24	(43.87)	

Table 3-217: FY 2020-21 IoWC post allocation

As per Regulation 32.6 of the MYT Regulations, 2019, the difference between the normative interest on working capital and the actual interest on working capital shall be considered as efficiency gain/ loss and shall be shared between the licensee and the beneficiaries in the ratio as per MYT Regulations, 2019.

AEML-D has further submitted that cash flows were severely affected by the COVID-19 pandemic in FY 2020-21. Due to this, cash flows of all the segments of business, i.e., generation, transmission and distribution were impacted because of which AEML had to avail higher working capital loans in FY 2020-21 to meet the shortfall in revenues. Hence, AEML-D requested the Commission to exercise its Power to Relax as per Regulation 105 of the MYT Regulations, 2019 and kindly allow actual interest on working capital to AEML-D without determining any efficiency loss in interest on working capital, since COVID-19 pandemic was a Force Majeure event. Accordingly, AEML-D has considered the actual interest on working capital, net off DPC & IOA, as presented above for truing up of FY 2020-21. The Commission is requested to approve the actual interest on working capital as presented above.

FY 2021-22

Interest on Working Capital (IoWC) has been considered at a rate equal to the weighted average base rate prevailing during the concerned year plus 150 basis points, i.e., one-year MCLR as declared by the SBI. For FY 2021-22, the base rate has remained unchanged at 7%. Thus, the rate considered for computing IoWC is 8.50% (7.00% + 1.50%).

The normative interest on working capital for Wires Business for FY 2021-22 is shown in the table below:

Table 3-218: Interest on Working Capital for Wire Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
O & M Expenses for a month	75.41	75.54
Maintenance spares at 1% of Opening GFA	67.37	75.71

Particulars / (Rs. Crore)	MYT Order	Actuals
One and half months of revenue from charges for use of	200.01	166.52
Distribution Wires (wheeling charges from all network		
consumers)		
Total Working Capital	342.80	317.76
Rate of Interest (%)	9.50%	8.50%
Interest on Working Capital	32.57	27.01

The normative interest on working capital for Supply Business for FY 2021-22 is shown in the table below:

Table 3-219: Interest on Working Capital for Supply Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
O & M Expenses for a month	37.04	38.57
Maintenance spares at 1% of Opening GFA	6.53	5.37
One and half months of revenue from sale of electricity	815.23	624.17
including revenue from CSS		
Less:		
Amount of Security Deposit from supply consumers	580.97	471.69
One month equivalent of cost of power purchased	240.99	266.26
Total Working Capital	36.83	(69.85)
Rate of Interest (%)	9.50%	8.50%
Interest on Working Capital	3.50	-

AEML has incurred actual interest on working capital for the Company as a whole. As stated in previous sections, the bond surplus of Rs. 360.52 Crore after refinancing has been used as working capital in the business. Therefore, a part of the interest paid for bonds has been allocated to interest on working capital (on proportionate basis) for FY 2021-22, as the bonds have, inter alia, been availed by the Company for general corporate purposes.

All the above interest has been segregated between generation, transmission and distribution Wires and Supply in the ratio of normative working capital requirement. The actual interest on working capital for FY 2021-22 incurred is shown in the table below:

Table 3-220: FY 2021-22 Actual IoWC allocation

Particulars / (Rs. Crore)	Generation	Transmission	Distribution Wires	Distribution Supply	Total
Interest on surplus from Bonds used for working capital financing	10.08	3.63	16.66	0	30.37

Particulars / (Rs. Crore)	Generation	Transmission	Distribution Wires	Distribution Supply	Total
Interest on other working capital loans	11.32	4.10	18.80	0	34.22
Interest on Import LC bill discounting			0 0		0.17
Total	21.56	7.73	35.46	0	64.76

AEML-D submitted that DPC and IOA recovered from consumers are not available separately for Wires Business and Supply Business. AEML-D has allocated the actual DPC & IOA received for FY 2020-21 between the Wires and the Supply business in the ratio of the actual revenue for FY 2021-22 (18:82) as follows:

Table 3-221: FY 2021-22 DPC IOA allocation

Particulars / (Rs. Crore)	Total	Wires	Supply
DPC	22.90	4.19	18.70
IOA	22.45	4.11	18.34
Total	45.35	8.31	37.04

Accordingly, the net entitlement of interest on working capital has been shown in the table below:

Table 3-222: FY 2021-22 IoWC post allocation

Particulars / (Rs. Crore)	Wires	Supply
Normative IoWC (A)	27.01	-
Actual IoWC	35.46	-
DPC & IOA	8.31	37.04
Actual IoWC less DPC & IOA (B)	27.15	-
Efficiency loss (C) = $(A-B) * (2/3)$	(0.10)	-
Net Entitlement (B + C)	27.06	-

Commission's Analysis and Ruling

The Commission has approved IoWC for AEML-D's Wires Business and Supply Business in accordance with Regulations 31.3 and 31.4 of the MYT Regulations, 2015 for FY 2019-20 and in accordance with Regulations 32.3 and 32.4 of the MYT Regulations, 2019 for FY 2020-21 and FY 2021-22. The Commission has considered 9.66% as the interest rate for computation of IoWC for FY 2019-20, being the weighted average rate worked out using SBI MCLR for 1 year plus 150 basis points from 1 April 2019 to 31 March, 2020. Similarly, Commission has considered the one-year SBI MCLR plus 150 basis points, i.e., 8.57% and 8.50% as the interest rate for IoWC for FY 2020-21 and FY 2021-22.

The Commission has observed that the Distribution Licensees raise claims for additional Security Deposit in April of next year based on the average billing of the consumer in the previous year, which is as per the specified Supply Code Regulations. However, the Distribution Licensees do not follow-up with the consumers regarding payment of the additional Security Deposit claim, and no action is taken by the Licensee for non-payment of the additional Security Deposit claim. Such non-payment of additional Security Deposit results in increasing the working capital requirement, thereby increasing the Interest on Working Capital, which is a costlier source of funds, as compared to the Security Deposit.

The Commission sought information from AEML-D regarding the claim for additional Security Deposit in FY 2019-20, FY 2020-21, and FY 2021-22, and the additional amounts actually received against these claims, which was submitted by AEML-D. The shortfall in receipt of Security Deposit vis-à-vis the claim for additional Security Deposit is Rs. 365.13 Crore in FY 2019-20. AEML-D has not raised any claim for additional Security Deposit in FY 2020-21 and FY 2021-22. The shortfall in receipt of Security Deposit has hence, been added to the amount of Security Deposit reported by AEML-D for the respective years, and the working capital requirement computed accordingly.

The Commission has notified the MERC Supply Code Regulations in March 2021, wherein the amount of Security Deposit has been increased to 2 months of average billing. The Commission has accordingly verified that the amount of Security Deposit for FY 2021-22 is not less than 2 months of total revenue for FY 2020-21. In case of AEML-D, the amount of Security Deposit after adding the Security Deposit claim raised by AEML-D as discussed above, is higher than the normative level of 2 months of total revenue for FY 2020-21.

Further, the Commission has considered the entire Security Deposit against the Supply Business as claimed by AEML-D in the MTR Petition and as approved by the Commission in the MYT Order, so that the principle adopted in the MYT Order is maintained. However, the Security Deposit should correctly be considered against the Wires Business and Supply Business, in proportion to the revenue from the respective Business. Hence, from the next MYT Petition, AEML-D should consider the Security Deposit against the Wires Business and Supply Business in proportion to the revenue from the respective Business.

Accordingly, the IoWC approved by the Commission is as given in the Tables below:

Table 3-223: Interest on Working Capital for Wires Business for FY 2019-20 approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
O&M Expenses for a month	70.89	69.57	69.72
Maintenance spares at 1% of Opening GFA	55.47	59.54	55.47
One and half months of revenue from charges for use	194.58	190.23	190.23
of Distribution Wires			
Total Working Capital	320.94	319.34	315.42
Rate of Interest (% p.a.)	9.50%	9.66%	9.66%
Interest on Working Capital	30.49	30.85	30.47

Table 3-224: Interest on Working Capital for Wires Business for FY 2020-21 approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
O&M Expenses for a month	72.96	72.49	64.67
Maintenance spares at 1% of Opening GFA	61.52	66.24	62.10
One and half months of revenue from charges for use	195.95	164.09	164.09
of Distribution Wires			
Total Working Capital	330.43	302.83	290.86
Rate of Interest (% p.a.)	9.50%	8.57%	8.57%
Interest on Working Capital	31.39	25.95	24.93

Table 3-225: Interest on Working Capital for Wires Business for FY 2021-22 approved by the Commission (Rs. Crore)

approved by the commission (its. crore)					
Particulars	MYT Order	True-up Petition	Approved after truing up		
O&M Expenses for a month	75.41	75.54	83.42		
Maintenance spares at 1% of Opening GFA	67.37	75.71	71.57		
One and half months of revenue from charges for use	200.01	166.52	166.52		
of Distribution Wires					
Total Working Capital	342.79	317.76	321.50		
Rate of Interest (% p.a.)	9.50%	8.50%	8.50%		
Interest on Working Capital	32.57	27.01	27.33		

Table 3-226: Interest on Working Capital for Supply Business for FY 2019-20 approved by the Commission. (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
O&M Expenses for a month	34.97	35.02	34.64
Maintenance spares at 1% of Opening GFA	5.06	5.06	5.06
One and half months of revenue from sale of	801.64	789.97	788.22
electricity including revenue from CSS			

Particulars	MYT Order	True-up Petition	Approved after truing up
Less:			
Amount of Security Deposit from Supply Consumers	481.57	469.71	834.84
One-month equivalent of cost of power purchased	202.69	240.47	242.14
Total Working Capital	157.41	119.86	-
Rate of Interest	9.50%	9.66%	9.66%
Interest on Working Capital	14.95	11.58	•

Table 3-227: Interest on Working Capital for Supply Business for FY 2020-21 approved by the Commission. (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
O&M Expenses for a month	35.84	37.00	34.09
Maintenance spares at 1% of Opening GFA	5.22	5.02	5.02
One and half months of revenue from sale of	797.43	555.94	555.09
electricity including revenue from CSS			
Less:			
Amount of Security Deposit from Supply Consumers	531.27	474.80	839.93
One-month equivalent of cost of power purchased	248.78	197.69	198.55
Total Working Capital	58.44	0.00	0.00
Rate of Interest	9.50%	8.57%	8.57%
Interest on Working Capital	5.55	0.00	0.00

Table 3-228: Interest on Working Capital for Supply Business for FY 2021-22 approved by the Commission. (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
O&M Expenses for a month	37.04	38.57	36.45
Maintenance spares at 1% of Opening GFA	6.53	5.37	5.37
One and half months of revenue from sale of	815.23	624.17	621.29
electricity including revenue from CSS			
Less:			
Amount of Security Deposit from Supply Consumers	580.97	471.69	836.82
One-month equivalent of cost of power purchased	240.99	266.26	274.62
Total Working Capital	36.84	0.00	0
Rate of Interest	9.50%	8.50%	8.50%
Interest on Working Capital	3.50	0.00	0

Sharing of gains and Losses on Interest on Working Capital

The actual interest on Working Capital of AEML has been segregated for Wires Business and Supply Business according to the ratio of respective normative working capital requirement. Such actual interest on working capital for Wire business and Supply Business is Rs. 27.22 Crore and Rs. 10.22 Crore, respectively, in FY 2019-20. Similarly, actual interest on working capital for Wire Business and Supply Business is Rs. 36.86 Crore and Rs. 0.00 Crore, respectively, in FY 2020-21. In FY 2021-22, actual interest on working capital for Wires Business and Supply Business is Rs. 35.46 Crore and Rs. 0.00 Crore, respectively.

As per 1st proviso to Regulation 32.6 of the MYT Regulations, 2019, delayed payment surcharge (DPC for short) and interest on delayed payment (IODP for short) shall be deducted from the actual IoWC, before sharing of efficiency gains or efficiency loss.

The Commission notes that AEML-D has allocated the actual DPC and IOA received for past year between the Wires Business and Supply Business in the ratio of the actual revenue for that year. The Commission has considered DPC and IOA as allocated by AEML-D.

For FY 2020-21, AEML-D has requested the Commission to allow the higher actual IoWC, on account of the cash flow constraints due to lower billing and impact of COVID pandemic. The actual IoWC, after deducting DPC and IODP, is slightly higher than the normative IoWC. Hence, the Commission allows the actual IoWC for FY 2020-21, without sharing of efficiency gains/losses.

The sharing of Gains and Losses on IoWC is given in the Tables below:

Table 3-229: Interest on Working Capital net entitlement after sharing of Gains and Losses for Wires Business in FY 2019-20 to FY 2021-22

	FY 1	9-20	FY 20-21		FY 21-22	
Particulars	True-up Petition	Approved after truing up	True-up Petition	Approved after truing up	True- up Petition	Approved after truing up
Normative IoWC	30.85	30.47	25.95	24.95	27.01	27.33
Actual IoWC	27.22	27.22	36.86	36.86	35.46	35.46
DPC & IODP	5.00	5.00	10.62	10.62	8.31	8.31
Actual IoWC less DPC & IODP	22.22	22.22	26.24	26.24	27.15	27.15
Net Entitlement	25.10	24.97	26.24	26.24	27.06	27.27

3.13 INTEREST ON CONSUMERS' SECURITY DEPOSIT

AEML-D's Submission

FY 2019-20

AEML-D submitted that it has paid interest on Consumer Security Deposit of Rs. 42.42 Cr. for FY 2019-20 at SBI MCLR as on 1 April 2018 plus 150 Basis Points, in accordance with MYT (First Amendment) Regulations, 2017. The Commission had also approved interest on consumer security deposit of Rs. 45.90 Crore for FY 2019-20 in the MYT Order, based on submissions of AEML-D.

FY 2020-21 and FY 2021-22

As per 1st proviso to Regulation 30.11 of the MYT Regulations, 2019, interest on the amount of consumer security deposit for the year shall be considered on the basis of the actual interest paid by the Licensee during the year.

For FY 2020-21 and FY 2021-22, AEML-D has paid interest on consumer security deposit of Rs. 21.06 Cr. and Rs. 18.71 Cr., respectively. Interest on CSD is paid to consumers at the end of the financial year.

The following Table shows the Interest on Security Deposit claimed by AEML-D.

Table 3-230: Interest on Consumer Security Deposit for FY 2019-20 to FY 2021-22 as submitted by AEML-D (Rs. Crore)

FY 2019-20		019-20	FY 2020-21		FY 2021-22	
Particulars	MYT Order	True-up Petition	MYT Order	True-up Petition	MYT Order	True-up Petition
Interest on Security Deposit	45.90	42.42	27.35	21.06	30.03	18.71

Commission's Analysis and Ruling

The Commission has approved the actual interest on CSD paid by AEML-D, in the truing up for FY 2019-20 to FY 2021-22 for the Supply Business, as shown in the Table below:

Table 3-231: Interest on Consumer Security Deposit for FY 2019-20 to FY 2021-22 as approved by Commission (Rs. crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
FY 2019-20	45.90	42.42	42.42
FY 2020-21	27.35	21.06	21.06
FY 2021-22	30.03	18.71	18.71

3.14 PROVISION FOR BAD AND DOUBTFUL DEBTS

AEML-D's Submission

FY 2019-20

AEML-D submitted that it has made an actual provision of Rs. 31.57 Cr. towards bad and doubtful debts for FY 2019-20 in its accounts. As per the MYT Regulations, 2015, a provision of up to 1.5% of receivables (as per the Audited Accounts, allocated to Wires and Supply Businesses) is allowable as provision for bad debts. Accordingly, the provision for bad and doubtful debts works out to Rs. 16.13 Cr. for FY 2019-20. For FY 2019-20 since the actual provision made is higher than the allowable amount, AEML-D has restricted its claim to the lower of the two, i.e., Rs. 16.13 Cr. AEML-D has segregated the amount between Wires Business and Supply Business in the ratio of revenue of Wires and Supply Business in FY 2019-20, as shown in the Table below:

Table 3-232: Provision for Bad and Doubtful Debts for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT	Actuals
	Order	
Provision for Bad Debts – Wires	3.37	2.98
Provision for Bad Debts – Supply	12.62	13.14
Total	15.99	16.13

FY 2020-21 and FY 2021-22

AEML-D has submitted that as per the provision of the MYT Regulations, 2019, provision for write-off of bad debts is to be considered for projections or provisional true-up and, for final true-up, actual write-off, subject to the limit of 1.5% of receivables, is to be considered.

The amount of bad debts written off is as per the books of accounts and there is no segregation between Wires Business and Supply Business, and hence, the same has been segregated in the ratio of revenue of Wires Business and Supply Business (19:81) for FY 2020-21 and (18:82) for FY 2021-22. The actual bad debts written off is Rs. 23.72 Cr. for FY 2020-21 and Rs. 18.31 Cr. for FY 2021-22, however, considering the Regulations, Rs. 15.42 Cr. for FY 2020-21 and Rs. 14.38 Cr. for FY 2021-22, being 1.5% of the receivables is considered for the purpose of ARR.

Table 3-233: FY 2020-21 and FY 2021-22 Bad debts written off

Particulars / (Rs. Crore)	FY 2020-21	FY 2021-22
	Actuals	Actuals
Receivables	1,027.99	958.47
1.5% of Receivables	15.42	14.38
Actual bad debts written off	23.72	18.31
Bad debts written off (restricted to 1.5% of	15.42	14.38
receivables)		
Actual bad debts written off – Wires business	3.01	2.63
Actual bad debts written off – Supply business	12.41	11.74
Approved in MYT Order	15.99	15.99
Provision for Bad Debts – Wires	3.37	3.37
Provision for Bad Debts – Supply	12.62	12.62

Commission's Analysis and Ruling

Regulations 73 and 82 of the MYT Regulations, 2015 for Wires Business and Retail Supply Business, respectively, specify the maximum provision for bad and doubtful debts for a year as 1.5% of the receivables of the respective businesses, provided that it is within 5% of the receivables. The Regulation also specifies that the provision to be allowed for any year shall not exceed the provision made by the Licensee in its audited accounts. Accordingly, the Commission has considered the actual provision made in the audited accounts for FY 2019-20, subject to the limit of 1.5% of receivables.

Regulations 76 and 85 of the MYT Regulations, 2019 for Wires Business and Retail Supply Business, respectively, specify the maximum provision for bad and doubtful debts for a year as 1.5% of the receivables of the respective businesses, provided that it is within 5% of the receivables. The Regulation also specifies that the provision to be allowed for any year shall not exceed the provision made by the Licensee in its audited accounts. In true up years provision for bad debt would be based on actual debt written off. Accordingly, the Commission has considered the actual bad debts written off in the audited accounts for FY 2020-21 and FY 2021-22, subject to the limit of 1.5% of receivables.

Accordingly, the Commission has approved the provision for bad and doubtful debts as shown in the following Table:

Table 3-234: Provision for Bad and Doubtful Debts for FY 2019-20 to FY 2021-22 approved by the Commission (Rs. Crore)

FY 2021-22 FY 2019-20 FY 2020-21 Appr Appr Appr True-True-Trueoved oved oved **Particulars MYT MYT MYT** up up up after after after Order Petiti Petiti Petiti **Order** Order truing truing truing on on on up up up Wires 3.37 2.98 2.98 3.37 3.01 3.01 3.37 2.63 2.63 **Business** Supply 12.62 13.14 13.14 12.62 12.41 12.41 12.62 11.74 11.74 **Business** Total 15.99 16.13 15.99 15.42 15.99 16.13 15.42 14.37 14.37

3.15 CONTRIBUTION TO CONTINGENCY RESERVE

AEML-D's Submission

FY 2019-20

In accordance with Regulation 34.1 of the MYT Regulations, 2015, AEML-D has created a contingency reserve as 0.25% of the opening GFA of Supply Business and Wires Business for FY 2019-20.

FY 2020-21 and FY 2021-22

Regulation 35.1 of the MYT Regulations, 2019 provide for contribution to contingency reserve (CCR) a sum not less than 0.25% and not more than 0.50% of the GFA. The Commission in the MYT Order has approved contribution to contingency reserve at 0.25% of the opening GFA.

The summary of contribution to Contingency Reserve is as shown in the Tables below:

Table 3-235: Contribution to Contingency Reserve for Wires Business & Supply Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

	Wires Bu	ısiness	Supply Business		
Particulars	MYT Order	True-up Petition	MYT Order	True-up Petition	
Opening Balance of GFA	5,547.17	5,953.54	505.99	505.99	
% Contribution	0.25%	0.25%	0.25%	0.25%	
Contribution to Contingency Reserves	13.87	14.88	1.26	1.26	

Table 3-236: Contribution to Contingency Reserve for Wires Business & Supply Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

	Wires Bu	ısiness	Supply Business	
Particulars	MYT Order	True-up Petition	MYT Order	True-up Petition
Opening Balance of GFA		6,623.92		501.75
% Contribution		0.25%		0.25%
Contribution to Contingency Reserves	16.73	16.56	1.68	1.25

Table 3-237: Contribution to Contingency Reserve for Wires Business & Supply Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

	Wires Bu	ısiness	Supply Business		
Particulars	MYTOrder	True-up Petition	MYT Order	True-up Petition	
Opening Balance of GFA		7,570.78		537.06	
% Contribution		0.25%		0.25%	
Contribution to Contingency Reserves	16.84	18.93	1.63	1.34	

Commission's Analysis and Ruling

As per Regulation 34.1 of MYT Regulations, 2015 and 35.1 of MYT Regulations 2019, the contribution to the Contingency Reserves in a year shall be between 0.25% and 0.50% of the original cost of fixed assets. The Commission had queried AEML-D on the documentary evidence for investment in various securities, to which AEML-D replied with the requisite details. AEML-D has invested the Contingency Reserve contribution in specified securities, in accordance with the applicable MYT Regulations. The Commission has approved the Contribution to Contingency Reserves for Wires and Supply Business for FY 2017-18 and FY 2018-19 at 0.25% of the approved value of the Opening GFA for the respective Businesses as shown in the Table below:

Table 3-238:Contribution to Contingency Reserves for FY 2019-20 for Wires and Supply Business approved by the Commission (Rs. Crore)

Wires Business			Supply Business			
Particulars	MYT Order	True-up Petition	Approved after truing up	MYT Order	True-up Petition	Approved after truing up
Opening Balance of GFA		5,953.54	5,547.17		505.99	505.99
% Contribution		0.25%	0.25%		0.25%	0.25%
Contribution to CR	13.87	14.88	13.87	1.26	1.26	1.26

Table 3-239: Contribution to Contingency Reserves for FY 2020-21 for Wires and Supply Business approved by the Commission (Rs. Crore)

		Wires Busin	ness	Supply Business		
Particulars	MYT Order	True-up Petition	Approved after truing up	MYT Order	True-up Petition	Approved after truing up
Opening Balance of GFA		6,623.92	6,210.07		501.75	501.75
% Contribution		0.25%	0.25%		0.25%	0.25%
Contribution to CR	15.38	16.56	15.53	1.31	1.25	1.25

Table 3-240: Contribution to Contingency Reserves for FY 2021-22 for Wires and Supply Business approved by the Commission (Rs. Crore)

		Wires Busin	ness	Supply Business		
Particulars	MYT Order	True-up Petition	Approved after truing up	MYT Order	True-up Petition	Approved after truing up
Opening Balance of GFA		7,570.78	7,156.92		537.06	537.06
% Contribution		0.25%	0.25%		0.25%	0.25%
Contribution to CR	16.84	18.93	17.89	1.63	1.34	1.34

3.16 INCOME TAX

AEML-D's Submission

FY 2019-20

AEML-D submitted that for FY 2019-20, the Commission, in the MYT Order in Case No. 325 of 2019, had approved Income Tax provisionally at the same level as approved for FY 2018-19, in accordance with MYT Regulations, 2015.

For the purpose of truing up of FY 2019-20, AEML-D has calculated the income tax for FY 2019-20 in accordance with the methodology followed by the Commission in MTR and MYT Orders.

Table 3-241: Income Tax Computation for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	FY 2019-20
Revenue from sale of Electricity including RAC from own consumers	7,758.08
Revenue from RAC from Changeover Consumers	46.75
Income from Wheeling Charges from Changeover and OA consumers	267.53
Income on account of CSS from OA consumers	160.23
Non-Tariff Income	170.82

Particulars / (Rs. Crore)	FY 2019-20
Less: Eff gains on O&M Expense	0.00
Less: Eff gains on IoWC	6.73
Less: Eff gains on Dist Loss	16.60
Total Revenue	8,380.08
Power Purchase Expenses	3,974.81
O&M Expenses	1,255.09
Impact on PF due to SC Judgment	3.17
Depreciation	280.64
Interest on Long Term Loans	152.66
Foreign exchange rate variation	0.73
Financing Charges	36.19
Refinancing Cost	23.75
NPV of Interest cost saving	0.46
Interest on Working Capital	42.42
Interest on Consumer Security Deposit	42.42
Provision for bad and doubtful debts	16.13
Contribution to contingency reserves	16.15
Transmission Charges - intra State	398.76
MSLDC Fees & Charges	2.00
Total Expense	6,245.38
Profit Before Tax	2,134.70
Add: Depreciation considered in Expenses	280.64
Add: Other disallowance while computing IT	104.06
Less: Tax Depreciation	414.21
Less: Other expenses allowed for computing IT	44.39
Less: Other Deduction under IT	(30.00)
Total Taxable Income	2,090.81
Corporate Tax Rate (%)	34.95%
Income Tax as per Corporate Tax Rate	730.74
Computation of MAT	
Profit Before Tax	2,134.70
Add: Provision for Bad Debts and other disallowances	235.26
Less: Reversal of provision for bad debts against earlier years provision	20.68
and other reversals	
Total Taxable Income	2,349.28
MAT (%)	17.47%
Income Tax as per MAT	410.42
	=40 = 4
Income Tax considered in ARR	730.74
MYT Order	596.37

The above Income Tax has been segregated for Wires Business and Supply Business, in the ratio of Regulatory Profit Before Tax of Wires Business and Supply Business respectively, as shown in the Table below:

Table 3-242: Income Tax for Wires Business and Supply Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	True-up Petition
Income Tax - Wires	89.34	143.20
Income Tax - Retail	507.03	587.53
Total	596.37	730.74

Commission's Analysis and Ruling

The Commission has computed the regulatory PBT and the Income Tax liability thereon on a stand-alone basis, in accordance with the approach followed in the MYT Order. The Commission has considered the Revenue heads and Expense heads as approved after true-up for FY 2019-20, which are different from the actual expenses considered by AEML-D in its Petition.

The Commission has computed Income Tax in accordance with Regulation 33.1 of MYT Regulations, 2015 and the ATE Judgment dated 2 December 2013 in Case No. 138 and Case No. 139 of 2012.

As specified in the MYT Regulations, 2015 and ATE Judgment, the Commission has arrived at Income Tax paid based on Regulatory PBT considering the normative cost allowed by the Commission. The ratio with regard to tax liability is calculated on the regulatory income and cost within the MYT regime considering the applicable tax depreciation for computation of the Income Tax. Accordingly, the calculation of Income Tax provides the tax payable for the Regulatory business whereby all the items of ARR and Revenue are considered on normative basis for tariff purpose. Also, in line with MYT Regulations, 2015, efficiency gains and incentive have not been considered for computation of Tax on PBT basis.

Further, in line with the past practice, the available MAT credit has been used to off-set the difference between Income Tax as per Corporate Tax rate and Income tax as per MAT rate, which has not been done by AEML-D in its computations.

The computation of the Income Tax for FY 2019-20 as submitted by AEML-D and as approved by the Commission is given in the Tables below:

Table 3-243: Income Tax for FY 2019-20 as approved by Commission (Rs. crore)

			FY 2019-20	20	
Particulars	Formula	MYT Order	True Up Petition	Approved after truing up	
Total Revenue					
Revenue from sale of Electricity including			7,758.08	7,758.08	
RAC from own consumers			7,736.06	7,730.00	
Revenue from RAC from Changeover			46.75	46.75	
Consumers			40.73	40.73	
Income from Wheeling Charges from			267.53	267.53	
Changeover and OA consumers			207.55	207.55	
Income on account of CSS from OA			160.23	160.23	
consumers					
Non-Tariff Income			170.82	170.82	
Less: Eff gains on O&M Expense					
Less: Eff gains on IoWC			6.73	2.75	
Less: Eff gains on Dist loss			16.60	13.59	
Total	a		8,380.08	8,383.34	
Total Expenses					
Power Purchase Expenses			3,974.81	3,974.81	
O&M Expenses			1,255.09	1,252.27	
Impact on PF due to SC Judgment			3.17	3.17	
Depreciation			280.64	271.99	
Interest on Long Term Loans			152.66	152.82	
Foreign exchange rate variation			0.73	0.20	
Financing Charges			36.19	29.13	
Refinancing Cost			23.75	23.73	
NPV of Interest cost saving			0.46	0.47	
Interest on Working Capital			42.42	24.97	
Interest on Consumer Security Deposit			42.42	42.42	
Provision for bad and doubtful debts			16.13	16.13	
Contribution to contingency reserves			16.15	15.13	
Transmission Charges - intra State			398.76	398.76	
MSLDC Fees & Charges			2.00	2.00	
Total	b		6,245.38	6,207.99	
Profit Before Tax	c=a-b		2,134.70	2,179.10	
Tax Adjustment					
Add					
Depreciation considered in Expenses	d		280.64	271.99	
Other disallowance while computing IT	e		104.06	104.06	
Total Tax Disallowances	f=d+e		384.70	376.05	
Less					
Tax Depreciation	g		414.21	414.21	

		FY 2019-20			
Particulars	Formula	MYT Order	True Up Petition	Approved after truing up	
Other expenses allowed for computing Income	h		44.39	44.39	
Tax	11		44.39	44.39	
Deduction - U/s 80 IA	i			-	
Other Deduction under IT (ICDS adjustments)	j		(30.00)	(30.00)	
Exempt Income under IT	k			-	
Total Tax Allowances	l=g to k		428.60	428.60	
Total Taxable Income	m=c+f-l		2,090.81	2,126.54	
Tax Payable at Normal rate (Corporate Tax Rate)	n= m x Tax		730.74	743.23	
Tax Payable under MAT Rate	q = MAT working		410.42	418.17	
Tax Applicable	r=max(n,q)		730.74	743.23	
Tax Paid	S				
Tax Paid to Tax Provision	t=s/r				
Less: Adjusting MAT Credit				103.29	
Tax to be recovered through ARR	$\mathbf{u} = \mathbf{t}\mathbf{x} \mathbf{s}$	596.37	730.74	639.94	
MAT Computation					
Total Revenue	a		8,380.08	8,387.08	
Total Expenses	b		6,245.38	6,207.99	
Profit Before Tax	c=a-b		2,134.70	2,179.10	
Add: Disallowances under Income Tax					
Provision for Bad Debts and other			235.26	235,26	
disallowances			233.20	255.20	
Sub total	d		235.26	235.26	
Less: Deductions under Income Tax					
Reversal of provision for bad debts against			20.68	20.68	
earlier years provision and other reversals			20.00	20.00	
Sub total	e		20.68	20.68	
Book Profit	k=c+d-e		2349.28	2,393.67	
Tax Payable under MAT Rate			410.42	418.17	
Revenue - Wires Business			1,646.91	1,646.50	
Revenue - Supply Business			6,756.91	6,756.91	
Tax - Wires Business			143.20	125.38	
Tax - Supply Business			587.53	514.55	

3.17 NON-TARIFF INCOME (NTI)

FY 2019-20

AEML-D's Submission

Wires Business

AEML-D submitted that it has made investment of contingency reserve in specified securities and has generated an interest income of Rs. 10.34 Crore in FY 2019-20. The actual investment made by AEML in securities is more than the amount of investment required to be made as per MYT Regulations, 2015. The cumulative investment required as per MYT Regulations, 2015 is Rs. 141.47 Crore as on 01.04.2019 while the cumulative investment as per books of accounts is Rs. 147.77 Crore. Hence, AEML-D has considered the interest on contingency reserve of Rs. 9.90 Crore in NTI on proportionate basis, equivalent to the investment required as per Regulations. The same has been segregated between Wires Business and Supply Business in the ratio of the cumulative contingency reserve investment between Wires Business and Supply Business.

AEML-T has commissioned 5 nos. of EHV stations at Goregaon, Gorai, Saki, Borivali and Chembur on existing Receiving stations plots of AEML-D. Similarly, there are a few installations of AEML-D at Aarey, Versova and Ghodbunder EHV station plots and located on the land, which is part of AEML-T asset base. AEML-D has included the rent receivable from AEML-T in NTI of Wires Business, while the rent payable by AEML-D is included in the A&G Expenses of AEML-D.

Out of the Other Miscellaneous Receipts of Rs. 108.44 Crore, revenue from All-in-Hire (AIH) charges received in FY 2019-20 was Rs. 105.32 Crore In addition, there is income from asset usage charges, other miscellaneous charges, etc.

The summary of Non-Tariff Income in Wires Business for FY 2019-20 is shown in the table below:

Table 3-244: Non-Tariff Income for Wires Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	Actuals
Rents of land & building	5.61
Income from Investments	8.74
Other/Miscellaneous receipts	108.44
Insurance Claim Received	1.85
Total	124.64
MYT Order	116.24

Commission's Analysis and Ruling

The Commission has verified the details submitted by AEML-D with regards to interest income on contingency Reserve Investment. The Commission accordingly approves the income from Contingency Reserve Investment as submitted by AEML-D.

The Commission has verified the documents received from AEML-D with regard to the minutes of meeting for arrangement of Land usage charges between AEML-T and AEML-D. The Commission accordingly approves the income from Land Usage Charges as submitted by AEML-D.

The Commission has considered the Miscellaneous Receipt of Rs. 108.44 Crore under Miscellaneous Receipt in Non-Tariff Income for FY 2019-20 as submitted by AEML-D.

The Commission has considered the Non-Tariff Income submitted by AEML-D for FY 2019-20, for Wires Business as follows:

Table 3-245: Non-Tariff Income for Wires Business for FY 2019-20 approved by Commission (Rs. Crore)

	Wire Business				
Particulars	MYT Order	True Up Petition	Approved after truing up		
Rents of land or buildings	5.72	5.61	5.61		
Sale of Scrap	1.75				
Income from investments	2.83	8.74	8.74		
Other/Miscellaneous receipts	104.88	108.44	108.44		
Interest on Other Investments	0.47				
Liabilities no longer required written back	0.51				
Insurance Claim Received	0.09	1.85	1.85		
Profit on Sale of Assets					
Total	116.24	124.64	124.64		

Supply Business

AEML-D's Submission

Rebate on Power Purchase Cost availed by AEML-D in FY 2019-20 has been included in the Non-Tariff Income of Supply Business for FY 2019-20 as per the directions of the Commission in its Order dated 15 June 2012 (Case No. 180 of 2011)

The recovery against theft of electricity in FY 2019-20 has been subtracted from the revenue from sales of electricity and is included in the NTI of Supply Business for FY 2019-20.

Income from schedule of charges received from consumers in FY 2019-20 is included in the NTI of Supply Business for FY 2019-20.

The summary of NTI of Supply Business considered by AEML-D for FY 2019-20 is shown in table below:

Table 3-246: FY 2019-20 Non-Tariff Income Supply

Particulars / (Rs. Crore)	Actuals
Sale of Scrap	3.91
Income from Investments	1.16
Income from consumer charges levied in accordance with Schedule of Charges	5.50
approved by the Commission	
Income from recovery against theft and/or pilferage of electricity	13.97
Other/Miscellaneous receipts	0.58
Rebate on power purchase	19.97
Burnt Meter Recovery	1.09
Total	46.19
MYT Order	41.25

Commission's Analysis and Ruling

The Commission has considered all the heads of actual NTI for FY 2019-20as submitted by AEML-D.

The Commission has considered the Non-Tariff Income submitted by AEML-D for FY 2019-20, for Supply Business as follows:

Table 3-247: Non-Tariff Income for Supply Business for FY 2019-20 approved by Commission (Rs. Crore)

	Supply Business				
Particulars	MYT Order	True Up Petition	Approved after truing up		
Sale of Scrap		3.91	3.91		
Income from investments	0.36	1.16	1.16		
Income from consumer charges levied in accordance with Schedule of Charges approved by the Commission	6.06	5.50	5.50		
Income from recovery against theft and/or pilferage of electricity	16.65	13.97	13.97		

	Supply Business				
Particulars	MYT Order	True Up Petition	Approved after truing up		
Other/Miscellaneous receipts	0.91	0.58	0.58		
Rebate on power purchase	16.36	19.97	19.97		
Burnt Meter Recovery	0.92	1.09	1.09		
Total	41.25	46.19	46.19		

FY 2020-21

AEML-D's Submission

The Commission in the MYT Order dated 30 March, 2023 in the section pertaining to provisional truing-up for FY 2019-20 directed AEML-D to transfer the existing mutual fund investment towards contribution to contingency reserve (CCR) to safer instruments, i.e., G-Sec within 6 months of the issue of the Order.

The CCR investment as per the Regulatory books for FY 2020-21 is as under:

Particulars / (Rs. Crore) **AEML-D AEML-D** AEML-**AEML-T** Total **D-** Total (W) **(S)** Invested value as on 01-04-2019 124.83 16.64 141.47 31.78 173.25 (including investment of FY 2018-1.26 Addition for FY 2019-20 (0.25% of 14.88 16.15 4.04 20.19 opening GFA for FY 2019-20) (to be invested by 30-09-2020 i.e. within 6 months of close of the year) Invested value as on 30-09-2020 139.72 17.90 157.62 193.44 35.81 (closing balance for FY 2020-21) Actual invested value as per books of 160.28 44.38 204.66 accounts as on 30.09.2020

Table 3-248: FY 2020-21 Contribution to CR investment

Out of the total amount as per books shown above, the amount of Rs. 185.07 cr. was invested in Mutual Funds as on 31 March, 2020. However, as per the Commission's direction in the MYT Order, the said amount was withdrawn and parked in Power Receivables Trust (PRT), a notified Trust under SEBI (Debenture Trustees) Rules and Regulations, 2019 and governed by Catalyst Trusteeship Limited.

Further, an additional investment of Rs. 21.99 cr. was made towards complying with investing the contribution of FY 2019-20, till 30 September, 2020. Out of the same, an amount of Rs. 19.15 cr. was invested in PRT and the balance Rs. 2.84 cr. in G-Sec.

Thereafter, as on Dec. 2020, an amount of Rs. 204.66 cr. has been invested in G-Sec. in compliance with the Commission's directions. This amount is more than the amount required as per the Regulations and shown in the table above. Further, it is submitted that even during the period when the amount was invested with PRT, the interest received from PRT is more than what could have been received through G-Sec. The interest available from PRT was in around 8.50% whereas the effective interest available from G-Sec is in the range of 6%-7%.

Therefore, investment in PRT was only an interim measure before withdrawing the funds and reinvesting in G-Sec., by Dec 2020. Further, as the interest received from PRT was more than the interest receivable from G-Sec, it has only been beneficial for the end consumers.

Thus, the contingency reserve investment was made in Mutual Funds, Power Receivable Trust and G-Sec during the course of the Financial Year (From Dec-2020, amount is invested in G-Sec) and the income received from the investment in FY 2020-21 was from three different sources, i.e., gain on sale of mutual funds, interest from Power Receivable trust and interest from G-Sec.

The total interest received has been apportioned to the investment required as per Regulations, since the actual investment is more than the required amount as per Regulatory books. In the next step, the total interest attributable to regulatory accounts is apportioned between Distribution Wires and Distribution Supply in the ratio of regulatory closing balance as on 30 September, 2020.

Accordingly, the interest considered for FY 2020-21 is shown in the table below:

Particulars (Rs. Cr) **AEML-D AEML-D AEML-D AEML-T Total** Wires Supply CRI Income in FY 20-21 12.18 3.11 15.29 160.28 44.38 Actual invested value as per books of accounts as on 30.09.2020 Invested value as on 30-09-2020 139.72 17.90 157.62 35.81 (closing balance for FY 2020-21) Attributable to Regulated books 11.98 2.51 14.49 AEML-D bifurcated into Wire & 10.62 1.36 11.98 Supply in regulatory closing ratio

Table 3-249: FY 2020-21 Interest from Contribution to CR

FY 2021-22

Out of the total amount, Rs. 204.66 crore was invested in G-Sec as on 31-03-2021. In September 2021, an amount of Rs. 23.25 Crore (Rs. 18.25 Crore for Distribution and Rs. 5 Crore for Transmission) was invested in T-Bills, which are also Government securities. Since, the maturity period of T-Bills is 6 months, they matured in March 2022. After their redemption, AEML again invested Rs. 24.79 Crore (Rs. 19.83 Crore in Distribution and Rs. 4.96 Crore in Transmission) in March 2022. Thus, the closing balance of invested contingency reserve as per books in FY 2021-22 is Rs. 229.45 Crore. Since, the actual amount invested in contingency reserve is more than the amount required as per Regulations, the actual interest received from contingency reserve has been apportioned corresponding to amount of contingency reserve required as per regulatory books at the end of FY 2021-22. In the next step, the total interest attributable to regulatory accounts is apportioned between Distribution Wires, Distribution Supply and Transmission in the ratio of regulatory closing balance of contingency reserve as on 30-09-2021.

Accordingly, the interest considered for FY 2021-22 is shown in the table below:

Particulars (Rs. Cr) **AEML-D AEML-D AEML-D AEML-T Total** Wires Supply Total CRI Income in FY 2021-22 10.84 2.99 13.83 Actual invested value as per books of 229.45 accounts as on 30-09-2021 Invested value as on 30-09-2020 156.28 19.16 175.43 40.60 216.03 (closing balance for FY 2020-21) Attributable to Regulated books 10.57 2.45 13.02 AEML-D bifurcated into Wire & 9.42 1.15 10.57 Supply in regulatory closing ratio

Table 3-250: FY 2021-22 Interest from Contribution to CR

AEML-D has included the rent receivable from AEML-T in NTI of Wires Business, while the rent payable by AEML-D is included in the A&G Expenses of AEML-D.

Revenue from AIH charges received in FY 2020-21 and FY 2021-22 is Rs. 101.83 Cr. and Rs. 135.17 Cr. (arrears Rs. 37.0 Cr.) respectively and is considered part of Wires business.

Rebate on Power Purchase Cost availed by AEML-D in FY 2020-21 and FY 2021-22 is Rs. 10.29 Cr. and Rs. 8.15 Cr. has been included in the Non-Tariff Income of Supply Business as per the directions of the Commission in its Order dated 15 June, 2012 in Case No. 180 of 2011.

The recovery against theft of electricity has been subtracted from the revenue from sales of electricity and is included in the non-tariff income of supply business in FY 2020-21 and FY 2021-22 amounting to Rs. 6.85 Cr. and Rs. 23.04 Cr. respectively.

Income from schedule of charges received from consumers in FY 2020-21 & FY 2021-22 is included in the non-tariff income of supply business.

The summary of Non-Tariff Income for FY 2020-21 and FY 2021-22 is shown in table below:

Table 3-251: Summary of Non-Tariff Income for Wires and Supply Business for FY 2020-21 and FY 2021-22 as submitted by AEML-D (Rs. Crore)

2020-21 and 1 1 2021-22 as submitted by ALMIL-D (Rs. CIVIC)							
Particulars / (Rs. Crore)		FY 2020-21			FY 2021-22		
	Wires	Supply	Total	Wires	Supply	Total	
Income from Investments	10.62	1.36	11.98	9.42	1.15	10.57	
Rents of land & building	5.25	-	5.25	-	-	-	
Sale of scrap	4.86	0.38	5.23	8.09	0.93	9.02	
AIH charges	101.83	-	101.83	135.17	-	135.17	
Land usage charges	-	-	-	5.25	-	5.25	
Other/Miscellaneous receipts	4.53	4.13	8.66	8.20	10.59	18.79	
Rebate income	-	10.29	10.29	-	8.15	8.15	
Income from vigilance	-	6.85	6.85	-	23.04	23.04	
Liabilities no longer required w/off	9.35	-	9.35	-	-	-	
Total	136.43	23.01	159.44	166.13	43.86	209.98	
MYT Order	120.36	42.32	162.68	126.12	43.62	169.74	

In accordance with MYT Regulations, 2019, AEML-D has not included the income from delayed payment charges and interest on delayed payment in the Non-Tariff Income shown above. Also, AEML-D has not included interest on staff loans and interest from investments (such as bank FDs) received in FY 2020-21 and FY 2021-22 in the Non-Tariff Income, as the loans and investments were extended/ made out of the RoE.

Commission's Analysis and Ruling

The Commission has considered all the heads of actual NTI for FY 2020-21 and FY 2021-22 as submitted by AEML-D.

The Commission has considered the Non-Tariff Income submitted by AEML-D for FY 2020-21 and FY 2021-22, for Wire Business as follows:

Table 3-252: Non-Tariff Income for Wire Business for FY 2020-21 and FY 2021-22 approved by Commission (Rs. Crore)

	FY 2020-21			FY 2021-22			
Particulars	MYT Order	True Up Petition	Approve d after truing up	MYT Order	True Up Petition	Approve d after truing up	
Total	120.36	136.43	136.43	126.12	166.13	166.13	

The Commission has considered the Non-Tariff Income submitted by AEML-D for FY 2020-21 and FY 2021-22, for Supply Business as follows:

Table 3-253: Non-Tariff Income for Supply Business for FY 2020-21 and FY 2021-22

approved by Commission (Rs. Crore)

			F	Y 2020-21	,	F	Y 2021-22
Sr. No	Particulars	MYT Order	April- March (Audited)	Approve d	MYT Order	April- March (Audited	Approve d
32	Total	42.32	23.01	23.01	43.62	43.86	43.86

3.18 INCOME FROM OTHER BUSINESS

AEML-D's Submission

FY 2019-20

Reliance Communication (RCOM) is utilizing rooftops of some of the receiving stations of AEML-D by installing its BTS (Telecom) Towers. Two third of the total of actual rental income in FY 2019-20 from RCOM towers has been considered as Other Business Income in accordance with the MYT Regulations, 2015.

RCOM has been using the optic fibre network of AEML-D for providing the back up path for its network. Two third of the total of actual rental income in FY 2019-20 from RCOM has been considered as Other Business Income in accordance with the MYT Regulations, 2015.

The summary of Other Business Income for FY 2019-20 is shown in the Table below:

Table 3-254: FY 2019-20 Income from Other Business

Particulars / (Rs. Crore)	MYT Order	Actuals
Rental Income for BTS tower business	0	0.31
Rental Income for optic fibre business	0.08	0.10
Total	0.08	0.41

FY 2020-21 and FY 2021-22

Income from Other Business has been considered from rental income from BTS tower and from optic fibre business. Also, lease charges on account of transformer being provided on lease to consumers is considered as part of income from Other Business. $2/3^{rd}$ of the total of actual rental income in FY 2020-21 and FY 2021-22 received has been considered as Other Business Income in accordance with the MYT Regulations, 2019.

The summary of Other Business Income for FY 2020-21 and FY 2021-22 is shown in the Table below:

Table 3-255: Income from Other Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	True-up Petition
Lease charges		0.03
Optic Fiber link	0.13	0.25
Tower Rental		0.37
Total	0.13	0.64

Table 3-256: Income from Other Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	True-up Petition
Lease charges		0.10
Optic Fiber link	0.13	2.10
Tower Rental		1.07
Total	0.13	3.27

Commission's Analysis and Ruling

The Commission has considered the actual Income from Other Business as submitted by AEML-D in line with the applicable MYT Regulations, as shown in the Table below:

Table 3-257: Income from Other Business for FY 2019-20 as approved by the Commission (Rs. Crore)

		FY 2019-20				
Sr. No.	Particulars	MYT Order	True-up Petition	Approved after truing up		
	Income from Other Business - rental		0.31	0.31		
1	income from RCom Towers		0.31	0.51		
2	Income from Other Business - Optic Fibre	0.08	0.10	0.10		
4	Total	0.08	0.41	0.41		

Table 3-258: Income from Other Business for FY 2020-21 and FY 2021-22 as approved by the Commission (Rs. Crore)

	шрр 2 0 1		FY 2020-21			FY 2021-22		
Sr. No	Particulars	MYT Order	True- up Petition	Approv ed after truing up	MYT Order	True- up Petition	Approv ed after truing up	
1	Income from Other Business - rental income from RCom Towers		0.37	0.37		1.07	1.07	
2	Income from Other Business - Optic Fibre	0.13	0.25	0.25	0.13	2.10	2.10	
3	Income from Lease charges		0.03	0.03		0.10	0.10	
4	Total	0.13	0.64	0.64	0.13	3.27	3.27	

3.19 Demand Side Management Expenses

AEML-D's Submission

FY 2019-20

The opening balance of LMC fund in FY 2019-20 was Rs. 1.48 Crore, while the actual expense on various other DSM activities in FY 2019-20 was Rs. 20.22 Lakh only and the closing balance of LMC fund in FY 2019-20 was Rs. 1.28 Crore. Hence, DSM expenses have been met through LMC fund and not funded out of ARR.

FY 2020-21 and FY 2021-22

The Commission, in the MYT Order in Case No. 325 of 2019, had not approved any DSM expense for FY 2020-21 and FY 2021-22. The opening balance of LMC fund in FY 2020-21 was Rs. 1.28 Crore, while the actual expense on DSM activities in FY 2020-21 was Rs. 11,400 only and the closing balance of LMC fund in FY 2020-21 was Rs. 1.28 Crore. The opening balance of LMC fund in FY 2021-22 was Rs. 1.28 Crore, while the actual expense on DSM activities in FY 2021-22 was Rs. 0.10 crore only and the closing balance of LMC fund in FY 2021-22 was Rs. 1.18 Crore. Hence, DSM expenses have been met through LMC fund and not funded out of ARR.

Commission's Analysis and Ruling

The Commission considers Nil DSM charges for FY 2019-20 to FY 2021-22 as considered by AEML-D.

3.20 EFFICIENCY GAIN/ (LOSS) FOR FY 2019-20 to FY 2021-22

3.20.1 Efficiency Gains due to over achievement of Distribution Losses

AEML-D's Submission

AEML-D submitted that the Distribution Loss for FY 2019-20 was 7.37%, against the target of 8.36% approved by the Commission in AEML-D's MYT Order in Case No. 34 of 2016. For the purpose of truing up of FY 2019-20, AEML-D has claimed the efficiency gains due to over achievement in distribution loss as per the methodology adopted by the Commission for FY 2017-18 and FY 2018-19 in the MYT Order in Case No. 325 of 2019. However, AEML-D has calculated the reduction in power purchase quantum at G-T interface due to over achievement in distribution loss and then has applied the average power purchase cost to determine the efficiency gains and the share of efficiency gains, as shown in table below:

Table 3-259: Efficiency Gains due to Overachievement in Distribution Losses for FY 2019-20 as submitted by AEML-D

Particulars	Notation	FY 2019-20
Target Loss	A	8.36%
Actual Loss	В	7.37%
Difference	C = A - B	0.99%
Own Sales (MU)	D	8,452.09
CO Sales (MU)	Е	1,560.18
OA Sales (MU)	F	314.99
Total sales (MU)	G = D + E + F	10,327.26
Total Sales at T-D at actual loss (MU)	H = G/(1-B)	11,149.47
Total Sales at T-D at target loss (MU)	I = G/(1-A)	11,269.38
Changeover & OA Sales at T-D (MU)	J	2017.49
Own Sales at T-D at actual loss (MU)	K = H -J	9,131.98
Own Sales at T-D at target loss (MU)	L = I - J	9,251.89
Transmission Loss	M	3.16%
Energy requirement at G-T at actual loss (MU)	N = K/(1-M)	9,430.11
Energy requirement at G-T at target loss (MU)	O = L/(1-M)	9,553.93
Reduction in power purchase quantum (MU)	P = O-N	123.82
Power purchase rate (RskWh)	Q	4.02
Efficiency Gains / (Loss) - Rs. Crore	R = P*Q/10	49.80
1/3rd Efficiency Gains - Rs. Crore	S = R/3	16.60

Commission's Analysis and Ruling

The Commission has considered Distribution Loss as a controllable parameter, in accordance with the MYT Regulations, 2015 for FY 2019-20 and in accordance with the MYT Regulations, 2019 for FY 2020-21 and FY 2021-22. As the computation of Distribution Losses for FY 2019-20 and FY 2021-22 shows that the actual losses are lesser than the normative losses, the Commission has computed the Efficiency Gain on this account considering the target Distribution Loss in the respective MYT Orders.

As regards FY 2020-21, as stated earlier, the Commission has taken a consistent view, irrespective of efficiency gain or loss, and has hence, computed the efficiency loss for actual Distribution Loss being higher than target Distribution Loss.

The sharing of Efficiency Gains on account of lower Distribution Loss has been computed considering the difference in actual power purchase quantum and expected power purchase quantum with target distribution loss. The Commission has adopted the same approach for computing the efficiency gain loss as adopted in the previous MYT Order. The average power purchase cost approved by the Commission for the respective year has been considered for computing the Efficiency Gain. The sharing of Efficiency Gain on account of lower than target Distribution Loss for FY 2019-20 to FY 2021-22 is shown in the following Tables:

Table 3-260: Sharing of Efficiency Gain on account of lower than target Distribution Loss for FY 2019-20, as approved by Commission.

Particulars	Notation	True Up Petition	Approved after
			Truing Up
Target Loss	A	8.36%	8.36%
Actual Loss	В	7.37%	7.37%
Difference	C = A - B	0.99%	0.99%
Own Sales (MU)	D	8,452.09	8452.09
CO Sales (MU)	Е	1,560.18	
OA Sales (MU)	F	314.99	
Total sales (MU)	G = D + E + F	10,327.26	
Total Sales at T-D at actual loss (MU)	H = G/(1-B)	11,149.47	
Total Sales at T-D at target loss (MU)	I = G/(1-A)	11,269.38	
Changeover & OA Sales at T-D (MU)	J	2017.49	
Own Sales at T-D at actual loss (MU)	K = H - J	9,131.98	9125.01
Own Sales at T-D at target loss (MU)	L = I - J	9,251.89	9223.15
Transmission Loss	M	3.16%	3.16%
Energy requirement at G-T at actual loss (MU)	N = K/(1-M)	9,430.11	9422.91
Energy requirement at G-T at target loss (MU)	O = L/(1-M)	9,553.93	9524.25
Reduction in power purchase quantum (MU)	P = O-N	123.82	101.34
Power purchase rate (RskWh)	Q	4.02	4.02
Efficiency Gains / (Loss) - Rs. Crore	R = P*Q/10	49.80	40.76
1/3rd Efficiency Gains - Rs. Crore	S = R/3	16.60	13.59

Table 3-261: Sharing of Efficiency Loss on account of higher than target Distribution Loss for FY 2020-21, as approved by Commission.

Particulars	Notation	True Up	Approved after
		Petition	Truing Up
Target Loss	A		7.55%
Actual Loss	В		7.81%
Difference	C = A - B		0.26%
Own Sales (MU)	D		7170.83
CO Sales (MU)	Е		
OA Sales (MU)	F		
Total sales (MU)	G = D + E + F	AEML-D	
Total Sales at T-D at actual loss (MU)	H = G/(1-B)	has not	
Total Sales at T-D at target loss (MU)	I = G/(1-A)	computed Efficiency	
Changeover & OA Sales at T-D (MU)	J	gain/loss	
Own Sales at T-D at actual loss (MU)	K = H - J	on	7778.07
Own Sales at T-D at target loss (MU)	L = I - J	Distributi	7756.44
Transmission Loss	M	on Loss	2.94%
Energy requirement at G-T at actual loss	N = K/(1-M)	on FY	
(MU)		2020-21	8013.67
Energy requirement at G-T at target loss	O = L/(1-M)		
(MU)			7991.39
Reduction in power purchase quantum (MU)	P = O-N		-22.29
Power purchase rate (RskWh)	Q		3.82
Efficiency Gains / (Loss) - Rs. Crore	R = P*Q/10		-8.52
1/3rd Efficiency Gains - Rs. Crore	S = R/3		-5.68

Table 3-262: Sharing of Efficiency Gain on account of lower than target Distribution Loss for FY 2021-22, as approved by Commission.

Particulars	Notation	True Up	Approved
		Petition	after Truing
			Up
Target Loss	A	7.30%	7.30%
Actual Loss	В	6.52%	6.52%
Difference	C = A - B	0.78%	0.78%
Own Sales (MU)	D	7956.69	7956.69
CO Sales (MU)	Е	1473.83	
OA Sales (MU)	F	292.80	
Total sales (MU)	G = D + E + F	9723.32	
Total Sales at T-D at actual loss (MU)	H = G/(1-B)	10401.58	
Total Sales at T-D at target loss (MU)	I = G/(1-A)	10489.02	
Changeover & OA Sales at T-D (MU)	J	1872.63	
Own Sales at T-D at actual loss (MU)	K = H - J	8528.95	8511.71
Own Sales at T-D at target loss (MU)	L = I - J	8616.39	8583.27
Transmission Loss	M	3.19%	3.19%

Particulars	Notation	True Up	Approved
		Petition	after Truing
			Up
Energy requirement at G-T at actual loss (MU)	N = K/(1-M)	8809.99	8792.18
Energy requirement at G-T at target loss (MU)	O = L/(1-M)	8900.31	8866.09
Reduction in power purchase quantum (MU)	P = O-N	90.33	73.91
Power purchase rate (RskWh)	Q	4.64	4.64
Efficiency Gains / (Loss) - Rs. Crore	R = P*Q/10	41.90	34.29
1/3rd Efficiency Gains - Rs. Crore	S = R/3	13.97	11.43

3.21 SUMMARY OF AGGREGATE REVENUE REQUIREMENT

AEML-D's Submission

The summary of the ARR for the Wires Business for FY 2019-20 is as shown in the Tables below:

Table 3-263: ARR of Wires Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
O&M Expenses – Net Entitlement	850.72	841.64
Impact on PF due to SC Judgment		3.04
Depreciation	256.27	254.42
Interest on Loan Capital	146.51	146.69
Foreign exchange rate variation		0.70
Financing Charges		33.86
Refinancing Cost		22.74
PV of Interest cost saving		1.09
Interest on Working Capital – Net Entitlement	30.49	25.10
Provision for bad and doubtful debts	3.37	2.98
Contribution to contingency reserves	13.87	14.88
Income Tax	89.34	143.20
Total Revenue Expenditure	1,390.57	1,490.34
Add: Return on Equity Capital	335.71	336.23
Aggregate Revenue Requirement	1,726.28	1,826.57
Less: Non-Tariff Income	116.24	124.64
Less: Income from other business	0.08	0.41
Past gap	18.46	18.46
Net Aggregate Revenue Requirement	1,628.42	1,719.98

Table 3-264: ARR for Supply Business in FY 2019-20 as submitted by AEML-D (Rs. Crore) $\,$

Particulars / (Rs. Crore)	MYT Order	Actuals
Power Purchase Expense	4,204.44	3,974.81
O&M Expenses – Net Entitlement	419.68	428.82
Impact on PF due to SC Judgment		0.13
Depreciation	26.00	26.22
Interest on Loan Capital	5.92	5.97
Foreign exchange rate variation		0.03
Financing Charges		2.33
Refinancing Cost		1.01
PV of Interest cost saving		(0.63)
Interest on Working Capital – Net Entitlement	14.95	3.86
Interest on Consumer Security Deposit	45.90	42.42
Provision for bad and doubtful debts	12.62	13.14
Contribution to contingency reserves	1.26	1.26
Intra-State Transmission Charges	398.72	398.76
MSLDC Fees & Charges	2.00	2.00
Income Tax	507.03	587.53
Total Revenue Expenditure	5,638.52	5,487.68
Add: Return on Equity Capital	27.84	28.08
Aggregate Revenue Requirement	5,666.36	5,515.76
Less: Non-Tariff Income	41.25	46.19
Less: Income from other business		0
Add: Eff Gains/(Loss) due to Distribution Loss		16.60
Past Gap	649.30	649.30
Net Aggregate Revenue Requirement	6,274.41	6,135.47

The summary of the ARR for the Wires and Supply Business for FY 2020-21 is as shown in the Tables below:

Table 3-265: ARR of Wires and Supply Business for FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT OF	MYT ORDER		s
	Wire	Retail	Wire	Retail
Power purchase (inclusive of InSTS, Standby & SLDC)		4,713.27		3,739.53
TPC-G payment		88.28		52.75
AEML-G true-up surplus		(91.96)		(91.96)
Operation & Maintenance expenditure	875.50	430.09	811.71	426.37
Depreciation	282.33	29.71	306.80	85.48
Interest on long-term loan	162.35	8.23	156.22	2.70
Financing, Refinancing charges			14.23	1.42
FERV				
Return on Equity	398.17	33.84	573.39	43.33
Interest on working capital	31.39	5.55	26.24	
Interest on CSD		27.35		21.06
Bad-debts written off	3.37	12.62	3.01	12.41
Contribution to contingency reserve	15.38	1.31	16.56	1.25
Non-Tariff Income	120.36	42.32	136.43	23.01
Income from Other Business	0.13		0.64	
Aggregate Revenue Requirement (ARR)	1,648.00	5,215.97	1,771.09	4,271.33
Past Gap	176.68	25.85	176.68	25.85
ARR adjustment		(142.87)		(142.87)
Total ARR	1,824.68	5,098.95	1,947.77	4,154.31
Revenue from Own consumers	1,318.87	5,285.41	1,062.53	4,388.30

Particulars / (Rs. Crore)	MYT ORDER		Actuals	
	Wire	Retail	Wire	Retail
Wheeling revenue from CO & OA consumers	252.91		250.21	
CSS revenue		68.04		52.40
Total Revenue	1,571.78	5,353.45	1,312.74	4,440.70
Gap / (Surplus)	252.90	(254.50)	635.03	(286.39)

The summary of the ARR for the Wires and Supply Business for FY 2021-22 is as shown in the Table below:

Table 3-266: ARR of Wires and Supply Business for FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT O	RDER	ACTUALS	
	Wire	Retail	Wire	Retail
Power purchase (inclusive of InSTS, Standby & SLDC)		4,675.33		4,660.05
Operation & Maintenance expenditure	904.96	444.45	1,006.54	456.50
Depreciation	303.04	38.53	347.67	23.48
Interest on long-term loan	168.12	16.20	188.05	0.55
Financing, Refinancing charges, FERV,			29.79	0.04
PV of interest cost saving				
Return on Equity	422.23	43.68	641.40	46.07
Interest on working capital	32.57	3.50	27.06	-
Interest on CSD		30.03		18.71
Bad-debts written off	3.37	12.62	2.63	11.74
Contribution to contingency reserve	16.84	1.63	18.93	1.34
Non-Tariff Income	126.12	43.62	166.13	43.86
Income from Other Business	0.13		3.27	-
D-loss efficiency gain				13.97
Aggregate Revenue Requirement (ARR)	1,724.88	5,222.35	2,092.67	5,188.59

Particulars / (Rs. Crore)	MYT O	MYT ORDER		ACTUALS	
	Wire	Retail	Wire	Retail	
ARR adjustment		109.50		109.50	
Total ARR	1,724.88	5,331.85	2,092.67	5,298.09	
Revenue from Own consumers	1,255.90	5,477.45	1,099.71	4,904.32	
Wheeling revenue from CO & OA consumers	234.49		232.41		
CSS revenue		89.20		65.97	
Total Revenue	1,490.39	5,566.65	1,332.12	4,970.29	
Gap / (Surplus)	234.49	(234.80)	760.54	327.80	

Commission's Analysis and Ruling

Based on the components as approved in the above paragraphs, the Commission has approved the ARR for Wires Business and Supply Business for FY 2019-20 to FY 2021-22, as shown in the Tables below:

Table 3-267: ARR for Wires Business for FY 2019-20 as approved by Commission (Rs. Crore)

(NS. CIOIC)							
Particulars	MYT Order	True-up Petition	Approved after truing up				
Operation & Maintenance Expenses	850.72	841.64	836.58				
Impact on PF due to SC Judgment		3.04	3.04				
Depreciation	256.27	254.42	245.76				
Interest on Loan Capital	146.51	146.69	146.84				
Foreign exchange rate variation	-	0.70	0.19				
Financing Charges	-	33.86	27.10				
Refinancing Charges	-	22.74	22.72				
PV of interest cost saving	-	1.09	1.10				
Interest on Working Capital	30.49	25.10	24.97				
Interest on deposit from Consumers and Distribution System Users	-	-	-				
Bad debts written off	3.37	2.98	2.98				
Contribution to contingency reserves	13.87	14.88	13.87				
Income Tax	89.34	143.20	125.38				
Total Revenue Expenditure	1390.57	1490.34	1450.54				
Add: Return on Equity Capital	335.71	336.23	335.78				
Aggregate Revenue Requirement	1726.28	1,826.57	1,786.32				
Less: Non-Tariff Income	116.24	124.64	124.64				
Less: Income from other business	0.08	0.41	0.41				
Past gaps	18.46	18.46	18.46				
Aggregate Revenue Requirement from Wires Business	1,628.42	1,719.98	1,679.73				

Table 3-268: ARR for Supply Business for FY 2019-20 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Power Purchase cost	4,204.44	3,974.81	3,974.81
Operation & Maintenance Expenses	419.68	428.82	415.69
Impact on PF due to SC Judgment		0.13	0.13
Depreciation	26.00	26.22	26.22
Interest on Loan Capital	5.92	5.97	5.97
Foreign exchange rate variation	-	0.03	0.01
Financing Charges	-	2.33	2.03

Particulars	MYT Order	True-up Petition	Approved after truing up
Refinancing Charges	-	1.01	1.01
PV of interest cost saving	-	(0.63)	(0.63)
Interest on Working Capital	14.95	3.86	-
Interest on deposit from Consumers and Distribution System Users	45.90	42.42	42.42
Bad debts written off	12.62	13.14	13.14
Contribution to contingency reserves	1.26	1.26	1.26
Intra-State Transmission Charges	398.72	398.76	398.76
MSLDC Fees & Charges	2.00	2.00	2.00
Income Tax	507.03	587.53	514.55
Total Revenue Expenditure	5,638.52	5,487.68	5,397.38
Add: Return on Equity Capital	27.84	28.08	27.15
Aggregate Revenue Requirement	5,666.36	5,515.76	5,424.53
Less: Non-Tariff Income	41.25	46.19	46.19
Less: Income from other business	-	-	-
Eff Gains/(Loss) due to Distribution Loss		16.60	13.59
Past gaps	649.30	649.30	649.30
Aggregate Revenue Requirement from Supply Business	6,274.41	6,135.47	6,041.23

Table 3-269: ARR for Wires Business for FY 2020-21 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Operation & Maintenance Expenses	875.50	809.53	776.04
Impact on PF due to SC Judgment	-	2.18	2.18
Depreciation	282.33	306.80	297.60
Interest on Loan Capital	162.35	156.22	156.88
Foreign exchange rate variation	-	-	-
Financing Charges	-	13.33	13.27
Refinancing Charges	-	0.89	0.90
PV of interest cost saving			
Interest on Working Capital	31.39	26.24	26.24
Interest on deposit from Consumers and Distribution System Users	-	-	-
Bad debts written off	3.37	3.01	3.01
Contribution to contingency reserves	15.38	16.56	15.53
Total Revenue Expenditure	1370.32	1334.77	1291.65
Add: Return on Equity Capital	398.17	573.39	451.23
Aggregate Revenue Requirement	1,768.49	1,908.17	1,742.88
Less: Non-Tariff Income	120.36	136.43	136.43

Particulars	MYT Order	True-up Petition	Approved after truing up
Less: Income from other business	0.13	0.64	0.64
Past gaps	176.68	176.68	176.68
Aggregate Revenue Requirement from Wires Business	1,824.68	1,947.77	1,782.48

Table 3-270: ARR for Supply Business for FY 2020-21 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Power Purchase cost	4,234.97	3,264.24	3,264.24
Operation & Maintenance Expenses	430.09	426.20	409.04
Impact on PF due to SC Judgment	-	0.17	0.17
Depreciation	29.71	85.48	85.48
Interest on Loan Capital	8.23	2.70	2.70
Foreign exchange rate variation	-	1	-
Financing Charges	-	1.38	1.38
Refinancing Charges	-	0.04	0.04
Interest on Working Capital	5.55	-	-
Interest on deposit from Consumers and Distribution System Users	27.35	21.06	21.06
Bad debts written off	12.62	12.41	12.41
Contribution to contingency reserves	1.31	1.25	1.25
Intra-State Transmission Charges	476.65	472.92	472.92
MSLDC Fees & Charges	1.65	2.36	2.36
Payment to TPC-G	88.28	52.75	52.75
True up Gap/(surplus) of AEMl-G	(91.96)	(91.96)	(91.96)
Total Revenue Expenditure	5,224.45	4,251.01	4,233.85
Add: Return on Equity Capital	33.84	43.33	33.89
Aggregate Revenue Requirement	5,258.29	4,294.34	4,267.73
Less: Non-Tariff Income	42.32	23.01	23.01
Less: Income from other business	-	-	-
Eff Gains/(Loss) due to Distribution Loss			(5.68)
Past gaps	25.85	25.85	25.85
ARR adjustment	(142.87)	(142.87)	(142.87)
Aggregate Revenue Requirement from Supply Business	5,098.95	4,154.31	4,122.02

Table 3-271: ARR for Wires Business for FY 2021-22 as approved by Commission (Rs. Crore)

(KS. C101e)				
Particulars	MYT Order	True-up Petition	Approved after truing up	
Operation & Maintenance Expenses	904.96	1,004.26	1001.02	
Impact on PF due to SC Judgment	-	2.28	2.28	
Depreciation	303.04	347.67	339.60	
Interest on Loan Capital	168.12	188.05	189.43	
Foreign exchange rate variation	-	0.33	0.09	
Financing Charges	-	13.54	10.68	
Refinancing Charges	-	12.47	12.47	
PV of interest cost saving	-	3.45	2.52	
Interest on Working Capital	32.57	27.06	27.27	
Interest on deposit from Consumers and				
Distribution System Users	-	-	-	
Bad debts written off	3.37	2.63	2.63	
Contribution to contingency reserves	16.84	18.93	17.89	
Total Revenue Expenditure	1428.90	1620.67	1605.88	
Add: Return on Equity Capital	422.23	641.40	504.55	
Aggregate Revenue Requirement	1,851.13	2,262.07	2,110.43	
Less: Non-Tariff Income	126.12	166.13	166.13	
Less: Income from other business	0.13	3.27	3.27	
Aggregate Revenue Requirement from Wires Business	1,724.88	2,092.67	1,941.03	

Table 3-272: ARR for Supply Business for FY 2021-22 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Power Purchase cost	4,192.92	4,179.99	4,272.07
Operation & Maintenance Expenses	444.45	456.43	437.39
Impact on PF due to SC Judgment	-	0.07	0.07
Depreciation	38.53	23.48	22.59
Interest on Loan Capital	16.20	0.55	0.17
Foreign exchange rate variation	-	0.00	-
Financing Charges	-	0.03	0.03
Refinancing Charges	-	0.04	0.04
PV of interest cost saving	-	(0.03)	(0.04)
Interest on Working Capital	3.50	-	-
Interest on deposit from Consumers and Distribution System Users	30.03	18.71	18.71
Bad debts written off	12.62	11.74	11.74
Contribution to contingency reserves	1.63	1.34	1.34

Particulars	MYT Order	True-up Petition	Approved after truing up
Intra-State Transmission Charges	480.59	477.84	477.84
MSLDC Fees & Charges	1.82	2.22	2.22
Total Revenue Expenditure	5,222.29	5,172.41	5,244.17
Add: Return on Equity Capital	43.68	46.07	34.01
Aggregate Revenue Requirement	5,265.97	5,218.48	5,278.18
Less: Non-Tariff Income	43.62	43.86	43.86
Less: Income from other business	-	-	-
Eff Gains/(Loss) due to Distribution Loss	-	13.97	11.43
ARR adjustment	109.50	109.50	109.50
Aggregate Revenue Requirement from Supply Business	5,331.85	5,298.09	5,355.25

3.22 REVENUE from Own Consumer

AEML-D's Submission

For FY 2019-20, AEML-D has charged tariffs as approved for FY 2019-20 in AEML-D's MTR Order dated 12th September 2018 in Case No. 200 of 2017. The revenue (excluding RA recovery) earned from sale of energy to the consumers in FY 2019-20 is shown in the table below:

Table 3-273: Revenue from Sales submitted by AEML-D for FY 2019-20

Particulars	MTR Order	True-up Petition
Revenue (Rs. Crore)	7,529.33	7,399.87
Own Sales (MU)	8,622.04	8,452.09
ABR (Rs. /kWh)	8.73	8.76

For FY 2020-21 and FY 2021-22, AEML-D has charged tariffs as approved for the respective years in AEML-D's MYT Order dated 31st March 2020 19. The revenue earned from sale of energy to consumers in FY 2020-21 and FY 2021-22 is shown in the tables below:

Table 3-274: Revenue from Sales submitted by AEML-D for FY 2020-21

Particulars	MTR Order	True-up Petition
Revenue (Rs. Crore)	6,604.28	5,450.83
Own Sales (MU)	8,834.29	7,170.83
ABR (Rs. /kWh)	7.48	7.60

Table 3-275: Revenue from Sales submitted by AEML-D for FY 2021-22

Particulars	MTR Order	True-up Petition
Revenue (Rs. Crore)	6,733.35	6,004.03
Own Sales (MU)	9,048.92	7,958.39
ABR (Rs./kWh)	7.44	7.54

The Commission asked for the audited Reconciliation Statement showing income and expenses and their allocation to generation, transmission and distribution businesses of AEML. From the Reconciliation Statement, the Commission has verified the revenue from sale of power.

The Commission has accepted the submission of AEML-D regarding revenue from assessed sales. Accordingly, it has not been considered as part of revenue, since it is included in Non-Tariff Income.

Accordingly, the Commission approves the actual total revenue from sale of electricity to own consumers, as shown in the Table below:

Table 3-276: Revenue for FY 2019-20 to FY 2021-22 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True Up Petition	Approved in truing Up
FY 2019-20	7,529.33	7,399.87	7,399.87
FY 2020-21	6,604.28	5,450.83	5,450.83
FY 2021-22	6,733.35	6,004.03	6,004.03

3.23 REVENUE FROM WHEELING CHARGES FROM CHANGE-OVER AND OPEN ACCESS CONSUMERS

AEML-D's Submission

The revenue earned from Wheeling Charges in FY 2019-20 is shown in the Table below:

Table 3-277: Wheeling Revenue from Change-over and OA Consumers in FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars (25 do 5 do	MYT Order	AEML-D Petition
Revenue from Wheeling Charges from Change-over & OA	274.09	267.53
Consumers		

The revenue earned from Wheeling Charges in FY 2020-21 and FY 2021-22, paid by Change-over consumers and OA consumers is shown in the Table below:

Table 3-278: Wheeling Revenue from Change-over and OA Consumers in FY 2020-21 and FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
FY 2020-21	252.91	250.21
FY 2021-22	234.49	232.41

Commission's Analysis and Ruling

The Commission has approved the actual revenue from Wheeling Charges from changeover and OA consumers as submitted by AEML-D, as shown in the following Table:

Table 3-279: Wheeling Revenue from Change-over and OA Consumers in FY 2019-

20 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
FY 2019-20	274.09	267.53	267.53
FY 2020-21	252.91	250.21	250.21
FY 2021-22	234.49	232.41	232.41

CROSS-SUBSIDY SURCHARGE 3.24 REVENUE FROM **FROM** OA **CONSUMERS**

AEML-D's Submission

The revenue earned from CSS in FY 2019-20, paid by Change-over consumers and OA consumers is shown in the Table below:

Table 3-280: Revenue from CSS in FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	True-up Petition
Revenue from CSS	166.38	160.23

The revenue earned from CSS in FY 2020-21 and FY 2021-22, paid by Change-over consumers and OA consumers is shown in the Table below:

Table 3-281: Revenue from CSS in FY 2020-21 and FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	True-up Petition
FY 2020-21	68.04	52.40
FY 2021-22	89.20	65.97

The Commission has verified the revenue from CSS from the audited Reconciliation Statement, and has approved it as shown in the following Table:

Table 3-282: Revenue from CSS in FY 2019-20 to FY 2021-22 as approved by Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
FY 2019-20	166.38	160.23	160.23
FY 2020-21	68.04	52.40	52.40
FY 2021-22	89.20	65.97	65.97

3.25 REVENUE GAP

AEML-D's Submission

FY 2019-20

The Revenue Gap for the Wires Business for FY 2019-20 is as under:

Table 3-283: Revenue Gap for Wires Business for FY 2019-20 as submitted by AEML-D (Rs Crore)

TIENTE B (TES CTOTC)			
Particulars	MYT Order	Actuals	
Wires ARR	1,628.42	1,719.98	
Wires Revenue from own consumers	71.77	198.11	
Wires Revenue from changeover and OA	1,628.42	1,719.98	
consumers			
Revenue Gap/(Surplus) of Wires Business	71.77	198.11	

The Revenue Gap for Supply Business for FY 2019-20 is as under:

Table 3-284: Revenue Gap/(Surplus) for Supply Business for FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	MTR Order	Actuals
Supply ARR	6,274.41	6,135.47
Supply Revenue from own consumers	(138.74)	(170.29)
Revenue from CSS	6,274.41	6,135.47
Revenue Gap/(Surplus) of Supply Business	(138.74)	(170.29)

FY 2020-21

The Revenue Gap for Wires Business for FY 2020-21 is as under:

Table 3-285: Revenue Gap for Wires Business for FY 2020-21 as submitted by AEML-D (Rs Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
Wires ARR	1,648.00	1,771.09
Past Gap allowed in MYT Order	176.68	176.68
Wires ARR with Revenue Gap	1,824.68	1,947.77
Wires Revenue from own consumers	1,318.87	1,062.53
Wires Revenue from changeover and OA consumers	252.91	250.21
Revenue Gap of Wires Business	252.90	635.03

The Revenue Gap for Supply Business for FY 2020-21 is as under:

Table 3-286: Revenue Gap/(Surplus) for Supply Business in FY 2020-21 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
Supply ARR	5,215.97	4,271.33
Past Gap allowed in MYT Order	25.85	25.85
ARR adjustment	(142.87)	(142.87)
Supply ARR with Revenue Gap	5,098.95	4,154.31
Supply Revenue from own consumers	5,285.41	4,388.30
Revenue from CSS	68.04	52.40
Revenue Gap of Supply Business	(254.50)	(286.39)

FY 2021-22

The Revenue Gap for Wires Business for FY 2021-22 is as under:

Table 3-287: Revenue Gap for Wires Business for FY 2021-22 as submitted by AEML-D (Rs Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
Wires ARR	1724.88	2,092.67
Past Gap allowed in MYT Order	-	-
Wires ARR with Revenue Gap	1,724.88	2,092.67
Wires Revenue from own consumers	1,255.90	1,099.71
Wires Revenue from changeover and OA consumers	234.49	232.41
Revenue Gap of Wires Business	234.49	760.54

The Revenue Gap for Supply Business for FY 2021-22 is as under:

Table 3-288: Revenue Gap/(Surplus) for Supply Business in FY 2021-22 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	Actuals
Supply ARR	5,222.35	5,188.59
Past Gap allowed in MYT Order	-	-
ARR adjustment	109.50	109.50
Supply ARR with Revenue Gap	5,331.85	5,298.09
Supply Revenue from own consumers	5,477.45	4,904.32
Revenue from CSS	89.20	65.97
Revenue Gap of Supply Business	(234.80)	327.80

Commission's Analysis and Ruling

Based on the approved ARR and Revenue as discussed in the previous paragraphs, the Commission has approved the Revenue Gap/(Surplus) for the Wires Business and Supply Business of AEML-D for FY 2019-20 to FY 2021-22 as shown in the Tables below:

Table 3-289: Revenue Gap/(Surplus) for Wires Business for FY 2019-20 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Total Wires ARR	1,628.42	1,719.98	1679.73
Less: Wires Revenue from own consumers	1,282.56	1,254.33	1,254.33
Less: Wires Revenue from changeover/OA consumers	274.09	267.53	267.53
Revenue Gap / (Surplus)	71.77	198.11	157.87

Table 3-290: Revenue Gap/(Surplus) for Supply Business for FY 2019-20 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	True-up Petition	Approved after truing up
Total Supply ARR	6,274.41	6,135.47	6,041.23
Less: Supply Revenue from own consumers	6,246.77	6,145.53	6,145.53
Less: Revenue from CSS	166.38	160.23	160.23
Revenue Gap / (Surplus)	(138.74)	(170.29)	(264.53)

Table 3-291: Revenue Gap/(Surplus) for Wires Business for FY 2020-21 as approved by the Commission (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	True-up Petition	Approved after truing up
Total Wires ARR	1,824.68	1,947.77	1,782.48
Less: Wires Revenue from own consumers	1,318.87	1,062.53	1,062.53
Less: Wires Revenue from changeover/OA consumers	252.91	250.21	250.21
Revenue Gap / (Surplus)	252.90	635.03	469.74

Table 3-292: Revenue Gap/(Surplus) for Supply Business for FY 2020-21 as approved by the Commission (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	True-up Petition	Approved after truing up
Total Supply ARR	5,098.95	4,154.31	4,122.02
Less: Supply Revenue from own consumers	5,285.41	4,388.30	4,388.30
Less: Revenue from CSS	68.04	52.40	52.40
Revenue Gap / (Surplus)	(254.50)	(286.39)	(318.68)

Table 3-293: Revenue Gap/(Surplus) for Wires Business for FY 2021-22 as approved by the Commission (Rs. Crore)

Particulars / (Rs. Crore)	MYT Order	True-up Petition	Approved after truing up
Total Wires ARR	1,724.88	2,092.67	1,941.03
Less: Wires Revenue from own consumers	1255.90	1099.71	1099.71
Less: Wires Revenue from changeover/OA consumers	234.49	232.41	232.41
Revenue Gap / (Surplus)	234.49	760.54	608.91

Table 3-294: Revenue Gap/(Surplus) for Supply Business for FY 2021-22 as approved by the Commission (Rs. Crore)

Particulars / (Rs. Crore)	MYT	True-up	Approved after
	Order	Petition	truing up
Total Supply ARR	5,331.85	5,298.09	5,355.25
Less: Supply Revenue from own consumers	5,477.45	4,904.32	4,904.32
Less: Revenue from CSS	89.20	65.97	65.97
Revenue Gap / (Surplus)	(234.80)	327.80	384.96

As regards Carrying Cost on the Revenue Gap/(Surplus), the same has been elaborated subsequently while discussing the 'Recovery of Past Gaps'.

3.26 REGULATORY ASSETS RECOVERY IN FY 2019-20

AEML-D's Submission

AEML-D has levied Regulatory Asset Charges in FY 2019-20 as approved in MTR Order in Case No. 200 of 2017. The Commission had approved the Regulatory Asset Charges for FY 2019-20 in the above Order considering RA recovery of Rs. 451.08 Crore. The actual RA recovery in FY 2019-20 from all consumers was Rs. 404.97 Crore. Thus, the RA under recovery is Rs. 46.11 Crore.

Table 3-295: FY 2019-20 RA recovery

Particulars	Rs. Crore
RA Recovery approved for FY 2019-20	451.08
Actual RA Recovery in FY 2019-20	404.97
RA under recovery	46.11

Commission's Analysis and Ruling

The Commission has considered the actual RA recovery as submitted by AEML-D. The RA over/under-recovery determined by the Commission after true-up is given in the following Table:

Table 3-296: Regulatory Asset Over/Under Recovery in FY 2019-20 as approved by the Commission (Rs. Crore)

Particulars	True-up Petition	Approved in this Order
RA Recovery approved for FY 2019-20	451.08	451.08
Actual RA Recovery in FY 2019-20	404.97	404.97
RA under recovery	46.11	46.11

The treatment of this Over/Under Recovery of Regulatory Asset is discussed along with the treatment of Cumulative Revenue Gap/(Surplus) in Chapter 6 of this Order.

4 PROVISIONAL TRUING-UP FOR FY 2022-23

AEML-D submitted that it has filed its Petition for provisional truing-up of expenditure and revenue for FY 2022-23 in accordance with Regulation 5.1 (b) of the MYT Regulations, 2019, which require the Distribution Licensee to file the MTR Petition comprising inter alia, provisional truing up for FY 2022-23 to be carried out under the MYT Regulations, 2019. Accordingly, AEML-D has presented the unaudited actuals of H1 of FY 2022-23 and the estimates of H2 of FY 2022-23. A comparison with the approved figures as per MYT Order is also presented along with reasons for deviations.

The Commission has analysed the estimated expenses and revenue under each head and provisionally approved the expenditure and revenue of AEML-D for FY 2022-23, in accordance with the MYT Regulations, 2019, as discussed in the subsequent paragraphs.

4.1 SALES

AEML-D's Submission

4.1.1 Actuals for H1 of FY 22-23

AEML-D submitted the actual category-wise own sales and change-over sales in H1 of FY 2022-23.

AEML-D submitted that it is not possible to quantify the exact quantum of OA consumption till September 2022, as the Generation Credit Note (GCN) of non-firm OA consumers till September 2022 has not been received yet. Therefore, the OA consumption shown in table below is subject to change subsequent to receipt of all GCNs.

Table 4-1: Estimated OA Consumption in H1 of FY 2022-23 as submitted by AEML-D (MU)

Particulars	H1 of FY 22-23 -Estimates
HT I - Industrial	98.97
HT II - Commercial	43.52
HT VI(B) - Public Service (Others)	9.85
Total	152.33

4.1.2 Estimates for H2 of FY 22-23

For estimating sales for H2 of FY 2022-23, the actuals for H2 of previous year cannot be relied upon as the sales in FY 2021-22 were significantly impacted by COVID. Therefore,

for estimating the sales for H2 of FY 2022-23, AEML-D has considered the LT category wise growth rates as considered by the Commission while projecting LT sales in the MYT Order of AEML-D dated 30 March, 2020 as these growth rates represented business as usual growth. Hence, AEML-D has applied the year wise growth rates (as per MYT Order) to the actual LT sales for FY 2019-20 to arrive at the normalised sales for 2022-23. The difference between total LT sales for FY 2022-23 as derived above and the actual LT sales till September 2022 is considered as LT sales for H2 of FY 2022-23.

In the MYT Order dated 30 March, 2020, the Commission had considered negative growth rate for HT Commercial category, while projecting sales for the fourth Control Period. However, the actual HT Commercial sales has shown increasing trend over the years in case of AEML-D. Hence, for estimating the HT sales for H2 of FY 2022-23, AEML-D has not considered the methodology followed for estimation of LT sales for H2 of FY 2022-23. AEML-D has used various steps for estimation of HT sales in H2 of FY 2022-23.

At present, AEML-D is carrying out two DSM programs – large scale refrigerator program and large-scale ceiling fan program, after getting approval from the Commission. The estimated incremental reduction in sales due to these two programs has been factored in the sales projections by AEML-D. AEML-D expects reduction of 0.13 MU in sales of H2 of FY 2022-23.

The incremental RTS generation in AEML-D licence area in H2 of FY 2022-23 is expected to be 1.99 MU. AEML-D has considered the same in different categories and has factored in the same estimation of sales for H2 of FY 2022-23.

The actual own sales in H1 of FY 22-23 and the estimated own sales in H2 of FY 22-23 worked out based on the methodology and assumptions is shown as under:

Table 4-2: Own Sales of Actual H1 and estimated H2 for FY 2022-23 as submitted by AEML-D (MU)

Particulars / (MU)	MYT Order	FY 2022-23		
		Own Sales (H1) - Provisional Actuals	Own Sales (H2) - Estimates	Own Sales (Total) - Estimates
LT Category				
LT I - Below Poverty Line	0.01	0.00	0.00	0.01
LT -I Residential (Single Phase)				
0-100	1880.81	846.92	981.46	1828.38
101-300	1226.29	655.65	607.26	1262.91

Particulars / (MU)	MYT Order	FY 2022-23			
		Own Sales	Own Sales	Own Sales	
		(H1) -	(H2) -	(Total) -	
		Provisional	Estimates	Estimates	
		Actuals			
301-500	206.12	138.59	63.90	202.49	
500 and above	68.30	54.29	11.23	65.53	
LT -I Residential (Three Phase)					
0-100	311.31	150.57	166.64	317.21	
101-300	450.24	232.46	229.39	461.85	
301-500	226.85	131.55	98.60	230.15	
500 and above	412.12	264.58	165.00	429.58	
LT II (a) - 0-20 kW	1956.47	894.11	1163.82	2057.93	
LT II (b) - 20-50 kW	229.04	110.40	137.99	248.39	
LT II (c) - above 50 kW	518.38	301.30	313.38	614.68	
LT III (a) - LT Industrial upto 20 kW	190.52	159.01	172.77	331.79	
LT III (b) - LT Industrial above 20 kW	378.08	188.82	206.16	394.98	
LT IV (a): PS - Govt. EI & Hospitals	39.92	14.80	24.86	39.67	
LT IV (b): PS – Others	310.01	91.08	100.90	191.98	
LT V (a): Agriculture – Pumpsets	0.14	0.04	0.01	0.05	
LT V (b): Agriculture – Others	0.48	0.18	0.21	0.39	
LT VI: EV Charging Stations	0	0.28	1.03	1.31	
Total LT	8405.08	4234.66	4444.61	8679.27	
HT Category					
HT I: HT-Industry	411.70	186.32	328.94	515.26	
HTII: HT- Commercial	279.88	232.82	173.64	406.46	
HT III: HT-Group Housing Society	29.37	6.51	4.65	11.16	
HT IV - HT Metro & Monorail	31.17	11.76	0	11.76	
HT V (a):PS - Govt. EI & Hospitals	5.96	3.44	2.79	6.23	
HT V (b):PS – Others	103.74	120.75	125.04	245.79	
HT VI: EV Charging Stations		0	70.00	70.00	
Total HT	861.82	561.60	705.06	1266.66	
EHT IV - HT Metro & Monorail		0	30.00	30.00	
Total	9266.90	4796.25	5179.68	9975.93	

4.1.3 Estimation of AEML-D Changeover Sales:

From FY 2020-21 onwards, AEML-D has been supplying a few consumers (residential category) on TPC-D network. The sales estimation made for own consumers, as shown above is inclusive of AEML-D changeover consumers. The actual AEML-D changeover sales for H1 of FY 2022-23 and estimated sales for H2 of 2022-23 is shown in table below:

Table 4-3: FY 2022-23 Changeover Sales H1 provisional actual & H2 estimated

Particulars / (MU)		FY 2022-23		
	Sales (H1) - Sales (H2) - Sales			
	Provisional	Estimates	(Total) -	
	Actuals		Estimates	
AEML-D Changeover Sales	0.91	0.77	1.68	0

4.1.4 Estimation of Changeover Sales on TPC-D (AEML-D) Network

The estimated change-over sales on TPC-D (*AEML-D*) network in H2 of FY 2022-23 is worked out based on the methodology and assumptions adopted is shown as under:

Table 4-4: Estimated Changeover Sales of H1 and H2 of FY 2022-23 as submitted by $AEML-D\ (MU)$

Particulars / (MU)	MYT	FY 2022-23			
	Order	Sales (H1) - Provisional Actuals	Sales (H2) - Estimates	Sales (Total) - Estimates	
LT Category					
LT I - Below Poverty Line	0	0	0	0	
LT -I Residential (Single					
Phase)					
0-100	485.94	248.33	233.66	481.98	
101-300	421.05	245.37	166.17	411.55	
301-500	71.12	52.25	18.21	70.46	
500 and above	19.10	15.26	2.69	17.95	
LT -I Residential (Three Phase)					
0-100	81.53	42.86	43.41	86.27	
101-300	119.22	66.52	59.46	125.98	
301-500	57.42	34.39	22.89	57.27	
500 and above	71.20	35.59	19.99	55.59	
LT II (a) - 0-20 kW	95.68	36.60	30.47	67.07	
LT II (b) - 20-50 kW	23.09	6.59	5.62	12.22	
LT II (c) - above 50 kW	32.90	8.15	5.83	13.98	
LT III (a) - LT Industrial upto 20 kW	6.75	7.22	6.70	13.92	
LT III (b) - LT Industrial above 20 kW	1.43	3.91	3.16	7.07	
LT IV (a): PS - Govt. EI & Hospitals	0	1.21	1.28	2.49	
LT IV (b): PS – Others	7.26	1.12	1.47	2.59	
LT V (a): Agriculture – Pumpsets	0	0	0	0	

Particulars / (MU)	MYT	FY 2022-23				
	Order	Sales (H1) - Provisional Actuals	Sales (H2) - Estimates	Sales (Total) - Estimates		
LT V (b): Agriculture – Others	0	0	0	0		
LT VI: EV Charging Stations	0	0	0	0		
Total LT	1493.69	805.39	621.02	1426.41		
HT Category						
HT I: HT-Industry	0.01	0	0	0		
HTII: HT- Commercial	0.33	0.11	0.10	0.21		
HT III: HT-Group Housing Society	0	0	0	0		
HT IV - HT Metro & Monorail	0	0	0	0		
HT V (a):PS - Govt. EI & Hospitals	0	0	0	0		
HT V (b):PS – Others	0	0	0	0		
HT VI: EV Charging Stations	0	0	0	0		
Total HT	0.34	0.11	0.10	0.21		
Total	1494.03	805.50	621.11	1426.61		

4.1.5 Estimation of OA consumption

For estimation of OA sales for FY 2022-23, AEML-D has considered the available OA consumption for H1 of FY 2022-23 (provisional actuals) and has applied the corelation factors on the consumption of September 2022 to determine the estimated consumption for H2 of FY 2022-23.

The estimated OA consumption for H1 and H2 of FY 2022-23 are shown in the table below:

Table 4-5: Estimated OA consumption of FY 2022-23 as submitted by AEML-D (MU)

Particulars /(MU)	MYT Order	OA Consumption (H1) - Estimates	OA Consumption (H2) - Estimates	OA Consumption (Total) - Estimates
HT I - Industrial	136.85	98.97	26.60	125.57
HT II - Commercial	93.77	43.52	74.22	117.73
HT VI(B) - Public Service (Others)	4.63	9.85	12.50	22.35
Total	235.25	152.33	113.32	265.65

AEML-D has estimated the sales for FY 2022-23, based on the actual sales in H1 of the year, past trends, and considering the expected addition of consumers in its supply area, as shown above.

The Commission has accepted the estimated sales for FY 2022-23 as submitted by AEML-D, as shown in the table below:

Table 4-6: Category-Wise Own Sales for FY 2022-23 as approved by Commission (MU)

(MC)								
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up					
EHT Category								
EHT IV - Industry								
EHT IV - Metro & Monorail		30.00	30.00					
HT Category								
HT I: HT-Industry	411.70	515.26	515.26					
HTII: HT- Commercial	249.75	406.46	406.46					
HT III: HT-Group Housing Society	29.37	11.16	11.16					
HT IV: HT -Public Water Works	8.13	-	-					
HT V - HT Metro & Monorail	31.17	11.76	11.76					
HT VI (a):PS - Govt. EI & Hospitals	5.96	6.23	6.23					
HT VI (b):PS - Others	95.61	245.79	245.79					
HT VII: Temporary Supply	30.13	-	-					
HT VIII: EV Charging Stations		70.00	70.00					
Sub-total	861.82	1,266.66	1,266.66					
LT Category								
LT I - Below Poverty Line	0.01	0.01	0.01					
LT -I Residential (Single Phase)		-	-					
0-100	1877.45	1,828.38	1,828.38					
101-300	1226.29	1,262.91	1,262.91					
301-500	206.12	202.49	202.49					
500and above	68.30	65.53	65.53					
LT -I Residential (Three Phase)		-	-					
0-100	311.31	317.21	317.21					
101-300	450.24	461.85	461.85					
301-500	226.85	230.15	230.15					
500and above	412.12	429.58	429.58					
LT II (a) - 0-20 kW	1,943.16	2,057.93	2,057.93					
LT II (b) - 20-50 kW	229.04	248.39	248.39					
LT II (c) - above 50 kW	518.38	614.68	614.68					
LT III (a) - LT Industrial upto 20 kW	190.52	331.79	331.79					

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
LT III (b) - LT Industrial above 20 kW	378.08	394.98	394.98
LT IV - Public Water Works	12.77	-	-
LT-V : LT- Advertisements and Hoardings	2.87	-	-
LT VI: LT -Street Lights	48.70	-	-
LT-VII (A): LT -Temporary Supply Religious	1.75	-	-
LT-VII (B): LT -Temporary Supply Others	10.43	-	-
LT VIII: LT - Crematorium & Burial Grounds	1.61	-	-
LT IX (a): PS - Govt. EI & Hospitals	39.92	39.67	39.67
LT IX (b): PS - Others	248.53	191.98	191.98
LT X (a): Agriculture - Pumpsets	0.14	0.05	0.05
LT X (b): Agriculture - Others	0.48	0.39	0.39
LT XI: EV Charging Stations	-	1.31	1.31
Sub-total	8,405.08	8,679.27	8,679.27
Total	9,266.90	9,975.93	9,975.93

The Changeover sales have been considered as approved in the MTR Order of TPC-D dated 31st March 2023 in Case No.225 of 2022. The sales have been considered net of the applicable distribution losses for HT and LT level. The category-wise changeover sales is not relevant for AEML-D Energy Balance.

Accordingly, the Change-over Sales provisionally approved by the Commission for FY 2022-23 is as stated in the Table below:

Table 4-7: Category-Wise Change-over Sales of FY 2022-23 as approved by Commission (MU)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
HT Category	0.34	0.21	0.23
LT Category	1493.68	1426.41	1463.32
Total	1494.02	1426.61	1463.55

The Commission has also provisionally approved the figures of OA consumption as shown in the Table below:

Approved after **MYT AEML-D** Particulars /(MU) provisional truing Petition Order up HT I - Industrial 136.85 196.58 196.58 93.77 66.03 66.03 HT II - Commercial HT VI(B) - Public Service (Others) 4.63 30.20 30.20 235.25 292.80 292.80 **Total**

Table 4-8: OA Consumption for FY 2022-23 as approved by the Commission (MU)

4.2 DISTRIBUTION LOSSES AND ENERGY BALANCE

AEML-D's Submission

The Commission had approved Distribution Loss of 7.05% for FY 2022-23 for AEML-D. AEML-D has considered the provisional actual distribution loss for H1 of FY 2022-23 at 6.44% and has considered the losses in H2 also at the same level, i.e., 6.44% only. AEML-D has proposed to consider the realistic distribution losses of 6.44% for FY 2022-23 for preparing the power purchase forecast.

The energy balance for FY 2022-23 is shown below with the provisional actual for H1 and estimated for H2, along with energy balance considered by the Commission for FY 2022-23 in AEML-D's MYT Order:

Table 4-9: Energy Balance for FY 2022-23 as submitted by AEML-D

Particulars	MYT Order	HI	H2	Total
T di vicului	NIII OIUCI	provisional	estimated	10001
		actual		
Own Sales (MU)	9,266.90	4,796.25	5,179.68	9,975.53
Less: EHT Sales (MU)			30.00	30.00
Less: AEML changeover sales (MU)		0.91	0.77	1.68
Changeover Sales (MU)	1,494.02	805.50	621.11	1,426.61
OA Consumption (MU)	235.25	152.33	113.32	265.65
Total Sales (MU)	10,996.16	5,753.17	5,883.34	11,636.52
Distribution Loss (%)	7.05%	6.44%	6.44%	6.44%
Energy input at T-D (MU)	11,830.27	6,148.86	6,288.02	12,436.88

From the energy balance, the energy requirement of AEML-D for its own consumers is worked out as below:

Table 4-10: FY 2022-23 Energy requirement as submitted by AEML-D

Particulars	MYT Order	HI	Н2	Total
		provisional	estimated	
		actual		
Own Sales (MU)	9,266.90			
Distribution loss in %	7.05%			
Transmission loss in %	3.18%			
Migrated HT Sales + OA consumption (MU)		152.45	113.41	265.86
HT Loss (%) as per MYT Order		1.59%	1.59%	1.59%
HT grossed up energy at T<>D (MU)		154.91	115.25	270.15
Migrated LT Sale (MU)		805.39	621.02	1,426.41
LT Loss (%) as per MYT Order		6.43%	6.43%	6.43%
LT grossed up energy at T<>D (MU)		860.73	663.69	1,524.43
Total T<>D energy attributable to Changeover		1,015.64	778.94	1,794.58
sale & OA consumption (MU)				
Net T<>D energy attributable to AEML-D		5,133.22	5,509.08	10,642.30
sale (MU) - A				
T-D energy attributable to AEML-D C/O sale		0.91	0.77	1.68
(metered sales grossed up approved TPC-D				
wheeling losses) - B				
EHT Sales		-	30.00	30.00
Total T<>D energy attributable to AEML-D		5,134.14	5,539.85	10,673.98
sale $(MU) - (A+B)$				
InSTS Loss (%) (H1 provisional actual) & (H2		3.34%	3.18%	3.26%
is considering as approved in the MYT Order)				
Total requirement of AEML-D (MU) at G-	10,297.29	5,311.55	5,721.80	11,033.35
T (MU)				

The Commission has considered the normative HT wheeling losses of 1.59% and LT Wheeling loss of 6.43% as approved for FY 2022-23 in MYT Order. The Commission has considered the Transmission Losses of 3.18% for FY 2022-23 as approved in the MYT Order. The change-over sales have been considered as approved earlier in this Chapter. The Distribution Losses have been provisionally considered as 6.44% for FY 2022-23, as submitted by AEML-D.

The following Table shows the Energy requirement worked out for FY 2022-23 by the Commission based on the approved Distribution Losses:

Table 4-11: Energy Requirement of AEML-D for FY 2022-23 as approved by the Commission.

Particulars	Units	MYT Order	Estimates	Approved
Own Sales	MU	9266.90		
Distribution Loss	%	7.05%		
Migrated HT Sales + OA consumption (MU)	MU		265.86	265.88
HT Loss (%)	%		1.59%	1.59%
HT grossed up energy at T<>D (MU)	MU		270.15	270.18
Migrated LT Sale (MU)	MU		1,426.41	1,463.32
LT Loss (%)	%		6.43%	6.43%
LT grossed up energy at T<>D (MU)	MU		1,524.43	1563.88
Total T<>D energy attributable to TPC-D sale & OA consumption (MU)	MU		1,794.58	1834.05
Net T<>D energy attributable to AEML-D sale (MU)	MU		10,642.30	10634.93
T<>D energy attributable to AEML-D c/o sale	MU		1.68	1.68
EHT Sales	MU		30.00	30.00
Total T<>D energy attributable to AEML-D sale (MU)	MU		10,673.98	10666.60
InSTS Loss (%)	%	3.18%	3.26%	3.18%
Total requirement of AEML-D (MU) at G-T (MU)	MU	10297.29	11,033.35	11016.94

4.3 POWER PROCUREMENT

4.3.1 AEML-G (ADTPS)

AEML-D's Submission

AEML-D submitted the energy availability from ADTPS as per actuals for the first half of FY 2022-23 and estimated for H2 to arrive at the power purchase for the full financial year. AEML-D has a PPA with ADTPS for supply of power till 15 October 2024, as approved by the Commission vide Order dated 1st November 2022 in Case No. 32 of 2022.

AEML-D has considered the variable cost of ADTPS for H1 as per the provisional actuals and for H2, AEML-D has optimized the power purchase cost, by limiting to the domestic coal and not the imported coal, since the prices of imported coal has upward trend over the past several months. Hence, the variable cost of generation for H2 of FY 2022-23 is estimated at Rs. 3.85/unit considering the domestic coal cost only. Fixed Charges for the

whole of FY 2022-23 have been considered as approved by the Commission in ADTPS MYT Order dated 30 March 2020 (Case No. 298 of 2019) as Rs. 337.11 Cr.

AEML-D submitted that it has considered backing down ADTPS to its technical minimum, till the generation schedule matches the demand requirement of AEML-D for estimating the shortfall and surplus for H2 of FY 2022-23. Technical minimum is considered since AEML-D is not in a position to estimate demand and availability of generating stations for the State as a whole, which has an impact on the backing down of the generating station. AEML-D has submitted the following power purchase from ADTPS in FY 2022-23.

Table 4-12: Power Procurement from ADTPS in FY 2022-23 as submitted by AEML-D

Source - ADTPS	Purchase (MU)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)	Rate (Rs./kWh)
H1 provisional actual	1,588.57	168.56	794.00	962.55	6.06
H2 estimated	1,438.22	168.56	554.41	722.96	5.03
Annual estimated	3,026.79	337.11	1,348.41	1,685.52	5.57
AEML-D MYT Order	3,733.00	337.97	1,500.67	1,838.64	4.93

Commission's Analysis and Ruling

The Commission has considered the quantum of power from ADTPS for FY 2022-23 in line with the generation provisionally approved for AEML-G in its Provisional Truing-up of FY 2022-23. The Commission has considered the fixed and variable cost as approved by the Commission in Provisional Truing-up of AEML-G for FY 2022-23, as shown in the Table below:

Table 4-13: Quantum & Cost of Power Purchase from AEML-G for FY 2022-23 as approved by Commission.

	MYT Order			AEML-D Petition				d after Prov truing up	isional
DTPS	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2022- 23	3,773	1,838.64	4.93	3026.79	1685.52	5.57	3026.79	1685.52	5.57

4.3.2 RENEWABLE ENERGY PROCUREMENT

4.3.2.1 Renewable Purchase Obligation – Hybrid

AEML-D's Submission

AEML-D has considered power purchase from Hybrid RE in FY 2022-23 at the approved Tariff of Rs. 3.24/kWh.

AEML-D has estimated generation from Hybrid source for H2 as per the actual generation received and generation profile supplied by the developer, along with the actuals of H1. The full year generation and cost from this source is as estimated below:

Purchase (MU) Cost (Rs. Crore) Rate (Rs./kWh) 971.34 314.72 H1 provisional actual 3.24 H2 estimated 1,462.32 473.79 3.24 Annual estimated 2,433.67 788.51 3.24 AEML-D MYT Order 3,066.00 993.38 3.24

Table 4-14: FY 2022-23 Purchase from Hybrid RE

Commission's Analysis and Ruling

The Commission has considered the quantum of power from Hybrid source for FY 2022-23 in line with the generation submitted by AEML-D in its Provisional Truing-up of FY 2022-23. The Commission has considered the Tariff of power as per the approved PPA.

Table 4-15: Quantum & Cost of Power Purchase from Hybrid RE for FY 2022-23 as approved by Commission.

II-de ad d	MY	T Order		AEM	L-D Petitio	on	Approved t	after Prov	isional
Hybrid RE	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2022-23	3066	993.38	3.24	2433.67	788.51	3.24	2433.67	788.51	3.24

4.3.2.2 Solar Power Procurement

AEML-D's Submission

AEML-D has not tied up with any new source for procuring Solar RE and has procured Solar power from its existing contracted source of DSPPL only, in H1 of FY 2022-23. For estimating the energy availability from DSPPL in H2 of FY 2022-23, AEML-D has

considered the trend in generation of DSPPL in second half of previous years. The actual power purchase details from DSPPL in H1 of FY 2022-23 and the cost for estimated power purchase from DSPPL in H2 of FY 2022-23 are shown in the table below:

Table 4-16: Power Purchase from DSPPL in FY 2022-23 as submitted by AEML-D

	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
H1 provisional actual	24.83	25.58	10.30
H2 estimated	27.08	27.89	10.30
Annual estimated	51.91	53.47	10.30
AEML-D MYT Order	66.19	68.17	10.30

AEML-D has also purchased Solar RE power through short term/ exchange in H1 of FY 2022-23, which is 47.02 MU and from Roof-top Solar and through OA purchase is 12.81 MU and 0.31 MU, respectively, which have been considered towards meeting the RPO target.

Also, AEML-D has purchased 971.34 MU from Hybrid RE Solar for H1 of FY 2022-23, out of which 490.06 MU is from Solar, which will also be considered as part of the Solar RPO. Also, for the estimated quantum of 1,462.32 MU for H2 of FY 2022-23, 731.16 MU is estimated as solar, considering that 50% will be met through Solar, and balance as Non-Solar.

AEML-D submitted the Solar RPO target and estimated achievement for FY 2022-23 as per RPO-REC Regulations, 2019 as shown in the Table below:

Table 4-17: Solar RPO Target till FY 2022-23 as submitted by AEML-D

Particulars	Cumulative shortfall / excess till FY 2021-22	FY 2022-23 estimated		Cumulative estimated shortfall / excess till FY 2022- 23
	MU	%	MU	MU
Gross Energy Consumption			11,033.35	
RPO Target		8.00%	882.67	
Achievement			1,333.27	
Shortfall / (Surplus)	857.47		(450.60)	406.87

AEML-D submitted that as the estimated achievement is more than the RPO target, the balance surplus is estimated to be offset against the shortfall existing till FY 2021-22. AEML-D has requested the Commission to consider the same and allow the estimated excess for FY 2022-23 to be offset against the cumulative shortfall till FY 2021-22.

The Commission has considered the actual power purchase of H1 and estimated power purchase from H2 from DSPPL Solar as submitted by AEML-D. The Commission has considered the rate of DSPPL in line with the rate approved in MYT Order. The Commission has approved Solar purchase from DSPPL as shown in the Table below:

Table 4-18: Power Purchase from DSPPL in FY 2022-23 as approved by the Commission (MU)

Particulars	MYT Order	AEML-D Petition	Approved after Provisional truing up
H1 Provisional Actuals		24.83	24.83
H2 Estimates		27.08	27.08
Quantum (MU)	66.19	51.91	51.91
Rate (Rs. /kWh)	10.30	10.30	10.30
Cost (Rs. Crore)	68.17	53.47	53.47

Accordingly, the Commission has worked out the shortfall of Solar RPO till FY 2022-23 based on the cumulative shortfall till FY 2021-22 approved in previous Chapter and targets for FY 2022-23 as per RPO-REC Regulations, 2019, as shown in the Table below:

Table 4-19: Cumulative shortfall of Solar RPO Target till FY 2022-23 as approved by the Commission (MU)

Particulars	AEML-D	Approved
Energy Input at G<>T	11033.35	11016.94
% Obligation Solar	8.00%	8.00%
Requirement	882.67	881.36
Previous year Shortfall/(Surplus)	857.46	870.26
RE Purchase for RPO	1333.27	1,333.27
Solar Shortfall/(Surplus)	406.86	418.34

Accordingly, the Commission has provisionally approved the shortfall of 418.34 MU of Solar RPO till FY 2022-23 as shown in the Table above.

4.3.2.3 Non-Solar Power Procurement

AEML-D's Submission

For estimating the energy availability from existing contracted sources in H2 of FY 2022-23, AEML-D has considered the trend in generation from the sources in second half of

previous years. Generally, it is observed that the generation from Wind sources is lower in H2 as compared to H1 and the same can also be seen from the monthly actuals for FY 2021-22. Hence, the estimates for H2 are on the lower side.

The summary of power procured by AEML-D from different sources for meeting its Non-Solar RPO in FY 2022-23 is as shown in the Table below:

Table 4-20: Estimated Non-Solar RE Purchase in FY 2022-23 as submitted by AEML-D

Particulars	Total (MU)	(Rs. /kWh)	Cost (Rs. Crore)
MYT Order	97.49	5.54	54.02
AEML-D Petition			
Reliance Innoventures	70.36	2.62	18.44
AAA Sons Enterprise	0.02	5.30	0.01
Vector Green Energy Pvt. Ltd	10.04	5.07	5.09
Tembhu Power Private Limited	0.47	4.26	0.20
Reliance Clean Power Pvt. Ltd	48.17	5.81	27.99
Total	129.06	4.01	51.72

The Non-Solar RE purchased through short-term sources/Exchange in H1 of FY 2022-23 is 23.59 MU. Further, in H1 of FY 2022-23, purchase of renewable energy under OA is 3.12 MU. Also, as elaborated above, AEML-D has purchased 971.34 MU from Hybrid RE Solar for H1 of FY 2022-23, out of which 481.28 MU is from Non-Solar, which will also be considered as part of the Non-Solar RPO. Also, out of the estimated quantum of 1,462.32 MU from Hybrid RE for H2 for FY 2022-23, 731.16 MU is estimated as Non-Solar, considering 50% as Solar and balance as Non-Solar.

The Non-Solar RPO target and estimated achievement for FY 2022-23 as per RPO-REC Regulations, 2019 is shown in the Table below:

Table 4-21: Non-Solar RPO target for FY 2022-23 as submitted by AEML-D

Particulars	Cumulative till FY 2022-23	FY	2022-23	Cumulative till FY 2022-23
	MU	%	MU	MU
Gross Energy Consumption			11,033.35	
Non-Solar RPO				
RPO Target		11.50%	1,268.83	
Achievement			1,368.21	
Shortfall / (Surplus)	4,119.24		(99.38)	4,019.86
Mini/Micro Hydro				

Particulars	Cumulative till FY 2022-23	FY 2022-23		Cumulative till FY 2022-23
	MU	%	MU	MU
RPO Target				
Achievement				
Shortfall / (Surplus)	7.99			7.99

The estimated achievement is more than the RPO target and the balance surplus is estimated to be offset against the shortfall existing till FY 2021-22. AEML-D has requested the Commission to consider the same and allow the estimated excess for FY 2022-23 to be offset against the cumulative shortfall till FY 2021-22.

Commission's Analysis and Ruling

The Commission observed that the quantum and cost from Non-solar RE purchase has been estimated by AEML-D based on the long term/medium term contracts tied -up by AEML-D in FY 2022-23. The Commission has therefore, considered the submission made by AEML-D for Non-Solar RE purchase in provisional Truing-up of FY 2022-23. The following Table shows the Non-Solar RE purchase considered by the Commission:

Table 4-22: Non-Solar RE power purchase for FY 2019-20 as approved by Commission

	MYT Order			AEML-D Petition			Approved after Provisional truing up		
Particulars	Quant	Cost	Rate	Quantu	Cost	Rate	Quantu	Cost	Rate
	um	(Rs.	(Rs./	m	(Rs.	(Rs./	m	(Rs.	(Rs./
	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)
Total	97.49	54.02	5.54	129.06	4.01	51.72	129.06	4.01	51.72

Accordingly, the Commission has worked out the shortfall of Non-Solar RPO till FY 2022-23 based on the cumulative shortfall till FY 2021-22 approved in previous Chapter and targets for FY 2022-23 as per RPO-REC Regulations, 2016, as shown in the Table below:

Table 4-23: Cumulative shortfall of Non-Solar RPO Target till FY 2022-23 as approved by the Commission (MU)

Particulars	AEML-D	Approved
Energy Input at G<>T	11033.35	11016.94
% Obligation Non-Solar	11.50%	11.50%
Requirement	1268.84	1266.95
Previous year Shortfall/(Surplus)	4127.23	4126.70

Particulars	AEML-D	Approved
RE Purchase for RPO	1368.21	1,368.21
Non-Solar Shortfall/(Surplus)	4027.85	4025.43

Accordingly, the Commission has provisionally approved the shortfall of 4,025.43 MU of Non-Solar RPO till FY 2022-23 as shown in the Table above. The Commission additionally provisionally approves cumulative shortfall of Mini / Micro RPO of 7.99 MU till FY 2022-23.

4.3.3 MEDIUM-TERM POWER PURCHASE

AEML-D's Submission

The Commission has, vide Order dated 29-08-2022 in Case No. 149 of 2022 adopted the tariff for purchase of 500 MW medium-term for the period 1-9-2022 to 14-10-2024 at Rs. 5.98/kWh. The said Agreement is not part of the MYT Order since, this development has taken place post the issuance of the MYT Order.

As the variable charge of both contracts is Rs 2.62/kWh, it is proposed that entire availability will be off-taken by AEML-D and surplus is any will be managed through sale at overall portfolio level.

MTPP Purchase (MU) Cost (Rs. Rate Crore) (Rs./kWh) H1 provisional actual for Sept-22 350.89 184.19 5.25 H2 estimated 2,184.00 1,147.36 5.25 2,534.89 5.25 Annual estimated (Sep 22 to Mar 23) 1,331.56

Table 4-24: FY 2022-23 Medium Term Power Purchase

Commission's Analysis and Ruling

The Commission has considered the quantum of power from medium-term source for FY 2022-23 in line with the quantum submitted by AEML-D in its Provisional Truing-up of FY 2022-23.

The Commission enquired from AEML-D regarding the basis for considering the rate of power purchase as Rs. 5.25/kWh, as against the adopted rate of Rs. 5.98/kWh. In reply, AEML-D submitted that though the adopted rate is Rs. 5.98/kWh, as per the PPA, Fixed Charges of Rs. 2.62/kWh are leviable up to 85% of estimated generation, while Variable Cost of Rs, 2.62/kWh plus Rs. 0.21/kWh towards transmission loss is leviable for estimated generation. Incentive at 50% of Rs. 2.62/kWh is payable on the estimated generation beyond 85% up to 100%. AEML-D has considered 100% PLF, hence, the incidence of per

unit Fixed Cost as well as the effective Variable Cost is reduced, due to 50% incentive beyond 85%. As AEML-D has purchased power at the effective rate of Rs. 5.25/kWh in H1 of FY 2022-23, the Commission has considered the rate of Rs. 5.25/kWh for projecting the power purchase cost from medium-term sources.

Table 4-25: Quantum & Cost of Power Purchase from Hybrid RE for FY 2022-23 as approved by Commission.

TTb	MYT Order			AEML-D Petition			Approved after Provisional truing up		
Hybrid RE	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2022- 23				2,534.89	1,331.56	5.25	2,534.89	1,331.56	5.25

4.3.4 SHORT-TERM POWER PURCHASE

AEML-D's Submission

AEML-D has procured power during H1 from Power Exchanges on day-ahead basis as well as from firm short-term sources at Exchange-linked prices.

In order to estimate the short-term power purchase in H2 of FY 2022-23, AEML-D has considered the hourly demand forecast and generation / availability forecast from firm sources and likely generation profile of RE sources in H2 of FY 2022-23. After meeting the demand with estimated generation from firm sources, the shortfall is estimated to be procured from short-term sources. Similarly, no increment / decrement to State Imbalance Pool has been estimated in H2 of FY 2022-23, as the same would be included in the hourly deficit / surplus as forecast. AEML-D submitted that it intends to procure short term power through bilateral mechanism on RTC basis or Power exchanges in H2 of FY 2022-23, which will be decided from time to time. AEML-D is estimating the rates of short-term power to soften in the ensuing period and hence, the average rate for STPP for H2 of FY 2022-23 is estimated at Rs. 5/kWh.

AEML-D has also purchased RE power from short-term sources in H1 of FY 2022-23, at an average rate of Rs. 8.62/kWh.

The power purchase quantum and cost from short-term sources for H1 and H2 of FY 2022-23 are as under:

Table 4-26: Power Purchase from Short-Term sources for FY 2022-23 as submitted by AEML-D

STPP	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
H1 provisional actual	2,045.37	1,569.21	7.67
H2 estimated	752.91	376.46	5.00
Annual estimated	2,798.28	1,945.67	6.95
MYT Order	3,334.60	1,167.11	3.50

The Commission has considered the submissions made by AEML-D as regards short-term purchase. The shortfall in purchase from VIPL-G is being met through short-term sources. However, a major portion of the shortfall is now being met from AEML-D's Medium term PPA. Therefore, the quantum of short-term purchase has been lower than the estimated quantum from short-term sources.

The Commission for the purpose of estimation has considered the actual procurement of short-term sources in H1 of FY 2022-23 and accordingly approved the same for FY 2022-23. The Commission has considered the rate of purchase from short-term sources for H2 of FY 2022-23 as Rs. 5.13/kWh, based on the past 3-year average rates in the Power Exchanges. The effective rate for the full year for short-term sources works out to Rs. 6.95/kWh.

The Commission has considered AEML-D's submission regarding actual purchase of short-term RE power in H1 of FY 2022-23.

Accordingly, the Commission has provisionally approved the power procurement from the short-term sources in FY 2022-23, as shown in the Table below:

Table 4-27: Short Term Power Purchase for FY 2022-23 as provisionally approved by the Commission.

	MYT Order			AEML-D Petition			Approved after Provisional truing up		
Particulars	Quantum	Cost	Rate per Unit	Quantum	Cost	Rate per Unit	Quantum	Cost	Rate per Unit
	(MU)	(Rs. Crore)	(Rs/kWh)	(MU)	(Rs. Crore)	(Rs/kWh)	(MU)	(Rs. Crore)	(Rs/kWh)
Bilateral / Power Exchanges				2727.28	1884.49	6.91	2727.28	1884.49	6.91
Short-term RE purchase				71.01	61.17	8.62	71.01	61.17	8.62
Total Short- Term Purchase	3,334.60	1,167.11	3.50	2,798.28	1,945.67	6.95	2,798.28	1,945.67	6.95

4.3.5 Banking of Energy

AEML-D's Submission

AEML-D had entered into banking transaction for the period Feb-22 to Apr-22, under which it received 251.28 MU in Feb-22 and Mar-22 (FY 2021-22) and 134.95 MU in Apr-22 (FY 2022-23). AEML-D has incurred OA charges and trading margin for the banking transaction pertaining to April 2022 in FY 2022-23, which has been claimed in the power purchase cost in H1 of FY 2022-23.

Also, the power has been returned in FY 2022-23 in the months of July, Aug, Sept and certain portion of October. The corresponding cost for the months from July to Sept amounting to Rs. 167.57 crore is claimed on provisional actual basis in H1 of FY 2022-23.

Commission's Analysis and Ruling

The Commission has considered the quantum of power procured under the Banking arrangement and the cost of power for Return Banking for FY 2022-23 as submitted by AEML-D in the Provisional Truing-up of FY 2022-23. The prudence check of whether this transaction is beneficial shall be done at the time of final truing up for FY 2022-23.

4.3.5.1 Sale of Surplus Power

AEML-D's Submission

The hourly demand forecast and generation/ availability forecast/estimates from firm and non-firm sources for H2 of FY 2022-23 is considered for determining surplus power availability in H2. Wherever, the generation availability from sources in any time block is

more than the energy requirement, surplus generation is assumed to be sold as the surplus is available during morning and day hours. Surplus sale will be undertaken from time to time on Power exchanges or Bilateral market from time to time. For estimating the revenue from sale of surplus power, AEML-D has considered the average rate of Rs. 5/kWh, at the same level as the rate for procurement of short-term power for H2 of FY 2022-23.

The details of sale of surplus power in FY 2022-23 (provisional actuals) are as under:

Table 4-28: Sale of Surplus Power in FY 2022-23 as submitted by AEML-D

	Sale (MU)	Rs. Crore	Rate (Rs./kWh)
H1 provisional actual	90.40	36.72	4.06
H2 estimated	170.00	85.00	5.00
Annual estimated	260.41	121.72	4.67

Commission's Analysis and Ruling

The Commission has provisionally considered the quantum of surplus power sale in FY 2022-23 as submitted by AEML-D. The rate of sale for such surplus power has been considered at actuals for H1 of FY 2022-23, and for H2 of FY 2022-23, the rate for sale of surplus power has been considered as Rs. 5.13/kWh, i.e., the same rate at which the short-term power purchase has been considered.

Table 4-29: Sale of Surplus Power in FY 2022-23 provisionally approved by the Commission

Particulars	AEML-D Petition		Approved after Provisional truing up			
	Quantum (MU)	Income (Rs.	Rate (Rs./kWh)	Quantum (MU)	Income (Rs.	Rate (Rs./kWh)
		Crore)			Crore)	
Surplus Power Sales	260.41	121.72	4.67	260.41	123.93	4.76

4.3.6 Power purchase cost from OA consumers

AEML-D's Submission

The surplus energy of Roof-Top Solar and Open Access consumers (Firm & Non-Firm) purchased by AEML-D during H1 of FY 2022-23, whose quantum is 6.83 MU and cost is Rs. 2.11 crore has been considered as part of power purchase cost.

Commission's Analysis and Ruling

The Commission has provisionally considered the same quantum and cost of power purchase of surplus energy from Roof-Top Solar and Open Access consumers for FY 2022-

23.

4.3.7 Imbalance/DSM Pool

AEML-D's Submission

For H1 of FY 2022-23, AEML-D has derived the energy decrement from Pool by considering the total energy input at T<>D, energy at T<>D for changeover and open access consumers, quantum of energy procured from different sources and the actual transmission loss for H1 of FY 2022-23 as per monthly transmission losses available on STU website. The energy quantum amounts to 177.37 MU. However, for cost purposes, for H1 of FY 2022-23, the cost as per DSM bills has been considered.

No increment/ decrement to DSM pool has been estimated in H2 of FY 2022-23 as the same would be included in the hourly deficit/ surplus as forecast and hence, no associated cost has been considered. Actuals, if any, would be submitted at the time of truing up.

Commission's Analysis and Ruling

The Commission will take a considered view regarding the quantum of Imbalance pool at the time of True up of FY 2022-23, based on the detailed submissions to be made by AEML-D. The Commission has provisionally considered the same estimation of quantum and cost of Imbalance Pool/DSM for FY 2022-23.

4.3.8 ADSM Charges

AEML-D's Submission

AEML was charged Rs. 892 lakh as ADSM charges out of which Rs. 881 lakh was on account of factors beyond control of AEML-D, and the same need to be allowed as Power Purchase cost.

Factors which are uncontrollable in nature are as below:

- 1. Deviation on account of Intra-State RE generation
- 2. Deviation within limit but frequency was beyond operating range
- 3. Curtailment in Real Time Market

ADSM charges for controllable events will be absorbed by AEML. Therefore, AEML-D has requested the Commission to allow Rs 428 lakhs (Rs 453 lakhs already waived off) as part of power purchase cost and the same has been estimated in H2 of FY 2022-23.

As per the MYT Regulations, 2019, ADSM Charges are not allowed to be passed through in the ARR. The Commission will take a considered view regarding the ADSM Charges at the time of True up of FY 2022-23, based on the detailed submissions to be made by AEML-D. The Commission has not considered the additional DSM amount sought to be passed through in the estimation of power purchase cost of FY 2022-23.

4.3.9 TRANSMISSION CHARGES, MSLDC CHARGES AND STANDBY CHARGES

4.3.9.1 Transmission Charges

AEML-D's Submission

The Transmission Charges have been claimed by AEML-D for FY 2022-23 as Rs. 482.12 crore based on actual amounts paid to the STU, which has raised monthly bills as per the InSTS Order dated 30th March 2020.

The summary of Transmission Charges for FY 2022-23 is shown in the Table below:

Table 4-30: Transmission Charges for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Transmission Charges	484.43	482.12

Commission's Analysis and Ruling

The Commission has approved the actual Transmission Charges paid by AEML-D for H1 of FY 2022-23 and estimated for H2 of FY 2022-23, as the same are in accordance with the Transmission Charges approved by the Commission in the MYT Order, as shown in the Table below:

Table 4-31: Transmission Charges for FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved in Provisional True up
Transmission Charges	484.43	482.12	482.12

4.3.9.2 MSLDC Charges

AEML-D's Submission

AEML-D has claimed the SLDC charges for FY 2022-23 as Rs. 2.39 Crore, as approved in the SLDC MYT Order dated 30th March 2020.

AEML-D submitted that the Commission had considered SLDC Charges of Rs. 1.97 Crore, while approving the ARR of AEML-D in its MYT Order. AEML-D had filed a Review Petition regarding the discrepancy in the amounts approved in MSLDC MYT Order and AEML-D's MYT Order. The Commission in the Order dated 21 July, 2020 in Case No. 103 of 2020 allowed the review and held as follows:

"Prayer regarding correction of MSLDC Charges payable by AEML-D from FY 2020-21 to FY 2024-25 to be considered as approved in the Order in Case No. 291 of 2019 dated 30 March 2020 is allowed. Impact of the same shall be claimed during upcoming MTR proceeding."

The summary of SLDC charges for FY 2022-23 is shown in the Table below:

Table 4-32: MSLDC Charges for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
MSLDC Charges	1.97	2.39

Commission's Analysis and Ruling

The Commission has approved the MSLDC Charges as estimated by AEML-D for FY 2022-23, as the same are in accordance with the MSLDC Charges approved by the Commission in the MSLDC MYT Order, as shown in the Table below:

Table 4-33: MSLDC Charges for FY 2022-23 approved by Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
MSLDC Charges	1.97	2.39	2.39

4.3.9.3 Stand-by Charges

AEML-D's Submission

As already elaborated in the truing up section of FY 2021-22, AEML has stopped availing the Standby facility from MSEDCL and has not paid the Standby Charges for H1 of FY

2022-23 and hence, AEML has not estimated the Standby Charges for H2 of FY 2022-23 as well.

Standby Charges for the earlier period

AEML-D has claimed refund of Standby Charges for earlier period as Rs. 217.37 Crore (inclusive of carrying cost) and the said amount has been considered as part of reduction in power purchase cost in H2 of FY 2022-23.

Commission's Analysis and Ruling

As stated in the Truing up of FY 2021-22, the Commission has approved the share of Standby Charges for the concerned Distribution Licensees in the MYT Orders, and had included the payment towards Standby Charges in the power purchase cost of AEML-D for the Control Period. The Commission is of the view that merely sending a letter to MSEDCL seeking discontinuance of the Standby Arrangement does not relieve AEML-D from its obligation to pay the Standby Charges to MSEDCL. The Standby arrangement is a very old arrangement, and any decision to discontinue the same, if at all acceptable, has to be arrived at after consultation of all the Parties concerned. During the Public Hearing and in its written objections, MSEDCL has strongly objected to the unilateral discontinuance of the Standby arrangement by AEML-D, and the non-payment of Standby Charges for 6 months of FY 2022-23, and the claim for refund of Standby Charges.

Hence, the Commission has considered AEML-D's share of the Standby Charges for FY 2022-23 as approved in MSEDCL's MYT Order dated 30th March 2020, as shown in the following Table:

Table 4-34: Stand-by Charges for FY 2022-23 as approved by Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Stand-by Charges	185.04	(217.37)	185.04

4.3.10 SUMMARY OF POWER PURCHASE

AEML-D Submission

The summary of estimated power purchase quantum and cost for FY 2022-23 as against the quantum and cost approved by the Commission in AEML-D's MYT Order is as under:

Table 4-35: Power Purchase for FY 2022-23 as submitted by AEML-D

		MYT Order		AEML-D Petition			
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. / kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs. / kWh)	
ADTPS	3,733.00	1,838.64	4.93	3,026.79	1,685.52	5.57	
DSPPL	66.19	68.17	10.30	51.91	53.47	10.30	
Non-Solar - Existing sources	97.49	54.02	5.54	129.06	51.72	4.01	
Wind-Solar Hybrid	3,066.00	993.38	3.24	2,433.67	788.51	3.24	
MTPP				2,534.89	1,331.56	5.25	
Purchase from OA				6.83	2.11	3.08	
Banking				134.95	167.57		
Short Term Purchase	3,334.60	1,167.11	3.50	2,798.28	1,945.67	6.95	
Surplus Sale				(260.41)	(121.72)	4.67	
Imbalance Pool				177.37	6.90		
ADSM Charges					4.28		
Sub-Total	10,297.29	4,121.33	4.00	11,033.35	5,915.58	5.36	
Transmission Charges		484.83			482.12		
SLDC Charges		2.39			2.39		
Standby Charges		185.04			(217.37)		
Total	10,297.29	4,793.59	4.66	11,033.35	6,182.72	5.60	

Based on the source-wise approval of power purchase as discussed above, the power purchase quantum and cost approved after provisional truing-up for FY 2022-23 is as shown in the following Table:

Table 4-36: Power Purchase for FY 2022-23 approved by the Commission (MU)

	MYT Order			AEML-D Petition			Approved after provisional truing up		
Particulars	Quantu	Cost	Rate	Quantu	Cost	Rate	Quantu	Cost	Rate
	m (MU)	(Rs. Crore)	(Rs./ kWh)	m (MU)	(Rs. Crore)	(Rs./ kWh)	m (MU)	(Rs. Crore)	(Rs./ kWh)
ADTPS	3,733.00	1,838.64	4.93	3,026.79	1,685.52	5.57	3,026.79	1,685.52	5.57
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DSPPL	66.19	68.17	10.30	51.91	53.47	10.30	51.91	53.47	10.30
Non-Solar -	97.49	54.02	5.54	129.06	51.72	4.01	129.06	51.72	4.01
Existing sources	97.49	34.02	3.34	129.00	31.72	4.01	129.00	31.72	4.01
Wind-Solar Hybrid	3,066.00	993.38	3.24	2,433.67	788.51	3.24	2,433.67	788.51	3.24
MTPP				2,534.89	1,331.56	5.25	2,534.89	1,331.56	5.25
Purchase from OA				6.83	2.11	3.08	6.83	2.11	3.08
Banking				134.95	167.57		134.95	167.14	

	MYT Order			AEML-D Petition			Approved after provisional truing up		
Particulars	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
Short Term Purchase	3,334.60	1,167.11	3.50	2,798.28	1,945.67	6.95	2,798.28	1,955.46	6.99
Surplus Sale				(260.41)	(121.72)	4.67	(260.41)	(123.93)	4.76
Imbalance Pool				177.37	6.90		177.37	6.90	
ADSM Charges					4.28			1	
Sub-Total	10,297.29	4,121.33	4.00	11,033.35	5,915.58	5.36	11,033.35	5,918.88	5.36
Transmission Charges		484.83			482.12			482.12	
SLDC Charges		2.39		_	2.39			2.39	
Standby Charges		185.04			(217.37)			185.04	
Total	10,297.29	4,793.59	4.66	11,033.35	6,182.72	5.60	11,033.35	6,588.43	5.97

4.4 OPERATION AND MAINTENANCE EXPENSES

AEML-D Submission

The actual O&M expenses in H1 of FY 2022-23 (provisional) are shown in the table below:

Table 4-37: FY 2022-23 O&M H1 provisional actual

Particulars	FY 2022-23 (H1) provisional actuals
Wires	492.53
Supply	201.54
Total	694.07

Wage Revision has been effective from FY 2021-22, with arrears of past years having been paid in FY 2021-22. Hence, the revised level of wages needs to be reflected in the normative allowance as otherwise normative allowance would be understated. Therefore, it is important that the normative O&M expenses for FY 2021-22 be appropriately adjusted, which will ensure correct representation of efficiency gains / losses for FY 2021-22 as well as revise the base for computing normative expenses for each year going forward.

The normative O&M expense for FY 2021-22 have been re-stated to include the impact of wage revision for FY 2021-22 and then the inflation indices as considered for FY 2021-22 are applied to arrive at the normative O&M expenses for FY 2022-23. AEML-D has considered escalation factor for FY 2021-22 for estimating expenses for FY 2022-23 and thereafter.

The summary of the O&M expenses as estimated by AEML-D for FY 2022-23 for Wires and Supply Business is shown in the Table below:

Table 4-38: Summary of O&M Expenses for FY 2022-23 for Wires Business as submitted by AEML-D (Rs Crore)

Particulars	Rs. Crore
Normative O&M expenses for FY 2021-22	906.46
Add: Wage revision arrears for FY 2021-22	33.85
Re-stated normative O&M expenses for FY 2021-22	940.31
Inflation	4.20%
Normative O&M expenses for FY 2022-23	979.79

Table 4-39: Summary of O&M Expenses for FY 2022-23 for Supply Business as submitted by AEML-D (Rs Crore)

Particulars	Rs. Crore
Normative O&M expenses for FY 2021-22	462.83
Add: Wage revision arrears for FY 2021-22	7.88
Re-stated normative O&M expenses for FY 2021-22	470.72
Inflation	4.24%
Normative O&M expenses for FY 2022-23	490.67

Commission's Analysis and Ruling

Accordingly, the Commission has approved the O&M Expenses as shown in the Table below:

For the provisional truing up of FY 2022-23, the Commission has escalated the trued up Normative O&M Expenses for FY 2021-22 as approved in this Order, by the Inflation Factor considered in the true-up for FY 2021-22, i.e., 4.29% and 4.33% for the Wires Business and Supply Business, respectively for projection purpose as per MYT Regulations, 2019, to arrive at the Normative O&M Expenses for FY 2022-23. The Commission has not added the impact of the wage revision while approving the normative O&M expenses for FY 2022-23 as sought by AEML-D, as there is no such provision in the MYT Regulations, 2019.

Table 4-40: O&M Expenses for FY 2022-23 for Wires and Supply Business as approved by the Commission (Rs. Crore)

Particulars / (Rs. Crore)	Approved for FY 2021-22 in this Order	Escalation Rate (%)	Allowable for FY 2022-23
Wires Business	902.22	4.29%	940.89

Particulars / (Rs. Crore)	Approved for FY 2021-22 in this Order	Escalation Rate (%)	Allowable for FY 2022-23
Supply Business	449.25	4.33%	468.69

4.5 CAPITALISATION

AEML-D Submission

AEML-D submitted that subsequent to the issue of the MYT Order on 30th March, 2020, several DPR schemes worth approx. Rs. 2,580 crore have been approved by the Commission. Accordingly, the revised projections of FY 2022-23 include the likely capitalisation against all those schemes as well, based on the progress of indenting / works. Further, IDC has been estimated for H2 and the same is also considered as part of estimated capitalization.

The estimated capitalization for FY 2022-23 in Wires and Supply Business is shown in table below:

Table 4-41: Capital Expenditure and Capitalization for Wires and Supply Business for FY 2022-23

Particulars/ Rs. Crore	MYT Order	FY 2022-23
		(Estimate)
Capitalization Wires*	246.83	819.74
Approved DPR		667.53
DPR proposed to be submitted		82.62
Non-DPR		69.59
Capitalization Supply	174.74	331.54
Approved DPR		84.24
DPR submitted awaiting approval		238.06
Non-DPR		9.24

^{*}The estimated amount is before considering estimated consumer contribution at Rs. 25.38 crore, being the actual for FY 2021-22.

AEML-D has submitted Metering DPR for new connection and replacement for FY 2022-23 to FY 2024-25 to the Commission, which is awaiting in-principle approval. AEML-D has included the capital expenditure estimated for the said DPR, in the Capital expenditure for FY 2022-23 shown in table above.

Brief description of the works to be carried out in FY 2022-23:

The network of AEML-D is divided into various levels and the capital expenditure is largely categorized as per these levels. The capital expenditure incurred till H1 of FY 2022-23 and likely to be incurred during balance period of FY 2022-23 is mainly under these categories as per approved DPR's taking into account the spill-over from previous year DPR works.

Brief description of Works carried out in FY 2022-23

- a. 33/11 kV Distribution Sub-Station (DSS)
- b. 11 kV Mains Network Strengthening
- c. Low Tension Mains
- d. Low Tension Services
- e. Street Lights
- f. Metering
- g. Information Technology (SAP Hana migration)
- h. Instruments (Non-DPR)
- i. Information Technology (IT) Infrastructure (Non-DPR)
- i. Others (Non-DPR)
- k. Civil (Non-DPR)
- 1. R&D, Safety and DSM (Non-DPR)
- m. System Modernization (Non-DPR)

Commission's Analysis and Ruling

The Commission has not considered any capitalisation against DPRs yet to be approved/yet to be submitted in FY 2022-23, since, the year is almost over, and no capitalisation can be achieved against such schemes.

As regards the capitalisation projected by AEML-D against approved DPR schemes, the Commission has accepted AEML-D's projections for the Supply Business. However, for the Wires Business, the Commission has reduced the capitalisation against the approved schemes wherein the proposed IDC under these schemes is exceeding the approved IDC under these schemes. The Commission has approved the IDC as claimed by AEML-D for FY 2020-21 and FY 2021-22 under these schemes but has proportionately reduced IDC for FY 2022-23. The Details of the Schemes are as below:-

Sr No	Name of the Scheme	_	Approved IDC in FY 2022-23 in Rs Cr	
1	11 kV Cable_Augmentation_FY 2020-21			

Sr No	Name of the Scheme		Approved IDC in FY 2022-23 in Rs Cr	
2	11 kV Substation_Improvement_FY 2020-21	3.75	0.08	3.66
3	LT Mains_New Supply_FY 2020-21	0.72	0.38	0.34
4	11 kV Oil Type Switchgear Augmentation_FY 2020-21	1.06	0.29	0.77
5	Street Light_improvement Supply_FY 2021-22 to FY 2023- 24			
6	Services_New Supply_FY 2020- 21	1.64	0.1	1.54
7	ADMS and SCADA			
	Total			6.31

The capitalisation against Non-DPR Schemes have been considered as claimed by AEML-D, as the same is within 20% of the approved DPR capitalisation.

The following Table shows the approved capitalization for FY 2022-23:

Table 4-42: Capitalization approved by the Commission for FY 2022-23 (Rs. Crore)

Particulars	N	IYT Orde	er	AEML-D Petition		Approved after provisional truing up			
	Wires	Supply	Total	Wires	Supply	Total	Wires	Supply	Total
DPR approved Schemes				667.59	84.24	751.83	661.28	84.24	745.52
DPR Yet to be approved				82.62	238.06	320.68			
Non-DPR Schemes				69.58	9.24	78.83	69.58	9.24	78.82
Total	246.83	174.74	421.57	819.79	331.54	1151.33	730.87	93.48	824.35

4.6 DEPRECIATION

AEML-D's Submission

AEML-D submitted that it has computed depreciation on provisional basis by considering the asset class-wise average depreciation rate of 4.44% for Wires Business and 4.34% for Supply Business, as considered for FY 2021-22. For FY 2022-23, the depreciation on consumer contribution is considered at Rs. 10.30 Crore at the same level as that for FY 2021-22.

Actual asset retirement in H1 of FY 2022-23 has been considered while computing depreciation. No asset retirement has been estimated for H2 at present. The estimate of depreciation for Wires Business for FY 2022-23 is shown in table below:

Table 4-43: Depreciation in FY 2022-23 for Wires Business as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	MYT Order	Estimated
Opening GFA	7,097.80	8,556.05
Addition *	229.22	819.74
Retirement in H1		9.70
Closing GFA	7,327.02	9,366.09
Depreciation	315.97	377.22
Depreciation on Consumer contribution		10.30
Depreciation	315.97	387.53

^{*} MYT Order is net of Consumer Contribution

The estimated depreciation for Supply Business for FY 2022-23 is shown in the table below:

Table 4-44: Depreciation in FY 2022-23 for Supply Business as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	MYT Order	Estimated
Opening GFA	871.17	543.80
Addition	174.74	331.54
Retirement in H1		9.85
Closing GFA	1,045.91	865.49
Depreciation	48.48	30.61
Depreciation on Consumer contribution		-
Depreciation	48.48	30.61

Commission's Analysis and Ruling

For computation of Depreciation for FY 2022-23, the Commission has considered the Opening Balance of GFA as the Closing Balance of GFA as approved in the final True up for FY 2021-22 in this Order. The Commission has considered asset addition for FY 2022-23 in line with the approved Capitalisation elaborated above. The Commission has considered asset retirements in line with the submissions of AEML-D for provisional Truing-up. Accordingly, the Commission has approved the Depreciation for FY 2022-23 as shown in the Tables below:

Table 4-45: Depreciation for Wires Business for FY 2022-23 as approved by the Commission (Rs. Crore)

	FY 2022-23			
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
Opening GFA	7097.80	8556.05	8142.07	
Addition	229.22	819.24	730.87	
Retirement	0	9.70	9.70	
Closing GFA	7327.02	9,366.09	8,863.24	
Depreciation	315.97	387.53	377.47	
Depreciation (as % of GFA)	4.38%	4.44%	4.44%	

Table 4-46: Depreciation for Supply Business for FY 2022-23 as approved by the Commission (Rs. Crore)

	FY 2022-23		
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Opening GFA	871.17	543.80	502.86
Addition	174.74	331.54	93.48
Retirement	0.00	9.85	9.85
Closing GFA	1,045.91	865.49	586.50
Depreciation	48.48	30.61	23.66
Depreciation (as % of GFA)	5.06%	4.34%	4.34%

4.7 FINANCING PLAN AND INTEREST EXPENSES

AEML-D's Submission

AEML-D has submitted that it shall fund the capex requirement by debt to the extent of 70% only. Hence, for the purpose of ARR and tariff for FY 2022-23, AEML-D has considered the debt equity ratio of 70:30 on provisional basis. AEML-D submitted that so far, in FY 2022-23, no new loans for undertaking capital expenditure have been obtained and hence, all capital expenditure is being funded through internal accruals.

As per the MYT Regulations, 2019, interest expenses at the time of approving ARR shall be allowed on the basis of weighted average interest rate of opening balance of all existing actual loans for the year. The weighted average interest rate of opening balance of loans in the loan portfolio of AEML in FY 2022-23 is 8.34%. Accordingly, AEML-D has considered this interest rate for calculation of interest expense on the normative loans for FY 2022-23. 70% of the capitalization (net of consumer contribution estimated for FY 22-

23) has been considered as normative loan addition in FY 2022-23. For the asset retired during H1 of FY 2022-23, consequential reduction in loan due to such retirement is considered in the ARR. During H2 of FY 2022-23, as no asset retirement is presently estimated, and no reduction of normative loan due to asset retirement has been considered as of now. The same shall be considered at the time of truing up of FY 2022-23.

The table below shows the interest on loans as approved for FY 2022-23 in the MYT Order and revised estimates for FY 2022-23:

Table 4-47: Interest on Loans for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Wires		
Opening Balance	1,842.07	2,420.58
Addition of new loans	172.78	556.05
Retirement		6.79
Repayment	315.97	387.53
Closing Balance	1,698.89	2,582.32
Interest Rate	9.05%	8.34%
Interest	160.23	208.62
Supply		
Opening Balance	236.22	9.08
Addition of new loans	122.32	232.08
Retirement		6.89
Repayment	48.48	30.61
Closing Balance	310.06	203.65
Interest Rate	9.05%	8.34%
Interest	24.72	8.87

Financing Charges

AEML-D has submitted that Regulation 30.8 of the MYT Regulations, 2019 specifies that the finance charges incurred for obtaining loans from financial institutions for any year shall be allowed by the Commission at the time of truing-up, subject to prudence check. Accordingly, AEML-D shall submit the financing charges incurred for FY 2022-23 at the time of truing up of FY 2022-23.

Commission's Analysis and Ruling

The Commission has considered the interest rate on loans for FY 2022-23 as 8.35%, same as approved in the truing up for FY 2021-22.

The Commission has considered the closing balance of loan approved for FY 2021-22 as the opening balance of loan for FY 2022-23. For assets capitalised in FY 2022-23, the Commission has considered 70% of the additional asset value as normative debt, in accordance with the MYT Regulations, 2019. The repayment of loan has been considered equal to the Depreciation allowed for the Year. Accordingly, the Commission has approved interest on loan for FY 2022-23 as given in the following Table:

Table 4-48: Interest Expenses for FY 2022-23 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wires Business			
Opening Balance	1,842.07	2,420.58	2,441.19
Less: Reduction of normative loan due to retirement of assets		6.79	6.79
Addition of new loans	172.78	556.05	493.84
Repayment	315.97	387.53	377.47
Closing Balance	1,698.88	2,582.31	2,550.77
Interest Rate (%)	9.05%	8.34%	8.35%
Interest	160.23	208.62	208.41
Supply Business			
Opening Balance	236.21	9.08	0.00
Less: Reduction of normative loan due to retirement of assets		6.89	6.89
Addition of new loans	122.32	232.08	65.44
Repayment	48.48	30.61	23.66
Closing Balance	310.05	203.66	34.88
Interest Rate	9.05%	8.34%	8.35%
Interest	24.72	8.87	1.46

4.8 RETURN ON EQUITY

AEML-D's Submission

Return on Equity (RoE) has been determined by applying the rates specified in the MYT Regulations, 2019. AEML-D has calculated the RoE for FY 2022-23 considering the base rate of 14% for Wires Business and 15.5% for Supply Business.

For provisional true-up of FY 2022-23 and for projections thereafter, AEML-D has considered the effective tax rate for grossing up RoE as the MAT rate of 17.47%.

30% of the capitalization (net of consumer contribution estimated for FY 2022-23) has been considered as equity addition. For the assets retired during H1 of FY 2022-23, consequential reduction in equity due to such retirement is considered in the ARR. During H2 of FY 2022-23, no asset retirement is estimated, hence, no reduction of equity due to asset retirement has been considered.

The estimates of RoE for the Wires Business and Supply Business for FY 2022-23 is shown in the Tables below:

Table 4-49: Return on Equity for FY 2022-23 for Wires Business as submitted by AEML-D (Rs. Crore)

Particulars Particulars	MYT Order	AEML-D Petition
Regulatory Equity at the beginning of the year	2,543.12	2,832.72
Capitalisation during the year	246.83	819.74
Consumer Contribution and Grants during the year	17.62	25.38
towards capital works		
Equity portion of capitalisation during the year	68.76	238.31
Reduction in Equity Capital on account of retirement /		2.91
replacement of assets		
Regulatory Equity at the end of the year	2,611.88	3,068.12
Rate of Return (%)	16.964%	16.96%
Total RoE	437.25	500.74

Table 4-50: Return on Equity for FY 2022-23 for Supply Business as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Regulatory Equity at the beginning of the year	265.34	167.13
Capitalisation during the year	174.74	331.54
Consumer Contribution and Grants during the year		
towards capital works		
Equity portion of capitalisation during the year	52.42	99.46
Reduction in Equity Capital on account of retirement /		2.95
replacement of assets		
Regulatory Equity at the end of the year	317.76	263.63
Rate of Return (%)	18.78%	18.78%
Total RoE	54.76	40.73

Commission's Analysis and Ruling

The Commission has computed RoE for FY 2022-23 in accordance with the MYT Regulations, 2019. The Commission has considered the closing equity of FY 2021-22 as approved in the final true up in this Order, as the opening equity for FY 2022-23. Additional

equity has been considered as 30% of the approved Capitalisation in FY 2022-23, after deducting the Consumer Contribution. The Commission has considered Consumer Contribution in line with the submission of AEML-D. Further, 30% of the equity corresponding to asset retirement during the year has been reduced to arrive at the amount of equity eligible for returns as per the Regulations.

The rate of Return on Equity has been taken as 14% for the Wires Business and 15.5% for the Supply Business, in accordance with the MYT Regulations, 2019. Pre-tax return on equity rate has been considered by taking the MAT rate of 17.47% for grossing up the RoE rate. The RoE approved by the Commission for Wires Business and Supply Business for FY 2022-23 is as shown in the Table below:

Table 4-51: Return on Equity for Wires Business and Supply Business for FY 2022-23 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wires Business			
Regulatory Equity at the beginning of the year	2,543.12	2,832.72	2,830.44
Capitalisation during the year	246.83	819.74	730.87
Consumer Contribution and Grants	17.62	25.38	25.38
Equity portion of capitalisation during the year	68.76	238.31	211.65
Equity portion of asset retired during the year		2.91	2.91
Regulatory Equity at the end of the year	2,611.88	3,068.12	3,039.18
Rate of Return (%)		14%	14%
Pre-tax rate of Return (%)		16.96%	16.96%
Total RoE	437.24	500.74	497.85
Supply Business			
Regulatory Equity at the beginning of the year	265.34	167.12	155.68
Capitalisation during the year	174.74	331.54	93.48
Consumer Contribution and Grants		-	
Equity portion of capitalisation during the year	52.42	99.46	28.04
Equity portion of asset retired during the year		2.95	2.95
Regulatory Equity at the end of the year	317.76	263.63	180.77
Rate of Return (%)		15.50%	15.50%
Pre-tax rate of Return (%)		18.78%	18.78%
Total RoE	43.68	40.73	31.59

4.9 INTEREST ON WORKING CAPITAL

AEML-D's Submission

AEML-D has calculated the interest on working capital for the Wires Business and Supply Business in accordance with Regulation 32.3 and 32.4 of the MYT Regulations, 2019.

The Security Deposit as on 30-09-2022 is Rs. 484.97 Crore. Additional differential amount of Security Deposit is estimated to be collected in H2 of FY 2022-23 and thus, the Security Deposit as at the end of FY 2022-23 is estimated to be Rs. 498.25 Crore.

For provisional true-up, the normative working capital interest as per MYT Regulations, 2019 has been considered. As per the MYT Regulations, 2019, the interest of working capital on normative working capital while approving ARR shall be allowed at one-year MCLR of SBI existing on the date of filing of Petition plus 150 basis points, which works out to 9.55%. The same has been used for calculating interest on working capital for provisional truing up of FY 2022-23.

The interest on working capital for Wires Business is shown in the table below:

Table 4-52:Interest on Working Capital for FY 2022-23 for Wires Business as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
O&M Expenses	77.95	81.65
Maintenance spares	70.98	85.56
Receivables	204.14	199.20
Total Working Capital	353.07	366.41
Rate of Interest (%)	9.50%	9.55%
Interest on Working Capital	33.54	34.99

The interest on working capital for Supply Business is shown in the table below:

Table 4-53:Interest on Working Capital for FY 2022-23 for Supply Business as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
O & M Expenses	38.27	40.89
Maintenance spares	8.71	5.44
Receivables	833.53	850.61
Less:		
Amount of Security Deposit from supply consumers	630.67	498.25
One-month equivalent of cost of power purchased	246.25	374.77

Particulars	MYT Order	AEML-D Petition
Total Working Capital	3.60	23.92
Rate of Interest (%)	9.50%	9.55%
Interest on Working Capital	0.34	2.28

The Commission has approved the IoWC for FY 2022-23 in accordance with the MYT Regulations, 2019. The Commission has considered the applicable rate of IoWC as 9.55%, which is the SBI MCLR as on date of filing the Petition plus 150 basis points. The Security Deposit considered in the true-up for FY 2021-22 has been increased by the increase estimated by AEML-D for FY 2022-23. The Commission has verified that the amount of Security Deposit for FY 2022-23 is higher than 2 months of average billing for the previous year, i.e., FY 2021-22.

Accordingly, IoWC approved by the Commission is given in the Tables below:

Table 4-54: Interest on Working Capital for Wires Business for FY 2022-23 approved by the Commission (Rs. Crore)

	FY 2022-23			
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
O & M Expenses for a month	77.95	81.65	78.41	
Maintenance spares at 1% of Opening GFA	70.98	85.56	81.42	
One and half months of revenue from charges for use of Distribution Wires	204.14	199.20	199.20	
Total Working Capital	353.07	366.41	359.02	
Rate of Interest (%)	9.50%	9.55%	9.55%	
Interest on Working Capital	33.54	34.99	34.29	

Table 4-55: Interest on Working Capital for Supply Business for FY 2022-23 approved by the Commission (Rs. Crore)

	FY 2022-23			
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
O & M Expenses for a month	38.27	40.89	39.06	
Maintenance spares at 1% of Opening GFA	8.71	5.44	5.03	
One and half months of revenue from sale of electricity including revenue from CSS	833.53	850.61	852.39	
Less:				

	FY 2022-23			
Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
Amount of Security Deposit from supply consumers	630.67	498.25	863.38	
One-month equivalent of cost of power purchased	246.25	374.77	408.58	
Total Working Capital	3.59	23.92	-	
Rate of Interest (%)	9.50%	9.55%	9.55%	
Interest on Working Capital	0.34	2.28	-	

4.10 INTEREST ON CONSUMER'S SECURITY DEPOSIT

AEML-D's Submission

As per MYT Regulations, 2019, the Interest on Consumer Security Deposit is to be allowed at the Bank Rate as declared by RBI as on 1st April of the year. The Bank Rate prevailing as on 1st April 2022 was 4.25%. Accordingly, AEML-D has calculated the interest on consumer security deposit for FY 2022-23 by considering the provisional actual of Rs. 10.40 Crore in H1 of FY 2022-23. For estimating for H2 for FY 2022-23, the interest rate of 4.25% is applied on the average security deposit amount as at the end of H1 and H2 of FY 2022-23 and the same is considered as part of Supply business.

Table 4-56: Interest on Consumer's Security Deposit in FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Interest on CSD	32.71	20.85

Commission's Analysis and Ruling

The Commission has provisionally approved the interest on CSD for FY 2022-23 for the Supply Business at Rs. 20.85 Crore, as estimated by AEML-D.

4.11 PROVISION FOR BAD AND DOUBTFUL DEBTS

AEML-D's Submission

AEML-D has considered the provision for bad and doubtful debts at the same level as in FY 2021-22. Accordingly, the provision for bad and doubtful debts estimated for FY 2022-23 for Wires Business and Supply business is as follows:

Table 4-57: Provision for Bad and Doubtful Debts for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Provision for Bad Debts - Wires	3.37	2.63
Provision for Bad Debts - Supply	12.62	11.74
Provision for Bad Debts - Total	15.99	14.38

The Commission has approved the provision for Bad and Doubtful Debts for FY 2022-23 at the same level as approved in the Truing-up of FY 2021-22. The following Table shows the Provision for Bad and Doubtful Debts considered for FY 2022-23:

Table 4-58: Provision for Bad and Doubtful Debts for FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wires Business	3.37	2.63	2.63
Supply Business	12.62	11.74	11.74
Total	15.99	14.38	14.38

4.12 CONTRIBUTION TO CONTINGENCY RESERVE

AEML-D's Submission

AEML-D, in accordance with Regulation 35.1 of MYT Regulations, 2019, has considered the contribution to contingency reserve equal to 0.25% of the original cost of fixed assets as on 01st April, 2022 for the Wires Business and Supply Business, separately. The Table below gives the summary of contribution to Contingency Reserve for the Wires Business and Supply Business for FY 2022-23:

Table 4-59: Contribution to Contingency Reserves in FY 2022-23 for Wires Business as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Opening GFA	7,097.80	8,556.05
% Contribution	0.25%	0.25%
Contribution to CR	17.74	21.39

Table 4-60: Contribution to Contingency Reserves in FY 2022-23 for Supply Business as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Opening GFA	871.17	543.80
% Contribution	0.25%	0.25%
Contribution to CR	2.18	1.36

As per Regulation 34, the Contribution to Contingency Reserves in a year shall be between 0.25% and 0.50% of the original cost of fixed assets. The Commission had approved the contribution to Contingency Reserves for Wires Business and Supply Business for FY 2022-23 at 0.25% of the approved value of the opening GFA for the respective Businesses, in the MYT Order. However, in its objection filed against TPC-D's MTR Petition, AEML-D has submitted that the Commission should either allow or disallow Contribution to Contingency Reserves for both the competing Licensees, rather than considering Contribution to Contingency Reserves for AEML-D and not considering Contribution to Contingency Reserves for TPC-D's Wires Business.

The Commission has considered this request of AEML-D, and decides that Contribution to Contingency Reserves shall not be considered for AEML-D's Wires Business from FY 2022-23 to FY 2024-25, wherein the investment of Contribution to Contingency Reserves is yet to be made. The Commission has considered Contribution to Contingency Reserves @0.25% of the Opening GFA for the Supply Business. The Contribution to Contingency Reserves considered by the Commission in the provisional true-up for FY 2022-23 is shown in the Table below:

Table 4-61: Contribution to Contingency Reserves for FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wires Business			
Opening Balance of GFA	7,097.80	8,556.05	8,142.07
% Contribution	0.25%	0.25%	-
Contribution to CR	17.74	32.09	<u>-</u>
Supply Business			
Opening Balance of GFA	871.17	543.80	502.86
% Contribution	0.25%	0.25%	0.25%
Contribution to CR	2.18	2.72	1.26

4.13 NON-TARIFF INCOME

AEML-D's Submission

AEML-D submitted that it has estimated Non-Tariff Income (NTI) for H2 of FY 2022-23 by considering the amount equal to the provisional actuals for H1 of FY 2022-23. The NTI approved for FY 2022-23 in the MYT Order and the estimated NTI for FY 2022-23 are shown in table below:

Table 4-62: Non-Tariff Income in FY 2022-23 for Wires and Supply Business as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	MYT Order	Estimated
Non-Tariff Income- Wires	132.18	140.55
Non-Tariff Income- Supply	44.99	65.14

Commission's Analysis and Ruling

The Commission has provisionally accepted Non-Tariff Income as estimated by AEML-D for the Wires Business and Supply Business for FY 2022-23, as shown in the Table below:

Table 4-63: Non-Tariff Income for FY 2022-23 approved by Commission (Rs. Crore)

Particulars/ Rs. Crore	MYT Order	AEML-D Petition	Approved after provisional true up
Non-Tariff Income- Wires	132.18	140.55	140.55
Non-Tariff Income- Supply	44.99	65.14	65.14

4.14 INCOME FROM OTHER BUSINESS

AEML-D's Submission

AEML-D submitted that it has considered the estimated Income from Other Business for FY 2022-23 at the same level as actuals for FY 2021-22. The summary of Other Business income for FY 2022-23 is as under:

Table 4-64: Income from Other Business for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Lease charges		0.10
Optic Fibre link	0.13	2.10
Tower Rental		1.07
Total	0.13	3.27

The Commission has provisionally accepted income from Other Business as estimated by AEML-D for the Wires Business for FY 2022-23, as shown in the Table below.

Table 4-65: Income from Other Business for FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML- D Petition	Approved after provisional truing up
Lease charges		0.10	0.10
Optic Fibre link	0.13	2.10	2.10
Tower Rental		1.07	1.07
Total	0.13	3.27	3.27

4.15 SUMMARY OF AGGREGATE REVENUE REQUIREMENT

AEML-D's Submission

The summary of the ARR is shown in the Table below:

Table 4-66: ARR for Wires and Supply Business for FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	MYT ORDER		I	ESTIMATES	5	
	Wire	Retail	Total	Wire	Retail	Total
Power purchase (inclusive of InSTS, Standby & SLDC)		4,793.17	4,793.17		6,182.72	6,182.72
O&M expenditure	935.41	459.28	1,394.69	979.79	490.67	1,470.46
Depreciation	315.97	48.48	364.44	387.53	30.61	418.14
Interest on long-term loan	160.23	24.72	184.95	208.62	8.87	217.49
Return on Equity	437.25	54.76	492.00	500.74	40.73	541.47
Interest on working capital	33.54	0.34	33.88	34.99	2.28	37.28
Interest on CSD		32.71	32.71		20.85	20.85
Provision for Bad and Doubtful Debts	3.37	12.62	15.99	2.63	11.74	14.37
Contribution to contingency reserve	17.74	2.18	19.92	21.39	1.36	22.75
Non-Tariff Income	132.18	44.99	177.17	140.55	65.14	205.68
Income from Other Business	0.13		0.13	3.27		3.27
Aggregate Revenue Requirement (ARR)	1,771.20	5,383.27	7,154.47	1,991.87	6,724.69	8,716.57
ARR adjustment		52.38	52.38		52.38	52.38
Total ARR	1,771.20	5,435.65	7,206.85	1,991.87	6,777.07	8,768.95

Particulars / (Rs. Crore)	MYT ORDER			ESTIMATES		
	Wire	Retail	Total	Wire	Retail	Total
Revenue from Own consumers	1,298.43	5,583.03	6,881.46	1,362.68	6,730.82	8,093.49
Wheeling revenue from CO & OA consumers	236.38		236.38	230.89		230.89
CSS revenue		88.30	88.30		74.06	74.06
Total Revenue	1,534.81	5,671.33	7,206.14	1,593.56	6,804.87	8,398.44
Gap / (Surplus)	236.39	(235.68)	0.71	398.31	(27.80)	370.51

AEML-D has submitted that on comparison of the estimated total ARR vis-à-vis approved ARR, the increase in Wires ARR by ~ Rs. 220 Crore is primarily on account of the following:

- Increase in provisional depreciation, interest and RoE as compared to the expenses considered in MYT Order due to increased capitalization ~ Rs. 183 Crore
- Increase in revised Normative O&M expenses vis-à-vis that approved in the MYT Order ~ Rs. 44 Crore
- Projected increase in NTI and Income from Other Business ~ Rs. 12 Crore

It is submitted that on comparison of the estimated Total ARR vis-à-vis approved ARR, the increase in Supply ARR by ~ Rs. 1,340 Crore is primarily on account of the following:

- Increase in power purchase cost ~ Rs. 1,390 Crore. This is primarily on account of the STPP rate approved in the MYT Order at Rs. 3.50/kWh vs. provisional actuals for H1 of FY 2022-23 and Rs. 5/kWh estimated for H2. Also, MTPP PPA has been approved from 1st Sept 2022 onwards, which has not been considered in the MYT Order.
- Reduction in provisional depreciation, interest and RoE as compared to the expenses considered in MYT Order due to lower capitalization vs. that approved in MYT Order for the earlier years ~ Rs. 48 Crore
- Increase in revised Normative O&M expenses vis-à-vis that approved in the MYT Order ~ Rs. 32 Crore
- Projected increase in NTI ~ Rs. 20 Crore

Further, the variation in revenue from own consumers is due to the provisional actuals for H1 of FY 2022-23 and the estimated tariff for H2 of FY 2022-23 by considering the estimated sales for the said period.

Commission's Analysis and Ruling

Based on the components of the ARR approved in the above paragraphs, the Commission has approved the ARR for Wires Business and Supply Business for FY 2019-20 as shown in the Tables below:

Table 4-67: ARR for Wires Business for FY 2022-23 approved by the Commission (Rs. Crore)

		FY 2022-23			
Sr. No.	Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
1	Operation & Maintenance Expenses	935.41	979.79	940.89	
2	Depreciation	315.97	387.53	377.47	
3	Interest on Loan Capital	160.23	208.62	208.41	
4	Interest on Working Capital	33.54	34.99	34.29	
5	Bad debts written off	3.37	2.63	2.63	
6	Contribution to contingency reserves	17.74	21.39	-	
7	Total Revenue Expenditure	1466.26	1634.95	1563.70	
8	Add: Return on Equity Capital	437.25	500.74	497.85	
9	Aggregate Revenue Requirement	1,903.51	2,135.69	2,061.55	
10	Less: Non-Tariff Income	132.18	140.55	140.55	
11	Less: Income from other business	0.13	3.27	3.27	
12	Aggregate Revenue Requirement from Distribution Wires	1,771.20	1,991.87	1,917.73	

The main reasons for the difference between the Wires ARR claimed by AEML-D for FY 2022-23 and that approved in this Order are:

- 1. Normative O&M Expenses approved in this Order are lower than that claimed by AEML-D, on account of consideration of lower escalation rate and non-consideration of higher base considered by AEML-D on account of wage revision.
- 2. Depreciation is lower than that claimed on account of lower capitalisation and nonconsideration of addition to GFA claimed by AEML-D on account of Consumer Contribution from previous years.

Table 4-68: ARR for Supply Business for FY 2022-23 approved by the Commission (Rs. Crore

			FY 2022-23		
Sr. No.	Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
1	Power Purchase Expenses (including Inter-State Transmission Charges)	4,306.37	5,698.21	6,103.92	
2	Operation & Maintenance Expenses	459.28	490.67	468.69	
3	Depreciation	48.48	30.61	23.66	
4	Interest on Loan Capital	24.72	8.87	1.46	
5	Interest on Working Capital	0.34	2.28	-	

		FY 2022-23		
Sr. No.	Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
6	Interest on Consumer Security Deposit	32.71	20.85	20.85
7	Bad debts written off	12.62	11.74	11.74
8	Contribution to contingency reserves	2.18	1.36	1.26
9	Intra-State Transmission Charges	484.83	482.12	482.12
10	MSLDC Fees & Charges	1.97	2.39	2.39
11	Total Revenue Expenditure	5,373.50	6,749.10	7,116.08
12	Add: Return on Equity Capital	54.76	40.73	31.59
13	Aggregate Revenue Requirement	5,428.26	6,789.83	7,147.67
14	Less: Non-Tariff Income	44.99	65.14	65.14
15	ARR Adjustment	52.38	52.38	52.38
16	Aggregate Revenue Requirement from Retail Supply	5,435.65	6,777.07	7,134.91

The main reasons for the difference between the Supply ARR claimed by AEML-D and that approved in this Order for FY 2022-23 are:

- Power purchase expense has increased because AEML-D has not considered payment of Standby Charges for FY 2022-23 and has also considered refund of Standby Charges paid in previous years, while the Commission has considered payment of approved Standby Charges. The cost of power purchase has also increased due to higher rates considered by the Commission for some sources in H2 of FY 2022-23.
- 2. O&M Expenses allowed in this Order are lower than that claimed by AEML-D, on account of consideration of lower escalation rate and non-consideration of impact of wage revision in normative O&M Expenses;
- 3. Depreciation, interest and RoE are lower than that claimed on account of lower capitalisation approved by the Commission.

4.16 REVENUE

4.16.1 Revenue from Wheeling charges from Change-over and Open Access Consumers

AEML-D's Submission

The actual revenue from wheeling charges from change-over and OA consumers in H1 of

2022-23 along with the estimated revenue from the same in H2 of FY 2022-23 is shown in the Table below:

Table 4-69: Wheeling Revenue from Change-over and OA Consumers in FY 2019-20 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
OA consumers		17.54
Change-over Consumers (HT)		213.35
Change-over Consumers (LT)		213.33
Total	236.38	230.89

Commission's Analysis and Ruling

The Commission has worked out the revenue based on the sales estimated as elaborated in the earlier Sections of this Chapter, and corresponding Wheeling Charges applicable to the respective category as approved in the MYT Order dated 30th March 2020, as shown in the Table below:

Table 4-70: Wheeling Revenue from Change-over & Open Access Consumers in FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wheeling Revenue from Change- over & Open Access Consumers	236.38	230.89	230.89

4.16.2 Revenue from Cross-Subsidy Surcharge (CSS)

AEML-D's Submission

The actual revenue from CSS from changeover and OA consumers in H1 of FY 2022-23 and the revenue from CSS from estimated changeover sales in H2 of FY 2022-23 are shown in the table below:

Table 4-71: Estimated Revenue from CSS in FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
OA consumers		33.58

Particulars	MYT Order	AEML-D Petition
Changeover Consumers		40.48
Total	88.30	74.06

The Commission has estimated the revenue from CSS from OA consumers and Changeover consumers based on the category wise cross subsidy surcharge applicable to estimated consumption. The revenue from CSS estimated for FY 2022-23 is as shown in the Table below.

Table 4-72: Revenue from CSS in FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Revenue from CSS	88.30	74.06	74.06

4.16.3 Revenue from sale of Electricity

AEML-D's Submission

In H1 of FY 2022-23, AEML-D has charged tariffs as approved by the Commission in AEML-D's MYT Order. The actual revenue from energy sales along with the FAC charged as approved by the Commission from time to time in H1 of FY 2022-23 and the revenue expected from energy sales in H2 of FY 2022-23 is presented in the table below. AEML-D has estimated the revenue in second half of FY 2022-23 by applying the approved tariffs for FY 2022-23 to the estimated sales of second half of FY 2022-23. The actual revenue billed in H1 of FY 2022-23 and the revenue from estimated sales in H2 of FY 2022-23 (at approved tariffs) is summarized below:

Table 4-73: Estimated Revenue from sale of power in FY 2022-23 as submitted by AEML-D

Particulars	MYT Order	AEML-D Petition
Revenue (Rs. Crore)	6,881.46	8,093.49
Sales (MU)	9,266.90	9,975.93

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Particulars	MYT Order	AEML-D Petition
ABR (Rs. /kWh)	7.43	8.11

The Commission has computed the revenue based on estimated sales for FY 2022-23 and applicable Tariff approved for FY 2022-23 in MYT Order dated 30th March 2020 along with applicable category-wise FAC, as shown in the following Table:

Table 4-74: Total Revenue in FY 2019-20 approved by Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up	
Revenue from Wheeling Charges	1298.43	1362.68	1362.68	
from own consumers	12/0.18	1802.00	1302.00	
Revenue from Sale of Electricity	5583.03	6730.82	6730.82	
from own consumers	3363.03	0730.62	0730.62	
Total Revenue (Rs. Crore)	6881.46	8093.49	8093.49	
Own Sales (MU)	9,266.90	9,975.93	9,975.93	
ABR (Rs. /kWh)	7.43	8.11	8.11	

4.17 TREATMENT OF SELECTIVE LOYALTY REBATE GIVEN TO CONSUMERS

TPC-D has raised the issue of selective 'Loyalty Rebate' given by AEML-D to consumers in order to deter such consumers from switching over to TPC-D. The same submissions had been made to the Switchover Committee appointed by the Commission. The Switchover Committee in its recommendations has stated as under:

"Tariff incentive/loyalty benefits (rebate) offered by Licensees to retain the consumers are not a subject matter of the Switchover Protocol and are beyond the Terms of Reference of this Committee. The Commission may take up this issue in appropriate proceedings."

During the TVS and in the queries sent to AEML-D, the Commission asked AEML-D to clarify regarding the 'Loyalty Rebate' given to consumers, and provide the following details:

- a. Details of such rebates/loyalty discounts provided to consumers;
- b. Method of passing through the rebates/loyalty discounts through the bills of AEML-D;
- c. The total amount of rebates/loyalty discounts given in FY 2019-20, FY 2020-21, and FY 2021-22;

- d. Clarify whether the above rebate/loyalty discounts have been given to selected consumers or to all consumers of that particular category;
- e. The treatment of the revenue loss due to offering of such rebates/loyalty discounts to consumers with regard to the provisions of the MERC MYT Regulations, 2019, as the adjustments are passed through the bills raised by AEML-D.

During the TVS, AEML-D admitted that the rebates had been passed through to the consumers through the electricity bills. However, in its written replies to the queries, AEML-D has simply stated as under:

"AEML-D wishes to submit that AEML-D has billed its consumers as per the tariff approved in the MYT Order and no lower tariff has been charged in the bill, be it energy charge, wheeling charge, fixed charge, demand charge, etc. as per the approved tariff schedule. Therefore, the revenue as billed has been considered for the purpose of determining the revenue gap / surplus, and thus there is no understatement of the same."

The above reply neither confirms nor denies the passing through of 'loyalty rebates' and is not a direct reply to the query raised by the Commission.

The MYT Regulations, 2019 specify that such rebates cannot be offered selectively, and have to be offered to entire category; also, impact of such rebates have to be borne by the DISCOM and cannot be passed on through ARR. The relevant provisions of the MYT Regulations, 2019 are reproduced below:

"81.5 The Distribution Licensee may offer a rebate to the consumers on the Tariff and charges determined by the Commission:

Provided that the Distribution Licensee shall submit details of such rebates to the Commission every quarter, in the manner and format, as stipulated by the Commission:

Provided further that the impact of such rebates on the Distribution Licensee shall be borne entirely by the Distribution Licensee and the impact of such rebate shall not be passed on to the consumers, in any form:

Provided also that such rebates shall not be offered selectively to any consumer/s, and shall have to be offered to the entire consumer category/subcategory/consumption slab in a non-discriminatory manner."

From the above, it is apparent that AEML-D has given loyalty rebates in a selective manner, however, AEML-D has not submitted any details despite specific query being raised by the Commission. As the rebates have been given through the bills of AEML-D, as admitted during the TVS, there has been a revenue loss to AEML-D, which is being attempted to be passed on through the ARR.

This is a clear violation of the MYT Regulations, 2019, and the Commission takes a very serious view of the matter.

The Commission has assessed that the revenue loss to AEML-D on account of the loyalty rebates is around Rs. 5 Crore, and has hence, considered notional revenue of Rs. 5 Crore in FY 2022-23, which has been adjusted against the ARR of the Supply Business.

The Commission has also fined AEML-D Rs. 1 lakh under Section 142 of the EA 2003 for violation of the MYT Regulations, 2019 and for non-submission of the relevant data. This amount has also been adjusted against the ARR of AEML-D's Supply Business.

4.18 REVENUE GAP/SURPLUS FOR FY 2022-23 FOR THE WIRES BUSINESS AND SUPPLY BUSINESS

AEML-D's Submission

The estimated Revenue Gap/(Surplus) for FY 2022-23 for the Wires Business and Supply Business is as shown in the Tables below:

Table 4-75: Revenue Gap/(Surplus) for Wires Business in FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Wires ARR	1,771.20	1,991.87
Revenue from Wheeling Charges from changeover and OA consumers		230.89
Revenue from Wheeling Charges from Own Consumers		1362.68
Revenue Gap of Wires Business		398.30

Table 4-76: Revenue Gap/(Surplus) for Supply Business in FY 2022-23 as submitted by AEML-D (Rs. Crore)

Particulars	MYT Order	AEML-D Petition
Supply ARR	5,435.65	6,777.77
Revenue from sale of electricity from own consumers		6730.82
Revenue from CSS		74.06
Revenue Gap of Supply Business		(27.81)

Based on the ARR and revenue provisionally approved for FY 2022-23 in the earlier paragraphs, the Revenue Gap/(Surplus) for the Wires Business and Supply Business for FY 2022-23 as provisionally approved by the Commission is shown in the Tables below:

Table 4-77: Provisional Revenue Gap/(Surplus) for the Wires Business for FY 2022-23 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Wires ARR	1,771.20	1,991.87	1,917.73
Revenue from Wheeling Charges from changeover and OA consumers		230.89	230.89
Revenue from Wheeling Charges from Own Consumers		1362.68	1362.68
Revenue Gap of Wires Business		398.30	324.16

Table 4-78: Provisional Revenue Gap/(Surplus) for the Supply Business for FY 2022-23 as approved by the Commission (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Supply ARR	5,435.65	6,777.77	7,134.91
Revenue from sale of electricity from own consumers		6730.82	6730.82
Revenue from CSS		74.06	74.06
Add: Revenue due to selective Loyalty Rebate given to consumers			5.00

Particulars	MYT Order	AEML-D Petition	Approved after provisional truing up
Add: Penalty for non-			
submission of data and			0.01
non-compliance with			0.01
MYT Regulations			
Revenue Gap of Supply		(27.81)	325.03
Business		(27.61)	323.03

The treatment of the above Revenue Gap/(Surplus) after provisional truing up for FY 2022-23 is discussed in Chapter 6 of this Order.

5 REVISED AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24 AND FY 2024-25

In accordance with Regulation 5.1 (b) of the MYT Regulations, 2019, AEML-D submitted the projected ARR for FY 2023-24 and FY 2024-25, along with projected expenses for the Wires Business and Supply Business separately. The Commission has discussed the expenditure allowed on each of the expense heads and the total expenses approved for FY 2023-24 and FY 2024-25 in the subsequent paragraphs.

5.1 SALES

AEML-D's Submission

AEML-D has projected the total energy sales to all consumers connected to its network, including Changeover and OA consumers and thereafter subtracted the projected Changeover and OA consumption from the same.

5.1.1 Projection of own LT Sales

AEML-D submitted that the growth rates (positive or negative) achieved in sales of FY 2020-21 and FY 2021-22 are not representative as they were COVID impacted years. Hence, for the purpose of projecting sales for FY 2023-24 and FY 2024-25, AEML-D has considered the 3-year CAGR between actual sales for FY 2019-20 and estimated sales for FY 2022-23. Wherever the CAGR derived above was unrealistic, suitable moderation has been done. AEML-D has applied the growth rates as derived above, to the estimated sales for FY 2022-23 to project the LT sales for FY 2023-24 and FY 2024-25.

5.1.2 **Projection of own HT Sales**

The steps considered for projecting HT sales for FY 2023-24 and FY 2024-25 are as under:

- a. Category-wise HT sales till FY 2019-20 have been considered. 3-year CAGR, 5-year CAGR and 7-year CAGR for different consumer categories has been determined. Appropriate CAGR has been considered for projection of HT sales and applied on the estimated HT sales of FY 2022-23. Wherever the growth rates have been negative, AEML-D has considered nominal growth rate of 1% for sales projection.
- b. AEML-D is expected to have addition of certain HT consumers from November 2022 considering the new supply applications received from consumers. The expected sales from the new consumers have been added in the projections of FY 2023-24 and FY 2024-25.
- c. Two EHV consumers, namely Metro 2A and 7 have switched over to AEML-D from October 2022 onwards. Their month-wise estimated consumption has been

considered in the sales projection of FY 2023-24 and FY 2024-25. Further, AEML expects addition of EHT – Industrial consumer in AEML-D's sales from April 2023 onwards. The expected sales to the EHT consumer(s) have been added in EHT sales for FY 2023-24 and FY 2024-25.

5.1.3 Reduction in Sales due to DSM Programmes

AEML-D has estimated reduction in sales due to two DSM programmes, i.e., large-scale refrigerator program and large-scale ceiling fan program for FY 2023-24 and FY 2024-25, which is 0.26 MU for each year.

5.1.4 Reduction in Sales due to Roof Top Solar Generation

The incremental RTS generation in AEML-D licence area in FY 2023-24 and FY 2024-25 is expected to be 6.39 MU and 14.39 MU, respectively.

Based on the above assumptions, projected Direct Sales are shown in the Table below:

Table 5-1: Projected Sales for FY 2023-24 and FY 2024-25 as submitted by AEML-D (MU)

Particulars / (MU)	FY 20	FY 2023-24		24-25
	MYT Order	Revised Projection	MYT Order	Revised Projection
LT Category				
LT I - Below Poverty Line	0.01	0.01	0.01	0.01
LT -I Residential (Single Phase)				
0-100	1940.94	1892.09	2000.68	1958.02
101-300	1262.33	1305.94	1297.35	1350.45
301-500	210.29	208.13	214.03	213.92
500 and above	67.64	65.58	66.54	65.50
LT -I Residential (Three Phase)				
0-100	322.83	328.26	334.30	339.70
101-300	466.37	477.58	482.19	493.86
301-500	232.91	236.56	238.53	243.14
500 and above	408.62	429.98	402.03	429.53
LT II (a) - 0-20 kW	1994.12	2099.48	2030.31	2139.19
LT II (b) - 20-50 kW	224.31	250.62	217.48	252.54
LT II (c) - above 50 kW	511.14	621.35	503.41	627.24
LT III (a) - LT Industrial upto 20 kW	193.66	334.64	196.48	336.93
LT III (b) - LT Industrial above 20 kW	371.72	398.41	364.92	401.22
LT IV (a): PS - Govt. EI & Hospitals	45.41	45.12	51.66	51.33
LT IV (b): PS – Others	358.56	193.67	417.28	195.10

Particulars / (MU)	FY 2023-24		FY 2024-25	
	MYT Order	Revised	MYT Order	Revised
		Projection		Projection
LT V (a): Agriculture – Pumpsets	0.18	0.07	0.23	0.09
LT V (b): Agriculture – Others	0.61	0.49	0.76	0.62
LT VI: EV Charging Stations	0	3.73	0	10.63
Total LT	8611.65	8891.70	8818.19	9109.00
HT Category				
HT I: HT-Industry	449.59	943.90	488.81	1755.16
HTII: HT- Commercial	262.40	423.97	248.30	430.40
HT III: HT-Group Housing Society	25.98	11.24	21.95	11.26
HT IV - HT Metro & Monorail	31.24	0	31.29	0
HT V (a):PS - Govt. EI & Hospitals	5.69	6.28	5.41	6.32
HT V (b):PS – Others	102.03	248.09	100.20	250.20
HT VI: EV Charging Stations		210.00		210.00
Total HT	876.93	1843.47	895.96	2663.35
EHT I - Industry		180.00		180.00
EHT IV - Metro & Monorail		120.00		120.00
Total	9488.58	11035.17	9714.15	12072.35

5.1.5 Projection of Changeover Sales on TPC-D network

AEML-D has submitted that it has been supplying a few consumers (residential category) on TPC-D network from FY 2020-21 onwards. The sales estimation made for own consumers, as shown above is inclusive of the AEML-D changeover consumers. AEML-D has projected the sales for these consumers by applying the residential category growth rate to the estimated sales for FY 2022-23. The sales projected for FY 2023-24 and FY 2024-25 are as under:

Particulars / (MU)	FY 2023-24	FY 2024-25
AEML-D Changeover Sales on TPC-D network	1.72	1.76

5.1.6 Projection of TPC-D Changeover Sales on AEML-D network

The projected TPC-D changeover sales for of FY 2023-24 and FY 2024-25 are as under:

Table 5-2: Projected TPC-D Changeover Sales on AEML-D network for FY 2023-24 and FY 2024-25 as submitted by AEML-D (MU)

	FY 2023-24		FY 2024-25	
Particulars / (MU)	MYT Order	Revised	MYT Order	Revised
		Projection		Projection
LT Category				

	FY 2023-24		FY 202	24-25
Particulars / (MU)	MYT Order	Revised	MYT Order	Revised
		Projection		Projection
LT I - Below Poverty Line	0	0	0	0
LT -I Residential (Single Phase)				
0-100	487.08	468.96	488.19	454.82
101-300	423.05	419.87	425.01	428.31
301-500	72.23	73.30	73.40	76.24
500 and above	19.94	18.84	20.89	19.88
LT -I Residential (Three Phase)				
0-100	80.40	91.14	79.31	96.25
101-300	117.22	131.47	115.27	137.18
301-500	56.31	59.33	55.14	61.45
500 and above	70.36	60.05	69.41	65.39
LT II (a) - 0-20 kW	95.68	105.63	95.68	149.04
LT II (b) - 20-50 kW	23.09	12.60	23.09	13.31
LT II (c) - above 50 kW	32.90	22.62	32.90	32.41
LT III (a) - LT Industrial upto 20 kW	5.29	14.53	4.14	15.73
LT III (b) - LT Industrial above 20 kW	0.87	7.67	0.53	8.92
LT IV (a): PS - Govt. EI & Hospitals	0	4.96	0	8.17
LT IV (b): PS – Others	9.07	2.84	11.34	3.38
LT V (a): Agriculture – Pumpsets	0	0	0	0
LT V (b): Agriculture – Others	0	0	0	0
LT VI: EV Charging Stations	0	0	0	0
Total LT	1493.49	1493.80	1494.30	1570.49
HT Category				
HT I: HT-Industry	0	0	0	0
HTII: HT- Commercial	0.15	0.21	0.07	0.22
HT III: HT-Group Housing Society	0	0	0	0
HT IV - HT Metro & Monorail	0	0	0	0
HT V (a):PS - Govt. EI & Hospitals	0	0	0	0
HT V (b):PS – Others	0	0	0	0
HT VI: EV Charging Stations	0	0	0	0
Total HT	0.15	0.21	0.07	0.22
Total	1493.64	1494.01	1494.37	1570.70

5.1.7 **Projection of OA Consumption**

AEML-D has projected the OA consumption of FY 2023-24 and FY 2024-25 by applying the category wise growth rates for HT categories to the estimated OA consumption for FY 2023-24 and FY 2024-25.

FY 2023-24 FY 2024-25 Particulars / (MU) **MYT Order MYT Order** Revised Revised **Projection Projection** HT I: HT-Industry 136.85 130.41 136.85 135.67 93.77 119.95 93.77 124.78 HTII: HT- Commercial HT V (b):PS – Others 4.63 22.57 4.63 23.48 **Total** 235.25 272.93 235.25 283.94

Table 5-3: Projected OA consumption for FY 2023-24 & FY 2024-25 as submitted by AEML-D (MU)

For projecting the sales for future years, the Commission in previous MYT and MTR Orders had adopted a holistic approach as it is difficult to establish any trend in the growth rates for specific consumer categories due to migration and reverse migration of consumers in some categories from TPC-D to AEML-D and vice-versa over the past several years.

Before projecting the revised energy sales for FY 2023-24 and FY 2024-25, it is important to review the projections for the period from FY 2019-20 to FY 2021-22 made in the MYT Order as against the actual sales achieved during this period. The Commission had projected energy sales for own consumers of AEML-D as 8622.03 MU, 8834.29 MU, and 9048.91 MU for FY 2019-20, FY 2020-21, and FY 2021-22, respectively in the MYT Order. As against this, the actual sales of AEML-D to own consumers were 8452.09 MU, 7170.83 MU, and 7956.69 MU for FY 2019-20, FY 2020-21, and FY 2021-22, respectively. The sales approved for FY 2019-20 were based on provisional actual values, hence, the variation is small. The actual sales in FY 2020-21 and FY 2021-22 were lower by around 19% and 12%, respectively, as compared to the approved sales, which is attributable to the impact of COVID and related lockdowns. Hence, in terms of direct sales, the variation in sales is attributable to the COVID impact. In the previous years, however, the method of holistic sales projections has given better results.

The Commission had projected changeover sales for TPC-D, after grossing up for losses, as 1638.05 MU, 1602.31 MU, and 1598.49 MU for FY 2019-20, FY 2020-21, and FY 2021-22, respectively in the MYT Order. As against this, the actual changeover sales of TPC-D were 1702.86 MU, 1587.51 MU, and 1561.76 MU for FY 2019-20, FY 2020-21, and FY 2021-22, respectively. The variation in changeover sales is marginal vis-à-vis the approved sales.

Hence, the methodology adopted by the Commission for sales projections could be considered appropriate, given the difficulties in assessing the category-wise trend of sales of TPC-D and AEML-D on stand-alone basis. In view of the above, for projecting category-wise sales for FY 2023-24 and FY 2024-25, the Commission has continued with the holistic approach and projected the energy sales, accordingly, as elaborated in the following paragraphs:

- (a) The Commission has analysed the growth trend of the category-wise total energy sales for past period. The Commission has analysed the growth trend of past sales in various segments as AEML-D Own sales, Changeover Sales, TPC-D Direct sales in AEML-D's area of supply, TPC-D Direct sales in BEST's area of supply, and Switchover Sales in AEML-D and BEST area.
- (b) The overall trend of growth in consolidated sales gives a realistic picture of category-wise trends, which have been used to project the overall category-wise sales for TPC-D and AEML-D combined for the area of supply overlapping with AEML-D.
- (c) The Commission has considered the past sales up to FY 2021-22 for growth trend analysis. The estimated energy sales for FY 2022-23 have been considered as base value for projecting the energy sales for FY 2023-24 and FY 2024-25.
- (d) CAGR of actual consolidated sales for different periods in the past five years, i.e., FY 2016-17 to FY 2021-22, has been analysed and an appropriate CAGR has been considered. Different CAGRs have been considered for TPC-D for the areas overlapping with AEML-D and BEST areas.
- (e) Direct sales of TPC-D were projected based on past trends as these are not affected by migration or reverse migration and are sales on TPC-D's own distribution network. Further, TPC-D's overall sales have been projected based on past growth trends in different segments, viz., sales in AEML-D's area of supply, sales in BEST's area of supply, sales because of new Direct consumers in BEST area, and sales because of new Direct Consumers in AEML-D's area.
- (f) The changeover sales have been estimated based on past trends. However, it is difficult to anticipate the extent of consumers shifting considering the difference in tariffs. The impact, if any, on this account shall be addressed at the time of truing up.
- (g) The category-wise CAGR considered for projecting the revised energy sales for FY 2023-24 and FY 2024-25, is shown in the following Table:

Table 5-4: Category-wise CAGR considered for projection of Energy Sales

Consumer Category	CAGR Considered for Consolidated Sales	CAGR for Total TPC-D Direct Sales	CAGR for TPC-D Direct Sales in BEST area
LT I - Below Poverty Line	0%	0%	0%

Consumer Category	CAGR Considered for Consolidated Sales	CAGR for Total TPC-D Direct Sales	CAGR for TPC-D Direct Sales in BEST area
LT I Residential	2%	10%	10%
LT II Commercial	10%	5%	5%
LT III (a) - LT Industrial up to 20 kW	17%	5%	20%
LT III (b) - LT Industrial above 20 kW	10%	5%	20%
LT IX - Public Service	11%	4%	5%
LT X: LT -Agriculture	0%	0%	0%
EHV Industry	10%	-	-
HT I: HT-Industry	10%	5%	5%
EHV Commercial	5%	5%	-
HT II: HT- Commercial	5%	5%	5%
HT III: HT-Group Housing Society	7%	10%	20%
HT V (A) - Railways	10%	5%	5%
HT V (B): Metro/Monorail	10%	-	-
HT VI - Public Service	19%	5%	-
HT VIII: EV Charging Stations	20%	-	-

- (h) For grossing up change-over sales, the HT and LT Wheeling Losses approved for AEML-D in its MYT Order have been considered.
- (i) The energy sales for AEML-D have been derived after deducting the TPC-D sales and Change-over Sales from the projected consolidated energy sales for FY 2023-24 and FY 2024-25.
- (j) The sales to new EHT consumers have been considered as projected by AEML-D.
- (k) The Open Access sales have been considered as estimated by AEML-D for FY 2023-24 and FY 2024-25.

In view of the above, the category-wise sales approved for FY 2023-24 and FY 2024-25 are given in the Tables below:

Table 5-5: Category-wise Direct Sales approved for FY 2023-24 and FY 2024-25 (MU)

Congress Cotogowy &		FY 2023-24			FY 2024-25	
Consumer Category & Consumption Slab	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approved in this Order
EHT Category						
EHT IV - Industry		180.00	180.00		180.00	180.00
EHT IV - Metro & Monorail		120.00	120.00		120.00	120.00
HT Category						
HT I: HT-Industry	449.59	943.90	614.12	488.81	1,755.16	725.22
HTII: HT- Commercial	262.40	423.97	426.79	248.30	430.40	448.14
HT III: HT-Group Housing Society	25.98	11.24	10.96	21.95	11.26	10.64
HT V - HT Metro & Monorail	31.24	-		31.29	-	
HT VI (a):PS - Govt. EI & Hospitals	5.69	6.28	11.46	5.41	6.32	17.90
HT VI (b):PS - Others	102.03	248.09	306.62	100.20	250.20	379.81
HT VIII: EV Charging Stations		210.00	70.00		210.00	70.00
Sub-total	876.93	1,843.47	1,439.95	895.96	2,663.35	1,651.71
LT Category						
LT I - Below Poverty Line	0.01	0.01	0.01	0.01	0.01	0.01
LT -I Residential (Single Phase)		-	-		-	-
0-100	1,940.94	1,892.09	1,935.04	2,000.68	1,958.02	1,973.31
101-300	1,262.33	1,305.94	1,258.49	1,297.35	1,350.45	1,283.38
301-500	210.29	208.13	209.65	214.03	213.92	213.80
500and above	67.64	65.58	67.43	66.54	65.50	68.77

Canguman Catagany &		FY 2023-24			FY 2024-25	
Consumer Category & Consumption Slab	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approved in this Order
LT -I Residential (Three						
Phase)		-	-		-	-
0-100	322.83	328.26	321.85	334.30	339.70	328.21
101-300	466.37	477.58	464.95	482.19	493.86	474.15
301-500	232.91	236.56	232.20	238.53	243.14	236.79
500and above	408.62	429.98	407.38	402.03	429.53	415.43
LT II (a) - 0-20 kW	1,994.12	2,099.48	2,273.60	2,030.31	2,139.19	2,511.34
LT II (b) - 20-50 kW	224.31	250.62	277.95	217.48	252.54	310.70
LT II (c) - above 50 kW	511.14	621.35	693.85	503.41	627.24	781.82
LT III (a) - LT Industrial upto 20 kW	193.66	334.64	391.95	196.48	336.93	462.41
LT III (b) - LT Industrial above 20 kW	371.72	398.41	446.52	364.92	401.22	503.82
LT IX (a): PS - Govt. EI & Hospitals	45.41	45.12	44.66	51.66	51.33	50.23
LT IX (b): PS - Others	358.56	193.67	215.84	417.28	195.10	242.48
LT X (a): Agriculture - Pumpsets	0.18	0.07	0.05	0.23	0.09	0.05
LT X (b): Agriculture - Others	0.61	0.49	0.39	0.76	0.62	0.39
LT XI: EV Charging Stations	-	3.73	3.73	-	10.63	10.63
Sub-total	8,611.65	8,891.70	9,245.56	8,818.19	9,109.00	9,867.72
Total	9,488.58	11,035.17	10,985.51	9,714.15	12,072.35	11,819.43

The category-wise Change-over sales by TPC-D on AEML-D network considered for FY 2023-24 and FY 2024-25 are given in the Table below:

Table 5-6: Category-wise TPC-D Change-over Sales on AEML-D network approved for 4th Control Period (MU)

FY 2023-24 FY 2024-25 Particulars / (MU) Approved in Approved in **AEML-D AEML-D MYT Order MYT Order Petition Petition** this Order this Order LT Category LT I - Below Poverty Line 0 0 0 0 0 0 LT -I Residential (Single Phase) 0-100 487.08 468.96 451.98 488.19 454.82 451.98 101-300 423.05 419.87 425.96 425.01 428.31 425.96 301-500 72.23 82.69 73.30 73.40 76.24 82.69 20.89 19.94 18.84 22.47 19.88 22.47 500 and above LT -I Residential (Three Phase) 80.40 91.14 87.84 79.31 96.25 87.84 0 - 100101-300 117.22 131.47 133.38 115.27 137.18 133.38 301-500 56.31 59.33 66.93 55.14 61.45 66.93 500 and above 70.36 60.05 71.62 69.41 65.39 71.62 LT II (a) - 0-20 kW 95.68 105.63 95.68 75.26 71.68 149.04 LT II (b) - 20-50 kW 23.09 12.86 23.09 13.50 12.60 13.31 LT II (c) - above 50 kW 32.90 22.62 32.90 32.41 17.27 16.44 LT III (a) - LT Industrial upto 20 kW 5.29 4.14 15.73 14.65 14.53 15.39 LT III (b) - LT Industrial above 20 kW 0.87 7.67 7.83 0.53 8.92 8.22 8.17 LT IV (a): PS - Govt. EI & Hospitals 0 4.96 1.51 1.66 LT IV (b): PS – Others 9.07 2.84 11.34 3.38 1.48 1.48 LT V (a): Agriculture – Pumpsets 0 0 0 0 0 0 0 0 0 0 LT V (b): Agriculture – Others 0 0 LT VI: EV Charging Stations 0 0 0 0 0

		FY 2023-24			FY 2024-25	
Particulars / (MU)	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approved in this Order
Total LT	1493.49	1493.80	1469.34	1494.30	1570.49	1475.66
HT Category						
HT I: HT-Industry	0	0	0	0	0	0
HTII: HT- Commercial	0.15	0.21	0.23	0.07	0.22	0.23
HT III: HT-Group Housing Society	0	0	0	0	0	0
HT IV - HT Metro & Monorail	0	0	0	0	0	0
HT V (a):PS - Govt. EI & Hospitals	0	0	0	0	0	0
HT V (b):PS – Others	0	0	0	0	0	0
HT VI: EV Charging Stations	0	0	0	0	0	0
Total HT	0.15	0.21	0.23	0.07	0.22	0.23
Total	1493.64	1494.01	1469.56	1494.37	1570.70	1475.89

The category-wise OA consumption approved for the 4th Control Period are given in the Table below:

Table 5-7: Category-wise OA Consumption approved for 4th Control Period (MU)

Particulars / (MU)	FY 2023-24			FY 2024-25			
	MYT Order	AEML-D	Approved in	MYT Order	AEML-D	Approved in	
		Petition	this Order		Petition	this Order	
HT I: HT-Industry	136.85	130.41	130.41	136.85	135.67	135.67	
HTII: HT- Commercial	93.77	119.95	119.95	93.77	124.78	124.78	
HT V (b):PS – Others	4.63	22.57	22.57	4.63	23.48	23.48	
Total	235.25	272.93	272.93	235.25	283.94	283.94	

5.2 DISTRIBUTION LOSSES AND ENERGY BALANCE

AEML-D's Submission

AEML-D submitted that for FY 2023-24 and FY 2024-25, the target distribution loss approved by the Commission in the MYT Order in Case No. 325 of 2019 were 6.80% and 6.55%, respectively. As the actual distribution losses of AEML-D in the completed years have been lower than approved and the estimated distribution losses of FY 2022-23 are also considerably lower, hence, projecting power purchase quantum for FY 2023-24 and FY 2024-25 at target distribution losses would result in additional power purchase cost. Hence, for the purpose of projections for FY 2023-24 and FY 2024-25, AEML-D has considered the distribution losses at more realistic levels of 6.29% and 6.14%, respectively, for FY 2023-24 and FY 2024-25, i.e., at 0.15% reduction in each year.

The Energy Balance projected by AEML-D for FY 2023-24 and FY 2024-25 is shown below along with Energy Balance considered by the Commission in AEML-D's MYT Order:

Table 5-8: Energy balance for FY 2023-24 & FY 2024-25 submitted by AEML-D

Particulars	FY 2023-24		FY 202	24-25
	MYT Order	Projection	MYT Order	Projection
Own Sales (MU)	9,488.60	11,035.17	9,714.15	12,072.35
Less: EHT Sales (MU)		300.00		300.00
Less: AEML changeover sales (MU)		1.72		1.76
Changeover Sales (MU)	1,493.64	1,494.01	1,494.36	1,570.70
OA Consumption (MU)	235.25	272.93	235.25	283.94
Total Sales (MU)	11,217.49	12,500.39	11,443.75	13,625.24
Distribution Loss (%)	6.80%	6.29%	6.55%	6.14%
Energy input at T-D (MU)	12,036.02	13,339.02	12,245.94	14,516.11

AEML-D submitted that above Distribution Losses are assumed only for the purpose of realistic assessment of power purchase cost, so that customers do not unnecessarily bear a higher cost in their tariffs. The target losses for the purpose of efficiency gains should still be considered at 6.80% and 6.55% only as approved in the MYT Order and the efficiency gains / loss in accordance with the provisions of the MYT Regulations, 2019 will be claimed at the time of truing up.

Since, the distribution loss projected by AEML-D for FY 2023-24 and FY 2024-25 is lower than the target distribution loss as per MYT Order, AEML-D has prorated the HT and LT wheeling loss as stipulated in the MYT Order to arrive at the revised HT and LT wheeling loss.

From the energy balance, the energy requirement of AEML-D for its own consumers is worked out as below:

Table 5-9: Energy Requirement for FY 2023-24 & FY 2024-25 as submitted by AEML-D (MU)

Particulars	FY 202	23-24	FY 202	24-25
	MYT Order	Projection	MYT Order	Projection
Own Sales (MU)	9,488.60		9,714.15	
Distribution loss in %	6.80%		6.55%	
Transmission loss in %	3.18%		3.18%	
Migrated HT Sales + OA consumption (MU)		273.14		284.15
HT Loss (%) – revised		1.47%		1.44%
HT grossed up energy at T<>D (MU)		277.22		288.29
Migrated LT Sale (MU)		1,493.80		1,570.49
LT Loss (%) – revised		5.94%		5.80%
LT grossed up energy at T<>D (MU)		1,588.22		1,667.24
Total T<>D energy attributable to Changeover sale		1,865.43		1,955.53
& OA consumption (MU)				
Net T<>D energy attributable to AEML-D sale		11,473.59		12,560.58
(MU) - A				
T-D energy attributable to AEML-D C/O sale		1.72		1.76
(metered sales grossed up approved TPC-D				
wheeling losses) - B				
EHT Sales		300.00		300.00
Total T<>D energy attributable to AEML-D sale		11,775.31		12,862.34
(MU) - (A+B)				
InSTS Loss (%) (as approved in the MYT Order)		3.18%		3.18%
Total requirement of AEML-D (MU) at G-T	10,515.36	12,162.06	10,736.51	13,284.80
(MU)				

Commission's Analysis and Ruling

AEML-D has achieved actual Distribution Loss lower than the target Distribution Loss in FY 2019-20 and FY 2021-22. The Commission observes that AEML-D has projected Distribution Loss for FY 2023-24 and FY 2024-25 as 6.29% and 6.14%, respectively, as compared to the Distribution Loss of 6.80% and 6.55% approved in the MYT Order for FY 2023-24 and FY 2024-25, respectively.

The Commission appreciates the fact that AEML-D has been able to achieve actual Distribution Loss lower than the target Distribution Loss, for which AEML-D has been able to retain its share of the efficiency gains. However, the Distribution Loss trajectory approved in the MYT Order is not typically revised at the time of MTR Order. Moreover, AEML-D's suggestion to consider different level of Distribution Losses for the purposes of energy requirement projections and sharing of efficiency gains/losses, is not practical.

Hence, the Commission has retained the Distribution loss trajectory approved in the MYT Order as shown in the following Table:

FY 2023-24 FY 2024-25 **Particulars MYT AEML-D MYT AEML-D** Approved in Approved in this Order **Petition** this Order Order Petition Order Distribution 6.80% 6.29% 6.80% 6.55% 6.14% 6.55% Loss

Table 5-10: Distribution Loss approved for FY 2023-24 and FY 2024-25

For FY 2023-24 and FY 2024-25, the Transmission Loss have been considered as 3.18%, as approved in the InSTS Order dated 31st March 2023 in Case No. 284 of 2022. The Direct Sales and Change-over Sales have been considered as approved earlier in this Chapter.

The Commission has considered LT and HT Losses of FY 2023-24 and FY 2024-25 as approved in the MYT Order, as given in the Table below:

FY 2023-24 FY 2024-25 Approved Approved **Particulars MYT AEML-D MYT AEML-D** in this in this Order Petition Petition Order Order Order HT distribution 1.59% 1.47% 1.59% 1.59% 1.47% 1.59% Loss LT distribution 7.41% 5.94% 6.43% 7.41% 5.80% 6.43% Loss

Table 5-11: HT and LT losses approved for FY 2023-24 and FY 2024-25

Accordingly, the Energy Balance approved by the Commission for FY 2023-24 and FY 2024-25 are shown in the Table below:

Table 5-12: Energy Input requirement approved for FY 2023-24 and FY 2024-25

Particulars		FY 2023-24			FY 2024-25	
	MYT	AEML-D	Approved	MYT	AEML-D	Approved
	Order	Petition	Approveu	Order	Petition	Approveu
Own Sales	9488.60			9714.15		
Distribution Loss	6.80%			6.55%		
Migrated HT Sales +		273.14	273.16		284.15	284.17
OA consumption (MU)		273.14	273.10		204.13	204.17
HT Loss (%)		1.47%	1.59%		1.44%	1.59%
HT grossed up energy		277.22	277.57		288.29	288.76
at T<>D (MU)		211.22	211.31		200.27	200.70
Migrated LT Sale		1,493.80	1,469.34		1,570.49	1,475.66
(MU)		1,475.00	1,407.34		1,570.47	1,475.00
LT Loss (%)		5.94%	6.43%		5.80%	6.43%
LT grossed up energy		1,588.22	1570.31		1,667.24	1577.07
at T<>D (MU)		1,300.22	1370.31		1,007.24	1377.07
Total T<>D energy						
attributable to TPC-D		1,865.43	1847.88		1,955.53	1865.82
sale & OA		1,005.45	1047.00		1,755.55	1003.02
consumption (MU)						
Net T<>D energy						
attributable to AEML-		11,473.59	11833.16		12,560.58	12764.80
D sale (MU)						
T<>D energy						
attributable to AEML-		1.72	1.72		1.76	1.76
D c/o sale						
EHT Sales		300	300		300	300
Total T<>D energy						
attributable to AEML-		11,775.31	12134.88		12,862.34	13066.56
D sale (MU)						
InSTS Loss (%)	3.18%	3.18%	3.18%	3.18%	3.18%	3.18%
Total requirement of						
AEML-D (MU) at G-	10,515.36	12,162.06	12,533.45	10,736.51	13,284.80	13,495.72
T (MU)						

5.3 POWER PURCHASE QUANTUM AND COST

AEML-D's Submission

AEML-D submitted that it shall continue procurement of power from its long-term and medium-term contracts and renewable energy contracts. In addition, AEML-D also plans to procure power from certain other sources. After taking into account these sources, the shortfall in power requirement is being estimated to be met through purchase from contracted short-term sources and Power Exchange.

5.3.1 Procurement from ADTPS (AEML-G)

AEML-D submitted that the power purchase from ADTPS is projected to be continued for FY 2023-24. The Fixed Cost payable to AEML-G and the variable cost per unit is in accordance with the MTR Petition of AEML-G. For the purpose of projecting power purchase from ADTPS, AEML-D has considered the present arrangement to subsist till 15th October 2024, as per the Commission's Order in Case No. 32 of 2022. Accordingly, the Fixed Cost from AEML-G, in accordance with the MTR Petition of AEML-G, has been pro-rated for FY 2024-25 and the variable cost per unit is in accordance with the MTR Petition of AEML-G.

Further, in anticipation that the higher price of imported coal will continue in future, AEML-D has asked AEML-G to explore various options to procure 100% quantity of domestic coal to optimize the coal cost and in view of this ADTPS has adopted an approach to receive coal as and when offered by Coal Company other than FSA, hence, AEML-D has considered 100% availability from Domestic Coal at the rate of Rs 3.84/kWh.

5.3.2 Backing Down of ADTPS (AEML-G)

AEML-D has considered AEML-G generation to be available at lower rates on account of Domestic coal availability and hence, it has not considered any backing down at this stage. Surplus, if any, will be sold from time to time and revenue shall be utilised to reduce power purchase cost. However, the actual generation from ADTPS will also be influenced by the backing down instructions as may be given by MSLDC from time to time.

Source - ADTPS Total Cost Purchase Fixed Cost Variable Rate (MU) (Rs. Crore) Cost (Rs. (Rs. Crore) (Rs./kWh) Crore) FY 2023-24 Projected 3,684.24 493.93 1,414.47 1,908.39 5.18 **AEML-D MYT Order** 5.05 3,743.84 341.37 1,549.95 1,891.32 FY 2024-25 Projected 2,085.93 217.22 800.84 1,018.06 4.88 AEML-D MYT Order 3,733.00 5.21 352.53 1,591.38 1,943.91

Table 5-13: Power Purchase from ADTPS for FY 2023-24 and FY 2024-25

Commission's Analysis and Ruling

The Commission has considered the power purchase from ADTPS for FY 2023-24 as approved in the MTR Order of AEML-G dated 31 March, 2023 in Case No. 229 of 2022. As regards purchase from ADTPS in FY 2024-25, the extension of the existing PPA

between AEML-D and AEML-G has been approved till October 15, 2024. However, in a recent Order in Case No. 240 of 2022, the Commission has held that there is a transmission constraint for getting power from outside Mumbai into Mumbai. As a consequence, both, TPC-D and BEST have been directed to extend their PPAs with TPC-G till March 31, 2025. In accordance with the same rationale, as the transmission constraint will impact AEML-D's sourcing of power from outside Mumbai, the Commission has considered the purchase from AEML-G for the entire FY 2024-25 as approved in the MTR Order of AEML-G dated 31 March, 2023 in Case No. 229 of 2022, rather than only till October 15, 2024. AEML-D will be required to extend its PPA with AEML-G till 31st March 2025.

The following Table shows the quantum and cost for power purchase from AEML-G considered in power purchase of AEML-D for FY 2023-24 and FY 2024-25:

Table 5-14: Power Purchase from ADTPS approved by the Commission for FY 2023-24 and FY 2024-25

	MYT Order			AEML-D Petition			Approved in this Order		
Source	Quant	Cost	Rate (Rs./	Quant	Cost	Rate (Rs./	Quant	Cost (Rs.	Rate (Rs./
	um (MU)	(Rs. Crore)	kWh)	um (MU)	(Rs. Crore)	kWh)	um (MU)	Crore)	kWh)
FY 2023-24	3743.84	1891.32	5.05	3684.24	1908.39	5.18	3684.24	1845.31	5.01
FY 2024-25	3733	1943.51	5.21	2085.93	1018.06	4.88	3678.82	1816.96	4.94

5.3.3 **Hybrid RE Power Purchase**

AEML-D's Submission

The Hybrid RE plant of 700 MW has been fully commissioned in FY 2022-23. Hence, the power purchase from this source has been projected taking into consideration the actual generation received over a period prorated to full capacity and as per the typical generation profile provided by the developer. The estimated generation and cost from this source as projected for FY 2023-24 and FY 2024-25 is as below:

Table 5-15: Power Purchase from Hybrid RE for FY 2023-24 and FY 2024-25

	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
FY 2023-24			
Projected	3,430.19	1,111.38	3.24
AEML-D MYT Order	3,066.00	993.38	3.24

	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
FY 2024-25			
Projected	3,422.22	1,108.80	3.24
AEML-D MYT Order	3,066.00	993.38	3.24

The Commission has adopted the tariff of Rs. 3.24 per kWh for purchase of 700 MW Hybrid RE power from this source. The Commission has accepted AEML-D's projection of quantum of purchase from this source, as the same is based on actual purchase in FY 2022-23, pro-rated for the full capacity and as per the typical generation profile provided by the Developer.

The quantum and cost of power purchase from Hybrid RE source approved by the Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 5-16: Power Purchase from Hybrid RE approved for FY 2023-24 and FY 2024-25

	MY	MYT Order A			AEML-D Petition			ed in this C	Order
Source	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2023-24	3,066.00	993.38	3.24	3,430.19	1,111.38	3.24	3,430.19	1111.38	3.24
FY 2024-25	3,066.00	993.38	3.24	3,422.22	1,108.80	3.24	3,422.22	1108.80	3.24

5.3.4 **RE+Thermal RTC**

AEML-D's Submission

AEML-D submitted that the Commission, vide Order dated 1st 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 15th October 2024 for 1,000 MW (RE + Thermal) on RTC basis. Presently, the rate projected is at Rs. 4/kWh.

Also, 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 power purchase from RE+ Thermal RTC projected by AEML-D for FY 2024-25 is as follows:

Table 5-17: Power Purchase from RE+Thermal RTC for FY 2024-25

Particulars	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
RE + Thermal RTC	4,032	1,612.80	4.00

Commission's Analysis and Ruling

The Commission has accorded approval for the power purchase from RE+Thermal RTC Source vide Order dated 1 November, 2022 (Case No. 32 of 2022).

AEML-D has considered the purchase from RE+Thermal source from 15th October 2024, with the intention of making up the shortfall in power purchase due to the expiry of the PPA with AEML-G. As stated earlier, the Commission has considered purchase of power by AEML-D from AEML-D for the entire FY 2024-25, rather than only till 15th October 2024, on account of the transmission constraints for getting power into Mumbai.

At the same time, even after purchasing from its tied-up long-term/medium-term sources, AEML-D will still face a shortfall, and will have to procure the power from other sources. Hence, for the purpose of this MTR Order, the Commission has considered the quantum of purchase from the proposed RE+Thermal source in FY 2024-25, after adjusting for the energy requirement, as higher energy availability has been considered from AEML-G.

However, there is no justification for the rate of Rs. 4 per kWh considered by AEML-D for purchase from this expected source, as the competitive bidding is yet to be completed. Hence, for the purpose of this Order, the Commission has considered power purchase 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 Commission thus approves the quantum and cost of power purchase from RE+Thermal RTC as follows:

Table 5-18: Power Purchase from RE+Thermal RTC approved for FY 2024-25

	N	MYT Order			AEML-D Petition			ed in this (Order
Source	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
RE + Thermal RTC				4,032.00	1,612.80	4.00	2,879.88	1411.14	4.90

5.3.5 **Solar Purchase**

AEML-D's Submission

AEML-D has an Energy Purchase Agreement (EPA) with Dhursar Solar Power Private Ltd. (DSPPL) for 40 MW. AEML-D has considered the energy availability from DSPPL for FY 2023-24 and FY 2024-25 at the same level as the actuals of FY 2021-22. The projected power purchase cost for purchase from DSPPL, considering the rate of Rs. 10.30/kWh (as considered for FY 2022-23 on provisional basis) is shown in the Table below:

Table 5-19: Power Purchase from DSPPL for FY 2023-24 and FY 2024-25

Particulars	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
FY 2023-24			
Projected	52.20	53.77	10.30
AEML-D MYT Order	66.19	68.17	10.30
FY 2024-25			
Projected	52.02	53.59	10.30
AEML-D MYT Order	66.19	68.17	10.30

As stated in above section, AEML-D has projected purchase of 3,430.19 MU and 3,422.22 MU from Hybrid RE source for FY 2023-24 and FY 2024-25, respectively, and 50% thereof is considered as being met from Solar and balance as non-Solar. Further, the purchase from RE + Thermal RTC is projected at 4,032 MU for FY 2024-25 and 51% thereof is considered as part of RE sourcing. Out of this 51%, 50% thereof is projected as being met from Solar and balance as non-Solar.

Considering the above, the estimated cumulative shortfall in solar RPO till FY 2023-24 and FY 2024-25 is shown in the tables below:

Table 5-20: Projected Solar RPO compliance till FY 2023-24

Particulars	Cumulative shortfall / excess till FY 2022-23	FY 2023-24		Cumulative shortfall / excess till FY 2023-24
	MU	%	MU	MU
Gross Energy Consumption			12,162.06	
RPO Target		10.50%	1,277.02	
Achievement			1,767.30	
Shortfall / (Surplus)	406.87		(490.28)	(83.41)

Particulars FY 2024-25 **Cumulative Cumulative** shortfall / excess till shortfall / excess till FY 2024-25 FY 2023-24 MU MU**%** MU 13,284.80 **Gross Energy Consumption RPO Target** 13.50% 1,793.45 Achievement 2,791.29 (997.85)(1,081.26)Shortfall / (Surplus) (83.41)

Table 5-21: Projected Solar RPO compliance till FY 2024-25

AEML-D submitted that the shortfall of \sim 860 MU at the end of FY 2021-22 is expected to convert into surplus of \sim 1,080 MU at the end of FY 2024-25.

Commission's Analysis and Ruling

The Commission has considered the submission made by AEML-D regarding quantum of power purchase from DSPPL, as the same is line with the trend of purchase in previous years. The Commission has considered the rate approved for purchase from DSPPL in FY 2022-23 for FY 2023-24 and FY 2024-25 also. The Commission accordingly approves the same Solar Power Purchase from DSPPL for FY 2023-24 and FY 2024-25 as shown in the Table below:

Table 5-22: Power Purchase from DSPPL approved by the Commission for FY 2023-24 and FY 2024-25

	MYT Order			AEML-D Petition			Approved in this Order			
Source	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	
FY 2023-24	66.19	68.17	10.30	52.20	53.77	10.30	52.20	53.77	10.30	
FY 2024-25	66.19	68.17	10.30	52.02	53.59	10.30	52.02	53.59	10.30	

The projected status of compliance with the Solar RPO targets for FY 2023-24 and FY 2024-25 is shown in the table below:

Table 5-23: Projected Solar RPO compliance for FY 2023-24 and FY 2024-25 as approved by the Commission (MU)

Solar requirement quantum	FY 20)23-24	FY 2024-25		
Solar requirement quantum	AEML-D	Approved	AEML-D	Approved	
Energy Input at G<>T	12162.06	12533.45	13284.80	13495.72	

Solar requirement quantum	FY 20)23-24	FY 2024-25		
Solar requirement quantum	AEML-D	Approved	AEML-D	Approved	
% Obligation Solar	10.50%	10.50%	13.50%	13.50%	
Requirement	1277.02	1316.01	1793.45	1821.92	
Previous year Shortfall/(Surplus)	406.86	418.34	-83.43	-32.95	
RE Purchase for RPO	1767.30	1767.30	2791.29	2497.50	
Solar Shortfall/(Surplus)	-83.43	-32.95	-1081.27	-708.53	

Thus, it is expected that there would be a surplus vis-a-vis the Solar RPO target in FY 2023-24 and FY 2024-25, which is estimated at 708.53 MU at the end of FY 2024-25.

5.3.6 **Non-Solar Purchase**

AEML-D's Submission

AEML-D has projected Non-Solar RE power purchase for FY 2023-24 and FY 2024-25 as shown in the Tables below:

Table 5-24: Projected Non-Solar RE Purchase for FY 2023-24 as submitted by AEML-D

Particulars	Total (MU)	(Rs./kWh)	Cost (Rs. Crore)
MYT Order	87.62	5.59	49.02
AEML-D Petition			
Vector Green Energy Pvt. Ltd	0.79	5.07	0.40
Tembhu Power Private Limited	11.94	4.26	5.09
Reliance Clean Power Pvt. Ltd	74.90	5.81	43.52
Total	87.62	5.59	49

Table 5-25: Projected Non-Solar RE Purchase for FY 2024-25 as submitted by AEML-D

Particulars	Total (MU)	(Rs./kWh)	Cost (Rs. Crore)
MYT Order	86.87	5.60	48.64
AEML-D Petition			
Tembhu Power Private Limited	11.83	4.26	5.04
Reliance Clean Power Pvt. Ltd	75.04	5.81	43.60
Total	86.87	5.60	48.64

AEML-D has projected purchase of 3,430.19 MU and 3,422.22 MU from its Hybrid RE source for FY 2023-24 and FY 2024-25, respectively, and 50% thereof is considered as met from non-Solar and balance from Solar. Further, the power purchase from RE + Thermal

RTC is projected at 4,032 MU for FY 2024-25 and 51% thereof is considered as part of RE sourcing. Out of this 51%, 50% thereof is projected as being met from Solar and balance as non-Solar.

Considering the above, the estimated cumulative shortfall in non-solar RPO till FY 2024-25 is shown in table below:

Table 5-26: Projected Non-Solar RPO compliance till FY 2023-24

Particulars	Cumulative shortfall / excess till FY 2022-23	FY 2023-24		Cumulative shortfall / excess till FY 2023-24
	MU	%	MU	MU
Gross Energy Consumption			12,162.06	
RPO Target		11.50%	1,398.64	
Achievement			1,802.73	
Shortfall / (Surplus)	4,019.86		(404.09)	3,615.77
Mini/Micro Hydro				
RPO Target				
Achievement				
Shortfall / (Surplus)	7.99			7.99

Table 5-27: Projected Non-Solar RPO compliance till FY 2024-25

Particulars	Cumulative shortfall / excess till FY 2023-24	FY 2024-25		Cumulative shortfall / excess till FY 2024-25
	MU	%	MU	MU
Gross Energy Consumption			13,284.80	
RPO Target		11.50%	1,527.75	
Achievement			2,826.14	
Shortfall / (Surplus)	3,615.77		(1,298.39)	2,317.38
Mini/Micro Hydro				
RPO Target				
Achievement				
Shortfall / (Surplus)	7.99			7.99

AEML-D has submitted that the shortfall of \sim 4,120 MU at the end of FY 2021-22 is expected to come down to \sim 2,320 MU at the end of FY 2024-25. AEML-D submitted that the present RE Non-Solar purchase is higher than the annual RPO targets, and the cumulative shortfall would be reduced in future through additional RE purchase.

The Commission has accepted the RE power purchase quantum projected by AEML-D for FY 2023-24 and FY 2024-25, as the same is as per past trends, and existing EPAs with RE sources approved by the Commission.

The Commission has considered the per unit cost of each of the Non-Solar RE sources, as per the approved EPA. Accordingly, the Commission has worked out the power purchase quantum and cost from each of the Non-Solar RE sources and approved the same for FY 2023-24 and FY 2024-25 as shown in the Table below:

Table 5-28: Projected Non-Solar RE Purchase for FY 2023-24 and FY 2024-25 as approved by Commission.

Source	MYT Order			AEML-D Petition			Approved in this Order		
	Quan	Cost	Rate	Quan	Cost	Rate	Quan	Cost	Rate
	tum	(Rs.	(Rs./	tum	(Rs.	(Rs./	tum	(Rs.	(Rs./
	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)
FY 2023-24	87.62	49.02	5.59	87.62	49.00	5.59	87.62	49.00	5.59
FY 2024-25	86.87	48.64	5.60	86.87	48.64	5.60	86.87	48.64	5.60

The projected status of compliance with the Non-Solar RPO targets for FY 2023-24 and FY 2024-25 is shown in the table below:

Table 5-29: Projected Non-Solar RPO compliance for FY 2023-24 and FY 2024-25 as approved by the Commission.

Solar requirement quantum	FY 20)23-24	FY 2024-25		
Solar requirement quantum	AEML-D	Approved	AEML-D	Approved	
Energy Input at G<>T	12162.06	12533.45	13284.80	13495.72	
% Obligation Non-Solar	11.50%	11.50%	11.50%	11.50%	
Requirement	1398.64	1441.35	1527.75	1552.01	
Previous year Shortfall/(Surplus)	4027.85	4025.43	3623.76	3664.05	
RE Purchase for RPO	1802.73	1802.73	2826.14	2532.35	
Non-Solar Shortfall/(Surplus)	3623.76	3664.05	2325.37	2683.71	

Thus, it is expected that there would be a cumulative shortfall vis-a-vis the Non-Solar RPO target in FY 2023-24 and FY 2024-25, which is estimated at 2683.71 MU at the end of FY 2024-25. AEML-D should address the cumulative RPO shortfall through purchase of additional Non-Solar power in the coming period.

5.3.7 Medium-Term Power Purchase

AEML-D's Submission

AEML-D submitted that it has projected the energy available from MTPP as per the provisions of the PPA. The requirement is considered for the full year for FY 2023-24 and for FY 2024-25, it is considered for the period April 2024 to 14th October 2024 (as per the Commission's Order in Case No. 149 of 2022). The per unit rate is considered same as for FY 2022-23. The power purchase quantum and cost from MTPP is as follows:

 MTPP
 Purchase (MU)
 Cost (Rs. Crore)
 Rate (Rs./kWh)

 FY 2023-24
 4,392.00
 2,307.34
 5.25

 FY 2024-25
 2,364.00
 1,241.93
 5.25

Table 5-30: Projected power purchase from MTPP

Commission's Analysis and Ruling

The Commission has considered the submission made by AEML-D regarding quantum of power purchase from MTPP. The Commission has considered the rate approved for purchase from MTPP in FY 2022-23 for FY 2023-24 and FY 2024-25 also. The Commission accordingly approves the same Power Purchase from MTPP for those years as shown in the Table below:

Table 5-31: Power Purchase from MTPP approved by the Commission for FY 2023-
24 and FY 2024-25

	MYT Order		AEML-D Petition			Approved in this Order			
Source	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2023-24				4,392.00	2,307.34	5.25	4,392.00	2,307.34	5.25
FY 2024-25				2,364.00	1,241.93	5.25	2,364.00	1,241.93	5.25

5.3.8 **Short-Term Power Purchase**

AEML-D's Submission

AEML-D has projected the hourly demand and generation availability from ADTPS, DSPPL, existing contracted Non-Solar RE sources and new hybrid RE sources as described above and determined the surplus and shortfall in energy on an hourly basis for FY 2023-24 and FY 2024-25. AEML-D has considered the energy shortfall to be met through purchase from short-term sources at the rate of Rs. 5/kWh for FY 2023-24 and FY 2024-25.

Short-term	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)	
FY 2023-24				
Projection	730.54	365.27	5.00	
MYT Order	3,551.71	1,243.10	3.50	
FY 2024-25				
Projection	915.79	457.89	5.00	
MYT Order	3,784.45	1,324.56	3.50	

Table 5-32: Short Term Power Purchase Cost for FY 2023-24 and FY 2024-25

The Commission has computed the balance amount of energy required after taking into account all the long-term/medium-term sources tied-up by AEML-D for FY 2023-24 and FY 2024-25, which has been considered as purchase from short-term sources. The Commission has considered the rate of Rs. 5.13 per unit, based on the average purchase rate in last 3 years on the IEX. The following Table shows the power purchase quantum and cost considered from short-term sources:

Table 5-33: Short Term Power Purchase Cost approved by the Commission for FY 2023-24 and FY 2024-25

	MYT Order			MYT Order AEML-D Petition			Approved in this Order			
Source	Quantu m	Cost (Rs.	Rate (Rs./	Quant um	Cost (Rs.	Rate (Rs./	Quantu m	Cost (Rs.	Rate (Rs./	
	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)	
FY 2023-24	3,551.71	1,243.10	3.50	730.54	365.27	5.00	730.54	374.77	5.13	
FY 2024-25	3,784.45	1,324.56	3.50	915.79	457.89	5.00	915.79	469.80	5.13	

5.3.9 **RE procurement under short-term**

AEML-D's Submission

AEML-D has considered 300 MW tie-up from RE generators for FY 2023-24 and FY 2024-25 at the estimated rate of Rs 2.90/kWh. AEML-D submitted that it has already initiated the Short-Term tendering process for different periods through DEEP portal. Also, at this stage, AEML-D has not considered this power against RPO fulfilment as actual quantum of RE power will be available once the contract is executed.

Table 5-34: Projected short-term RE power for FY 2023-24 and FY 2024-25

RE procurement	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
FY 2023-24	525.60	152.42	2.90

RE procurement	Purchase (MU)	Cost (Rs. Crore)	Rate (Rs./kWh)
FY 2024-25	525.60	152.42	2.90

The Commission has considered the quantum for additional RE power procurement as projected by AEML-D for FY 2023-24. For FY 2024-25, there is no requirement of this power, considering the energy availability considered by the Commission from other sources, hence, no purchase has been considered from this source in FY 2024-25.

The Commission has considered the purchase rate from this source as Rs. 4.90 per unit, which is the average GDAM rate from July 2022 to December 2022 in the IEX. The following Table shows the approved quantum and cost of power purchase from additional RE sources:

Table 5-35: Additional RE Power Purchase Cost approved by the Commission for FY 2023-24 and FY 2024-25

	MYT Order		MYT Order AEML-D Petition			Approved in this Order			
Source	Quant um	Cost (Rs.	Rate (Rs./	Quant um	Cost (Rs.	Rate (Rs./	Quant um	Cost (Rs.	Rate (Rs./
	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)	(MU)	Crore)	kWh)
FY				525.60	152.42	2.90	525.60	257.54	4.90
2023-24				323.00	132.42	2.90	323.00	237.34	4.90
FY				525 (0	150.40	2.00			
2024-25				525.60	152.42	2.90	ı	ı	-

5.3.10 Sale of Surplus Power

AEML-D's Submission

AEML-D submitted that it has projected hourly surplus power after considering availability of power from different sources and the projected demand. AEML-D has assumed that all surplus power will be sold through Power Exchanges. For projecting the revenue from sale of surplus power, AEML-D has considered the rate of Rs. 5/kWh, at the same level as the rate for procurement of short-term power for these years.

Table 5-36: Revenue from Surplus Power for FY 2023-24 and FY 2024-25

	MU	Rs. Crore	Rate (Rs./kWh)
FY 2023-24	1,586.34	793.17	5.00
FY 2024-25	1,526.24	763.12	5.00

The Commission notes that AEML-D has introduced considerable amount of RE Power in its power purchase mix. AEML-D has also consistently been selling surplus power on account of mismatch between demand and energy availability during different hours of the day in previous years. The Commission has considered the rate for such sale of surplus power at the same level as rate for purchase of short-term power, i.e., Rs. 5.13 per kWh. Hence, the Commission has approved the quantum and income from surplus power sale based on the available surplus, after considering the power availability from different sources, as below:

Table 5-37: Surplus Sale approved by the Commission for FY 2023-24 and FY 2024-25

	N	IYT Ordo	er	AEM	IL-D Peti	tion Approved		ed in this	ed in this Order	
Source	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	
FY 2023-24				1,586.34	793.17	5.00	1214.96	623.27	5.13	
FY 2024-25				1,526.24	763.12	5.00	1230.48	631.24	5.13	

5.3.11 Banking

AEML-D's Submission

AEML-D has projected banking of ~ 846 MU in the months of Apr-23, May-23, Oct-23 to Nov-23 and Mar-24 with return at 105% in FY 2024-25 at Rs. 4/kWh. The cost of return banking is considered in FY 2024-25.

For FY 2024-25, banking of ~ 1,326 MU is projected in the months of Apr-24, May-24 and Oct-24 to Mar-25 with return at 105% in FY 2025-26 (cost of return banking not estimated as the return year will fall outside the Control Period).

AEML-D added that the above projections are based on offers received from the Party. The summary of power purchase under projected banking arrangements is as follows:

Table 5-38: Projected power purchase through Banking

Banking	MU	Cost (Rs. Crore)
FY 2023-24	846.00	
FY 2024-25	1,326.60	355.32

The Commission asked AEML-D to submit the copies of the proposed Banking arrangements for FY 2023-24 and FY 2024-25. AEML-D submitted the necessary documents. On perusal of the same, it is observed that the quantum of power considered by AEML-D from forward banking and return banking are appropriate. Further, the documents show that the rate for return of 105% of forward banking quantum is capped at Rs. 4 per kWh. Hence, the Commission has considered the rate of Rs. 4 per kWh for return banking considered in FY 2024-25. The quantum and cost of forward and return banking approved by the Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 5-39: Banking transaction approved by the Commission for FY 2023-24 and FY 2024-25

	MYT Order			AEML-D Petition			Approved in this Order		
Source	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quant um (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2023-24				846.00			846.00		
FY 2024-25				1326.60	355.32		1326.60	355.32	

5.3.12 **Imbalance pool**

AEML-D's Submission

No increment/ decrement to the DSM pool has been estimated for FY 2023-24 and FY 2024-25, as the same would be included in the hourly deficit/ surplus as forecast and thus, no associated cost has been considered. Actuals, if any, would be submitted at the time of truing up.

Commission's Analysis and Ruling

The Commission has not considered any quantum and cost from the DSM Pool for FY 2023-24 and FY 2024-25, as the same cannot be estimated, and shall be considered at the time of truing up for the respective years.

5.3.13 Standby Charges

AEML-D's Submission

AEML-D submitted that as stated in the earlier Section on truing up for FY 2021-22, it has stopped availing the Standby facility from MSEDCL and has not paid the Standby Charges

from October 2021 onwards. In view of the same, AEML-D has not projected the Standby Charges for FY 2023-24 and FY 2024-25.

Commission's Analysis and Ruling

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. The Standby Charges considered by the Commission for FY 2023-24 and FY 2024-25 are shown in the Table below:

Table 5-40: Standby Charges approved by the Commission for FY 2023-24 and FY 2024-25

Particulars	MYT Order	AEML-D Petition	Approved in this
			Order
FY 2023-24	185.93	-	184.89
FY 2024-25	186.81	-	184.86

5.3.14 Transmission Charges

AEML-D's Submission

AEML-D has considered the Transmission Charges as approved in the InSTS Order dated 30-03-2020 in Case No. 327 of 2019 and has claimed Rs. 485.30 Crore for FY 2023-24 and Rs. 483.09 Crore for FY 2024-25.

Commission's Analysis and Ruling

The Commission has considered the Transmission Charges for FY 2023-24 and FY 2024-25 in line with the share of AEML-D as approved in the InSTS Order dated 31st March 2023 in Case No. 284 of 2022 for FY 2023-24 and FY 2024-25. The following Table shows the approved Transmission Charges for AEML-D:

Table 5-41: Transmission Charges approved by the Commission for FY 2023-24 and FY 2024-25 (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved in this Order
FY 2023-24	488.14	485.30	490.65
FY 2024-25	486.30	483.09	588.54

5.3.15 SLDC Charges

AEML-D's Submission

AEML-D has considered the SLDC charges as approved in the SLDC Order dated 30-03-2020 in Case No. 291 of 2019 and has claimed expenses of Rs. 2.56 Crore for FY 2023-24 and Rs. 2.62 Crore for FY 2024-25.

Commission's Analysis and Ruling

The Commission has considered the MSLDC Charges for FY 2023-24 and FY 2024-25 in line with the share of AEML-D as approved in the MSLDC Order dated 31 March 2023 in Case No. 233 of 2022 for FY 2023-24 and FY 2024-25. The following Table shows the approved MSLDC Charges for AEML-D:

Table 5-42: MSLDC Charges approved by the Commission for FY 2023-24 and FY 2024-25 (Rs. Crore)

Particulars	MYT Order	AEML-D Petition	Approved in this Order
FY 2023-24	2.55	2.56	1.82
FY 2024-25	2.58	2.62	1.94

5.3.16 Summary of Power Purchase

AEML-D's Submission

AEML-D submitted the following power purchase quantum and cost based on the discussions made in above sections:

Table 5-43: Power Purchase Cost Projected by AEML-D for FY 2023-24 and FY 2024-25

Particulars	MYT Order FY 2023-24		Projec	ction FY 202	23-24	MYT (Order FY 2	024-25	Projection FY 2024-25			
	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantu m (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Cost (Rs. Crore)	Rate (Rs./ kWh)
ADTPS	3,743.84	1,891.32	5.05	3,684.24	1,908.39	5.18	3,733.00	1,943.91	5.21	2,085.93	1,018.06	4.88
DSPPL	66.19	68.17	10.30	52.20	53.77	10.30	66.19	68.17	10.30	52.02	53.59	10.30
Existing Non-solar sources	87.62	49.02	5.59	87.63	49.00	5.59	86.87	48.64	5.60	86.87	48.64	5.60
Wind-Solar Hybrid	3,066.00	993.38	3.24	3,430.19	1,111.38	3.24	3,066	993.38	3.24	3,422.22	1,108.80	3.24
MTPP				4,392.00	2,307.34	5.25				2,364.00	1,241.93	5.25
RE RTC Thermal										4,032.00	1,612.80	4.00
Short term purchase	3,551.71	1,243.10	3.50	730.54	365.27	5.00	3,784.45	1,324.56	3.50	915.79	457.89	5.00
Surplus				(1,586.34)	(793.17)	5.00				(1,526.24)	(763.12)	5.00
RE procurement under short term				525.60	152.42	2.90				525.60	152.42	2.90
Banking				846.00						1,326.60	355.32	
Total	10,515.36	4,244.99	4.04	12,162.07	5,154.41	4.24	10,736.51	4,378.66	4.08	13,284.80	5,286.33	3.98
Transmission chares		488.14			485.30			486.30			483.09	
SLDC charges		2.55			2.56			2.58			2.62	
Standby charges		185.93			-			186.81			-	
Total	10,515.36	4,921.62	4.68	12,162.07	5,642.27	4.64	10,736.51	5,054.36	4.71	13,284.80	5,772.04	4.34

Based on the analysis elaborated above, the Commission has approved the Power Purchase quantum and cost for FY 2023-24 and FY 2024-25 as given in the Tables Below:

Table 5-44: Power Purchase Quantum and Cost approved by the Commission for FY 2023-24

							11 (11 0 1			
Particulars	MYT Order FY 2023-24			Projec	Projection FY 2023-24			Approved in this Order		
	Quantu	Cost	Rate	Quantum	Cost	Rate	Quantum	Cost	Rate	
	m (MU)	(Rs.	(Rs./	(MU)	(Rs.	(Rs./	(MU)	(Rs.	(Rs./	
	` ,	Crore)	kWh)	, ,	Crore)	kWh)	` ,	Crore)	kWh)	
ADTPS	3,743.84	1,891.32	5.05	3,684.24	1,908.39	5.18	3,684.24	1,845.31	5.01	
DSPPL	66.19	68.17	10.30	52.20	53.77	10.30	52.20	53.77	10.30	
Existing Non-solar	87.62	49.02	5.59	87.63	49.00	5.59	87.63	49.00	5.59	
sources										
Wind-Solar Hybrid	3,066.00	993.38	3.24	3,430.19	1,111.38	3.24	3,430.19	1,111.38	3.24	
MTPP				4,392.00	2,307.34	5.25	4,392.00	2,307.34	5.25	
RE RTC Thermal										
Short term purchase	3,551.71	1,243.10	3.50	730.54	365.27	5.00	730.54	374.77	5.13	
Surplus				(1,586.34)	(793.17)	5.00	(1,214.96)	(623.27)	5.13	
RE procurement under				525.60	152.42	2.90	525.60	257.54	4.90	
short term										
Banking				846.00			846.00	-		
Total	10,515.36	4,244.99	4.04	12,162.07	5,154.41	4.24	12,533.45	5,375.84	4.29	
Transmission chares		488.14			485.30			490.65		
SLDC charges		2.55			2.56			1.82		
Standby charges		185.93			-			184.89		
Total	10,515.36	4,921.62	4.68	12,162.07	5,642.27	4.64	12,533.45	6,053.21	4.83	

Table 5-45: Power Purchase Quantum and Cost approved by the Commission for FY 2024-25

Particulars	MYT (Order FY 2	024-25	Projec	tion FY 202	24-25	Approv	rder	
	Quantu	Cost	Rate	Quantum	Cost	Rate	Quantum	Cost	Rate
	m (MU)	(Rs.	(Rs./	(MU)	(Rs.	(Rs./	(MU)	(Rs.	(Rs. /
		Crore)	kWh)		Crore)	kWh)		Crore)	kWh)
ADTPS	3,733.00	1,943.91	5.21	2,085.93	1,018.06	4.88	3678.82	1816.96	4.94
DSPPL	66.19	68.17	10.30	52.02	53.59	10.30	52.02	53.59	10.30
Existing Non-solar	86.87	48.64	5.60	86.87	48.64	5.60	86.87	48.64	5.60
sources									
Wind-Solar Hybrid	3,066	993.38	3.24	3,422.22	1,108.80	3.24	3,422.22	1,108.80	3.24
MTPP				2,364.00	1,241.93	5.25	2,364.00	1,241.93	5.25
RE RTC Thermal				4,032.00	1,612.80	4.00	2,879.88	1,411.14	4.90
Short term purchase	3,784.45	1,324.56	3.50	915.79	457.89	5.00	915.79	469.80	5.13
Surplus				(1,526.24)	(763.12)	5.00	(1,230.48)	(631.24)	5.13
RE procurement under				525.60	152.42	2.90			
short term							-	-	-
Banking				1,326.60	355.32		1,326.60	355.32	
Total	10,736.51	4,378.66	4.08	13,284.80	5,286.33	3.98	13495.72	5874.93	4.35
Transmission chares		486.30			483.09			588.54	
SLDC charges		2.58			2.62			1.94	
Standby charges		186.81			-			184.86	
Total	10,736.51	5,054.36	4.71	13,284.80	5,772.04	4.34	13495.72	6650.28	4.93

5.4 OPERATION AND MAINTENANCE EXPENSES

AEML-D's Submission

AEML-D submitted the O&M expense approved for FY 2023-24 and FY 2024-25 by the Commission in the MYT Order as under:

Table 5-46: Approved O&M for FY 2023-24 and FY 2024-25

Particulars/ (Rs. Crore)	FY 2023-24	FY 2024-25
Wires	966.88	999.40
Supply	474.61	490.45
Total	1,441.49	1,489.86

The normative O&M expense for FY 2022-23 is considered and the inflation indices as considered for FY 2021-22 have been applied to arrive at the normative O&M expenses for FY 2023-24 and FY 2024-25.

The normative O&M expenses projected by AEML-D for FY 2023-24 and FY 2024-25 for Wires Business is as follows:

Table 5-47: Normative O&M Wire

Particulars	Rs. Crore
Normative O&M expenses for FY 2022-23	979.79
Inflation for estimating for FY 2023-24 and FY 2024-25	4.20%
Normative O&M expenses for FY 2023-24	1,020.94
Normative O&M expenses for FY 2024-25	1,063.81

The normative O&M expenses projected by AEML-D for FY 2023-24 and FY 2024-25 for Supply Business is as follows:

Table 5-48: Normative O&M Supply

Particulars	Rs. Crore
Normative O&M expenses for FY 2022-23	490.67
Inflation for estimating for FY 2023-24 and FY 2024-25	4.24%
Normative O&M expenses for FY 2023-24	511.47
Normative O&M expenses for FY 2024-25	533.15

AEML-D added that the actual cost incurred on account of PF payment in accordance with the SC Judgment will be claimed at the time of truing up for FY 2023-24 and FY 2024-25.

Further, AEML-D submitted that it would claim the DSM cost at the time of true-up for the deployment of EV AC Chargers as approved by the Commission vide letter dated 30-05-

2022. This DSM cost will be claimed as a separate line item in the ARR and will not form part of the O&M Cost.

Commission's Analysis and Ruling

The normative O&M expense for FY 2022-23 have been considered as the base O&M expenses and the inflation indices as considered for FY 2021-22 are applied to arrive at the normative O&M expenses for FY 2023-24 and FY 2024-25. Hence, the Commission has considered the escalation factor of 4.29% and 4.33% for escalating the O&M expenses for the Wires Business and Supply Business, respectively. Accordingly, the Commission has approved the O&M Expenses for FY 2023-24 and FY 2024-25 as shown in the Table below:

The normative O&M expenses for FY 2023-24 and FY 2024-25 for Wires Business is as follows:

Table 5-49: Normative O&M expense approved for Wire business (Rs. Crore)

Particulars	MYT	AEML-D	Rs. Crore
	Order	Petition	
Normative O&M expenses for FY 2022-23			940.89
Inflation for estimating for FY 2023-24 and FY			4.29%
2024-25			
Normative O&M expenses for FY 2023-24	966.88	1,020.94	981.23
Normative O&M expenses for FY 2024-25	999.40	1,063.81	1,023.29

Similarly, the normative O&M expenses for FY 2023-24 and FY 2024-25 for Supply business is as follows:

Table 5-50: Normative O&M expense approved for Supply business (Rs. Crore)

Particulars	MYT	AEML-D	Rs. Crore
	Order	Petition	
Normative O&M expenses for FY 2022-23			468.69
Inflation for estimating for FY 2023-24 and FY			4.33%
2024-25			
Normative O&M expenses for FY 2023-24	474.61	511.47	488.97
Normative O&M expenses for FY 2024-25	490.45	533.15	510.13

5.5 CAPITAL EXPENDITURE AND CAPITALISATION

AEML-D's Submission

AEML-D submitted that there were several DPRs, which were approved subsequent to the issuance of the MYT Order. Also, certain other DPRs have been submitted to the Commission for in-principle approval. AEML-D has also submitted network related DPRs and Metering DPR, which includes capitalization phasing in FY 2023-24 and FY 2024-25.

The capitalization projected for FY 2023-24 and FY 2024-25 is shown in the Table below:

Particulars/ Rs. Crore FY 2023-24 FY 2024-25 **MYT Order MYT Order Projected Projected Capitalization Wires *** 222,48 849.39 222,48 746.38 Approved DPR 518.74 393.04 153.62 167.85 DPR submitted awaiting approval DPR proposed to be submitted 88.64 104.53 Non-DPR 88.39 80.96 10.42 10.42 681.13 **Capitalization Supply** 543.88 66.16 100.00 Approved DPR DPR submitted awaiting approval 472.72 576.13 DPR proposed to be submitted Non-DPR 5.00 5.00

Table 5-51: Projected Capitalization for FY 2023-24 and FY 2024-25

Brief Description of the works to be carried out in FY 2023-24 and FY 2024-25

AEML-D has proposed Capital Expenditure and Capitalization in the following Schemes:

1. 33/11 kV Receiving Station

- a. Installation and commissioning of new 33-22/11 kV substations
- b. Augmentation of capacity at existing 33-22/11 kV substations
- c. Laying of 33 kV cables for diversion/reconfiguration of existing network
- d. Replacement of old and obsolete equipment/ cables
- e. Any other associated works.

2. 11 kV Mains Network Strengthening

- a. Installation and commissioning of new 11/0.433 kV substations along with the associated 11kV feeders.
- b. 11 kV network improvement schemes to relieve over-loaded infrastructure.
- c. Up-gradation of cable network.
- d. Replacement of old and obsolete switchgears (Oil-type RMU) / cables
- e. Any other associated works.

^{*} The estimated amount is before considering projected consumer contribution at Rs. 25.38 crore, being the actual for FY 2021-22.

3. Low Tension Mains

- a. Laying of new LT feeders and installation of LT pillars
- b. LT network improvement schemes to relieve loaded infrastructure.
- c. Replacement of old and obsolete equipment/ cables
- d. Any other associated works.
- 4. Low Tension Services
- 5. Street Lights
- 6. Metering
- 7. Information Technology (SAP Hana migration)
- 8. System Modernization
- 9. Instruments
- 10. Information Technology (IT) Infrastructure
- 11. Others
- 12. Civil
- 13. R&D, Safety and DSM

Commission's Analysis and Ruling

The Commission has undertaken prudence check of the capitalisation proposed during FY 2023-24 and FY 2024-25. The Commission has considered the Capitalization for the Control Period based on the DPR schemes approved by the Commission till date. The Commission has considered the DPR approved cost for approving capitalization for FY 2023-24 and FY 2024-25.

The Commission also observes that AEML-D has proposed capitalisation against DPR schemes that are submitted to the Commission, but yet to be approved by the Commission. The summary of proposed capitalisation against such DPR schemes yet to be approved for Wires Business and Supply Business is given in the Table below:

Table 5-52: Capitalisation against DPR schemes yet to be approved by the Commission (Rs. Crore)

Particulars	FY	FY
	2023-24	2024-25
Wires Business	171.41	190.82
Supply Business	472.72	576.13

If DPR schemes are pending approval, then additional capitalisation up to 20% of capitalisation approved for that year may be added, in accordance with Regulation 24.6 of MYT Regulations, 2019, as reproduced below:

"24.6 The Commission may approve, for each year of the Control Period, an additional amount equivalent to 20% of the total capital expenditure approved for that year, towards planned or unplanned capital expenditure that is yet to be approved by the Commission."

Accordingly, against DPR schemes pending for approval, the Commission has allowed additional capitalisation at 20% of the approved DPR capitalisation for Wires Business and Supply Business for FY 2023-24 and FY 2024-25.

Non-DPR to DPR ratio for Wires Business is within the limit of 20% in FY 2023-24 and FY 2024-25. Therefore, Non-DPR capitalisation for these years is considered same as submitted by AEML-D.

Further, as elaborated in the provisional truing up for FY 2022-23, the Commission has disallowed the excess IDC claimed by AEML-D against certain schemes, as shown in the Table below:

Table 5-53: IDC Disallowed by the Commission for FY 2023-24 and FY 2024-25

No	Particulars	Peti	ition	Appr	oved	Disallo	wance
		FY 2023-	FY 2024-	FY 2023-	FY 2024-	FY 2023-	FY 2024-
		24	25	24	25	24	25
1	11kV Cable_Augmentation_FY 2020-21	2.57	2.35	0	0	2.57	2.35
2	11kV Substation_Improvement_FY 2020-21		1.81		0.16		1.65
3	LT Mains_New Supply_FY 2020-21	0.05		0.03		0.02	
4	11kV Oil Type Switchgear Augmentation_FY 2020-21	0.86	0.88	0.47	0.46	0.39	0.42
5	ADMS and SCADA	0.86		0.33		0.53	
	Total					3.51	4.42

In line with the approach adopted in the MYT Order, the Commission has also verified that the capitalisation approved for FY 2023-24 and FY 2024-25 is higher than 50% of the

average capitalisation in the last 5 years. In case of AEML-D, the approved capitalisation for FY 2023-24 and FY 2024-25 is significantly higher than 50% of the average capitalisation in the last 5 years, i.e., Rs. 335.26 Crore and Rs. 11.60 Crore for the Wires Business and Supply Business, respectively.

The capitalisation approved by the Commission for FY 2023-24 and FY 2024-25 is summarised in the Table below:

Table 5-54: Capitalisation approved for FY 2023-24 and FY 2024-25 (Rs. Crore)

Particulars/ Rs. Crore	FY 2023-24			FY 2024-25			
	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approve d in this Order	
Capitalization Wires	222.48	849.39	691.65	222.48	746.38	605.91	
Approved DPR		518.74	502.72		393.04	437.46	
DPR submitted awaiting approval		153.62	100.54		167.85	97.40	
DPR proposed to be submitted		88.64	100.34		104.53	87.49	
Non-DPR		88.39	88.39		80.96	80.95	
Capitalization Supply	10.42	543.88	84.39	10.42	681.13	125.00	
Approved DPR		66.16	66.16		100.00	100.00	
DPR submitted awaiting approval		472.72	13.23		576.13	20.00	
DPR proposed to be submitted							
Non-DPR		5.00	5.00		5.00	5.00	

5.6 DEPRECIATION

AEML-D's Submission

AEML-D submitted that it has worked out the depreciation for FY 2023-24 and FY 2024-25 on provisional basis by considering the average rate of depreciation for FY 2021-22, i.e., 4.44% for Wires Business and 4.34% for Supply Business. For FY 2023-24 and FY 2024-25, the depreciation on consumer contribution is considered at Rs. 10.30 Crore at the same level as that for FY 2021-22.

The projection for asset retirement is not considered as no estimation is available at present. Actual asset retirement for each year would be presented at the time of true-up. The estimated depreciation for Wires Business and Supply Business for FY 2023-24 and FY 2024-25 is shown in the Tables below:

545 (145 61 61 61 61 61 61 61 61 61 61 61 61 61							
Particulars	FY 202	23-24	FY 2024-25				
	MYT Order	Projected	MYT Order	Projected			
Opening GFA	7,327.02	9,366.09	7,533.62	10,215.48			
Addition *	206.60	849.39	206.60	746.38			
Closing GFA	7,533.62	10,215.48	7,740.22	10,961.86			
Depreciation	325.51	434.66	334.56	470.08			
Depreciation on Consumer contribution		10.30		10.30			
Depreciation	325.51	424.36	334.56	459.78			

Table 5-55: Depreciation for Wires Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Table 5-56: Depreciation for Supply Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	Projected	MYT Order	Projected
Opening GFA	1,045.91	865.49	1,056.33	1,409.37
Addition	10.42	543.88	10.42	681.13
Closing GFA	1,056.33	1,409.37	1,066.75	2,090.50
Depreciation	53.16	49.41	53.69	76.02
Depreciation on Consumer contribution				
Depreciation	53.16	49.41	53.69	76.02

The Commission has computed the Depreciation for FY 2023-24 and FY 2024-25 in accordance with Regulation 28 of the MYT Regulations, 2019 for the Distribution Wires and Retail Supply Business, separately.

The Commission has considered the closing GFA for FY 2022-23 as approved in this Order, as the opening GFA for FY 2023-24, and the addition of GFA equivalent to the capitalisation approved. The Commission has computed the Depreciation on the average GFA for the year by applying the weighted average Depreciation rate as approved for FY 2021-22 in this Order. The Commission has applied the weighted average Depreciation rate of 4.44% for the Wires Business and 4.34% for Retail Supply Business, based on the average depreciation rates approved in the truing up for FY 2021-22.

^{*} MYT Order is net of consumer contribution

The Depreciation approved by the Commission for Wires Business and Supply Business for the Control Period is shown in the Table below:

Table 5-57: Depreciation approved for Wires Business for FY 2023-24 and FY 2024-25 (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25			
	MYT	AEML-D	Approved	MYT	AEML-D	Approved	
	Order	Petition	in this	Order	Petition	in this	
			Order			Order	
Opening GFA	7,327.02	9,366.09	8,863.24	7,533.62	10,215.48	9,554.89	
Addition *	206.60	849.39	691.65	206.60	746.38	605.91	
Closing GFA	7,533.62	10,215.48	9,554.89	7,740.22	10,961.86	10,160.79	
Depreciation		4.44%	4.44%		4.44%	4.44%	
Rate (%)		1.1170	1.1170		1.1170	1.1170	
Depreciation	325.51	434.66	408.84	334.56	470.08	437.64	
Depreciation on							
Consumer		10.30	-		10.30		
contribution							
Depreciation	325.51	424.36	408.84	334.56	459.78	437.64	

Table 5-58: Depreciation approved for Supply Business for 4th Control Period (Rs. Crore)

Particulars		FY 2023-24			FY 2024-25			
	MYT	AEML-D Approved in		MYT	AEML-D	Approved in		
	Order	Petition	this Order	Order	Petition	this Order		
Opening GFA	1,045.91	865.49	586.50	1,056.33	1,409.37	670.89		
Addition	10.42	543.88	84.39	10.42	681.13	125.00		
Closing GFA	1,056.33	1,409.37	670.89	1,066.75	2,090.50	795.89		
Depreciation Rate (%)		4.34%	4.34%		4.34%	4.34%		
Depreciation	53.16	49.41	27.31	53.69	76.02	31.86		

5.7 INTEREST ON LONG-TERM LOAN

AEML-D's Submission

AEML-D submitted that Regulation 30.5 of the MERC MYT Regulations, 2019 specifies that for computing interest on loan capital allowable in the ARR, the rate of interest shall be the weighted average rate of interest computed on the basis of the actual long-term loan portfolio at the beginning of each year. In this regard, AEML-D submitted that the weighted average rate of interest considering the opening balance of loans for FY 2022-23 works out to 8.34%. There shall be variation in interest rate of individual loans in the overall loan portfolio of AEML in FY 2023-24 and FY 2024-25, which cannot be predicted now. Hence AEML-D has considered the interest rate of 8.34% on provisional basis for calculation of interest expense for FY 2023-24 and FY 2024-25.

Further, 70% of the capitalization (net off consumer contribution estimated for FY 2023-24 and FY 2024-25) has been considered as normative loan addition. During FY 2023-24 and FY 2024-25, since no asset retirement is estimated, no reduction of normative loan due to asset retirement has been considered. The same shall be considered at the time of truing up of FY 2023-24 and FY 2024-25. Repayment is considered equivalent to deprecation as per Regulation 303 of the MYT Regulations, 2019. The interest on loan for the Wires Business and Supply Business is computed considering the average loan balance, as shown in the Tables below:

Table 5-59: Interest on Long-Term Loan for Wires Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	FY 2023-24		FY 2024-25		
	MYT Order	Projected	MYT Order	Projected	
Opening Balance	1,698.89	2,582.32	1,529.11	2,734.76	
Addition of new loans	155.74	576.80	155.74	504.70	
Repayment	325.51	424.36	334.56	459.78	
Closing Balance	1,529.11	2,734.76	1,350.29	2,779.67	
Interest Rate (%)	9.05%	8.34%	9.05%	8.34%	
Interest on Loans	146.07	221.72	130.29	229.95	

Table 5-60: Interest on Long-Term Loan for Supply Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	FY 2023-24		FY 2024-25		
	MYT Order Projected		MYT Order	Projected	
Opening Balance	310.06	203.65	264.20	534.95	
Addition of new loans	7.29	380.72	7.29	476.79	

Particulars / (Rs. Crore)	FY 2023-24		FY 2024-25		
	MYT Order	Projected	MYT Order	Projected	
Repayment	53.16	49.41	53.69	76.02	
Closing Balance	264.20	534.95	217.80	935.72	
Interest Rate (%)	9.05%	8.34%	9.05%	8.34%	
Interest on Loans	25.99	30.80	21.81	61.33	

The opening loan for FY 2023-24 has been considered equal to the closing loan for FY 2022-23 as approved in the provisional Truing-up for FY 2022-23, in earlier Chapter of this Order.

The Commission has considered the debt amount for FY 2023-24 and FY 2024-25 equal to 70% of the capitalisation approved. The loan repayments have been considered equal to the depreciation approved for the respective years. The interest rate has been considered equal to the rate of interest considered for FY 2022-23 and the interest on long-term loan has been computed on the normative average loan for FY 2023-24 and FY 2024-25.

The interest expenses on long-term loans approved by the Commission for FY 2023-24 and FY 2024-25 are summarised in the Tables below:

Table 5-61: Interest on Long-Term Loan for Wires Business for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25			
	MYT Order	AEML-	Approved	MYT	AEML-D	Approved	
		D	in this	Order	Petition	in this	
		Petition	Order			Order	
Opening Balance	1,698.89	2,582.32	2,550.77	1,529.12	2,734.76	2,608.32	
Addition of new loans	155.74	576.80	466.39	155.74	504.70	406.37	
Repayment	325.51	424.36	408.84	334.56	459.78	437.64	
Closing Balance	1,529.12	2,734.76	2,608.32	1,350.30	2,779.67	2,577.05	
Interest Rate (%)	9.05%	8.34%	8.35%	9.05%	8.34%	8.35%	
Interest on Loans	146.07	221.72	215.39	130.29	229.95	216.49	

Table 5-62: Interest on Long-Term Loan for Supply Business for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25			
	MYT	AEML-D	Approved	MYT	AEML-D	Approved	
	Order	Petition	in this	Order	Petition	in this	
			Order			Order	
Opening Balance	310.06	203.65	34.88	264.20	534.95	66.64	
Addition of new loans	7.29	380.72	59.07	7.29	476.79	87.50	
Repayment	53.16	49.41	27.31	53.69	76.02	31.86	
Closing Balance	264.20	534.95	66.64	217.80	935.72	122.28	
Interest Rate (%)	9.05%	8.34%	8.35%	9.05%	8.34%	8.35%	
Interest on Loans	25.99	30.80	4.24	21.81	61.33	7.89	

5.8 INTEREST ON WORKING CAPITAL

AEML-D's Submission

AEML-D has submitted that it has computed the normative interest on working capital in accordance with the MYT Regulations, 2019.

The Security Deposit estimated as at the end of FY 2022-23 is Rs. 498.25 Crore including Rs. 13.28 Crore, which is estimated to be collected in H2 of FY 2022-23. For FY 2023-24, Rs. 26.56 Crore (Rs. 13.28 Crore * 2) is projected to be collected during the year and hence security deposit of Rs. 524.80 Crore is projected as at the end of FY 2023-24 (Rs. 498.25 Crore + Rs. 26.56 Crore). On similar lines for FY 2024-25, Rs. 551.36 Crore is the security deposit, which is projected as at the end of FY 2024-25 (Rs. 524.80 Crore + Rs. 26.56 Crore).

As per MYT Regulations, 2019, the Base Rate has been defined as One-year MCLR of SBI plus 150 basis points. As on the date of filing this Petition, the SBI one-year MCLR plus 150 Basis Points works out to 9.55%.

The normative interest on working capital as per MYT Regulations, 2019 for Wires Business and Supply Business is shown in the Tables below:

Table 5-63: IoWC for Wires Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars	FY 2023-24		FY 202	4-25
	MYT Order	Projected	MYT Order	Projected
O&M expenses	80.57	85.08	83.28	88.65
Maintenance Spares	73.27	93.66	75.34	102.15
Receivables	208.32	427.72	212.56	430.60
Less: Amount of Security Deposit				
Working Capital Requirement	362.17	606.45	371.18	621.40
Interest rate	9.50%	9.55%	9.50%	9.55%
Interest on Working Capital	34.41	57.92	35.26	59.34

Table 5-64: IoWC for Supply Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

P articulars	FY 202	FY 2023-24		4-25
	MYT Order	Projected	MYT Order	Projected
O&M expenses	39.55	42.62	40.87	44.43
Maintenance Spares	10.46	8.65	10.56	14.09
Receivables	850.85	780.71	868.51	811.85
Less: Amount of Security Deposit	680.37	524.81	730.07	551.37
Less: One-month equivalent cost of power	252.52	311.16	259.20	396.16
Working Capital Requirement	(32.03)	(3.98)	(69.33)	(77.16)
Interest rate	9.50%	9.55%	9.50%	9.55%
Interest on Working Capital	-	-	-	-

The Commission has computed the IoWC for the Wires Business and Supply Business in accordance with Regulations 32.3 and 32.4 of the MYT Regulations, 2019. The Commission has considered the rate of interest for computation of IoWC as 9.55% considering the applicable MCLR of SBI plus 150 basis points, in accordance with the MYT Regulations, 2019. The Commission has considered the Security Deposit based on the closing balance for FY 2022-23 plus the expected increase in FY 2023-24 and FY 2024-25 as projected by AEML-D. However, AEML-D should ensure that it collects Security Deposit equivalent to 2 months average billing of the previous year, in accordance with the MERC Supply Code Regulations, 2021. Further, in line with the approach adopted in the MYT Order, the Commission has considered the Security Deposit entirely against the

Supply Business. However, from next time's Petition, AEML-D should consider the Security Deposit appropriately against the Wires Business and Supply Business.

The IoWC approved by the Commission for the Wires and the Business for FY 2023-24 and FY 2024-25 is shown in the Tables below:

Table 5-65: IoWC for Wires Business for FY 2023-24 and FY 2024-25 as approved by the Commission (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25			
	MYT	AEML-	Approved	MYT	AEML-	Approved	
	Order	D	in this	Order	D	in this	
		Petition	Order		Petition	Order	
O&M expenses	80.57	85.08	81.77	83.28	88.65	85.27	
Maintenance Spares	73.27	93.66	88.63	75.34	102.15	95.55	
Receivables	208.32	427.72	318.57	212.56	430.60	399.30	
Less: Amount of							
Security Deposit							
Working Capital	362.17	606.45	488.97	371.18	621.40	580.12	
Requirement	302.17	000.43	400.77	3/1.10	021.40	300.12	
Interest rate	9.50%	9.55%	9.55%	9.50%	9.55%	9.55%	
Interest on	34.41	57.92	46.70	35.26	59.34	55.40	
Working Capital	5-111	51,72	40.70	33.20	27.34	22,40	

Table 5-66: IoWC for Supply Business for FY 2023-24 and FY 2024-25 as approved by the Commission (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25			
	MYT	AEML-	Approve	MYT	AEML-	Approve	
	Order	D	d in this	Order	D	d in this	
		Petition	Order		Petition	Order	
O&M expenses	39.55	42.62	40.75	40.87	44.43	42.51	
Maintenance Spares	10.46	8.65	5.86	10.56	14.09	6.71	
Receivables	850.85	780.71	858.80	868.51	811.85	894.42	
Less: Amount of Security Deposit	680.37	524.81	889.94	730.07	551.37	916.50	

Particulars		FY 2023-24		FY 2024-25		
	MYT	AEML-	Approve	MYT	AEML-	Approve
	Order	D	d in this	Order	D	d in this
		Petition	Order		Petition	Order
Less: One-month						
equivalent cost of	252.52	311.16	350.66	259.20	396.16	402.78
power						
Working Capital	(32.03)	(3.98)	_	(69.33)	(77.16)	_
Requirement	(32.03)	(3.76)	_	(09.33)	(77.10)	-
Interest rate	9.50%	9.55%	9.55%	9.50%	9.55%	9.55%
Interest on Working	0	1	_	0	_	_
Capital	V	•	•	U		_

5.9 INTEREST ON CONSUMER SECURITY DEPOSIT

AEML-D's Submission

Regulation 30.11 of the MYT Regulations, 2019 provides that interest shall be allowed on the amount held in cash as security deposit from retail consumers at the Bank Rate as declared by RBI as on 1st April of the year. Accordingly, considering the prevailing Bank Rate of RBI of 6.50%, AEML-D has considered interest rate of 6.50% for projecting the interest on consumer security deposit for FY 2023-24 and FY 2024-25, as given below:

Table 5-67: Interest on Security Deposit for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	FY 2023-24		FY 2024-25		
	MYT Order Projected		MYT Order	Projected	
Interest on CSD	35.40	33.25	38.08	34.98	

Commission's Analysis and Ruling

For approving the Interest on CSD, the Commission has considered the Bank Rate of 6.15%, prevalent as on date of filing of the Petition, rather than the Bank Rate prevalent as on 1st April of the year as specified in the MYT Regulations, 2019, considering the same to be more realistic for FY 2023-24 and FY 2024-25. The amount of Security Deposit has been considered as stated above, while computing the working capital requirement. Accordingly, the Interest on CSD approved by the Commission is shown in the Table below:

Table 5-68: Interest on Security Deposit for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars/ Rs.		FY 2023-24		FY 2024-25		
Crore	MYT	AEML-D Approved		MYT	AEML-D	Approved
	Order	Petition in this		Order	Petition	in this
			Order			Order
Interest on CSD	35.40	33.25	53.91	38.08	34.98	55.55

5.10 RETURN ON EQUITY

AEML-D's Submission

AEML-D submitted that it has calculated the RoE for FY 2023-24 and FY 2024-25 considering the base rate of 14% for Wires Business and 15.5% for Supply Business. Also, AEML-D has estimated the effective tax rate for grossing up RoE as the MAT rate of 17.47%.

Further, AEML-D has considered equity addition as 30% of the capitalization (net of consumer contribution estimated for FY 2023-24 and FY 2024-25). During FY 2023-24 and FY 2024-25, since no asset retirement is estimated, no reduction of equity due to asset retirement has been considered and the same shall be considered at the time of truing up of FY 2023-24 and FY 2024-25.

The table below shows the return on equity as approved in the MYT Order and projections for Wires Business for FY 2023-24 and FY 2024-25:

Table 5-69: Return on Equity for Wires Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	FY 2023-24		FY 2024-25	
	MYT Order	Projected	MYT Order	Projected
Regulatory Equity at the beginning of	2,611.88	3,068.12	2,673.86	3,315.32
year	·	·	·	·
Capitalization during the year	222.48	849.39	222.48	746.38
Consumer Contribution and Grants	15.88	25.38	15.88	25.38
during the year	13.00	23.30	13.00	25.50
Equity portion of capitalization	61.98	247.20	61.98	216.30
during the year	01.50	2.7.20	01.50	210.50
Regulatory Equity at the end of year	2,673.86	3,315.32	2,735.84	3,531.62

Particulars / (Rs. Crore)	FY 2023-24		FY 2024-25	
	MYT Order	Projected	MYT Order	Projected
Return on Regulatory Equity (%)	16.964%	16.96%	16.964%	16.96%
Return on Regulatory Equity	448.34 541.43		458.85	580.74

The table below shows the return on equity as approved in the MYT Order and projections for Supply Business for FY 2023-24 and FY 2024-25:

Table 5-70: Return on Equity for Supply Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	FY 202	23-24	FY 202	24-25
	MYT Order	Projected	MYT Order	Projected
Regulatory Equity at the beginning of year	317.76	263.63	320.89	426.80
Capitalization during the year	10.42	543.88	10.42	681.13
Consumer Contribution and Grants during the year				
Equity portion of capitalization during the year	3.13	163.16	3.13	204.34
Reduction in Equity Capital on account of retirement				
Regulatory Equity at the end of year	320.89	426.79	324.01	631.13
Return on Regulatory Equity (%)	18.78%	18.78%	18.78%	18.78%
Return on Regulatory Equity	59.97	64.83	60.56	99.34

Commission's Analysis and Ruling

The Commission has computed the RoE for FY 2023-24 and FY 2024-25 in accordance with Regulation 29 of the MERC MYT Regulations, 2019. The Closing Equity of FY 2022-23 has been considered as Opening Equity of FY 2023-24 and onwards. Addition to equity is considered equal to 30% of the capitalization approved in this Order for the respective year as specified in the MYT Regulations, 2019.

The base rate of RoE has been considered as 14% for Wires Business and 15.50% for Retail Supply Business. The MAT rate of 17.47% has been considered for grossing up the base rate of RoE for FY 2023-24 and FY 2024-25.

The pre-tax ROE approved by the Commission for the Wires Business and Supply Business for FY 2023-24 and FY 2024-25 is shown in the Tables below:

Table 5-71: Return on Equity for Wires Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars		FY 2023-24		FY 2024-25		
	MYT Order	AEML-D Petition	Approve d in this Order	MYT Order	AEML-D Petition	Approve d in this Order
Regulatory Equity at the beginning of year	2,611.88	3,068.12	3,039.18	2,673.86	3,315.32	3,239.06
Capitalization during the year	222.48	849.39	691.65	222.48	746.38	605.91
Consumer Contribution and Grants during the year	15.88	25.38	25.38	15.88	25.38	25.38
Equity portion of capitalization during the year	61.98	247.20	199.88	61.98	216.30	174.16
Regulatory Equity at the end of year	2,673.86	3,315.32	3,239.06	2,735.84	3,531.62	3,413.21
Return on Regulatory Equity (%)	16.964%	16.96%	16.96%	16.964%	16.96%	16.96%
Return on Regulatory Equity	448.34	541.43	532.50	458.85	580.74	564.23

Table 5-72: Return on Equity for Supply Business for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars		FY 2023-24		FY 2024-25			
	MYT	AEML-	Approve	MYT	AEML-	Approve	
	Order	D	d in this	Order	D	d in this	
		Petition	Order		Petition	Order	
Regulatory Equity at the	317.76	263.63	180.77	320.89	426.79	206.08	
beginning of year	317.70	203.03	100.77	320.07	420.77	200.00	
Capitalization during the year	10.42	543.88	84.39	10.42	681.13	125.00	
Consumer Contribution and							
Grants during the year							
Equity portion of	3.13	163.16	25.32	3.13	204.34	37.50	
capitalization during the year	3.13	103.10	23.32	3.13	204.54	37.30	
Reduction in Equity Capital							
on account of retirement							
Regulatory Equity at the end	320.89	426.79	206.08	324.01	631.13	243.58	
of year	320.07	420.77	200.00	324.01	031.13	243.30	
Return on Regulatory Equity	18.78%	18.78%	18.78%	18.78%	18.78%	18.78%	
(%)	10.7070	10.70/0	10.70/0	10.70/0	10.70/0	10.7070	
Return on Regulatory	59.97	64.83	36.33	60.56	99.34	42.23	
Equity	37.71	U-1.03	30.33	00.50	<i>77</i> .3 4	72.23	

5.11 PROVISION FOR BAD AND DOUBTFUL DEBTS

AEML-D's Submission

AEML-D submitted that as per mentioned in the section of provisional truing up for FY 2022-23 and considering the provisions of the MYT Regulations 2019 (Regulation 76 and 85), for the purpose of projections, AEML-D has considered the provision for Bad and Doubtful debts at the same level as actuals for FY 2021-22. The following Table shows the provision for bad and doubtful debts proposed by AEML-D:

Table 5-73: Provision for Bad Debts for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	FY 2023-24		FY 202	24-25
	MYT Order Projected		MYT Order	Projected
Provision for Bad debts- Wires	3.37	2.63	3.37	2.63

Particulars/ Rs. Crore	FY 2023-24		4 FY 2024-25	
	MYT Order Projected		MYT Order	Projected
Provision for Bad debts- Supply	12.62	11.74	12.62	11.74

The Commission has considered the provision for bad and doubtful debts in line with the figures approved in Provisional Truing-up of FY 2022-23. The following Table shows the provision for bad and doubtful debts approved by the Commission for FY 2023-24 and FY 2024-25.

Table 5-74: Provision for Bad Debts for FY 2023-24 and FY 2024-25 approved by the Commission (Rs. Crore)

Particulars		FY 2023-24			FY 2024-25		
	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approved in this Order	
Provision for Bad debts- Wires	3.37	2.63	2.63	3.37	2.63	2.63	
Provision for Bad debts- Supply	12.62	11.74	11.74	12.62	11.74	11.74	

5.12 CONTRIBUTION TO CONTINGENCY RESERVE

AEML-D's Submission

Regulation 35.1 of the MYT Regulations, 2019 specifies that a sum not less than 0.25 per cent and not more than 0.5 per cent of the original cost of fixed assets shall be allowed as Contribution to Contingency Reserve. AEML-D has calculated the contribution to contingency reserve for FY 2023-24 and FY 2024-25 as 0.25% of the opening GFA of that year for Wires Business and Supply Business separately.

The summary of contribution to contingency reserve for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 5-75: Contribution to Contingency Reserve for Wires Business and Supply Business for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	FY 202	23-24	FY 2024-25		
	MYT	Projected	MYT	Projected	
	Order		Order		
Opening balance of GFA for Wires Business	7,327.02	9,366.09	7,533.62	10,215.48	
% Contribution	0.25%	0.25%	0.25%	0.25%	
Contribution to Contingency Reserve for	18.32	23.42	18.83	25.54	
Wires Business					
Opening balance of GFA for Supply	1045.91	865.49	1,056.33	1,409.37	
Business					
% Contribution	0.25%	0.25%	0.25%	0.25%	
Contribution to Contingency Reserve for	2.61	2.16	2.64	3.52	
Supply Business					

The Commission has computed the Contribution to Contingency Reserves at 0.25 % of the Opening GFA for the Supply Business in accordance with the MYT Regulations, 2019 and based on the capitalisation approved for FY 2023-24 and FY 2024-25. As discussed in the provisional truing up for FY 2022-23, the Commission has not considered the Contribution to Contingency Reserves for the Wires Business from FY 2022-23 onwards, hence, no contribution has been considered for FY 2023-24 and FY 2024-25.

The Contribution to Contingency Reserves approved by the Commission is shown in the Tables below:

Table 5-76: Contribution to Contingency Reserve for Wires Business for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars	FY 2023-24				FY 2024-2	5
	MYT	AEML-	Approved	MYT	AEML-	Approved
	Order	D	in this	Order	D	in this
		Petition	Order		Petition	Order
Opening balance of GFA	7,327.02	9,366.09	8,863.24	7,533.62	10,215.48	9,554.89
% Contribution	0.25%	0.25%	_	0.25%	0.25%	-
Contribution to Contingency Reserve	18.32	23.42	-	18.83	25.54	-

Table 5-77: Contribution to Contingency Reserve approved for Retail Supply Business for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars	FY 2023-24			FY 2024-25		
	MYT	MYT AEML- Approved		MYT	AEML-	Approved
	Order	D	in this	Order	D	in this
		Petition	Order		Petition	Order
Opening balance of GFA	1045.91	865.49	586.50	1,056.33	1,409.37	670.89
% Contribution	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Contribution to Contingency Reserve	2.61	2.16	1.47	2.64	3.52	1.68

5.13 NON-TARIFF INCOME

AEML-D's Submission

AEML-D submitted that it has projected the Non-Tariff Income (NTI) for FY 2023-24 and FY 2024-25 at the same level as that estimated for FY 2022-23. The NTI approved for FY 2023-24 and FY 2024-25 in the MYT Order and the projected NTI for these years are shown in the Table below:

Table 5-78: Non-Tariff Income for FY 2023-24 and FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars/ Rs. Crore	FY 202	23-24	FY 2024-25		
	MYT Order Projected		MYT Order	Projected	
Non-Tariff Income- Wires	138.56	140.55	145.28	140.55	
Non-Tariff Income - Supply	46.42	65.14	47.93	65.14	

Commission's Analysis and Ruling

The Commission has observed that there is an average increase of 4% and 12% in the NTI for the Wires Business and Supply Business, respectively, in the recent years. Hence, the Commission has considered a 5% increase in the NTI for FY 2023-24 and FY 2024-25, over the estimated NTI for FY 2022-23.

The Non-Tariff Income approved for the Wires Business and Supply Business for FY 2023-24 and FY 2024-25, is shown in the Table below:

Table 5-79: Non-Tariff Income for FY 2023-24 and FY 2024-25 as approved by Commission (Rs. Crore)

Particulars/ Rs. Crore	FY 2023-24				FY 2024-	25
	MYT AEML- Approved		MYT	AEML-	Approved	
	Order	D	in this	Order	D	in this
		Petition	Order		Petition	Order
Non-Tariff Income- Wires	138.56	140.55	147.57	145.28	140.55	154.95
Non-Tariff Income - Supply	46.42	65.14	68.39	47.93	65.14	71.81

5.14 INCOME FROM OTHER BUSINESS

AEML-D's Submission

AEML-D submitted that it has projected the Income from Other Business for FY 2023-24 and FY 2024-25 at the same level as that of actuals for FY 2021-22. The Income from Other Business approved for FY 2023-24 and FY 2024-25 in the MYT Order and the projected Income from Other Business for these years is shown in the table below:

Table 5-80: Income from Other Business submitted by AEML-D for FY 2023-24 and FY 2024-25 (Rs. Crore)

Particulars	FY 202	3-24	FY 2024-25		
	MYT Order Projected		MYT Order	Projected	
Lease charges		0.10		0.10	
Optic Fiber link	0.13	2.10	0.13	2.10	
Tower Rental		1.07		1.07	
Total	0.13	3.27	0.13	3.27	

Commission's Analysis and Ruling

The Commission has observed that there is a significant increase in the Income from Other Business in FY 2021-22 over previous years. Hence, the Commission has considered a 10% increase in the Income from Other Business for FY 2023-24 and FY 2024-25, over the estimated Income from Other Business for FY 2022-23.

The approved Income from Other Business for FY 2023-24 and FY 2024-25 is shown in the Table below:

Particulars FY 2023-24 FY 2024-25 **MYT** AEML-**Approved MYT AEML-Approved** D Order in this Order D in this **Petition** Order **Petition** Order Income from 0.13 3.27 3.60 3.27 3.96 0.13 Other Business

Table 5-81: Income from Other Business approved by Commission for FY 2023-24 and FY 2024-25 (Rs. Crore)

5.15 TREATMENT OF AMOUNT RECEIVED AGAINST SALE OF SANTACRUZ LAND TO RINFRA

At the time of transfer of assets and Distribution Licence from RInfra to REGSL/AEML, the Santacruz land owned by the Wires Business was allowed to be retained by RInfra, for a compensation of Rs. 271.56 Crore.

In the Commission's Order dated 28 June 2018 in Case No. 140 of 2017, wherein the Commission approved the assignment of Distribution Licence and transfer of assets from RInfra to REGSL/AEML, the Commission had directed as under:

- 1. "REGSL will have to manage not only the office requirement but also the residential quarters/leased accommodation, within the proceeds of Santacruz property. Any consequential capital expenditure proposed by REGSL for office premises and residential quarters during the tenure of the licence, on account of these 4 Plots being retained by RInfra, shall not exceed the amount paid/adjusted by RInfra for the Santacruz land;
- m. <u>Alternatively</u>, if REGSL decides to take the required office premises and residential premises <u>on lease</u>, on account of these 4 Plots being retained by RInfra, the same shall be subject to the prior approval of the Commission and <u>such lease expenses will have to be capped within the proceeds of Santacruz property</u>; ... " (emphasis added)

In this context, in the previous MYT proceedings, AEML-D was asked to clarify about the treatment of this amount lying with AEML, and AEML submitted that it would plan and revert in the MTR proceedings. However, AEML-D's original MTR Petition was silent on this issue.

On being queried, AEML-D cited COVID difficulties for non-utilisation of the amount till date and stated that once the property is finalized and acquired by AEML-D, AEML-D shall submit the details of the property, the amount utilised and balance, if any remaining.

AEML-D was also asked to submit the actual amount held by AEML-D, after considering the holding cost. AEML-D submitted the same by considering the rate of interest for holding cost equal to the RBI Bank Rate for the respective year, and stated that the amount of Rs. 271.56 Crore has increased to Rs. 335.55 Crore, after considering the holding cost. The computation of Holding Cost by AEML-D is shown in the Table below:

Table 5-82: AEML-D Computation of Holding Cost on Amount received from sale of Santacruz land to RInfra (Rs. Crore)

Particulars	FY 2018-	FY 2019-	FY 2020-	FY 2021-	FY 2022-
raruculars	19	20	21	22	23
Opening Balance	0.00	271.56	271.56	271.56	271.56
Addition	271.56	0.00	0.00	0.00	0.00
Closing Balance	271.56	271.56	271.56	271.56	271.56
Holding Cost Rate (%)	6.58%	5.64%	4.31%	4.25%	5.49%
Holding Cost	10.53	15.32	11.69	11.54	14.90
Total with holding cost					335.55

Moreover, the holding cost has to be computed from the time the amount was received till the time the amount if returned/utilised, at the same rate of interest applicable for Interest on Working Capital, rather than the RBI Bank Rate as considered by AEML-D. The total amount along with holding cost computed at the same rate of interest applicable for Interest on Working Capital has increased to Rs. 386 Crore at the end of FY 2022-23.

This amount should either be utilised by AEML-D in the manner directed in the above-said Order or be passed through to the consumers. Considering that almost three and a half years have passed since this amount has been held by AEML-D, the Commission has decided to treat this amount in the following manner:

- The entire carrying cost amount of Rs. 127.12 Crore has been adjusted in the Wires ARR of FY 2023-24;
- the entire Principal amount, i.e., Rs. 271.56 Crore has been adjusted in the Wires ARR of FY 2023-24.

The computation of Holding Cost by the Commission considering the above treatment is shown in the Table below:

Table 5-83: Computation of Holding Cost on Amount received from sale of Santacruz land to RInfra as approved by the Commission (Rs. Crore)

Particulars	FY 2018-	FY 2019-	FY 2020-	FY 2021-	FY 2022-	FY 2023-
1 at uculats	19	20	21	22	23	24
Opening Balance	0.00	271.56	271.56	271.56	271.56	271.56
Addition	271.56	0.00	0.00	0.00	0.00	(271.56)
Closing Balance	271.56	271.56	271.56	271.56	271.56	0.00
Holding Cost Rate (%)	9.89%	9.66%	8.57%	8.50%	9.55%	9.55%
Holding Cost	15.67	26.23	23.26	23.08	25.92	12.96
Total with holding cost						398.68

Thus, the amount of Rs. 398.68 Crore has been considered for adjustment in the ARR of AEML-D for the Wires Business for FY 2023-24.

5.16 TRUE-UP SURPLUS OF AEML-G

The Commission has trued-up the ARR of AEML-G for the period from FY 2019-20 to FY 2021-22 and done provisional true-up for FY 2022-23, in the MTR Order dated 31st March 2023 in Case No. 229 of 2022. The Commission has determined a surplus of Rs. 47.48 Crore after truing up for AEML-G, which has been passed on to AEML-D and the ARR of AEML-D adjusted accordingly for FY 2023-24.

5.17 AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24 AND FY 2024-25

AEML-D's Submission

The summary of the ARR for the Wires Business and Supply Business for FY 2023-24 and FY 2024-25 is given in the Tables below:

Table 5-84: ARR for FY 2023-24 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	N	MYT ORDE	R	ESTIMATES		
	Wires	Supply	Total	Wires	Supply	Total
Power purchase (inclusive of InSTS, Standby & SLDC)		4,921.38	4,921.38		5,642.27	5,642.27
Operation & Maintenance expenditure	966.88	474.61	1,441.49	1,020.94	511.47	1,532.41
Depreciation	325.51	53.16	378.67	424.36	49.41	473.78
Interest on long-term loan	146.07	25.99	172.06	221.72	30.80	252.52
Return on Equity	448.34	59.97	508.31	541.43	64.83	606.26
Interest on working capital	34.41		34.41	57.92		57.92
Interest on CSD		35.40	35.40		33.25	33.25
Provision for Bad and Doubtful Debts	3.37	12.62	15.99	2.63	11.74	14.37
Contribution to contingency reserve	18.32	2.61	20.93	23.42	2.16	25.58
Non-Tariff Income	138.56	46.42	184.98	140.55	65.14	205.68
Income from Other Business	0.13		0.13	3.27		3.27
Aggregate Revenue Requirement (ARR)	1,804.19	5,539.32	7,343.51	2,148.59	6,280.81	8,429.40

Table 5-85: ARR for FY 2024-25 as submitted by AEML-D (Rs. Crore)

Particulars / (Rs. Crore)	N	MYT ORDER		ESTIMATES		
	Wires Supply Total		Wires	Supply	Total	
Power purchase (inclusive of InSTS, Standby & SLDC)		5,054.40	5,054.40		5,772.04	5,772.04

Particulars / (Rs. Crore)	N	AYT ORDE	R]	ESTIMATE	S
	Wires	Supply	Total	Wires	Supply	Total
Operation & Maintenance expenditure	999.40	490.45	1,489.85	1,063.81	533.15	1,596.96
Depreciation	334.56	53.69	388.25	459.78	76.02	535.81
Interest on long-term loan	130.29	21.81	152.10	229.95	61.33	291.28
Return on Equity	458.85	60.56	519.41	580.74	99.34	680.09
Interest on working capital	35.26		35.26	59.34		59.34
Interest on CSD		38.08	38.08		34.98	34.98
Provision for Bad and Doubtful Debts	3.37	12.62	15.99	2.63	11.74	14.37
Contribution to contingency reserve	18.83	2.64	21.47	25.54	3.52	29.06
Non-Tariff Income	145.28	47.93	193.21	140.55	65.14	205.68
Income from Other Business	0.13		0.13	3.27		3.27
Aggregate Revenue Requirement (ARR)	1,835.16	5,686.32	7,521.48	2,277.98	6,526.99	8,804.97

Based on the components of the ARR approved in the above paragraphs, the Commission has approved the ARR for the Wires and the Supply Business for FY 2023-24 and FY 2024-25 as shown in the Tables below:

Table 5-86: ARR for FY 2023-24 and FY 2024-25 for Wires Business as approved by Commission (Rs. Crore)

			FY 2023-24			FY 2024-25	
Sl.	Particulars	MYT Order	AEML-D Petition	Approved in this Order	MYT Order	AEML-D Petition	Approved in this Order
1	Operation & Maintenance Expenses	966.88	1,020.94	981.23	999.40	1,063.81	1,023.29
2	Depreciation	325.51	424.36	408.84	334.56	459.78	437.64
3	Interest on Loan Capital	146.07	221.72	215.39	130.29	229.95	216.49
4	Interest on Working Capital	34.41	57.92	46.70	35.26	59.34	55.40
5	Bad debts written off	3.37	2.63	2.63	3.37	2.63	2.63
6	Contribution to contingency reserves	18.32	23.42	-	18.83	25.54	-
7	Total Revenue Expenditure	1494.55	1750.98	1654.78	1521.73	1841.06	1735.45
8	Add: Return on Equity Capital	448.34	541.43	532.50	458.85	580.74	564.23
9	Aggregate Revenue Requirement	1,942.89	2,292.41	2,187.29	1,980.57	2,421.80	2,299.68
10	Less: Non-Tariff Income	138.56	140.55	147.57	145.28	140.55	154.95
11	Less: Income from other business	0.13	3.27	3.60	0.13	3.27	3.96
12	ARR adjustment due to amount received against sale of Santacruz land to RInfra			398.68			
13	Aggregate Revenue Requirement from Wires Business	1,804.19	2,148.59	1,637.43	1,835.16	2,277.98	2,140.77

Table 5-87: ARR for FY 2023-24 and FY 2024-25 for Supply Business as approved by Commission (Rs. Crore)

			FY 2023-24			FY 2024-25	
Sl.	Particulars		Projected	Approved	MYT Order	Projected	Approved
1	Power Purchase Expenses (including Inter-State Transmission Charges)	4,430.92	5,154.41	5,560.73	4,565.47	5,286.33	6,059.79
2	Operation & Maintenance Expenses	474.61	511.47	488.97	490.45	533.15	510.13
3	Depreciation	53.16	49.41	27.31	53.69	76.02	31.86
4	Interest on Loan Capital	25.99	30.80	4.24	21.81	61.33	7.89
5	Interest on Working Capital	-	-	-	-	-	-
6	Interest on Consumer Security Deposit	35.40	33.25	53.91	38.08	34.98	55.55
7	7 Bad debts written off		11.74	11.74	12.62	11.74	11.74
8	Contribution to contingency reserves	2.61	2.16	1.47	2.64	3.52	1.68
9	Intra-State Transmission Charges	488.14	485.30	490.65	486.30	483.09	588.54
10	MSLDC Fees & Charges	2.12	2.56	1.82	2.16	2.62	1.94
11	DSM Expenses	0.20			0.47		
12	Total Revenue Expenditure	5,525.77	6,281.11	6,640.85	5,673.69	6,492.78	7,269.12
13	Add: Return on Equity Capital	59.97	64.83	36.33	60.56	99.34	42.23
14	Aggregate Revenue Requirement	5,585.74	6,345.94	6,677.17	5,734.25	6,592.13	7,311.34
15	Less: Non-Tariff Income	46.42	65.14	68.39	47.93	65.14	71.81
16	True up surplus of AEML-G			(47.48)			
17	Aggregate Revenue Requirement from Supply Business	5,539.32	6,280.81	6,561.30	5,686.32	6,526.99	7,239.53

6 CUMULATIVE REVENUE GAP, TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2023-24 AND FY 2024-25

6.1 PAST PERIOD CLAIMS FROM RINFRA

Service Tax related to AIH charges income

In addition to the Revenue Gap / Surplus of previous years, RInfra has also raised demand for certain payments made by it for the period prior to the acquisition of business by the Adani Group. These payments relate to the Service Tax liability as settled by RInfra with the Department, related to AIH charges income from Street Light maintenance. RInfra had presented its claims on Service Tax payment on AIH Charges in its Petition in Case No. 200 of 2017, on which the Commission had ruled as under:

"As regards the possibility of payment of Service Tax / GST by Rinfra-D on AIH Charges demanded by DGCEI, the Commission will take a considered view on the matter if such payment is made in future."

In the same Order, the Commission had allowed Service Tax actually paid by RInfra till then, on income received from AIH charges.

Rinfra has communicated to AEML that it has paid a total of Rs. 5.40 Crore towards full and final settlement of remaining Service Tax liability under the Sabka Vishwas Legacy Dispute Resolution Scheme, 2019 of the Govt. of India. RInfra has requested AEML-D to claim the said amount from its tariff and pay the same to RInfra, along with applicable interest. The details of the payments made by RInfra along with the Discharge Certificate issued by the concerned Department have been submitted along with the Petition. Accordingly, AEML-D has included the claim made by RInfra, along with applicable interest cost from the date of payment by RInfra till March 2023, in the cumulative Revenue Gap / Surplus of the Wires Business as shown below:

Table 6-1: Service tax payment as claimed by AEML-D (Rs. Crore)

Period	Principal	FY 20	FY 21	FY 22	FY 23	Total	Total with Carrying cost
20-03-2020	2.51	0.09	0.22	0.21	0.24	0.76	3.27
30-06-2020	2.89		0.18	0.25	0.28	0.71	3.60

Period	Principal	FY 20	FY 21	FY 22	FY 23	Total	Total with Carrying cost
Total	5.40	0.09	0.40	0.46	0.52	1.47	6.87

In line with the approach adopted in earlier Orders, the Commission allows the pass through of the actual Service tax on AIH Charges paid by RInfra/AEML along with the associated carrying cost, as claimed by AEML-D, which has been considered in the Cumulative Gap/(Surplus) till FY 2022-23.

Interest on long-term loan for FY 2017-18 emanating from Review Order

AEML-D had filed a Review Petition (Case No. 103 of 2020) on various issues related to MYT Order in Case No. 325 of 2019, out of which one of the matters pertained to correcting the interest rate on loan from 10.36% to 10.51% for FY 2017-18.

The Commission in its Order dated 21 July, 2020 in Case No. 103 of 202 held as follows:

"15.10 The Commission notes that it has already allowed interest expenses at rate of 10.36% and now with review allowed as above, same needs to be allowed at rate of 10.51%. This has impact of allowing an additional amount of Rs. 2.37 crore as interest on long term loan. However, such change would also have impact on other components of ARR such as Income Tax. Hence, as stated in para 14 above, AEML-D is allowed to claim this amount alongwith the net impact and with carrying cost in upcoming MTR proceedings.

...

f. Prayer regarding correcting rate of interest of 10.36% to 10.51% while computing the amount of Interest on loan for FY 2017-18 is allowed. Net impact of the same shall be claimed during upcoming MTR proceeding with carrying cost (para no. 15.10). "

In accordance with the above, considering the impact of the Order on interest on long-term loan and consequential impact on Income Tax, the difference for the Wires Business and Supply Business is worked out as below:

-			0	`			
Particulars		Wires		Supply			
	MYT Revised		Difference	MYT	Revised	Difference	
	Order			Order			
Interest on loan	156.14	158.38	2.23	9.19	9.32	0.13	
Income Tax	106.34	106.19	(0.15)	240.37	240.02	(0.35)	
Total			2.08			(0.22)	

Table 6-2: Impact due to Interest on long term loan (Rs. Crore)

The impact of the same along with carrying cost from FY 2018-19 to FY 2022-23 is as follows:

Table 6-3: Impact with carrying cost on interest due to Review

Particulars	Principal	Carrying cost	Total
Wires	2.08	0.95	3.02
Supply	(0.22)	(0.10)	(0.32)
Total	1.86	0.85	2.70

Commission's Analysis and Ruling

The Commission has verified the computations submitted by AEML-D and allows the claim towards interest on loan for FY 2017-18 and associated impact on Income Tax, along with carrying cost, as claimed by AEML-D.

Over-recovery of Regulatory Assets

AEML-D submitted that there has been an over-recovery against the approved recovery of Regulatory Assets (RA) till the close of FY 2019-20, largely due to the fact that the previous MTR Order (of last Control Period) continued for the first 5 months of FY 2018-19, till the RAC for FY 2018-19 was revised through the said Order.

The Commission in the MYT Order in Case No. 325 of 2019 in Table 6-28 approved the over recovery of RA with holding cost as Rs. 75.68 Crore and considered the same in the cumulative Gap/ (Surplus) till FY 2019-20. As against the same, the actual over recovery of RA with holding cost is Rs. 70.97 Crore. Thus, the difference between the approved and the actual amount along with carrying cost is proposed to be recovered in the cumulative Revenue Gap till FY 2022-23. The working is provided below:

Table 6-4: Recovery of RA as per MYT Order in Case No. 325 of 2019

Particulars	FY 18-19	FY 19-20	FY 20-21
Principal – Opening	0	(100.09)	(60.25)
Addition	(100.09)	39.84	
Principal – Closing	(100.09)	(60.25)	(60.25)
Holding cost (%)	9.89%	9.50%	9.50%
Holding cost	(4.95)	(7.62)	(2.86)
Principal with holding cost			(75.68)

Table 6-5: Revised Working of RA Recovery

Particulars	FY 18-19	FY 19-20	FY 20-21
Principal – Opening	0	(100.10)	(56.07)
Addition	(100.10)	44.03	
Principal – Closing	(100.10)	(56.07)	(56.07)
Holding cost (%)	9.89%	9.66%	8.57%
Holding cost	(4.95)	(7.54)	(2.40)
Principal with holding cost			(70.97)

Table 6-6: RA recovery

Particulars	FY 20-21	FY 21-22	FY 22-23
Principal – Opening	0	3.30	3.30
Difference between approved Vs actual (70.97-75.68)	4.71		
Addition due to RA recovery in FY 20-21	(1.41)		
Principal – Closing	3.30	3.30	3.30
Carrying / Holding cost (%)	8.57%	8.50%	9.55%
Carrying / Holding cost	0.14	0.28	0.32
Principal with carrying / holding cost			4.04

The Commission has verified the computations submitted by AEML-D and allows the claim towards difference in RA recovery considered in the MYT Order and the actual RA recovery, along with carrying cost, as claimed by AEML-D.

6.2 INCREMENTAL REVENUE GAP/SURPLUS FOR FY 2019-20

AEML-D's Submission

AEML-D has considered the Revenue Gap/(Surplus) for FY 2019-20 as calculated in its Petition. The Commission had determined provisional Revenue Surplus for FY 2019-20 at Rs. 66.97 Crore (Rs. 71.77 Crore Gap in Wires Business and Rs. 138.74 Crore Surplus in Supply Business) in AEML-D's MYT Order dated 30 March, 2020. Hence, AEML-D has

computed the incremental Revenue Gap/(Surplus) to be recovered for FY 2020-21, as shown in the Table below:

Table 6-7: Incremental Revenue Gap/(Surplus) for FY 2019-20

Particulars / (Rs. Crore)	Revenue Gap / (Surplus) allowed in MYT Order	Revenue Gap / (Surplus) after truing up	Incremental Gap / (Surplus)
Wires Business	71.77	198.11	126.34
Supply Business	(138.74)	(170.29)	(31.55)
Wires & Supply Business	(66.97)	27.82	94.79

Commission's Analysis and Ruling

As elaborated in Chapter 3 of this Order, the Commission had determined provisional Revenue Gap of Rs. 71.77 Crore for the Wires Business and provisional Revenue Surplus of Rs. 138.74 Crore for the Supply Business for FY 2019-20 in the MYT Order dated 30 March, 2020. The Commission has now approved Revenue Gap of Rs. 157.87 Crore for the Wires Business and Surplus of Rs. 264.53 Crore for the Supply Business, after truing up for FY 2019-20 in this Order.

The following Table shows the Incremental Revenue Gap/(Surplus) approved by the Commission after truing up for FY 2019-20:

Table 6-8: Incremental Revenue Gap/(Surplus) approved for FY 2019-20

Particulars / (Rs. Crore)	Revenue Gap / (Surplus) allowed in MYT Order	Revenue Gap Approved after truing up	Incremental Gap / (Surplus)
Wires Business	71.77	157.87	86.10
Supply Business	(138.74)	(264.53)	(125.79)
Wires & Supply Business	(66.97)	(106.66)	(39.69)

6.3 REVENUE GAP / SURPLUS FOR FY 2020-21

AEML-D's Submission

The Revenue Gap/(Surplus) for FY 2020-21 has been calculated by AEML-D as shown in the Table below:

Table 6-9: Revenue Gap/(Surplus) for FY 2020-21

Particulars / (Rs. Crore)	Wires Business	Supply Business	Wires & Supply Business
Revenue Gap / (Surplus)	635.03	(286.39)	348.64

Commission's Analysis and Ruling

As elaborated in Chapter 3 of this Order, the Commission has approved the Revenue Gap of Rs. 469.74 Crore for Wires Business and Revenue Surplus of Rs. 318.68 Crore for the Supply Business, after truing up for FY 2020-21. The Commission has thus, approved Total Revenue Gap of Rs. 151.06 Crore for the Wires Business and Supply business after Truing-up for FY 2020-21, as shown in the Table below:

Table 6-10: Revenue Gap/(Surplus) Approved for FY 2020-21

Particulars / (Rs. Crore)	Wires Business	Supply Business	Wires & Supply Business
Revenue Gap/(Surplus)	469.74	(318.68)	151.06

6.4 REVENUE GAP / SURPLUS FOR FY 2021-22

AEML-D's Submission

The Revenue Gap/(Surplus) for FY 2021-22 has been calculated by AEML-D as shown in the Table below:

Table 6-11: Revenue Gap/(Surplus) for FY 2021-22

Particulars / (Rs. Crore)	Wires Business	Supply Business	Wires & Supply Business
Revenue Gap/(Surplus)	760.54	327.80	1088.35

Commission's Analysis and Ruling

As elaborated in Chapter 3 of this Order, the Commission has approved the Revenue Gap of Rs. 608.91 Crore for Wires Business and Revenue Gap of Rs. 381.96 Crore for the Supply Business, after truing up for FY 2021-22. The Commission has thus, approved Total Revenue Gap of Rs. 993.87 Crore for the Wires Business and Supply business after Truing-up for FY 2021-22, as shown in the Table below:

Table 6-12: Revenue Gap/(Surplus) Approved for FY 2021-22

Particulars / (Rs. Crore)	Wires Business	Supply Business	Wires & Supply Business
Revenue Gap/(Surplus)	608.91	384.96	993.87

6.5 PROVISIONAL REVENUE GAP/ SURPLUS FOR FY 2022-23

AEML-D's Submission

The provisional Revenue Gap/(Surplus) for FY 2022-23 as computed by AEML-D is shown in the Table below:

Table 6-13: Provisional Revenue Gap/(Surplus) for FY 2022-23

Particulars / (Rs. Crore)	Wires Business	Supply Business	Wires & Supply Business
Revenue Gap/(Surplus)	398.31	(27.80)	370.51

Commission's Analysis and Ruling

As elaborated in Chapter 4 of this Order, the Commission has approved Revenue Gap of Rs. 344.51 Crore for the Wires Business and Revenue Gap of Rs. 325.03 Crore for the Supply Business, after provisional truing up for FY 2022-23. The Commission has thus, approved Total Revenue Gap of Rs. 669.54 Crore for the Wires Business and Supply Business after provisional truing-up for FY 2022-23, as shown in the Table below:

Table 6-14: Provisional Revenue Gap/(Surplus) Approved for FY 2022-23

Particulars / (Rs. Crore)	Wires	Supply	Wires & Supply
	Business	Business	Business
Provisional Revenue Gap / (Surplus)	324.16	325.03	649.19

6.6 CUMULATIVE REVENUE GAP / SURPLUS TILL FY 2022-23

AEML-D's Submission

AEML-D submitted that carrying / holding cost is only computed for revenue gap / surplus pertaining to FY 2019-20, FY 2020-21 and FY 2021-22 and not on the provisional revenue gap / surplus of FY 2022-23, as the same is provisional at this stage.

The Cumulative Past Gap/(Surplus) proposed by AEML-D is shown in the Table below:

Table 6-15: Recovery of Cumulative Revenue Gap / Surplus till FY 2022-23 (Rs. Crore)

CIO		G 1	
Particulars	Wires	Supply	Total
1 at ticulars	Business	Business	1 Otal
Incremental Revenue Gap of FY 2019-20	126.34	(31.55)	94.79
Revenue Gap of FY 2020-21	635.03	(286.39)	348.64
Revenue Gap of FY 2021-22	760.54	327.80	1,088.35
Provisional Revenue Gap of FY 2022-23	398.31	(27.80)	370.51
Carrying cost on Revenue Gap of FY 2019-20	46.28	(22.57)	23.71
Carrying cost on Revenue Gap of FY 2020-21	141.83	(63.97)	77.87
Carrying cost on Revenue Gap of FY 2021-22	104.96	43.31	148.26
RA adjustment	4.04		4.04
Service Tax liability claimed by RInfra, along	6.87		6.87
with carrying cost till the close of FY 2022-23			
Review Order (Case No. 103 of 2020) impact	3.02	(0.32)	2.70
Total	2,227.22	(61.48)	2,165.73

Commission's Analysis and Ruling

The Commission has considered the carrying/(holding) cost up to FY 2023-24, assuming that the amounts will be recovered during FY 2023-24. Any further staggering of the recovery has been considered separately, as elaborated subsequently.

The Commission approves the cumulative Revenue Gap/(Surplus) for the Wires Business, Supply Business and combined Distribution Business till FY 2022-23, based on the amounts approved in earlier paragraphs, as shown in the Table below:

Table 6-16: Approved Cumulative Revenue Gap/(Surplus) of Wires Business till FY 2022-23 (Rs. Crore)

Particulars	AEML-D Petition	Approved in this Order
Incremental Revenue Gap of FY 2019-20	126.34	86.10
Revenue Gap of FY 2020-21	635.03	469.74
Revenue Gap of FY 2021-22	760.54	608.91
Provisional Revenue Gap of FY 2022-23	398.31	324.16
Carrying cost on Revenue Gap of FY 2019-20	46.28	
Carrying cost on Revenue Gap of FY 2020-21	141.83	278.18
Carrying cost on Revenue Gap of FY 2021-22	104.96	
RA adjustment	4.04	4.04
Service Tax liability claimed by RInfra, along with carrying cost till the close of FY 2022-23	6.87	6.87
Review Order (Case No. 103 of 2020) impact	3.02	3.02
Total	2,227.22	1,781.01

Table 6-17: Approved Cumulative Revenue Gap/(Surplus) of Supply Business till FY 2022-23 (Rs. Crore)

Particulars	AEML-D Petition	Approved in this Order
Incremental Revenue Gap of FY 2019-20	(31.55)	(125.79)
Revenue Gap of FY 2020-21	(286.39)	(318.68)
Revenue Gap of FY 2021-22	327.80	384.96
Provisional Revenue Gap of FY 2022-23	(27.80)	325.03
Carrying cost on Revenue Gap of FY 2019-20	(22.57)	
Carrying cost on Revenue Gap of FY 2020-21	(63.97)	(73.10)
Carrying cost on Revenue Gap of FY 2021-22	43.31	
Review Order (Case No. 103 of 2020) impact	(0.32)	(0.32)
Total	(61.48)	192.10

Table 6-18: Approved Cumulative Revenue Gap/(Surplus) of combined Distribution Business till FY 2022-23 (Rs. Crore)

Particulars	AEML-D Petition	Approved in this Order
Incremental Revenue Gap of FY 2019-20	94.79	(39.69)
Revenue Gap of FY 2020-21	348.64	151.06
Revenue Gap of FY 2021-22	1,088.35	993.87
Provisional Revenue Gap of FY 2022-23	370.51	649.19
Carrying cost on Revenue Gap of FY 2019-20	23.71	
Carrying cost on Revenue Gap of FY 2020-21	77.87	205.08
Carrying cost on Revenue Gap of FY 2021-22	148.26	
RA adjustment	4.04	4.04
Service Tax liability claimed by RInfra, along with carrying cost till the close of FY 2022-23	6.87	6.87
Review Order (Case No. 103 of 2020) impact	2.70	2.70
Total	2,165.73	1,973.11

6.7 APPROACH FOR RECOVERY OF PAST GAP / (SURPLUS)

AEML-D submitted that there is significant Revenue Gap in the Wires Business, as opposed to the Supply Business. AEML-D submitted that most of the Revenue Gap in Wires Business is arising on account of lower recovery from Wheeling Charges as a result of reduced sales due to COVID slowdown spreading over three years, viz., FY 2019-20, FY 2020-21 and FY 2021-22. In the past Orders, the Commission has, to reduce tariff shock to consumers as a result of large Revenue Gaps, phased out the Revenue Gap over a longer period, where the advantage is that, despite inclusion of carrying cost, this additional cost

gets absorbed due to higher energy sales in the future, thereby minimising the impact on tariffs. This Revenue Gap is an outcome of a force majeure situation and may thus, be dealt with similarly, thereby avoiding another economic shock to consumers who are now gradually recovering from the crippling effects of the pandemic.

Therefore, in accordance with the practice adopted in the previous Tariff Orders, AEML-D has proposed to recover the Wires Revenue Gap/(Surplus) and Supply Revenue Gap/(Surplus) over FY 2023-24 and FY 2024-25. The annualised recovery, after factoring in appropriate interest cost, is worked out as under:

Table 6-19: Recovery of Wires Business Cumulative Gap / (Surplus) till FY 2022-23

Particulars / (Rs. Crore)	FY 2023-24	FY 2024-25
Opening	2,227.22	1,113.61
Recovery	1,113.61	1,113.61
Closing	1,113.61	
Carrying cost (%)	9.55%	9.55%
Carrying cost	159.52	53.17
Recovery with carrying cost	1,273.13	1,166.78

Table 6-20: Recovery of Supply Business Cumulative Gap / (Surplus) till FY 2022-23

Particulars / (Rs. Crore)	FY 2023-24	FY 2024-25
Opening	(61.48)	(30.74)
Recovery	(30.74)	(30.74)
Closing	(30.74)	
Carrying cost (%)	9.55%	9.55%
Carrying cost	(4.40)	(1.47)
Recovery with carrying cost	(35.15)	(32.21)

Commission's Analysis and Ruling

From the MYT Order dated 30th March 2020, the Commission allowed recovery of the Revenue Gap/(Surplus) of the Wires Business and Supply Business through the ARRs of the respective business, rather than considering the combined ARR of Wires Business and Supply Business.

The Revenue Gap of the Wires Business is extremely high as compared to the Revenue Gap of the Supply Business, largely on account of the under-recovery of revenue from Wheeling Charges due to lower sales, though the incidence of cost of the Wires Business is fixed.

Hence, in line with the past approach, the Commission has spread the recovery of the Cumulative Gap/(Surplus) till FY 2022-23 over the remaining years of the Control Period, i.e., FY 2023-24 and FY 2024-25, such that the overall tariff increase in both the years will be similar.

The recovery of Revenue Gap/(Surplus) allowed by the Commission, after factoring in appropriate carrying/(holding) cost on account of deferment/advancement of the recovery of Revenue Gap/(Surplus), is shown in the Tables below:

Table 6-21: Approved Recovery of Cumulative Gap / (Surplus) of Wires Business

Particulars / (Rs. Crore)	FY 2023-24		FY 20)24-25
	AEML-D	Approved	AEML-D	Approved
	Petition	in this	Petition	in this
		Order		Order
Opening	2,227.22	1,781.01	1,113.61	961.74
Recovery	1,113.61	819.26	1,113.61	961.74
Closing	1,113.61	961.74		-
Carrying cost (%)	9.55%	9.55%	9.55%	9.55%
Carrying cost	159.52	91.85	53.17	91.85
Recovery with carrying cost	1,273.13	911.11	1,166.78	1,053.59

Table 6-22: Approved Recovery of Cumulative Gap / (Surplus) of Supply Business

Particulars / (Rs. Crore)	FY 2023-24		FY 20)24-25
	AEML-D	Approved	AEML-D	Approved
	Petition	in this	Petition	in this
		Order		Order
Opening	(61.48)	192.10	(30.74)	(76.84)
Recovery	(30.74)	268.95	(30.74)	(76.84)
Closing	(30.74)	(76.84)		-
Carrying cost (%)	9.55%	9.55%	9.55%	9.55%
Carrying cost	(4.40)	(7.34)	(1.47)	(7.34)
Recovery with carrying cost	(35.15)	261.61	(32.21)	(84.18)

The Commission has approved the revised ARR for the Wires Business and Supply Business for FY 2023-24 and FY 2024-25, as elaborated in Chapter 5 of this Order. Considering the ARR approved for the year and the recovery of the Cumulative Gap/(Surplus) as approved above, the net ARR approved for recovery for the Wires

Business and Supply Business for FY 2023-24 and FY 2024-25, is shown in the Tables below:

Table 6-23: Net ARR approved for Wires Business for FY 2023-24 and FY 2024-25

Particulars	FY 20)23-24	FY 2024-24		
	AEML-D	Approved in	AEML-D	Approved in	
	Petition	this Order	Petition	this Order	
Standalone ARR	2,148.59	1,637.43	2,277.98	2,140.77	
Recovery of Past Gap/(Surplus)	1,273.13	911.11	1,166.78	1,053.59	
Net ARR	3,421.72	2,548.54	3,444.76	3,194.36	

Table 6-24: Net ARR approved for Supply Business for FY 2023-24 and FY 2024-25

Particulars	FY 20)23-24	FY 2024-24		
	AEML-D	Approved in	AEML-D	Approved in	
	Petition	this Order	Petition	this Order	
Standalone ARR	6,280.81	6,608.78	6,526.99	7,239.53	
Recovery of Past Gap/(Surplus)	(35.15)	261.61	(32.21)	(84.18)	
Net ARR	6,245.66	6,870.39	6,494.78	7,155.35	

6.8 WHEELING CHARGES

AEML-D's Submission

AEML-D has proposed the Wheeling Charges in the same denomination as approved by the Commission vide its MYT Order dated March 30, 2020, i.e., Rs./kWh for LT consumers and Rs./kVAh for HT consumers for FY 2023-24 and FY 2024-25 in accordance with Regulation 73.2 of the MYT Regulations, 2019. The projected energy sales for different HT categories are made in terms of kWh and thereafter converted to kVAh using average Power Factor (PF) of FY 2020-21 to FY 2021-22. Accordingly, the determination of Wheeling Charges for HT consumers is also done in Rs/kWh terms first and then converted to Rs/kVAh terms using the same PF.

Currently, there is no separate tariff category for EHT consumers in AEML-D's approved Tariff Schedule. However, AEML-D has recently acquired Mumbai Metro as a EHT consumer. As per the MERC Supply Code and SoP Regulations, 2021, the connection

infrastructure of EHT consumers is to be developed by the Transmission Licensee and EHT consumer will only pay the normative service connection charges for the same. Therefore, as no distribution system of AEML-D will be involved, no cost pertaining to distribution network development or operations can be considered and hence, there cannot be any wheeling charges for AEML-D's EHT consumers, if any, supplied by it. However, TPC-D has challenged the provisions of the Supply Code Regulations in this regard, in the Hon'ble Bombay High Court. Therefore, depending upon the outcome of the said matter, AEML-D will suitably approach the Commission for applicability of wheeling charges on EHT consumers, if so required in future.

Therefore, AEML-D has distributed the Wires ARR only over its HT and LT consumers and has proposed Wheeling Charges for HT and LT consumers only. AEML-D has calculated the revised Wheeling Charges for FY 2023-24 and FY 2024-25 as per the methodology followed in the past by the Commission. The total revenue requirement of the Wires Business is distributed between HT and LT voltage levels on the basis of GFA at these voltage levels and thereafter, the cost allocated to HT is shared between HT and LT by distributing the HT allocated cost in proportion to the energy sales (kWh) volume at HT and LT respectively.

The summary of proposed Wheeling Charges for FY 2023-24 and FY 2024-25 along with the prevailing Wheeling Charges is shown in the Table below:

Table 6-25: Existing Wheeling Charges and Proposed Wheeling Charges (Rs./kWh)

Particulars /	FY 2022-23	FY 2023-24		FY 20)24-25
(Rs./kWh)	(Existing)	Approved in MYT Order	AEML-D Petition	Approved in MYT Order	AEML-D Petition
HT Wheeling charges (Rs./kWh)	0.68	0.68	1.17	0.68	1.08
HT Wheeling Charge (Rs./kVAh)	0.66	0.66	1.14	0.66	1.05
LT Wheeling charges (Rs./kWh)	1.47	1.48	2.65	1.48	2.53

The income from Wheeling Charges from the changeover and OA consumers has been estimated by applying the above charges to the sales of changeover and open access consumers as estimated for the relevant year. The balance revenue requirement of the Wires Business is met from recovery from wheeling revenue from estimated sales to own consumers in each year. The estimated revenue from Wheeling Charges from changeover and OA consumers is shown in the table below:

Table 6-26: Revenue from Wheeling Charges from Changeover & OA consumers

Particulars	FY 2023-24	FY 2024-25
Total Revenue from Wheeling Charges from Changeover	426.96	427.51
and OA consumers (Rs. Crore)		

The Commission has approved the Net ARR of the Wires Business for FY 2023-24 and FY 2024-25, as elaborated in the previous Section. The Commission has distributed the total Wires ARR over HT and LT consumers and computed the Wheeling Charges for HT and LT category. The Wires ARR is distributed between HT and LT voltage levels based on the basis of GFA at these voltage levels. The ratio of HT:LT voltage assets has been considered at the same level of 48.92:51.08 approved in the MYT Order. Thereafter, the cost allocated to HT is shared between HT and LT by distributing the HT allocated cost in proportion to the sales volume at HT and LT. Wheeling Charges to EHT consumers shall be NIL.

The Wheeling Charges determined by the Commission for AEML-D's Wire consumers for FY 2023-24 and FY 2024-25, and the Revenue from Wheeling Charges are shown in the Tables below:

Table 6-27: Approved Wheeling Charges

	FY 2023-24		FY 2024-25	
Particulars	AEML-D	Approved in	AEML-D	Approved in
	Petition	this Order	Petition	this Order
HT Wheeling Charge (Rs/kWh)	1.17	1.00	1.08	1.17
HT Wheeling Charge (Rs/kVAh)	1.14	0.97	1.05	1.14
LT Wheeling Charge (Rs/kWh)	2.65	2.21	2.53	2.60

Table 6-28: Revenue from Wheeling Charges (Rs. Crore)

	FY 2023-24		FY 2024-25	
Particulars	AEML-D Approved in Petition this Order		AEML-D Petition	Approved in this Order
Total Revenue from Wheeling Charges from Changeover and OA consumers	426.96	358.03	427.51	440.80

6.9 CROSS SUBSIDY SURCHARGE (CSS)

AEML-D's Submission

AEML-D submitted that it has calculated the CSS based on the formula specified in the Tariff Policy notified on 28th January 2016, and adopted by the Commission in its MYT Order. The said formula is described as under:

$$S = T - [C/(1-L/100) + D + R]$$

Where:

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

For the purpose of computing CSS, the different components of the CSS formula are explained below:

- "T" is the proposed revised Tariff of the consumer category
- "C" is the weighted average cost of power purchase for each year of the Control Period, including RPO, but excluding transmission, standby and SLDC charges
- "L" is the aggregate of transmission, distribution losses applicable to open access consumers, expressed as a percentage applicable to the relevant voltage level. Under the basic tenets of Multi-Year Tariff framework, the total distribution losses for FY 2023-24 and FY 2024-25 are considered at the target level as per the MYT Order and hence the Wheeling losses for HT and LT have also been considered at the same level as approved in the MYT Order.

Table 6-29: Wheeling Losses for HT and LT

Particulars	FY 2023-24	FY 2024-25
HT Wheeling Loss	1.47%	1.44%
LT Wheeling Loss	5.94%	5.80%

The transmission loss applicable to both HT and LT are shown in table below:

Table 6-30: Transmission Losses for HT and LT

Particulars	FY 2023-24	FY 2024-25
Transmission Loss	3.18%	3.18%

• "D" is the aggregate of transmission and wheeling charge applicable to the relevant voltage level. The transmission and wheeling charges are shown in the table below:

Table 6-31: Transmission and Wheeling Charges for HT and LT

Particulars (Rs./kWh)	FY 2023-24	FY 2024-25
HT Voltage		
Wheeling Charges	1.17	1.08
Transmission Charges	0.44	0.40
Total	1.61	1.48
LT Voltage		
Wheeling Charges	2.65	2.53
Transmission Charges	0.44	0.40
Total	3.09	2.93

"R" is the per unit carrying cost. The per unit carrying cost for FY 2023-24 and FY 2024-25 as shown in the Table below is computed by separating the past revenue gap proposed to be recovered in this Petition each year into Principal and carrying cost components.

Table 6-32: Per Unit Carrying Cost

Particulars (Rs./kWh)	FY 23-24	FY 24-25
Per Unit Carrying Cost (R)	0.14	0.04

AEML-D has ensured that category-wise CSS determined using the formula as per the Tariff Policy does not exceed 20% of the tariff (ABR) applicable to the category, as per the provisions of the Tariff Policy.

In accordance with the prevailing billing methodology, the CSS for HT consumers is required to be denominated in terms of Rs/kVAh. For this purpose, the Rs./kWh CSS determined as above is converted to Rs./kVAh using the same average PF as considered for Wheeling Charges. Therefore, the revised CSS in Rs./kVAh for HT consumers is as shown in the table below.

The category-wise revised CSS proposed for FY 2023-24 and FY 2024-25, along with the prevailing CSS is shown in the table below:

Table 6-33: Existing CSS and CSS Proposed by AEML-D (Rs/kWh)

Particulars /	FY 2022-	FY 2023-24		FY 20	24-25
(Rs./kWh for LT, Rs/kVAH for HT)	23 (Existing)	Approved in	AEML-D	Approved in	AEML-D
ŕ	· · · · · · · · · · · · · · · · · · ·	MYT Order	Petition	MYT Order	Petition
HT Category	1.40	1 45	1.51	1 45	1.20
HT I: HT-Industry	1.48	1.47	1.51	1.47	1.39
HTII: HT- Commercial	1.83	1.91	1.75	2.01	1.59
HT III: HT-Group	1.53	1.57	1.61	1.64	1.51
Housing Society					
HT V - HT Metro &	1.46	1.47		1.49	
Monorail					
HT VI (a):PS - Govt. EI	1.53	1.52	1.57	1.56	1.47
& Hospitals					
HT VI (b):PS - Others	1.59	1.61	1.66	1.65	1.55
HT VIII: EV Charging					
Stations					
LT Category					
LT I - Below Poverty			0.43		0.64
Line					
LT -I Residential	0.16	0.07	0.43	0.04	0.64
LT II (a) - 0-20 kW	1.61	1.62	1.40	1.62	1.38
LT II (b) - 20-50 kW	1.84	1.86	1.98	1.90	1.84
LT II (c) - above 50 kW	1.95	1.96	2.05	1.99	1.89
LT III (a) - LT	1.00	0.90	0.79	0.90	0.58
Industrial upto 20 kW					
LT III (b) - LT	1.74	1.76	1.86	1.78	1.67
Industrial above 20 kW					
LT IX (a): PS - Govt. EI	0.74	0.71	0.69	0.67	0.76
& Hospitals					
LT IX (b): PS - Others	1.12	1.08	1.88	1.05	1.76
LT X (a): Agriculture -					
Pumpsets					
LT X (b): Agriculture -			0.81		0.63
Others					
LT XI: EV Charging					
Stations					

The summary of revenue from changeover and open access consumers through the proposed CSS for FY 2023-24 and FY 2024-25 is shown in the table below:

Table 6-34: Revenue from Proposed CSS

Particulars (Rs. Crore)	FY 2023-24	FY 2024-25
Revenue from Proposed CSS	127.95	161.90

Commission's Analysis and Ruling

The Commission has computed the CSS based on the Formula stipulated in the Tariff Policy, 2016 as detailed below:

$$S = T - [C/(1-L/100) + D + R],$$

To arrive at the CSS for the various consumer categories, the values considered for the components of the CSS are as below:

The Transmission Loss has been considered as 3.18% as approved in the InSTS Tariff Order, while Wheeling Losses have been considered as 1.59% for HT and 6.43% for LT voltage, as approved in the MYT Order. Transmission Charges have been computed based on the Transmission Charges approved and total sales approved for FY 2023-24 and FY 2024-25. These Charges have been deducted for computing the CSS. The Transmission Charge and Wheeling Charge considered by the Commission for computing CSS for FY 2023-24 and FY 2024-25 is as shown in the Table below:

Table 6-35: Transmission and Wheeling Charges considered by the Commission (Rs./kWh)

Particulars	FY 2023-24	FY 2024-25	
Wheeling Charges			
EHT Voltage	-	-	
HT Voltage	1.00	1.17	
LT Voltage	2.21	2.60	
Transmission Charges (EHT, HT and LT)	0.45	0.50	

The Commission has considered the carrying cost based on the deferment of the revenue requirement for the Wires Business and Supply Business, and the Carrying Cost per unit for the purpose of computation of CSS has been considered as shown in the Table below:

Table 6-36: Carrying Cost considered by the Commission (Rs./kWh)

Particulars	FY 2023-24	FY 2024-25
Carrying Cost (Rs. Crore)	84.51	84.51
Approved Sales (MU)	10985.51	11819.43
Carrying Cost per unit	0.08	0.07

It is observed that though AEML-D has projected sales and revenue from sales to EHT category, it has not proposed any CSS for the EHT categories, which is incorrect. The Commission has determined the CSS for the EHT categories, where some sales are projected, as the ABR is required for determination of CSS.

However, the Commission further notes that MOP has recently notified Amendments to the Rules, namely, Electricity (Amendment) Rules, 2022 notified on 29th December 2022, wherein it has stipulated that cross-subsidy surcharge to be determined by the Appropriate Commission shall not exceed twenty percent (20%) of Average Cost of Supply. The relevant extract of the notified Rule 13 is as under:

"13. Surcharge payable by Consumers seeking Open Access.-The surcharge, determined by the State Commission under clause (a) of sub-section (1) of section 86 of the Electricity Act,2003 shall not exceed twenty per cent of the average cost of Supply." (emphasis added)

The CSS computed in accordance with the Formula stipulated in the Tariff Policy has been capped at 20% of the ACOS, in accordance with the above quoted Rules notified by the Ministry of Power.

Based on the above, the category-wise CSS approved by the Commission for FY 2023-24 and FY 2024-25 in Rs/kWh and Rs/kVAh terms is as given in the Tables below:

Table 6-37: Approved CSS for FY 2023-24 and FY 2024-25 (Rs/kWh)

Consumer Categories	FY 2023-24	FY 2024-25
EHT CONSUMERS		
EHT I - Industry	1.71	1.75
EHT IV - Railways, Metro & Monorail	1.71	1.75
HT CONSUMERS		
HT I – Industry	1.71	1.75
HT II – Commercial	1.71	1.75
HT III - Group Housing Society (Residential)	1.71	1.75
HT V - Public Services		
a) Govt. Edu. Inst. & Hospitals	1.71	1.75
b) Others	1.71	1.75
HT VI - EV Charging Stations	1.71	1.75
LT CONSUMERS		
LT I (A) - Residential (BPL)	-	-
LT I (B) - Residential	0.35	0.01
LT II - Commercial		
(A) - Upto 20 kW	1.71	1.33
(B) - > 20 kW & < 50 kW	1.71	1.75
(C) - > 50kW	1.71	1.75
LT III (A) - Industry < 20 kW	0.80	0.62
LT III (B) - Industry > 20kW	1.71	1.53
LT IV- Public Services		
a) Govt. Edu. Inst. & Hospitals	1.11	0.98

Consumer Categories	FY 2023-24	FY 2024-25
b) Others	1.40	1.28
LT V – Agriculture		
a) Pumpsets	-	-
b) Others	1.23	1.11
LT V - EV Charging Stations	0.46	0.48

Table 6-38: Approved CSS for FY 2023-24 and FY 2024-25 (Rs/kVAh)

Consumer Categories	FY 2023-24	FY 2024-25
EHT CONSUMERS		
EHT I - Industry	1.68	1.72
EHT IV - Railways, Metro & Monorail	1.56	1.60
HT CONSUMERS		
HT I – Industry	1.68	1.72
HT II – Commercial	1.66	1.70
HT III - Group Housing Society (Residential)	1.67	1.70
HT V - Public Services		
a) Govt. Edu. Inst. & Hospitals	1.62	1.65
b) Others	1.67	1.71
HT VI - EV Charging Stations	1.56	1.60

The CSS is calculated as the difference between the ABR and cost elements for that category/sub-category. However, on account of the telescopic nature of tariffs for the Residential category, the ABR for any slab, if calculated, shall also include the revenue against consumption of consumers consuming higher than that slab. Hence, the Commission computes the ABR as well as the CSS for the category/sub-category as a whole, rather than the consumption slab. Further, the Tariff Policy does not stipulate anywhere that CSS cannot be levied for subsidised categories. Hence, the Commission has continued to determine the CSS for the category/sub-category as a whole. Further, in order to ensure consistency in approach, the CSS has been determined in the same manner for AEML-D and TPC-D.

The Revenue from the approved CSS from Changeover Sales and Open Access Sales are shown in the Table below:

Table 6-39: Revenue from CSS (Rs. Crore)

Table 0-37. Revenue from CBB (Rs. Crore)						
	FY 2023-24		FY 2024-25			
Particulars	AEML-	Approved	AEML-	Approved		
1 at ticulars	D	in this	D	in this		
	Petition	Order	Petition	Order		
Total Revenue from CSS from	127.95	113.39	161.90	69.11		
Changeover and OA consumers	121.93	113.39	101.90	09.11		

6.10 Tariff revision for FY 2023-24 and FY 2024-25

AEML-D's Submission

AEML-D submitted that the overall increase / (decrease) in tariff required in FY 2023-24 and FY 2024-25 vis-à-vis the existing tariff for FY 2022-23 along with the applicable FAC is shown in the table below.

Table 6-40: Tariff Increase/(Decrease) required in FY 2023-24 and FY 2024-25

Particulars / (Rs. Crore)	FY 2023-24	FY 2024-25
Wires and Supply ARR	8,429.40	8,804.97
Past Gap Recovery	1,237.99	1,134.57
Total to be recovered	9,667.38	9,939.54
Revenue at revised Wheeling Charge & CSS from	554.91	589.41
changeover consumers		
Net ARR to be recovered from own consumers	9,112.48	9,350.13
Revenue at existing tariff from own consumers	9,236.37	9,886.45
Shortfall / (Excess) at existing Tariff	(123.89)	(536.32)
Tariff Hike / (Decrease) required	(1.34%)	(5.42%)

Note: Revenue of Existing Tariff for FY 23-24 derived by applying existing tariff of FY 22-23 to the forecasted sales of FY 23-24. Revenue from Existing Tariff for FY 24-25 is derived by applying the proposed tariffs of FY 23-24 to the forecasted sales of FY 24-25

Commission's Analysis and Ruling

As elaborated earlier, the Commission has spread the revenue requirement of the Wires Business and Supply Business over FY 2023-24 and FY 2024-25 in such a manner that the overall tariff increase of combined Wires and Supply Business is around the same level for both the years.

The tariff increase approved by the Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 6-41: Approved Tariff Increase/(Decrease) for FY 2023-24 and FY 2024-25

Particulars	FY 2023-24	FY 2024-25
Total ARR Approved (A)	8,246.21	9,380.30
Past Revenue Gap (B)	1,973.11	
Revenue Deferment (C)	(884.90)	884.90
Carrying Cost on deferment (D)	84.51	84.51
Total ARR to be recovered $(E = A \text{ to } D)$	9,418.93	10,349.71

Particulars	FY 2023-24	FY 2024-25
Revenue at Existing Tariff (F)	9217.87	9905.31
Revenue Gap at existing tariff $(G = E - F)$	201.06	444.40
Energy Sales (MU) (H)	10,985.51	11,819.43
ACOS (Rs/kWh) ($I = E/H*10$)	8.57	8.76
ABR at existing tariff incl. FAC (Rs/kWh) (J)	8.39	8.38
Revenue Gap per unit (Rs/kWh) (K = I - J)	0.18	0.38
Tariff Hike Required (L = K/J)	2.18%	4.49%
YoY tariff hike	2.18%	2.13%

Thus, the Commission has approved an overall year-on-year tariff increase of 2.18% and 2.13% for FY 2023-24 and FY 2024-25, respectively.

6.11 TARIFF DESIGN CONSIDERATION

The Commission's views on each aspect of Tariff Philosophy raised by AEML-D as well as on other relevant aspects are detailed below.

The Commission has considered the main objectives of the Electricity Act, 2003 ("EA, 2003") including the protection of the interest of consumers, the supply of electricity to all areas and rationalisation of tariffs. The EA, 2003 also enjoins the Commission to maintain a healthy balance between the interest of the Utilities and the reasonableness of the cost of power being supplied to consumers. The Commission has also kept in view the principles of tariff determination set out in Sections 61 and Section 62 of the EA, 2003, the Tariff Policy, 2016 and the MYT Regulations, 2019, and also taken into consideration AEML-D's submissions as well as the public responses in these MYT proceedings.

6.11.1 Cross Subsidy

AEML-D's Submission

AEML-D submitted that the present process of tariff setting follows a system where cross-subsidisation of a consumer category is worked out by the Commission considering AEML-D's Average Cost of Supply (ACoS) for own consumers (i.e., net Retail ARR divided by total energy sales to own consumers) and setting the Energy Charges and Demand / Fixed Charges so as to arrive at Average Billing Rate (ABR), which is at an acceptable % of ACoS, i.e., lower compared to previous year approved % for subsidising consumers and higher for subsidised consumers. The considerations of +/- 20% of ACoS are also factored in, wherever required. Generally, this is the current approach of tariff determination.

However, this method, by design, results in under-statement of cross-subsidisation for HT consumers and over-statement of cross-subsidisation for LT consumers. This is because while the ABR includes HT Wheeling Charges or LT Wheeling Charges, the ACoS includes the socialised average Wheeling Charges, which is higher than HT Wheeling Charge and lower than LT Wheeling Charge. The numerator, which is ABR and the denominator, which is ACoS, are not comparable due to this anomaly and the cross-subsidy picture gets distorted. Therefore, this is an incorrect method for representation of cross-subsidy and accordingly tariff determination.

The correct method would be to isolate the impact of Wheeling Charges and measure cross-subsidy only with respect to the retail portion of tariffs, by comparison of average Retail Tariff and average Retail Cost of Supply. AEML-D has worked out the Retail ACoS independently, based on the ARR divided by total sales to own consumers. In order to have a fair comparison with approved cross-subsidy of previous year, AEML-D has also worked out the Retail ABR (i.e., not including Wheeling Charges) / Retail ACoS for FY 2022-23 as approved in the MYT Order and determined the cross-subsidy % for FY 2022-23 and used that as a reference to work out the cross-subsidy percentage for FY 2023-24 as per the reduction / increase in subsidisation as required by the Electricity Act and Tariff Policy.

AEML-D requested the Commission to approve this methodology as not only being scientific and logical, but also in line with the requirements of the MYT Regulations, 2019. For AEML-D, the recast cross-subsidy position from FY 2022-23 using the Retail Average Cost of Supply method, is given below:

Table 6-42: Category-wise Cross Subsidy for FY 2022-23 recasted as per MYT Order

Particulars	As per MYT Order			Recast using approved values from		
				MYT Order		
	Total	Total	ABR as %	Retail	Retail	Retail ABR
	ABR	ACoS	of ACoS	ABR	ACoS	as % of
						Retail ACoS
LT I - Residential	6.57	7.43	88%	5.10	6.03	85%
LT II (a) - 0-20 kW	8.05	7.43	108%	6.58	6.03	109%
LT II (b) - 20-50 kW	9.22	7.43	124%	7.74	6.03	128%
LT II (c) - above 50 kW	9.73	7.43	131%	8.25	6.03	137%
LT III (a) - LT Industrial upto 20 kW	7.42	7.43	100%	5.95	6.03	99%

Particulars	As per MYT Order		Recast using approved values from			
			MYT Order			
	Total	Total	ABR as %	Retail	Retail	Retail ABR
	ABR	ACoS	of ACoS	ABR	ACoS	as % of
						Retail ACoS
LT III (b) - LT Industrial	8.72	7.43	117%	7.24	6.03	120%
above 20 kW	0.72	7.43	11770	7.24	0.03	12070
LT IX (a) : LT -Public	7.15	7.43	96%	5.68	6.03	94%
Service (A)	7.13	7.43	7070	3.00	0.03	J470
LT IX (b) : LT -Public	7.53	7.43	101%	6.06	6.03	101%
Service (B)	7.55	7.15	10170	0.00	0.03	10170
LT X (a) : LT -Agriculture	5.32	7.43	72%	3.84	6.03	64%
Pumpsets	3.32	7.45	3.01	0.02	0.70	
LT X (b) : LT -Agriculture	6.77	7.43	91%	5.30	6.03	88%
Others	0.77	7.43		3.30	0.05	0070
HT Category						
HT I: HT-Industry	7.73	7.43	104%	7.05	6.03	117%
HTII : HT- Commercial	9.45	7.43	127%	8.77	6.03	146%
HT III: HT-Group Housing	7.78	7.43	105%	7.10	6.03	118%
Society	7.70	7.43	10370	7.10	0.03	11070
HT V - Metro & Monorail	7.89	7.43	106%	7.20	6.03	120%
HT VI (a) - Public Service	8.23	7.43	111%	7.55	6.03	125%
(A)	0.23	7.43	111/0	7.55	0.03	123/0
HT VI (b) - Public Service	8.22	7.43	111%	7.54	6.03	125%
(B)	0.22	7.43	111/0	7.54	0.03	123/0

The recast cross-subsidisation % as shown in the table above has been used as reference to propose cross-subsidy reduction for FY 2023-24 and hence, determine tariffs accordingly. Similarly, the process is repeated for setting cross-subsidy and tariffs for FY 2024-25 also. AEML-D has accordingly proposed tariffs in this Petition.

AEML-D submitted that even if the Commission does not change the methodology of tariff design, despite its own Regulations as aforesaid, and continues with the traditional ACoS approach, the correction required in cross-subsidy can be externally imposed in such manner that the consumer categories, which are disadvantaged as a result of ACoS method (as their actual cross-subsidy is under-represented in ACoS method) are able to see a higher reduction in cross-subsidy and the consumer categories, which are benefited in the ACoS

method (as their cross-subsidy is over-represented in ACoS method) face an increase in cross-subsidy. In other words, the guidance for cross-subsidy reduction / increase can be taken from RACoS + WC method, while still using ACoS method. This is absolutely essential to correct as the present method is directly in the teeth of the extant Regulations and is also fundamentally incorrect as elaborated above, which is severely impacting AEML-D's competitive position, which is anyway disadvantaged due to its poor consumer mix vis-à-vis competition.

Commission's Analysis and Ruling

The Commission has studied AEML-D's submission in this regard. There appears to be merit in AEML-D's contention that the tariff should be determined based on the Retail ACoS rather than the combined ACoS, as the Wheeling Charges are same for all consumers getting supply at the same voltage, and the element of cross-subsidy is inherent in the Retail ACoS. However, it should be noted that the Commission has always determined tariffs for all Distribution Licensees based on the combined ACoS including in the MYT Order, and it would not be advisable to change such an important aspect of the tariff determination process in the MTR Order. This aspect may be considered in the next MYT Order after understanding all the implications of such a change in the tariff determination philosophy.

Hence, for the purpose of this Order, the Commission has continued with the approach of determining category-wise tariff and cross-subsidy based on the combined ACoS for the Distribution Business. At the same time, the Commission has ensured that the same method of determination of tariff based on the combined ACoS is applied for AEML-D and TPC-D, so that there is no adverse impact on either Licensee on account of the tariff determination method adopted. The competitiveness of the Licensees is largely dependent on the category-wise tariffs and the consumer mix.

6.11.2 Considerations for Cross – Subsidization and Tariff Design with respect to fair competition

AEML-D's Submission

In the case of AEML-D and TPC-D, while both are Distribution Licensees in the same area of supply, there is a vast difference between the consumer mix and cost structure of the two on account of the way the businesses have evolved. AEML-D started off as a conventional Distribution Licensee, which slowly and gradually rolled out its distribution network in its entire area of supply and served every consumer that applied to it for power supply, without regard to economic strata of the consumer, voltage level or its geographical location. TPC-D, on the other hand, chose to remain a Bulk Licensee for more than 80 years, supplying

power only to bulk power consumers and Distribution Licensees and only thereafter, from about 2004-05 onwards, TPC-D started showing interest in retail supply and expanding its distribution network and supplying power to end consumers. However, the network expansion of TPC-D, unlike that of AEML-D, has been selective, which is driven not by obligation, but by choice.

AEML-D submitted that the continuation of network expansion by TPC-D, without any obligatory roll-out plan, will continue to provide it with the opportunity to expand the network in the way it chooses, while maintaining or even improving its per capita consumption. The present regulatory provisions are therefore, inadequate and allow one Licensee to maintain and possibly improve its competitive position, by planning its investment to allow expansion in the areas it chooses. AEML-D's distribution network exists exhaustively in all slum pockets in the common licence area, while TPC-D's network does not exist in any slum pocket is a testimony to the fact that no level playing field exists between the two Licensees and the present regulatory framework is doing little to improve the situation.

A simple analysis of per capita consumption (specific consumption) on network of the two Licensees reveals a stark difference, arising primarily because of AEML-D is serving 10 lakh slum consumers on its network while TPC-D serves none. Selective network development has only deteriorated the per capita consumption. AEML's commercial viability is being hampered, while at the same time, its ability to subsidise tariffs of lowend consumers is reducing. This will lead to even more migration through further tariff distortion of high-end consumers and this process will ultimately lead to a meltdown of competition, in medium to long-term.

The fact remains that tariff design alone has the ability to correct the situation, while not stifling competition, but keeping it balanced. If tariff design is correctly calibrated, the possibility of parallel and wasteful network development is automatically exhausted. On the other hand, if the tariff favourability continues to remain, it only provides further impetus to opportunistic network expansion. A right balance is thus required where the Commission, in order to protect competition and not skew it in favour of one party alone, intervenes both with structural improvements in Regulations as well as with tariff design, at least till the time the network, cost and consumer mix characteristics of both Licensees becomes fairly similar and level playing field is thus achieved. Thereafter, the competition will ensue primarily based on operational, price and service delivery efficiencies.

In order to ensure sustenance of competition and choice of supply, it is important that future tariffs are set in such manner that the present tariff differences between the two Licensees

should endeavour to correct the mix balance so as to create a level playing field between the two Licensees. Another possible way to achieve the same is to impose some kind of levy on TPC-D such as a a "universal access charge", which will reflect the disparity of network characteristics of the two Licensees. This could exist, albeit temporarily, as a form of compensation by TPC-D for its continued inability to develop any form of network in slum areas of the common area of supply, while continuing to do so, outside. AEML-D alone cannot be obligated to service all slum areas, while the other Licensee, which carries the same Universal Service Obligation, goes scot-free.

There is definitely a need to correct this network mix imbalance. The Regulatory framework should ensure that similar obligation is placed on both Licensees and in case the same is operationally not feasible or is required to be phased out over time, a financial levy should be imposed on TPC-D, which will be utilised by AEML-D to reduce its network cost and the same can be recovered by TPC-D from its retail supply consumers.

AEML-D understands that the Commission will need to obtain data, facts and figures from both Licensees in case it initiates work in this regard and hence, AEML-D is only raising this as a possible solution for the problem of network mix disparity, while not actually proposing any charges in this Petition. The actual charges would depend on the data as may be required and supplied by the two Licensees, if so, required by the Commission during next tariff proceedings.

Thus, in order to ensure sustenance of competition and choice of supply, it is important that future tariffs are set in such manner that the present tariff differences between the two Licensees should endeavour to correct the mix balance so as to create a level playing field between the two Licensees whose cost structure are vastly different due to the way the businesses have evolved and continue to evolve.

Commission's Analysis and Ruling

The Commission feels that in a parallel Licence environment, all the Licensees shall compete on a level playing field. The Commission has, therefore, while determining tariffs for FY 2023-24 and FY 2024-25, tried to adopt the same principles for determining the revenue requirement and tariffs of both competing Distribution Licensees, viz., AEML-D and TPC-D.

The Commission determines the category-wise tariffs of Distribution Licensees with the following primary objectives:

- Reduction in the cross-subsidies between the Licensee's consumers with respect to the prevalent cross-subsidies;
- No category is subjected to a tariff shock;
- To meet the approved revenue requirement through the revised tariffs;

In case of AEML-D and TPC-D, the Commission has to also consider the added aspect of ensuring that the same tariff philosophy is adopted for both and that the inter-se competitiveness is also not affected. The category-wise tariffs are also impacted by the consumer and consumption mix of different Distribution Licensees. The situation also varies if there is an overall tariff increase or tariff reduction. In case of overall tariff reduction, it is easier to achieve most of the above stated objectives.

However, this is a delicate balancing job, and it is likely that some unintended consequences or anomalies in tariff structure creep in. The Commission is always responsive to suggestions of tariff rationalisation, and even attempts to match the sometimes-conflicting proposals made by the Distribution Licensees.

In the past, in order to correct certain anomalies in the consumer mix, the Commission had consciously decided the category-wise tariffs of the competing Distribution Licensees, in order to achieve the larger objective of having fair competition and a level playing field. Over the years, the anomalies have been corrected though not fully and the Commission is aware that the same cannot be achieved overnight.

It is observed that based on the tariff measures implemented by the Commission in the previous Tariff Orders, the consumption mix of TPC-D and AEML-D are now quite similar to each other, in terms of mix of subsidising and subsidised sales and mix of residential sales to overall sales. Of course, the sales mix on own wires of the Licensee are significantly different for AEML-D and TPC-D, due to the much smaller network of TPC-D. The Commission is also seized of the issues related to selective network development and switchover of consumers, in separate proceedings.

The Commission has hence, continued to rationalise the category-wise tariffs to achieve the primary objectives stated above.

6.11.3 Cost of Supply for tariff fixation

AEML-D's Submission

AEML-D submitted that the Retail ACoS is the correct benchmark against which the retail charges in tariff (i.e., Energy Charge and Fixed / Demand Charges) should be determined, because the Wires cost reflects entirely in the Wheeling Charges for all consumers, including own consumers, without any cross-subsidisation. Accordingly, AEML-D has proposed Energy and Demand / Fixed Charges tariffs with reference to Retail ACoS. The Retail ACoS and Total Cost of Supply (Retail ACoS + Allocated per unit Wires cost) of AEML-D for FY 2023-24 and FY 2024-25 is as shown in the table below:

Table 6-43: Retail ACoS and Total Cost of Supply

Particulars / (Rs./kWh)	FY 2023-24	FY 2024-25
Retail ACoS	5.93	5.60
Retail ACoS + HT Wheeling Charge	7.10	6.68
Retail ACoS + LT Wheeling Charge	8.58	8.13

Commission's Analysis and Ruling

As stated earlier, the Commission has continued to determine the category-wise tariffs based on the combined ACoS, rather than the Retail ACoS as proposed by AEML-D.

The ACoS approved by the Commission for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 6-44: Approved ACoS for FY 2023-24 and FY 2024-25 (Rs/kWh)

Particulars	FY 2023-24	FY 2024-25
Total ARR to be recovered	9,418.93	10,349.71
Energy Sales (MU)	10,985.51	11,819.43
ACOS (Rs/kWh)	8.57	8.76

6.11.4 Fixed Charges and Demand Charges

AEML-D's Submission

The Commission, in the MYT Order dated 21 October 2016 in Case No. 34 of 2016, had decided to gradually increase the Fixed Charges and Demand Charges of consumers to increase the percentage recovery of Fixed Cost in the ARR through Fixed Charges and

Demand Charges. In continuation with the same principle, the Commission, in the MTR Order dated 12 September 2018, increased the Fixed Charges and Demand Charges in FY 2018-19 and FY 2019-20 over the Fixed and Demand Charges applicable for FY 2017-18. Further, in the MYT Order dated 30 March, 2020, the Commission observed that the fixed cost coverage by Fixed / Demand Charges is around 22% for AEML-D and accordingly increased Fixed / Demand charges to provide for an increased recovery of about 27% over the period FY 2020-21 to FY 2024-25.

However, AEML-D submitted that it is unable to recompute the figure of 27% as mentioned in the MYT Order. As per AEML-D, the fixed cost (other than network) is Retail ARR less variable cost of power purchase. Considering the same, the revenue from MYT approved Fixed Charges works out to 53% in FY 2023-24 and 56% in FY 2024-25. However, AEML-D has now entered into Medium-Term power purchase contract, which also has a fixed cost component, and which was not there at the time of MYT Order. Therefore, with the revised fixed cost, the coverage through approved fixed charges will be 35% for FY 2023-24 and 51% for FY 2024-25. This is abysmally low and requires rationalisation to ensure greater coverage. Therefore, AEML-D has proposed increase in Fixed Charges in FY 2023-24 and proposes to maintain the same in FY 2024-25 as well, because MTPP contract is only till October 2024 and hence, even with the same Fixed Charges as proposed for FY 2023-24, the Fixed Cost coverage increases in FY 2024-25. With the revised Fixed Charges, the fixed cost coverage is 40% in FY 2023-24 and 56% in FY 2024-25.

AEML-D requested the Commission to continue with its rationalisation of Fixed / Demand charges so that these charges continue to recover increasing percentage of fixed cost and the fixed cost recovery from variable charges is reduced on an ongoing basis, as otherwise, a dip in energy sales (e.g., COVID or any such event) causes a large pile up of Revenue Gap, as fixed cost under-recovery increases.

Based on the proposed Fixed / Demand Charges, the percentage recovery of Fixed Cost from Fixed/ Demand Charges for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 6-45: Percentage of Fixed Cost Recovery from Revenue from Fixed / Demand Charges

Particulars / (Rs. Crore)	FY 2023-24	FY 2024-25
Retail ARR (including past gap)	6,280.81	6,526.99
Variable Cost of Power Purchase	3,682.39	4,542.64
Retail Fixed Cost	2,598.42	1,984.35
Revenue from Fixed/Demand Charges	1,023.01	1,084.01

Particulars / (Rs. Crore)	FY 2023-24	FY 2024-25
Revenue as % of fixed charge	40%	56%

Commission's Analysis and Ruling

The Fixed Costs of the Supply Business includes all expenses, except the variable cost of power purchase.

Of the total ARR of AEML-D's Supply Business, the fixed cost is around 37% and 29% of the total ARR for FY 2023-24 and FY 2024-25. The recovery of the Fixed Cost through existing Fixed/Demand Charges is around 33% and 38% for FY 2023-24 and FY 2024-25, which is on the low side. Accordingly, the Commission has decided to gradually increase the Fixed/Demand Charges for all consumer categories, such that the recovery of fixed cost of AEML-D from Fixed/Demand Charges increases to 35% and 42% for FY 2023-24 and FY 2024-25, respectively. The higher revenue from this increase has been used to offset the Energy Charges of different consumer categories. The category-wise Fixed/Demand Charges approved for FY 2023-24 and FY 2024-25 are summarised subsequently in this Section, along with other Charges.

6.11.5 Energy Charges

AEML-D's Submission

AEML-D submitted that it has proposed Energy Charges for each category, considering the Cross Subsidy percentage of consumer categories as derived using the ratio of Retail ABR to Retail ACoS. To the extent possible, AEML-D has tried to reduce / maintain at the same level the cross-subsidy percentage of subsidizing consumers and has increased the cross subsidy percentage of other subsidized consumers.

The kWh based sales forecast for HT consumers for FY 2023-24 and FY 2024-25 has been converted to kVAh based forecast using the average PF of the period FY 2020-21 to FY 2021-22 and then the tariffs have been proposed in Rs./kVAh terms to work out the revenue.

The Commission in the MYT Order dated 30March, 2020, had stated that it intends to introduce kVAh based tariff for consumer categories with load more than 20 kW at the time of MTR, based on feedback on kVAh billing. In this regard, AEML-D submitted that while kVAh billing for HT consumers has been implemented by it and it can be scaled up for LT consumers above 20 kW as well, it would not be advisable to do so in the middle of the Control Period, when the tariffs have already been once denominated in Rs/kWh terms for such consumers. Furthermore, change in basis of tariff application would cause confusion among consumers needing a lot of clarification on the part of the Distribution Licensees to

address consumer queries. Further, in case of LT consumers above 20 kW, the amount of PF Incentive is generally less than the surcharge levied on such consumers. For FY 2021-22, the actual PF incentive for LT consumers has been Rs. 12.71 Crore, whereas the PF Surcharge has been above Rs. 14 Crore. This indicates that a large proportion of LT consumers above 20 kW are in any case not responding to the tariff signal for improvement in PF provided through PF Incentive / Surcharge. This is largely due to the limited response ability of these consumers, which is not going to improve if kVAh billing is implemented. In contrast, when PF Incentive / Surcharge was applicable for HT consumers (prior to kVAh billing), more than 99% of the total amount corresponded to PF incentive and only a very small proportion of consumers were being subjected to PF surcharge.

Therefore, AEML-D has not proposed kVAh billing for LT consumers above 20 kW at this stage. A decision can be taken on expanding the scope of kVAh billing at the time of next MYT Order, based on a more detailed analysis of the type and category of consumers and their response to PF based tariff signals.

Commission's Analysis and Ruling

In the MYT Order, the Commission approved kVAh billing for all HT categories of AEML-D. The Commission had stated its intention to implement kVAh billing for LT consumers with load of 20 kW and above at the time of MTR proceedings, based on the feedback received after implementation of kVAh billing for HT consumers.

Based on AEML-D's submission, the Commission has decided not to extend the kVAh billing to LT consumers with load of 20 kW in this MTR Order, and a decision in this regard shall be taken at the time of next MYT Order.

While determining per unit charges in kVAh, the Commission has used category-wise PF, which is lower than unity. This makes the per unit kVAh tariff lower than the tariff, which would have been determined in kWh terms, though the consumer will have to pay the same amount and revenue generated shall be the same.

The approved category-wise Energy Charges are summarised subsequently for each Year of the Control Period.

6.11.6 Cross Subsidy reduction trajectory

AEML-D's Submission

Based on the proposed tariff, the category-wise cross subsidy reduction trajectory proposed by AEML-D for FY 2023-24 and FY 2024-25 is shown in the Table below:

Table 6-46: Category-wise Cross Subsidy reduction trajectory Proposed by AEML-D

Particulars	FY 22-23	FY 23-24	FY 24-25
	(Existing)	(Proposed)	(Proposed)
EHT Category			
EHT I - Industry		104%	103%
EHT IV - Metro & Monorail		101%	100%
HT Category			
HT I: HT-Industry	117%	110%	107%
HTII: HT- Commercial	146%	133%	127%
HT III: HT-Group Housing Society	118%	119%	120%
HT IV - HT Metro & Monorail	122%	-	-
HT V (a):PS - Govt. EI & Hospitals	120%	120%	120%
HT V (b):PS - Others	125%	124%	122%
HT VI: EV Charging Stations		56%	61%
LT Category			
LT -I Residential	85%	88%	90%
LT II (a) - 0-20 kW	109%	104%	103%
LT II (b) - 20-50 kW	128%	123%	119%
LT II (c) - above 50 kW	137%	128%	124%
LT III (a) - LT Industrial upto 20 kW	99%	94%	89%
LT III (b) - LT Industrial above 20 kW	120%	113%	108%
LT IV (a): PS - Govt. EI & Hospitals	130%	92%	92%
LT IV (b): PS - Others	124%	114%	112%
LT V (a): Agriculture - Pumpsets	72%	73%	66%
LT V (b): Agriculture - Others	91%	94%	90%
LT VI: EV Charging Stations		40%	44%

Commission's Analysis and Ruling

As stated earlier, the Commission has determined the cross-subsidy and category-wise tariffs with respect to the ACoS, in accordance with the MYT Regulations, 2019, rather than the Supply ACoS as proposed by AEML-D. Based on the approved tariffs and the ACoS, as described above, the category-wise cross-subsidy approved by the Commission for AEML-D based on revised tariffs for FY 2023-24 and FY 2024-25, is presented in the following Table:

Table 6-47: Category-wise Cross Subsidy approved by the Commission (%)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	(Existing)	(Approved)	(Approved)
EHT Category			
EHT I - Industry	89%	84%	82%
EHT IV - Metro & Monorail	91%	85%	84%
HT Category			
HT I: HT-Industry	105%	105%	103%
HTII: HT- Commercial	112%	109%	110%
HT III: HT-Group Housing Society	115%	107%	109%
HT V (a):PS - Govt. EI & Hospitals	99%	104%	102%
HT V (b):PS - Others	104%	108%	112%
HT VI: EV Charging Stations	82%	99%	103%
LT Category			
LT -I Residential	87%	91%	91%
LT II (a) - 0-20 kW	104%	108%	106%
LT II (b) - 20-50 kW	119%	117%	116%
LT II (c) - above 50 kW	125%	118%	116%
LT III (a) - LT Industrial upto 20 kW	97%	97%	98%
LT III (b) - LT Industrial above 20 kW	112%	109%	109%
LT IV (a): PS - Govt. EI & Hospitals	97%	100%	102%
LT IV (b): PS - Others	102%	103%	106%
LT V (a): Agriculture - Pumpsets	78%	84%	87%
LT V (b): Agriculture - Others	96%	101%	104%
LT VI: EV Charging Stations	81%	92%	96%

Note: * Existing cross-subsidy has been calculated based on prevalent tariff and projected sales for FY 2023-24, and is not the cross-subsidy approved for FY 2023-24 in the MYT Order

There is cross-subsidy inherent in the tariff structure on account of historical reasons and the manner in which the Licensee has evolved, and the present sales mix. There is a need to have a proper roadmap for reduction of cross-subsidy. AEML-D is directed to submit the detailed roadmap for reduction of cross-subsidies between consumer categories, along with the appropriate justification, along with the next MYT Petition, so that the Commission can finalise the road map after due public consultation.

6.11.7 Tariff for prepaid meter

AEML-D's Submission

AEML-D submitted that the Metering DPR submitted for in-principle approval of the Commission for the period from FY 2022-23 to FY 2024-25 is for new connections by installation of smart meters and replacement of meters with Smart meters. The Smart meters have prepaid facility as well. AEML-D requested the Commission to provide a 5% discount on the tariff to be approved, so that the consumers are inclined to move towards the concept of prepaid meters. This will also go towards passing on the saving in working capital achieved through prepaid meters.

Commission's Analysis and Ruling

The Commission notes that Smart metering rollout being proposed has provision of prepaid metering. Hence, option of pre-paid meter based billing needs to be enabled. The Commission also notes that in the past, discount of 5% was approved by the Commission for pre-paid metering for consumers of some of Distribution Licensee in the State. But the said pre-paid metering was envisaged for limited number of consumers and with intention of improving collection efficiency. But when almost all consumers are being installed with Smart meter having pre-paid facility, providing such discount of 5% per month would not be useful as same cost is again loaded into ARR and hence tariff of consumers. However, the Commission is of the view that it is essential to provide rebate which is not only commensurate with the prevailing market rates but also promote consumers to opt for prepaid metering. Accordingly, the Commission approves rebate of 2% for consumers who are opting for pre-paid metering which is inclusive of prompt payment discount which otherwise is payable for early payment.

6.11.8 EV Charging Tariff

AEML-D's Submission

The Commission has approved EV charging tariff at a specific rate for public EV chargers, and for consumers using the charging facility to charge their own vehicles, the Order provides for levy of same tariff as levied on the premises. The Public EV charging tariff also includes a Demand Charge component.

AEML-D submitted that the Public EV chargers installed by it under the DSM programme and even otherwise installed by external agencies always suffer from low load factor because the number of vehicles requiring charging or the number of times a given vehicle is charged is significantly less, as a result of low adoption of EVs, high cost of EVs and general inertia from consumers from moving from their existing conventional vehicle to a EV. The per unit tariff for EV charging stations is usually quite high, because of high

manifestation of demand charges over lower number of units. Load factor is generally very low and is not likely to improve anytime soon. As a result, even the DSM program of AEML-D is seeing low acceptance. Therefore, AEML-D requested the Commission to approve a single part tariff for EV charging stations.

AEML-D also requested the Commission to remove the distinction between public EV charging station and that used for charging own vehicle at its premises. Consumers, even those who install a charger for charging their own vehicle, ask for a separate meter for the same because of lack of power points in the parking area. Also, if premises tariff is applied to the separate EV connection, then the consumer will always have slab benefit, thereby remaining in the lowest slab for the EV connection. This problem is also resulting in the consumers opting for separate individual connections instead of going for a common connection in the society under the DSM program (because common connection will be under EV public charging tariff, where there is no slab benefit).

Also, in the DSM program, EV charging is allowed during only night time. However, the users have requested for day time charging in case of emergency and allowing such charging during daytime will defeat the purpose of DSM program. Thus, it is proposed that for the EV Chargers installed under the DSM program, the user will be charged twice (two times) the approved Public EV Charging tariff for charging vehicle during day time.

The additional revenue from allowing charging during daytime will compensate the fixed charges waiver as proposed under Sr. No. (1) above. This will ensure that the programme will not result in undue burden on other consumers.

Commission's Analysis and Ruling

As regards AEML-D's proposal for a single-part tariff for EV Charging Stations, the Commission has not accepted the same, as all categories have to pay a two-part tariff.

As regards the distinction between Public EV charging station and that used for charging own vehicle at own premises, in the MYT Order, the Commission had clarified that in case the vehicle is charged at own premises, the tariff applicable for the respective category shall be applicable. However, it is understood that the Licensees are allowing sub-metering or separate connections for EV charging stations desired by the consumers. If the consumer consumes electricity for EV charging under his normal bill, then he is getting the slab benefit, which is not intended for EV connections. At the same time, once the consumption reaches a certain level, then the consumer will have to pay at the highest slab.

Considering the intent to promote usage of EVs, the Commission allows consumers the

option to have a separate EV connection, and the tariff for such connections shall be same as the tariff applicable for EV Charging Stations. The Commission has determined the tariff for EV Charging Stations close to the ACoS, as detailed subsequently.

6.11.9 Other Issues

6.11.9.1 Charges for physical copy of E Bill

AEML-D's Submission

AEML-D has proposed to levy nominal charges of Rs. 10 per bill per month for providing a physical copy of the bill, to discourage the practice of seeking physical copy of bills by consumers. This is expected to act as a deterrent for consumers against opting for physical copy, when they can easily obtain an E bill on their respective emails. Also, these charges will be applicable only for consumer accounts where email ID is updated and not for the other consumers, who do not have a valid email or no decent access to internet to download a soft copy of the bill.

Commission's Analysis and Ruling

The Commission has not accepted AEML-D's request for levying a charge for providing a physical copy of the electricity bill every month.

The Tariff Schedule provides for a discount of Rs. 10 per consumer per bill for those opting for E-bills through written/email confirmation, and for no hard copy of the bills being generated for such consumers. AEML-D shall make more promotion about such discount to encourage consumers to opt for e-bill.

6.11.9.2 Charges for payment by cheque / ceiling in case of cheque payment

AEML-D's Submission

AEML-D requested the Commission to consider the request of putting a ceiling of Rs. 5000/- on cheque payment. Cheque payments represent about 10% of total bill payments in case of AEML-D and add un-necessary cost in the system relating to banking, processing, collection and handling charges. Furthermore, issues related to illegibility, cutting/rubbing on cheque, worn out cheque leaves, realisation in case cheque issued is not payable at par, etc. also arise, which become a cause for dispute.

Alternatively, charges of Rs. 100 per cheque may be prescribed, which, in AEML-D's opinion, appear significant enough to act as a deterrent and hence, achieve the same objective of discouraging / reducing payments by cheque.

Commission's Analysis and Ruling

Cheques are valid financial instruments and levy of additional charges for payment by cheque is not appropriate. The Commission is allowing the A&G expenses to the Licensee, for undertaking all such activities.

6.11.9.3 Remittance of PF Surcharge or Incentive from TPC-D to AEML-D or viceversa for change-over consumers

AEML-D's Submission

AEML-D submitted that presently, in case of changeover consumers, the PF incentive paid by TPC-D to consumers or Surcharge levied, is retained by TPC-D, despite the fact that PF is a network related issue and impact of low or high PF affects network performance. TPC-D acts only as a Supply Licensee for such consumers and is therefore, not entitled to retain any surcharge so collected for low PF or provide any incentive so paid for high PF. It is therefore, submitted that TPC-D be directed to remit PF Surcharge so collected from change-over consumers to AEML-D and similarly AEML-D will remit to TPC-D (and recover from its ARR), the PF incentive so required to be paid by TPC-D to such consumers. The net payable / receivable can be adjusted as a separate line item in the existing process of remittance of Wheeling Charges.

Commission's Analysis and Ruling

The existing system has been in place since the beginning of the changeover mechanism, and the Commission is not inclined to modify such dispensation in the MTR Order.

6.11.9.4 Additional Fixed charges for Stand-by supply/ Alternative Fire Fighting connections

AEML-D's Submission

AEML-D submitted that during the course of consultations over the MERC Supply Code and SoP Regulations, 2021, AEML-D had suggested that demand / fixed charges are inadequate to cover the fixed cost associated with fire-fighting connections. These connections remain idle, recording zero consumption and hence, there is absolutely no recovery from these connections, except the minimum demand charges. The Commission had held that these issues relate to tariff and hence, are to be suitably handled at the time of tariff determination.

In case of other regular connections, the fixed cost not recovered through fixed charges is recovered from energy charges, but that is not the case with such connections because their energy consumption is nil. Hence, there is a need to treat cost recovery from these connections differently as compared to regular connections of the same category. Accordingly, AEML-D, in this Petition, has sought additional Demand / Fixed Charges (twice the applicable charges) from connections given to buildings for Alternate Fire Fighting. This is important to ensure that the fixed cost of retail services, fixed cost of power purchase contracts, etc., which are otherwise not recovered from these connections due to billing of minimum charges only, are, at least partially recovered, so that tariff burden on other regular supply connections is lessened.

In any event, even for regular connections, the recovery of fixed cost through fixed / demand charges is limited to 27%, as discussed above. In case of such connections, where only minimum demand charges are levied, that percentage reduces considerably and therefore, there is a need to ensure that fixed / demand charges of these connections are raised so at least that much fixed cost, which is otherwise recovered from regular connection, is recovered from these connections also.

Commission's Analysis and Ruling

Fire-fighting connections are essential for the safety and security of the inhabitants of the respective establishment. By design, they are not expected to function regularly, and are required to be brought into action only when an emergency arises. It is natural that the electricity consumption of these connections will be minimal. As regards the underrecovery of the fixed costs on account of minimal energy consumption, the Commission is of the view that the same is not likely to be of any significant level, and the same is in any case recovered through the tariff of all consumers. The Licensee is not put to any loss on this account. Moreover, levying twice the Fixed/Demand Charges because the energy consumption is minimal is not reasonable.

Hence, the Commission has not accepted AEML-D's suggestion to levy Fixed/Demand Charges at twice the normal rate for Fire Fighting connections.

6.11.9.5 IT/ITeS Certificate requirement

AEML-D's Submission

AEML-D submitted that in the MYT Order dated March 30, 2020, the Commission had removed the requirement of having certification under GoM Policy for claiming Industrial Tariff for IT and ITeS Units.

Thus, the Commission had removed the requirement of providing IT/ITeS certificate for seeking industrial tariff connection for such units. In absence of the same, the assessment of purpose of a connection is now done based on site inspection and on the basis of whether the purpose qualifies under the listed purposes under Clause 4 (iii) of the GoM IT/ITeS Policy of 2015.

It is observed from above that many of the listed purposes are very general such as "Payroll, "Human Resource Services", Insurance Claim processing", Website services", "legal databases", etc., and there is no standard way to verify that the unit existing at the site is actually engaged in providing any of the above listed purposes. Furthermore, even if the original Company, which owned the site / plot / premises is a Company engaged in any of the above businesses, the current tenant who is supplied electricity may not at all be engaged in an IT/ITeS activity and hence eligible for industrial tariff.

AEML-D submitted that earlier it used to obtain GoM issued IT/ITeS certificate to verify the nature of the activity performed at the site. As the Certificates had a limited validity, the tariff was restored to Commercial category upon expiry of certificate and later restored back to Industrial (with retrospective effect) when renewal certificate was furnished. This ensured that there was no malpractice and only genuine cases were given industrial tariff. However, absence of requirement of IT/ITeS Certificate has left the discretion of providing Industrial tariff to such a connection with the Distribution Licensee, whose only tool for the purpose is site inspection. Sometimes, personnel of AEML-D are not even allowed to enter the office on the pretext of confidentiality and they are then to make the assessment only by external observation, where it becomes even more difficult to assess the purpose of connection, particularly when the activity is so general in nature.

The Commission, in the MYT Order, had cited an ATE Judgment to remove the requirement of IT/ITeS Certificate. However, in view of the issues related to identification of purpose of use described above, the Commission may provide the required discretion to Distribution Licensees to assess the purpose as best as possible and, in case the same is not possible to assess by visual inspection, the consumer may be required to provide IT/ITeS Certification in order to avail Industry tariff.

Commission's Analysis and Ruling

The ATE Order is quite clear that tariff categorisation cannot be linked to any certificate. Hence, the Commission removed the requirement of IT/ITeS certificate issued by GoM for being categorised under Industrial category. There is no change in this dispensation.

6.11.9.6 Recovery of arrears of migrated consumers

AEML-D's Submission

AEML-D submitted that the Commission in the MYT Order for TPC-D in Case No. 326 of 2019 dated 30-03-2020, ruled that changeover consumers shall have to pay the balance amount of arrears to the new Licensee, who shall remit the same to the original Licensee. The new Licensee is thus, authorised to bill such amount to the reverse change-over consumer and remit the amount to the earlier Licensee against collection.

In this regard, several meetings were conducted with TPC-D, however, out of the total 95,684 cases amounting to Rs. 9.37 Crore reported to TPC-D, only 25,052 cases amounting to Rs. 2.81 Crore has been debited so far by TPC and AEML-D has received only Rs. 1.79 Crore as on 04-01-2023.

AEML has been continuously following up with TPC for the recovery of the balance amount and has shared the pending cases data with TPC on 07-01-2023. No update has been received from TPC on the same and this is a clear violation of the Commission's ruling as per the aforesaid Order.

AEML-D requested the Commission to direct TPC-D to settle the amount payable to AEML-D at the earliest.

Commission's Analysis and Ruling

The Commission directs TPC-D to expeditiously process such requests and remit the amounts due to AEML-D at the earliest and in any case within 3 months of this Order.

6.11.9.7 Inclusion of 220 kV and 22 kV voltage level for EHT and HT Metro/Mono Rail/Railways

AEML-D's Submission

The Commission in the MYT Order in Case No. 325 of 2019 has approved tariff for Metro, Mono Rail and Railways at Extra High Voltage (132 kV/110 kV) and High Voltage (33 kV/11 kV). AEML-D requested the Commission to include the 220 kV and 22 kV voltage levels also to read as Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22 kV/11 kV).

Commission's Analysis and Ruling

The Commission has accepted AEML-D's submission and has made the corresponding modifications to the approved Tariff Schedule.

6.12 COMMISSION'S TARIFF PHILOSOPHY

The Commission's views on other aspects of Tariff Philosophy are detailed below.

6.12.1 Stabilising (buffer) for Fuel Cost Adjustment

As per MYT Regulations, 2019, the aggregate gain or loss to a Distribution Licensee on account of variation in cost of fuel, power purchase, and inter-State Transmission Charges shall be passed through under the Fuel Adjustment Charge (FAC) component of the Z-factor Charge (Z_{FAC}), as an adjustment in its tariff on a monthly basis. Relevant part of the MYT Regulations, 2019 is reproduced below:

"10.2 The aggregate gain or loss to a Distribution Licensee on account of variation in cost of fuel, power purchase, and inter-State Transmission Charges, covered under Regulation 9.1, shall be passed through under the Fuel Adjustment Charge (FAC) component of the Z-factor Charge (Z_{FAC}), as an adjustment in its Tariff on a monthly basis, as specified in these Regulations and as may be determined in orders of the Commission passed under these Regulations, and shall be subject to ex-post facto approval by the Commission on a quarterly basis:..."

Similar arrangement of passing on variation in fuel and power purchase cost existed in all earlier Tariff Regulations of the Commission. Such mechanism is in line with the provision of the EA, 2003, which mandates recovery of the fuel cost in timely manner so that the Distribution Licensees are able to recover their legitimate power purchase cost variation in a timely manner. This has helped regular recovery of power purchase variations without accumulating it till the next tariff revision. This provision also addresses the financial issues of Distribution Licensee wherein the payments for power purchase are required to be made in timely manner at an increased rate. At the same time, it also helped in reducing carrying cost burden on consumer, which otherwise have to be borne, if instead of such monthly levy, accumulated gap is recovered through annual tariff revision. Although, consumers are also acquainted with this mechanism, there is a general and reasonable expectation that once the tariff is approved by the Commission, to the extent possible, it should remain consistent during the year and there should not be huge variations due to FAC. The unknown variation in the tariff on account of FAC has adverse financial implications on all the categories especially Industrial and Commercial categories where the impact of FAC is

generally higher. Variation in tariff is magnified when there is negative FAC leading to reduction in tariff during a particular month and positive FAC in the immediate next month thereby increasing the tariff.

Variation in FAC is either on account of change in fuel related costs or mix of power procurement. To alleviate this issue to the extent possible and to minimise the impact of FAC, the Commission, while approving this Tariff Order, has built-in annual fuel cost escalation. The Commission is fully aware that in spite of approving this annual escalation rate, the possibility of FAC cannot be ruled out completely since change in power procurement mix on account of changing sales may lead to FAC besides change in rate of power procurement in future years. However, it is expected that in order to provide stable tariff to consumers, Distribution Licensee may wait at least six month from issuance of this Order to balance out impact of variation in power purchase cost before levying it to consumers.

Therefore, using its powers for Removing Difficulty under Regulation 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism specified under Regulation 10 of the MYT Regulations, 2019:

- a. Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:
 - (i) Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost;
 - (ii) Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost;
 - (iii) Such carry forward of negative FAC shall be continued till next tariff proceeding.
 - (iv) In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism.

In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders. Further, till date, the Distribution Licensees have been levying FAC up to the prescribed limit of 20% of variable component of tariff without prior approval in accordance with the MYT Regulations, 2015, and submitting the

FAC computations on a quarterly basis within 60 days of the close of each quarter, for post facto approval. However, as the Commission has created a FAC fund as stated above to address the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC. This will ensure that the FAC mechanism is implemented with the changes as desired by the Commission, and the consumers are not levied FAC without prior approval.

The details of the FAC as per the Regulations, shall be submitted by the 15th of every month prior to the month in which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month.

6.13 TIME OF DAY TARIFF

AEML-D has not proposed any revision in the Time of Day (ToD) tariffs applicable for its various consumer categories. In this context, the Commission had conducted a detailed study of the load curves of different Licensees, and the scope for aligning the Licenseewise ToD tariffs to the load curve and the supply curve. Considering that the contribution of RE power in AEML-D's supply mix is expected to increase further, AEML-D should study this aspect thoroughly and propose appropriate ToD tariffs in its next MYT Petition.

6.14 GREEN ENERGY TARIFF

- 6.14.1 The Commission determined Green Power Tariff for the consumers opting for meeting its 100% of power requirement through RE sources in the Case No. 134 of 2020 dated 22.03.2021, which is stipulated as Rs 0.66 per kWh as per the conditions and methodology specified under said Order.
- 6.14.2 On 6 June, 2022, Ministry of Power, GoI has notified Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022. The said rules mandate the State Commission to determine Green Power Tariff. The Commission has already determined the same vide its Order dated 22 March, 2021 as mentioned above.
- 6.14.3 Such Green Power Tariff would be in addition to regular tariff approved in MYT Order. The Commission observes that the concept of Green Tariff has been well appreciated by many stakeholders across state as it provides opportunity for

- consumers willing to meet their power requirement through green energy sources, however, the concept is still at nascent stage with limited participation.
- 6.14.4 Besides, there have been several developments since introduction of concept including COVID pandemic situation, which also has bearing on renewable energy development in the country. Other market related developments such as introduction of GDAM/GTAM and REC multiplier etc. are still evolving. Under the circumstance, the Commission is of the considered view that any change in mechanism of Green Tariff is not desirable at this stage and the same should continue for remaining period of the 4th Control Period. Thus, the Commission hereby approves the Green Tariff of Rs 0.66/kWh to be applicable during remaining period of 4th Control Period (i.e. FY 2023-24 and FY 2024-25).
- 6.14.5 However for ease of implementation and to comply with provisions of MoP Rules, the Commission stipulates following terms and conditions for levy of Green Power Tariff.
- 6.14.5.1 All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting RE power on payment of Green Power Tariff.
- 6.14.5.2 The consumers who have opted for Open Access can also requisition for RE Power on payment of Green Power Tariff for balance power supplied by Distribution Licensee.
- 6.14.5.3 If the Obligated Entity wants to meet its RPO by requisitioning RE Power from the Distribution Licensee, then such entity shall pay additional Rs 0.50 /kWh for the Green Power Tariff i.e., the Obligated entity shall pay total Green Power Tariff of Rs 1.16/kWh. Since the obligated entity also has the option to meet RPO by purchasing REC and is currently being traded at Rs 1/kWh, the green tariff is proposed with slight premium to REC Price.
- 6.14.5.4 Revenue earned through Green Power Tariff shall be treated as tariff income of Supply Business and thereby be fully accounted for reduction in ARR of supply business.
- 6.14.5.5 If the consumer is not an obligated entity under RPO Regulations, then that energy shall be counted towards RPO fulfilment of Distribution Licensee.
- 6.14.5.6 The Consumer will have option to select the quantum of green power to be purchased in steps of 25% and going up to 100% of the consumption.
- 6.14.5.7 Such an option will also be available for Open Access consumer for its balance consumption from the Distribution Licensee.
- 6.14.5.8 The Distribution Licensee will levy Green Power Tariff only for percentage of consumption opted by the Consumer.

- 6.14.5.9 Distribution Licensee shall issue Annual certificate to consumers stating percentage of power requirement of such consumer has been sourced through RE sources
- 6.14.5.10 Any requisition for green energy from a distribution licensee shall be for a minimum period of one year.
- 6.14.5.11 Distribution Licensee shall process the request of Consumer for Green Power Tariff not later than 30 days from the receipt of the request or next billing cycle, whichever is earlier. Distribution Licensee shall provide the facility of requesting for Green Power Tariff through its Web Portal, Mobile App or any other digital mode for convenience of consumers.
- 6.14.5.12 Temporary Consumers can also opt of Green Tariff as per methodology specified above and Distribution Licensee shall *issue certificate specifying that power requirement has been sourced through RE sources after receipt of payment.*
- 6.14.5.13 The Rules notified by MoP, GOI also specify that rating of the consumer based on the percent of green energy purchased by such consumer. The Commission notes that RPO specified for FY 2023-24 and FY 2024-25 is 22% and 25% respectively and is likely to be revised upwards going forward in next Control Period. As Distribution Licensee will already be meeting such consumption, it would not be correct to issue any certificate to individual consumer for RPO to be met by Distribution Licensee as a whole. The Commission has allowed the consumer the choice to opt for RE purchase in the steps of 25%. Accordingly, the Commission introduces the rating to be given by Distribution Licensee at the end of the financial year along with the electricity bill for the month of March specifying the percentage of power purchased from RE sources from his total consumption and rating as given below:

% of RE Purchase Opted	Rating
>50% to 75%	Semi-Green
>75% to 100%	Green

6.15 Advance Payment:

6.15.1.1 Regulation 16 of the MERC (Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021 allows the consumer to make the advance payment of charges for electricity supplied. The Commission notes that interest is payable at Bank Rate for such

- advance payment and such rate being lower than prevailing market rate, there is not much response from the Consumer to avail this facility.
- 6.15.1.2 The Commission is of the view that there is need to encourage the consumers to make advance payment, which will not only increase the collection of Distribution Licensee but also reduce the working capital requirement. Thus, the Commission, hereby deems it fit to invoke its Power to Relax under Regulation 30 of MERC (Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021 to allow higher interest rate based on the amount of advance payment.
- 6.15.1.3 Thus, the Commission hereby allows the advance payment/pre-payment of the bills for consumers for amount not exceeding 12 times average monthly bill for the past twelve months. Such facility shall be available for eligible consumers only for non-defaulting consumers on record for at least past 12 months. Such consumers shall be eligible to avail discount in graded manner on their monthly bills, so long as they maintain advance payment amount in following manner:

Advance Payment Amount maintained with Utility as on date of monthly bill Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, 9 to 12 months]	 Discount in monthly bill applicable at the rate of Percent Discount in monthly Bill Amount = 1/12 x (SBI 1-yr MCLR as on 1st Apr) + 150 basis points 	• (1/12) x 8.5% = 0.708% (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, 6 to 9 months]	Percent Discount in monthly Bill Amount = 1/12 x (SBI 1- yr MCLR as on 1st Apr) + 120 basis points	• (1/12) x 8.2% = 0.683% (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, 3 to 6 months]	 Percent Discount in monthly Bill Amount = 1/12 x (SBI 1- yr MCLR as on 1st Apr) + 90 basis points 	• (1/12) x 7.9% = 0.658% (monthly bill discount)
Advance Amount = Equiv. of (Avg. Monthly Bill for past 12 months) x [No. of months, upto 3 months]	 Percent Discount in monthly Bill Amount = 1/12 x (SBI 1- yr MCLR as on 1st Apr) + 60 basis points 	• (1/12) x 7.6% = 0.633% (monthly bill discount)

*Note: Assume SBI 1-year MCLR of 7% p.a

6.16 REVISED TARIFF FOR FY 2023-24 AND FY 2024-25

The Commission has continued to determine the tariffs with an in-built incentive to consumers to reduce their consumption. The billing impact is designed to increase as the

consumption increases on account of the higher telescopic tariffs applicable to higher consumption slabs, while at the same time ensuring that even consumers in the higher consumption slabs are charged at a lower rate to the extent of the consumption corresponding to lower slabs.

As mentioned previously, the Commission has attempted to bring the tariff of most of the categories in the \pm 20% of ACoS range as prescribed by the Tariff Policy. Further, the Commission has also tried to ensure that the level cross-subsidy either remains constant or reduces in the subsequent year so as to steadily approach the ACoS as envisaged in the Tariff Policy.

The approved category-wise tariffs for FY 2023-24 and FY 2024-25 are given in the Tables below:

6.17 REVISED TARIFFS EFFECTIVE FROM 1 APRIL, 2023 (FY 2023-24)

No Sla LT 1 LT 2 LT 0-1	T Category & Consumption T Category Γ I (A)- Below Poverty Line Γ -I (B) Residential 100 11-300	Fixed/ Demand Charge per month Rs. 11	Energy Charge (Rs/kWh)	Wheeling Charges (Rs / kWh)
1 LT 2 LT 0-1	Γ Category Γ I (A)- Below Poverty Line Γ -I (B) Residential	month Rs. 11	(Rs/kWh)	kWh)
1 LT 2 LT 0-1	Γ I (A)- Below Poverty Line Γ -I (B) Residential 100	Rs. 11		,
1 LT 2 LT 0-1	Γ I (A)- Below Poverty Line Γ -I (B) Residential 100		2.20	2.21
2 L7 0-1 10	Γ-I (B) Residential 100		2.20	2.21
0-1 10	100	D = 05 \$\$		
10			2.45	2.21
	11 200	Rs. 85 ^{\$\$}	3.45	2.21
		Rs. 125 \$\$	5.55	2.21
	01-500		7.45	2.21
	00 and above	Rs. 150 \$\$	8.55	2.21
3 L I	Г II - LT Commercial			
_ `	20 kW load	Rs. 445	6.05	2.21
(B) > 2	20 kW and $\leq 50 \text{ kW}$ load	Do 275 man 1 VA	6.20	2.21
(C) > 3	50 kW load	Rs. 375 per kVA	6.45	2.21
4 L7	Γ III - LT Industry			
(A) Up	pto 20 kW load	Rs. 445	5.85	2.21
(B) At	bove 20 kW	Rs. 375 per kVA	6.15	2.21
5 L7	Γ IV – Public Services	-		
Go	overnment Hospitals & Educational	Rs. 445	6.20	2.21
(A) Ins	stitutions	KS. 443	0.20	2.21
(B) Ot	thers	Rs. 445	6.60	2.21
6 L7	ΓV - Agriculture			
(A) Pu	impsets	Rs 40 per HP	4.30	2.21
(B) Ot	thers	Rs. 90 per kW	6.10	2.21
7 L7	Γ VI: Electric Vehicle Charging	D = 75 1-X/A	5.04	2.21
	ations	Rs. 75 per kVA	5.04	2.21
TO	OD Tariffs (in addition to above base			
tar	riffs) – compulsory for LT II (B) and			
C	C), LT III (B), and LT IV (A) and (B),			
	nd optional for LT II (A) and LT III			
(A	a) categories			
06	500 hours to 0900 hours			0.00
09	900 hours to 1200 hours			0.50

Sl. No	Consumer Category & Consumption Slab	Fixed/ Demand Charge per month	Energy Charge (Rs/kWh)	Wheeling Charges (Rs / kWh)
	1200 hours to 1800 hours			0.00
	1800 hours to 2200 hours			1.00
	2200 hours to 0600 hours			-0.75

Sl. No	Consumer Category & Consumption Slab	Fixed/ Demand Charge per month	Energy Charge (Rs/kVAh)	Wheeling Charges (Rs / kVAh)
	EHT Category			
1	EHT I: Industry	Rs. 375 per kVA	6.60	1
2	EHT II: Commercial	Rs. 375 per kVA	6.70	1
3	EHT III: Group Housing Society	Rs. 375 per kVA	6.05	1
4	EHT IV Railways, Metro & Monorail	Rs. 375 per kVA	6.15	-
5	EHT V (A): Public Service - Government Hospitals & Educational Institutions	Rs. 375 per kVA	6.80	-
6	EHT V (B): Public Service - Others	Rs. 375 per kVA	7.23	-
7	EHT VI: Electric Vehicle Charging Stations	Rs. 375 per kVA	6.53	1
	HT Category			
8	HT I: HT-Industry	Rs. 375 per kVA	6.60	0.97
9	HT II: HT- Commercial	Rs. 375 per kVA	6.70	0.97
10	HT III: HT-Group Housing Society	Rs. 375 per kVA	6.05	0.97
11	HT IV: HT Ralways, Metro & Monrail	Rs. 375 per kVA	6.15	0.97
12	HT V (A): HT Public Service - Government Hospitals & Educational Institutions	Rs. 375 per kVA	6.80	0.97
13	HT V (B): HT Public Service - Others	Rs. 375 per kVA	7.23	0.97
14	HT VI: HT Electric Vehicle Charging Stations	Rs. 75 per kVA	6.53	0.97
	TOD Tariffs (in addition to above base tariffs) for all EHT Categories, and HT			
	I, HT II, HT V (A) and (B), and HT VI categories			
	0600 hours to 0900 hours			0.00
	0900 hours to 1200 hours			0.50
	1200 hours to 1800 hours			0.00
	1800 hours to 2200 hours			1.00
	2200 hours to 0600 hours			-0.75

Notes:

- 1. Fuel Adjustment Cost will be applicable to all consumers and will be charged over the above tariffs, on the basis of the FAC formula specified by the Commission, and computed on a monthly basis.
- 2. \$\$: Fixed Charge of Rs. 150 per month will be levied on residential consumers availing 3 phase supply. Additional Fixed Charge of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

6.18 REVISED TARIFFS EFFECTIVE FROM 1 APRIL, 2024 (FY 2024-25)

Sl. No	Consumer Category & Consumption	Fixed/ Demand	Energy	Wheeling
		Charge per	Charge	Charges (Rs /
NO	Slab	month	(Rs/kWh)	kWh)
	LT Category			
1	LT I (A)- Below Poverty Line	Rs. 12	2.20	2.60
2	LT -I (B) Residential			
	0-100	Rs. 90 \$\$	3.15	2.60
	101-300	Rs. 135 ^{\$\$}	5.40	2.60
	301-500		7.10	2.60
	500 and above	Rs. 160 \$\$	8.15	2.60
3	LT II - LT Commercial			
(A)	≤ 20 kW load	Rs. 475	5.75	2.60
(B)	$> 20 \text{ kW}$ and $\leq 50 \text{ kW}$ load	Do. 400 man 1.VA	6.00	2.60
(C)	> 50 kW load	Rs. 400 per kVA	6.20	2.60
4	LT III - LT Industry			
(A)	Upto 20 kW load	Rs. 475	5.80	2.60
(B)	Above 20 kW	Rs. 400 per kVA	5.95	2.60
5	LT IV – Public Services			
(A)	Government Hospitals & Educational	Rs. 475	6.20	2.60
(A)	Institutions			
(B)	Others	Rs. 475	6.60	2.60
6	LT V - Agriculture			
(A)	Pumpsets	Rs 45 per HP	4.30	2.60
(B)	Others	Rs. 100 per kW	6.10	2.60
7	LT VI: Electric Vehicle Charging	Rs. 80 per kVA	5.15	2.60
/	Stations	Ks. ou per KVA		
	TOD Tariffs (in addition to above base			
	tariffs) – compulsory for LT II (B) and			
	(C), LT III (B) , and LT IV (A) and (B) ,			
	and optional for LT II (A) and LT III			
	(A) categories			
	0600 hours to 0900 hours			0.00
	0900 hours to 1200 hours			0.50
	1200 hours to 1800 hours			0.00
	1800 hours to 2200 hours			1.00
	2200 hours to 0600 hours			-0.75

Sl. No	Consumer Category & Consumption Slab	Fixed/ Demand Charge per month	Energy Charge (Rs/kVAh)	Wheeling Charges (Rs / kVAh)
	EHT Category			
1	EHT I: Industry	Rs. 400 per kVA	6.55	-
2	EHT II: Commercial	Rs. 400 per kVA	6.70	-
3	EHT III: Group Housing Society	Rs. 400 per kVA	6.05	-
4	EHT IV - Railways, Metro & Monorail	Rs. 400 per kVA	6.15	-
5	EHT V (A): Public Service - Government Hospitals & Educational Institutions	Rs. 400 per kVA	6.80	-
6	EHT V (B): Public Service - Others	Rs. 400 per kVA	7.74	-

Sl. No	Consumer Category & Consumption Slab	Fixed/ Demand Charge per month	Energy Charge (Rs/kVAh)	Wheeling Charges (Rs / kVAh)
7	EHT VI: Electric Vehicle Charging Stations	Rs. 400 per kVA	6.86	1
	HT Category			
8	HT I: HT-Industry	Rs. 400 per kVA	6.55	1.14
9	HT II: HT- Commercial	Rs. 400 per kVA	6.70	1.14
10	HT III: HT-Group Housing Society	Rs. 400 per kVA	6.05	1.14
11	HT IV - Railways, Metro & Monorail	Rs. 400 per kVA	6.15	1.14
12	HT V (A): Public Service - Government Hospitals & Educational Institutions	Rs. 400 per kVA	6.80	1.14
13	HT V (B): Public Service - Others	Rs. 400 per kVA 7.		1.14
14	HT VI: Electric Vehicle Charging Stations	Rs. 80 per kVA	6.86	1.14
	TOD Tariffs (in addition to above base			
	tariffs) for all EHT Categories, and HT			
	I, HT II, HT V (A) and (B), and HT VI			
	categories			
	0600 hours to 0900 hours			0.00
	0900 hours to 1200 hours			0.50
	1200 hours to 1800 hours			0.00
	1800 hours to 2200 hours			1.00
	2200 hours to 0600 hours			-0.75

Notes:

- 1. Fuel Adjustment Cost will be applicable to all consumers and will be charged over the above tariffs, on the basis of the FAC formula specified by the Commission, and computed on a monthly basis.
- 2. \$\$: Fixed Charge of Rs. 160 per month will be levied on residential consumers availing 3 phase supply. Additional Fixed Charge of Rs. 160 per 10 kW load or part thereof above 10 kW load shall be payable.

The detailed computation of category-wise revenue with revised tariffs for FY 2023-24 and FY 2024-25 is set out at **Annexure I** of this Order.

The approved Tariff Schedule for FY 2023-24 and FY 2024-25 is given at **Annexure II** of this Order.

7 SCHEDULE OF CHARGES

AEML-D's Submission

The Commission had approved the Schedule of Charges in the MYT Order dated 30March, 2020 in Case No. 325 of 2019. While approving the Schedule of Charges in the MYT Order, the Commission had kept the Service Connection Charges at the same level as approved in the MTR Order dated 12th September 2018 and other charges were increased using an escalation rate equal to the Consumer Price Index for Industrial Workers (CPI-IW).

As the Service Connection charges have not been increased since the Order dated 12th September 2018, AEML-D has proposed an increase in Service Connection Charges based on the increase in Wholesale Price Index (WPI) from September 2018 till April 2022, i.e., a period of 4 years. The same increase is also proposed in other miscellaneous charges.

CPI and WPI are being published using 2016 base, since September 2020. Therefore, in the period above, the CPI-IW and WPI from September 2020 are normalised to 2011-12 series in order to have the same base throughout the period concerned.

The increase in CPI-IW and WPI (2011-12 series or normalised to 2011-12 series) between September 2018 and April 2022 is as shown in table below:

Table 7-1: Increase in CPI-IW and WPI between September 2018 and August 2022

Particulars	Sep-18	Apr-22	% Increase
CPI - IW	301	365	21%
WPI	120.9	151.9	26%

Accordingly, AEML-D has proposed increase in all charges as approved under Schedule of Charges using the above inflation factors.

Changes / modifications proposed in the Schedule of Charges

AEML-D has submitted that any consumer who switched over to TPC earlier and is willing to migrate back to AEML-D's network, should not be levied Service Connection charges again, if adequate network of AEML-D is already present in the premises to provide connection. Because, in that case, the only activity required would be to re-install the meter. Further, the consumer would have borne service connection charges of TPC-D as well. However, in case, network augmentation is required to reconnect the consumer to AEML-

D's network, then normative service connection charges as applicable for load enhancement should be levied.

AEML-D further submitted that as per the Supply Code and SoP Regulations, 2021, it proposed to charge actual cost of providing connection in cases of Alternate Fire Fighting and other stand-by connections (e.g., MCGM pumping stations), if sought by consumer. Unlike regular connections, these connections only add fixed cost in the system, without commensurate energy sales as they remain idle most of the time.

In line with the Order dated 12.06.2017, there could be LT consumers requiring supply, where the load demanded requires construction of substation. If the consumer is willing to pay for such substation and associated equipment as Dedicated Distribution Facility, the application is not required to be referred to the other Licensee or to M-DNAC and the Licensee receiving such application can proceed to provide supply. However, in such cases, there should be enabling provision in the Schedule of Charges to recover the actual cost of dedicated infrastructure from the consumer. Accordingly, AEML-D has made appropriate changes in the proposed Schedule of Charges to take care of the same.

In the approved Schedule of Charges, under serial no. C-1, the load limits are proposed to be changed in line with the changes made in the Supply Code Regulations, as below:

Existing category Proposed category Basis Sr. No. Motive power >134 HP but <= Motive power >134 HP but <= Supply Code 201 HP or other loads >100 kW 201 HP or other loads >100 kW Regulations, 2021 but <=150 kW but <=160 kW C(1)(2005)Supply Code Above 150 kW Above 160 kW Regulations, 2021

Table 7-2: Proposed Schedule of Charges load limits

As per the presently approved Schedule of Charges, the charges applicable for load enhancement are applicable on the total load demanded (new load + existing load). AEML-D has submitted that this may be required only in cases where additional load requirement leads to infrastructure upgradation. Where the additional load can be accommodated on existing infrastructure itself, the charges should apply on incremental load only as the consumer has already paid for its existing load earlier, at the time of seeking connection.

In cases of reconnection of supply, following disconnection due to non-payment, it is proposed that if such reconnection is sought more than once in a financial year, then from 2nd instance onwards, the charges applicable for reconnection should be enhanced to twice the original amount. AEML-D submitted that this would help bring in some deterrence against non-payment of electricity bill. Also, the Licensee incurs cost related to manpower in order to carry out such reconnections, which must be off-set by increasing charges from 2nd instance onwards, else the repeated defaults of a few consumers put an un-necessary cost burden on other paying consumers.

First visit charges for new connection or additional supply request – The present Schedule of Charges only provide charges for first visit. However, there are repeated visits also, many a times, because of some non-compliance on the part of the consumer. These visits result in added cost of manpower, which must be offset to avoid cost burden on existing consumers. Also, there should be some deterrence so that customer compliance can be ensured. Hence, AEML-D has proposed that the site visit charges for new connection or additional supply request should be enhanced to twice the original amount for 2nd and subsequent visits.

Based on the above reasoning, the proposed Schedule of Charges, along with basis of proposal is given in the table below:

Table 7-3: Proposed Schedule of Charges

Sr. No.	Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)	Basis of proposal
A	Application processing for New connections/ Reduction or addition of Load/Shifting of service/ Extension of service/Change of Tariff Category/Temporary Connection			
	a) Single-phase	70	85	Increase in line with CPI - IW
	b) Three-phase	110	135	Increase in line with CPI - IW
	c) HT supply	280	340	Increase in line with CPI - IW
В	Change of Name			
	a) Single-phase	70	85	Increase in line with CPI - IW
	b) Three-phase	70	85	Increase in line with CPI - IW

Sr.	Particulars	Existing	Proposed	Basis of proposal
No.		Charges (Rs.)	Charges (Rs.)	
	c) HT supply	220	265	Increase in line with CPI - IW
С	Service Connection Charges			
1	L.T. Supply			
	Single Phase			
	For loads up to 5 kW	2,000	2,500	Increase in line with WPI
	For loads above 5 kW and upto 10 kW	2,000	2,500	Increase in line with WPI
	Three Phase			
	Motive power upto 27 HP or other loads upto 20 kW	3,000	3,700	Increase in line with WPI
	Motive power > 27 HP but <= 67 HP or other loads >20 kW but <= 50 kW	6,500	8,100	Increase in line with WPI
	Motive power > 67 HP but <= 134 HP or other loads >50 kW but <= 100 kW	12,000	15,000	Increase in line with WPI
	Motive power >134 HP but <= 201 HP or other loads >100 kW but <=160 kW	12,000	15,000	Increase in line with WPI
	Above 160 kW	2,50,000	3,15,000	Increase in line with WPI
	Alternate Fire Fighting Connection (Single phase or three phase)	-	At actual	In line with Supply Code Regulations, 2021
	Provision for Dedicated Distribution Facility to LT consumer	-	At actual	In line with Order dated 12.06.2017, in Case No. 182 of 2014
2	H.T. Supply			
	If line extended from existing network			
	For loads upto 500 kVA	3,50,000	4,35,000	Increase in line with WPI
	For loads above 500 kVA	4,00,000	5,00,000	Increase in line with WPI
	Provision for Dedicated Distribution Facility to HT consumer	At actual	At actual	Kept at the same level
3	Temporary Connection (LT or HT)	At actual	At actual	Kept at the same level
4	Extension of Load: (a) charges will be applicable on the incremental load, in case	As in Sr. No.1,2, 3 & 4 above	As proposed in Sr. No.1,2, 3 & 4 above	In line with WPI
	•			

Sr.	Particulars	Existing	Proposed	Basis of proposal
No.		Charges (Rs.)	Charges (Rs.)	
	no upgradation of network is			
	required.			
	(b) If upgradation is required,			
	charges will be applicable on			
	total load (existing load +			
	incremental demanded)			
	Supervision Charges in case			
5	work is carried out by Licensed			
	Electrical Contractor (LEC)			
	For providing HT supply	15,000	18,200	In line with CPI-IW
	For providing LT supply to three			
	phase Industrial/Commercial	6,000	7,300	In line with CPI-IW
	Consumers only		(1) NU (I	
			(1) Nil (In case	
			no network extension /	
			augmentation	
			required)	
	Service connection charges in		(2) As per Sr.	
6	case of switch-over: for	_	No. 1, 2 or 4,	New provision
	consumers reverting back to the		as the case	F
	network of AEML-D		may be, in	
			case network	
			extension /	
			augmentation	
			is required	
D	Miscellaneous and General			
1	Charges			
1	Re-connection Charges	150	180	In line with CPI-IW
	a) Re-installation of fuse cut-out			
	b) Re-installation of meter	450	550	In line with CPI-IW
	c) HT Supply	730	890	In line with CPI-IW
	d) Re-connection of Service Cable	1120	1,360	In line with CPI-IW
2	Shifting of Meter, if carried out only on consumer's request			
	Single-Phase	150	180	In line with CPI-IW
	Three-Phase	290	350	In line with CPI-IW
2	Shifting of services, if carried			
3	out only on consumer's request			
	Single-Phase	At Actual	At Actual	Kept at the same level
	Three-Phase	At Actual	At Actual	Kept at the same level

Sr. No.	Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)	Basis of proposal				
110.		Charges (Rs.)	Charges (Rs.)					
4	Meter Testing on site on Consumer's request							
	Single-Phase	150	180	In line with CPI-IW				
	Three-Phase	510	620	In line with CPI-IW				
5	Meter Testing at Laboratory							
	Single-Phase	290	350	In line with CPI-IW				
	Three-Phase	730	890	In line with CPI-IW				
	HT Tri-vector/TOD meter	1460	1,770	In line with CPI-IW				
	Meter testing at Government approved laboratory	At actual	At actual	Kept at same level				
6	Cost of Meter (applicable when consumer opts to purchase the meter from AEML-D & in case of Lost or Burnt meter)							
	Single-Phase meter	1400	3186	As per standard cost sheet submitted to the Commission (for smart meter)				
	Three Phase whole current meter	4100	4779	As per standard cost sheet submitted to the Commission (for smart meter)				
	Three Phase CT operated meter	5500	10030	As per standard cost sheet submitted to the Commission (for smart meter)				
	HT TOD meter	6200	7,530	In line with CPI-IW				
	ABT compliant meter	At actual	At actual	Kept at same level				
7	First visit Charges (Only for new connection or additional supply request)	110	130	In line with CPI-IW				
8	Charges for Additional copies of test reports (Rs./page)	1	1	In line with CPI-IW				
9	Photocopying of Regulatory Orders etc. (Rs./Page)	1	1	In line with CPI-IW				
10	Duplicate copy of each monthly bill (Rs./Bill)	2	2.40	In line with CPI-IW				
11	Statement of Accounts (Rs./Page)	3	3.60	In line with CPI-IW				

Sr.	Particulars	Existing	Proposed	Basis of proposal				
No.		Charges (Rs.)	Charges (Rs.)					
12	Charges for Dishonored Cheques (irrespective of cheque amounts) - for first instance	250	300	In line with CPI-IW				
13	Charges for Dishonored Cheques (irrespective of cheque amounts) - for 2nd and subsequent instance	750	910	In line with CPI-IW				
D	Schedule of Charges related to Open Access							
1	Open Access Processing fee per application	3000	3,600	In line with CPI-IW				
2	Open Access Operating Charges per month	3000	3,600	In line with CPI-IW				

AEML-D requested the Commission to approve the proposed Schedule of Charges for FY 2023-24 and FY 2024-25. However, AEML-D requested the Commission to maintain uniformity in the Service Connection Charges between AEML-D and TPC-D, as existing at present, as these charges are normative and hence, should not result in creating any artificial barriers for competition between the two Licensees.

Commission's Analysis and Ruling

In line with the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, AEML-D has sought approval for revision of certain components of "Schedule of Charges" (SoC) for the various services provided to the consumers.

The Commission observed that most of the charges have been proposed to increase in line with the CPI-WPI. The Commission feels that it is approprtiate to increase the charges in line with the CPI and WPI.

AEML-D has requested that any consumer who switched over to TPC earlier and is willing to migrate back to AEML-D's network, should not be levied Service Connection charges again, if adequate network of AEML-D is already present in the premises to provide connection. However, such a case is clearly a case of new connection, and hence, Service Connection Charges will be applicable.

The Commission approves the Schedule of Charges, as shown in the Table below:

Table 7-4: Approved Schedule of Charges

Sr.	Particulars	roved Schedule Existing		Basis
No.	r ar uculars	Charges (Rs.)	Approved Charges (Rs.)	Dasis
110.		Charges (Ks.)	Charges (Ks.)	
	Application processing for			
	New connections/ Reduction or			
	addition of Load/Shifting of			
A	service/ Extension of			
	service/Change of Tariff			
	Category/Temporary			
	Connection			
	a) Single-phase	70	85	Increase in line with CPI - IW
	b) Three-phase	110	135	Increase in line with
	<u> </u>			CPI - IW
	c) HT supply	280	350	Increase in line with CPI - IW
В	Change of Name			
	a) Single-phase	70	85	Increase in line with CPI - IW
	b) Three-phase	70	85	Increase in line with CPI - IW
	c) HT supply	220	275	Increase in line with CPI - IW
C	Service Connection Charges			
1	L.T. Supply			
	Single Phase			
	For loads up to 5 kW	2,000	2,400	Increase in line with WPI
	For loads above 5 kW and upto	2,000	2 400	Increase in line with
	10 kW	2,000	2,400	WPI
	Three Phase			
	Motive power upto 27 HP or	2,000	2.650	Increase in line with
	other loads upto 20 kW	3,000	3,650	WPI
	Motive power > 27 HP but <= 67			Increase in line with
	HP or other loads >20 kW but <= 50 kW	6,500	7,900	WPI
	Motive power > 67 HP but <=			Increase in line with
	134 HP or other loads >50 kW but <= 100 kW	12,000	14,500	WPI
	Motive power >134 HP but <=			Increase in line with
	201 HP or other loads >100 kW but <=160 kW	12,000	14,500	Increase in line with WPI
	Above 160 kW	2,50,000	3,00,000	Increase in line with WPI

Sr.	Particulars	Existing	Approved	Basis				
No.		Charges (Rs.)	Charges (Rs.)					
	Alternate Fire Fighting			In line with Supply				
	Connection (Single phase or	-	At actual	Code Regulations,				
	three phase)			2021				
	Provision for Dedicated			In line with Order				
	Distribution Facility to LT	-	At actual	dated 12.06.2017, in				
2	Consumer H.T. Supply			Case No. 182 of 2014				
2	If line extended from existing							
	network							
	For loads upto 500 kVA	3,50,000	4,25,000	Increase in line with WPI				
	For loads above 500 kVA	4,00,000	4,90,000	Increase in line with WPI				
	Provision for Dedicated Distribution Facility to HT	At actual	At actual	Kept at the same level				
	consumer							
3	Temporary Connection (LT or HT)	At actual	At actual	Kept at the same level				
	Extension of Load:							
	(c) charges will be applicable on							
	the incremental load, in case no upgradation of network is	As in Sr.	As proposed in					
4	required	No.1,2, 3 & 4	Sr. No.1,2, 3 &	In line with WPI				
	(d) If upgradation is required,	above	4 above					
	charges will be applicable on							
	total load (existing load +							
	incremental demanded) Supervision Charges in case							
5	work is carried out by Licensed							
	Electrical Contractor (LEC)							
	For providing HT supply	15,000	18,750	In line with CPI-IW				
	For providing LT supply to three							
	phase Industrial/Commercial	6,000	7,500	In line with CPI-IW				
	Consumers only Miscellaneous and General							
D	Charges and General							
1	Re-connection Charges							
	a) Re-installation of fuse cut-out	150	180	In line with CPI-IW				
	b) Re-installation of meter	450	550	In line with CPI-IW				
	c) HT Supply	730	900	In line with CPI-IW				
	d) Re-connection of Service Cable	1120	1,400	In line with CPI-IW				

Sr.	Particulars	Existing	Approved	Basis				
No.		Charges (Rs.)	Charges (Rs.)					
	Shifting of Meter, if carried out							
2	only on consumer's request							
	Single-Phase	150	180	In line with CPI-IW				
	Three-Phase	290	350	In line with CPI-IW				
3	Shifting of services, if carried							
	out only on consumer's request							
	Single-Phase	At Actual	At Actual	Kept at the same level				
	Three-Phase	At Actual	At Actual	Kept at the same level				
4	Meter Testing on site on Consumer's request							
	Single-Phase	150	180	In line with CPI-IW				
	Three-Phase	510	630	In line with CPI-IW				
5	Meter Testing at Laboratory							
	Single-Phase	290	350	In line with CPI-IW				
	Three-Phase	730	900	In line with CPI-IW				
	HT Tri-vector/TOD meter	1460	1,800	In line with CPI-IW				
	Meter testing at Government approved laboratory	At actual	At actual	Kept at same level				
6	Cost of Meter (applicable when consumer opts to purchase the meter from AEML-D & in case of Lost or Burnt meter)							
	Single-Phase meter	1400	3500	As per standard cost sheet submitted to the Commission (for smart meter)				
	Three Phase whole current meter	4100	4700	As per standard cost sheet submitted to the Commission (for smart meter)				
	Three Phase CT operated meter	5500	10500	As per standard cost sheet submitted to the Commission (for smart meter)				
	HT TOD meter	6200	7,750	In line with CPI-IW				
	ABT compliant meter	At actual	At actual	Kept at same level				
7	First visit Charges (Only for new connection or additional supply request)	110	135	In line with CPI-IW				
8	Charges for Additional copies of test reports (Rs./page)	1	1	In line with CPI-IW				

Sr. No.	Particulars	Existing Charges (Rs.)	Approved Charges (Rs.)	Basis
9	Photocopying of Regulatory Orders etc. (Rs./Page)	1	1	In line with CPI-IW
10	Duplicate copy of each monthly bill (Rs./Bill)	2	2	In line with CPI-IW
11	Statement of Accounts (Rs./Page)	3	3	In line with CPI-IW
12	Charges for Dishonored Cheques (irrespective of cheque amounts) - for first instance	250	300	In line with CPI-IW
13	Charges for Dishonored Cheques (irrespective of cheque amounts) - for 2nd and subsequent instance	750	900	In line with CPI-IW
D	Schedule of Charges related to Open Access			
1	Open Access Processing fee per application	3000	3,750	In line with CPI-IW
2	Open Access Operating Charges per month	3000	3,750	In line with CPI-IW

Further, in order to ensure a level playing field and as prayed for by both AEML-D and TPC-D, the Commission has approved the same Schedule of Charges for both AEML-D and TPC-D applicable from this Order.

8 APPLICABILITY

8.1 APPLICABILITY OF REVISED TARIFF

The Tariffs determined in this Order shall be applicable from 1 April, 2023. Where the billing cycle of a consumer is different with respect to the date of applicability of the revised tariffs, they should be made applicable for the consumption on a pro rata basis. The bills for the respective periods as per the existing and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during the respective periods, computed on the basis of average unit consumption per day multiplied by the number of days in the respective periods covered in the billing cycle).

The Commission notes that the present tariff determination for FY 2023-24 and FY 2024-25 is done after taking into consideration the prevailing high power purchase rates in the market, embedded generation considering transmission constraints, etc as the case may be. The Commission is of the view that if there is any substantial improvement/reduction in the costs considered by the Commission in the present Order, the Licensee may file revised tariff Petition for the 5th year of the Control Period i.e., FY 2024-25 in accordance with the Regulation 10 of the MYT Regulations, 2019.

8.2 APPLICABILITY OF ORDER

This Mid Term Review Tariff Order for FY 2023-24 and FY 2024-25 shall come into force from 1 April, 2023.

Sd/- Sd/- Sd/(Mukesh Khullar) (I. M. Bohari) (Sanjay Kumar)
Member Member Chairperson



9 Annexure I (D): Revenue with Revised Tariffs for FY 2023-24

								Colorin	1							Document					
Category	No. of consumers - Total	Fixed Cahrges (Rs./connection/ month)	Demand Charges (Rs./kVA/month)		Wheeling Charges (Rs./kWh)	Wheeling Charges (Rs./kVah)	Sales in MkWh - Total	Sales in MkWh(LT) and MkVAh(HT)- Total	Avg. Demand (KVA / month)	Revenue from Fixed Charges (Rs. Crore)	Revenue from Demand Charges (Rs. Crore)	Revenue from Energy Charges (Rs. Crore)	Revenue from Wheeling Charges (Rs. Crore)	PF Surcharge (Rs Cr)	PF Incentive (Rs Cr)	Prompt Payment Discount (Rs Cr)	Revenue from ToD charges (Rs. Crore)	Revenue from Green Energy Cess (Rs. Cr)	Digital Payment Discount (Rs. Crore)	Total revenue (Rs. Crore)	Average Billing Rate (Rs./kWh)
EHT Category																					
EHT I - Industry	2		375	6.60			180.00	183.64	20000		9.00	121.20	-							130.20	7.23
EHTII: Commercial																					
EHT III: Group Housing Society																					
EHT IV - Metro & Monorail	2		375	6.15			120.00	131.74	15000		6.75	81.02	-							87.77	7.31
EHT V (a):PS - Govt. EI & Hospitals																					
EHT V (b):PS - Others																					
EHT VI: EV Charging Stations																					
Sub-total	4						300.00	315.37	35000.00	0.00	15.75	202.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	217.97	7.27
HT Category																					
HT I: HT-Industry	168		375	6.60		0.97	614.12	626.53	101958		72.88		61.04	0.00	(0.00)	(2.39)			-	551.38	8.98
HTII: HT- Commercial	294		375			0.97		440.17	130154		60.82	294.91	42.89	(0.00)	0.00	(3.43)	4.73	0.85	-	400.65	9.39
HT III: HT-Group Housing Society	16		375			0.97	10.96	11.27	4915		2.21		1.10	-		(0.09)	-	-	-	10.04	9.16
HT IV - HT Metro & Monorail	0		375			0.97			0		0.00		-	-			-	-		-	
HT V (a):PS - Govt. EI & Hospitals	8		375			0.97	11.46	12.13	1869		0.84			-		(0.05)	0.03	-	-	10.25	010 1
HT V (b):PS - Others	84		375			0.97		314.08	36801		16.56			-	-	(1.67)	0.88	9.62	-	283.06	9.23
HT VI: EV Charging Stations	1		75	6.53		0.97	70.00	76.85	20000		1.80	50.18	7.49	-		-	-	-	-	59.47	8.50
Sub-total	571						1439.95	1481.02	295698	0.00	155.11	1000.75	144.29	0.00	0.00	-7.63	8.30	14.48	0.00	1314.84	9.13
LT Category																					oxdot
LT I - Below Poverty Line	160	11		2.20	2.21		0.01	0.01		0.00		0.00	0.00	-		(0.00)	-	-	(0.00)	0.01	6.49
LT -I Residential (Single Phase)	0						-			0.00		-	-			-	-	-	-	-	7.82
0-100	768354	85		3.45	2.21		1,935.04	1,935.04		78.37		667.59		-		(2.39)		0.08	(/		
101-300	849856	125		5.55	2.21		1,258.49	1,258.49		127.48		698.46				(3.14)		0.10	()		
301-500	151331	125		7.45	2.21		209.65	209.65		22.70		156.19		-		(0.90)		0.02	(,		
500and above	43955	150		8.55	2.21		67.43	67.43		7.91		57.66	14.93			(0.42)	-	0.01	(0.21)	79.85	
LT -I Residential (Three Phase)	0						-			0.00		-	-	-		-	-	-	-	-	
0-100	59583	150		3.45	2.21		321.87	321.87		10.72		111.05	10100	-	-	(0.53)		0.02	()		
101-300	86804	150		5.55	2.21		465.00	465.00		15.62		258.07		-		(1.33)		0.04	()		
301-500	72138	150		7.45	2.21		232.25	232.25		12.98		173.02		-	-	(1.01)		0.03	()		
500and above	83017	150		8.55	2.21		408.98	408.98		14.94		349.68	,	-	-	(2.37)		0.06	()		-
LT II (a) - 0-20 kW	428830	445		6.05	2.21		2,273.60	2,273.60		229.00		1,375.53		0.00	(0.00)	(,			/		9.24
LT II (b) - 20-50 kW	6437		375		2.21		277.95	277.95	87849	0.00				4.28	(2.22)				()		10.00
LT II (c) - above 50 kW	5855	***	375		2.21		693.85	693.85	214356	0.00				6.58	(8.15)	,			()		10.10
LT III (a) - LT Industrial upto 20 kW	18451	445		5.85	2.21		391.95	391.95	0	9.85				- 440	(8.60)	(1.06)		0.01	(0.46)	324.39	8.28
LT III (b) - LT Industrial above 20 kW	3299		375		2.21		446.52	446.52	98974	0.00	44.54	274.61		3.19	(5.62)	(,			/		9.37
LT IV (a): PS - Govt. EI & Hospitals	950	445		6.20	2.21		44.66	44.66		0.51		27.69			(0.23)				(0.02)		8.58
LT IV (b): PS - Others	4568			6.60	2.21		215.84	215.84		2.44		142.45		0.70	(1.45)	(/					8.87
LT V (a): Agriculture - Pumpsets	22	40		4.30	2.21		0.05	0.05		0.00		0.02		0.00		-	-	-	(0.00)	0.04	
LT V (b): Agriculture - Others	8	95		6.10	2.21		0.39	0.39	4404	0.00		0.24		0.01	(0.01)	(0.00)	- 0.01	- 0.01	(0.00)	0.34	
LT VI: EV Charging Stations	21		75	5.04	2.21		3.73	3.73	2595	0.00	0.23			0.01	(0.01)	()				2.96 7885.61	7.93
Sub-total	2583639						9247.28	9247.28	403774	532.54	180.76	5143.30								1.000100	8.53 8.57
Total	2584214					1	10987.23	11043.67	734472.01	532.54	351.63	6346.27	2191.37	15.09	-17.68	-30.82	24.76	16.03	-9.47	9418.42	8.57

10 Annexure I (E): Revenue with Revised Tariffs for FY 2024-25

																							-
Category	No. of consumers - Total	Fixed Charges (Rs./connecti on/month)	Demand Charges (Rs./kVA/mon th)	Energy Charges (Rs./kWh)	Energy Charges (Rs./kVah)	Wheeling Charges (Rs./kWh)	Wheeling Charges (Rs./kVah)	Sales in MkWh - Total	Sales in MkWh(LT) and MkVAh(HT)- Total	Avg. Demand (KVA / month)	Revenue from Fixed Charges (Rs. Crore)	Revenue from Demand Charges (Rs. Crore)	Revenue from Energy Charges (Rs. Crore)	Revenue from Wheeling Charges (Rs. Crore)	PF Surcharge (Rs Cr)	PF Incentive (Rs Cr)	Load Factor Incentive (Rs Cr)	Prompt Payment Discount (Rs Cr)	Revenue from ToD charges (Rs. Crore)	Revenue from Green Energy Cess (Rs. Cr)	Digital Payment Discount (Rs. Crore)	Total revenue (Rs. Crore)	Average Billing Rate (Rs./kWh)
EHT Category																							
EHT I - Industry	2		400		6.55			180.00	183.64	20000		9.60	120.28	-								129.88	7.22
EHTII: Commercial																							
EHT III: Group Housing Society																							
EHT IV - Metro & Monorail	2		400		6.15			120.00	131.74	15000		7.20	81.02	-								88.22	7.35
EHT V (a):PS - Govt. EI & Hospitals																							
EHT V (b):PS - Others																							
EHT VI: EV Charging Stations																							
Sub-total	4							300.00	315.37	35000.00	0.00	16.80	201.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	218.10	7.27
HT Category									-					-									
HT I: HT-Industry	169		400		6.55		1.14	725.22	739.88	102978		78.23	484.62	84.13	0.00	(0.00)	(0.32)	(2.39)	2.66	4.01	-	650.92	8.98
HTII: HT- Commercial	297		400		6.70		1.14	448.14	462.19	131456		65.50	309.67	52.55	(0.00)	0.00	(0.12)	(3.43)	4.73	0.85	-	429.75	9.59
HT III: HT-Group Housing Society	16		400		6.05		1.14	10.64	10.94	4965		2.38	6,62	1.24	-		-	(0.09)	-	-	-	10.16	9.55
HT IV - HT Metro & Monorail	0		400		6.15		1.14		-	0		0.00	-	-	-				-	-		-	
HT V (a):PS - Govt. EI & Hospitals	8		400		6.80		1.14	17.90	18.94	1888		0.91	12.88	2.15	-	-		(0.05)	0.03	-	-	15.92	8.89
HT V (b):PS - Others	85		400		7.74		1.14	379.81	389.05	37169		17.84	301.12	44.24		-		(1.67)	0.88		-	372.03	9.80
HT VI: EV Charging Stations	1		80		6.86		1.14	70.00	76.85	20000		1.92	52.72	8.74				- (110.7)	-	-	-	63.37	9.05
Sub-total	577				0.00			1651.71	1697.85	298455		166.78	1167.63	193.05		0.00	-0.45	-7.63	8,30	14.48	0.00		
LT Category								1001.71	10,7100	270100			1107100	2,0,00		****			0.00	11110	-	10.12.11	7.01
LT I - Below Poverty Line	160	12		2.20		2.60		0.01	0.01		0.00		0.00	0.00	-		-	(0.00)	-	-	(0.00)	0.01	7.06
LT -I Residential (Single Phase)	0							-	-		0.00		-	-	-	-		-			-	-	7.98
0-100	776053	90		3.15		2.60		1.973.31	1,973.31		83.81		621.59	512.14	-			(2.39)		0.08	(1.20)	1,213.83	
101-300	859765	135		5.40		2.60		1,283,38	1,283,38		139.28		693.03	333.08	-			(3.14)		0.10		1,160.50	
301-500	157533	135		7.10		2.60		213.80	213.80		25.52		151.80	55.49	-			(0.90)		0.02	\	231.40	
500and above	46791	160		8.15		2.60		68.77	68,77		8.98		56.05	17.85	-			(0.42)		0.01	(0.21)	82.23	
LT -I Residential (Three Phase)	0	100		0.115		2.00		-	-		0.00		-	-	-			(0.12)	-	-	- (0.21)	-	
0-100	60797	160		3.15		2.60		328.24	328.24		11.67		103.39	85.19				(0.53)		0.02			
101-300	87675	160		5.40		2.60		474.19	474.19		16.83		256.06	123.07	-	-		(1.33)		0.04			
301-500	75542	160		7.10		2.60		236.84	236.84		14.50		168.15	61.47				(1.01)		0.03			
500and above	88587	160		8.15		2.60		417.04	417.04		17.01		339.89	108.24	-	-	-	(2.37)	-	0.06		461.96	
LT II (a) - 0-20 kW	433114	475		5.75		2.60		2,511.34	2,511.34		246.87		1,444.02	651.78	0.00	(0.00)		(4.35)				2,336.26	9.30
LT II (b) - 20-50 kW	6552	+/3	400			2.60		310.70	310.70	88728		42.59	186.42	80.64		(2.22)		(0.64)					10.12
LT II (b) - 20-50 kW LT II (c) - above 50 kW	6000		400	6.20		2.60		781.82	781.82	220270		105.73	484.73	202.91	6.58	(8.15)		(2.62)					10.12
LT III (a) - LT Industrial upto 20 kW	18635	475		5.80		2.60		462.41	462.41	220270	10.62	0.00	268.20	120.01		4/		(1.06)		0.40	(0.46)		8.59
		475	400	5.80		2.60		503.82	503.82	99964		47.98			3.19	(5.60)	-					397.31 478.86	9.50
LT III (b) - LT Industrial above 20 kW	3332									99964		47.98	299.77	130.76	0.115	(5.62)		(1.78)	1115	0.10.5			
LT IV (a): PS - Govt. EI & Hospitals	959	475		6.20		2.60		50.23	50.23		0.55		31.14	13.04		(0.23)		(0.04)	0.23		(0.02)	44.97	8.95
LT IV (b): PS - Others	4614	475		6.60		2.60		242.48	242.48		2.63		160.03	62.93	0.70	(1.45)		(0.59)	0.25		(0.14)		9.25
LT V (a): Agriculture - Pumpsets	22	45		4.30		2.60		0.05	0.05		0.00		0.02	0.01		-	-	-			(0.00)	0.04	
LT V (b): Agriculture - Others	8	100		6.10		2.60		0.39	0.39		0.00		0.24	0.10		-	-	-	-	-	(0.00)	0.35	9.08
LT VI: EV Charging Stations	21		80	5.15		2.60		10.63	10.63	7560		0.73	5.47	2.76		(0.01)		(0.00)					8.45
Sub-total	2626160							9869.43	9869.43	416522		197.03	5270.01	2561.44		-17.68							
Total	2626741							11821.15	11882.66	749976.76	578.30	380.61	6638.94	2754.49	15.09	-17.68	-0.45	-30.82	24.76	16.03	-9.47	10348.95	8.75

11 Annexure II: Tariff Schedule for FY 2023-24 and FY 2024-25

ADANI ELECTRICITY MUMBAI LIMITED – DISTRIBUTION BUSINESS SCHEDULE OF ELECTRICITY TARIFFS

(With effect from 1 April, 2023)

The Maharashtra Electricity Regulatory Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, has determined, by its Mid-term Review Order dated 31st March, 2023 in Case No. 231 of 2022, the Tariff for supply of electricity by the Distribution Licensee, Adani Electricity Mumbai Limited – Distribution Business (AEML-D) to various classes of consumers as applicable from **1 April**, **2023**.

General

- 1. These Tariffs supersede all Tariffs so far in force.
- 2. The Tariffs are subject to revision and/or surcharge that may be levied by the Distribution Licensee from time to time as per the directives of the Commission.
- 3. The Tariffs are exclusive of the separate Electricity Duty, Tax on Sale of Electricity and other levies by the Government or other competent authorities, which will be payable by consumers over and above the Tariffs.
- 4. The Tariffs are applicable for supply at one point only.
- 5. The Distribution Licensee may measure the Maximum Demand for any period shorter than 30 minutes / 15 minutes of maximum use, subject to conformity with the Commission's Electricity Supply Code Regulations, where it considers that there are considerable load fluctuations in operation.
- 6. The Tariffs are subject to the provisions of the applicable Regulations and any directions that may be issued by the Commission from time to time.
- 7. Unless specifically stated to the contrary, the figures of Energy Charge and Wheeling Charge are denominated in Rupees per unit (kWh or kVAh as case may be) for the energy consumed during the month.
- 8. Fuel Adjustment Charge (FAC) computed in accordance with provisions of MYT Regulations, 2019 and Commission's directions in this regard from time to time shall be applicable to all categories of consumers, and will be charged over and above the base tariff.

LOW TENSION (LT) TARIFF

LT I (A): LT – Residential (BPL)

Applicability:

This Below Poverty Line (BPL) Tariff category is applicable to Residential consumers who have a Sanctioned Load upto 0.25 kW and who have consumed upto 360 units per annum in the previous financial year. The eligibility of such consumers will be reassessed at the end of each financial year. If more than 360 units have been consumed in the previous financial year, the LT I (B) - Residential Tariff shall thereafter be applicable, and such consumer cannot revert thereafter to the BPL category irrespective of his future consumption level.

The categorisation of BPL consumers will be reassessed at the end of the financial year on a pro rata basis if there has been consumption for only a part of the year The categorisation of BPL consumers who have been added during the previous year would be assessed on a pro rata basis, i.e., 30 units per month.

This BPL category will also be applicable to all new consumers subsequently added in any month with a Sanctioned Load of upto 0.25 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month.

The BPL Tariff is applicable only to individuals and not to institutions.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge	Wheeling Charge	Energy Charge
(kWh)	(Rs./Connection/ Month)	(Rs/kWh)	(Rs/kWh)
BPL Category	11	2.21	2.20

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge	Wheeling Charge	Energy Charge
(kWh)	(Rs./Connection/ Month)	(Rs/kWh)	(Rs/kWh)
BPL Category	12	2.60	2.20

LT I (B): LT – Residential

This Tariff category is applicable for electricity used at Low/Medium Voltage for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, water pumping in the following premises:

- a) Private residential premises, Government / semi-Government residential quarters, Private Corporate bodies staff quarters / Hostels / Rest Houses;
- b) Premises used exclusively for worship, such as temples, gurudwaras, churches, mosques, etc.; provided that halls, gardens or any other part of such premises that may be let out for a consideration or used for commercial activities would be charged at the applicable LT-II Tariff, unless specified in other category;
- c) Government / Private / Co-operative Housing Societies / Colonies/complexes (where electricity is used exclusively for domestic purposes) only for common facilities such as Water Pumping / Street and other common area Lighting / Lifts /Parking Lots/ Fire-fighting Pumps and other equipment, etc.;
- d) Sports Clubs or facilities / Health Clubs or facilities / Gymnasium / Swimming Pool / Community Hall of Government / Private / Co-operative Housing Colonies/complexes - provided that they are situated in the same premises, and are for the exclusive use of the members and employees of such Housing Colonies/complexes;
- e) Telephone booths owned/operated by Persons with Disabilities/Handicapped persons;
- f) Residential premises used by professionals like Lawyers, Doctors, Engineers, Chartered Accountants, etc., in furtherance of their professional activities, but not including Nursing Homes and Surgical Wards or Hospitals;
- g) Single-phase household Flour Mills (Ghar-ghanti) used only for captive purposes;
- h) A residential LT consumer with consumption upto 500 units per month (current month of supply) who undertakes construction or renovation activity in his existing premises: such consumer shall not require a separate temporary connection, and would be billed at this Residential Tariff rate;
- i) Home-stay facilities at tourist destinations and religious places.
- j) Consumers undertaking business or commercial / industrial / non-residential activities from a part of their residence, whose monthly consumption is upto 300 units a month and annual consumption in the previous financial year was upto 3600 units. The applicability of this Tariff to such consumers will be assessed at the end of each financial year. In case

consumption has exceeded 3600 units in the previous financial year, the consumer will thereafter not be eligible for the Tariff under this category but be charged at the Tariff otherwise applicable for such consumption, with prior intimation to him.

- k) Entities supplied electricity at a single point at Low/Medium Voltage for residential purposes, in accordance with the Electricity (Removal of Difficulties) Eighth Order, 2005, in the following cases:
 - i. a Co-operative Group Housing Society which owns the premises, for making electricity available to the members of such Society residing in the same premises for residential purposes; and
 - ii. a person, for making electricity available to its employees residing in the same premises for residential purposes.
- l) Crematoriums and Burial Grounds for all purposes, including area lighting, Electric Kiln, Water Pumps, etc.
- m) Temporary purposes for public religious functions / festivals like Ganesh Utsav, Navaratri, Eid, Moharrum, Ram Lila, Diwali, Christmas, Guru Nanak Jayanti, Gopalkala Utsav, Dashera, etc., and for areas where community prayers are held; and for functions to commemorate anniversaries of personalities and National or State events for which Public Holidays have been declared, such as Gandhi Jayanti, Ambedkar Jayanti, Chhatrapati Shivaji Jayanti, Republic Day, Independence Day, Maharashtra Day, etc.

Provided that such temporary connection shall be subjected to 1.5 times of fixed charges.

Note:

This Tariff category shall also be applicable to consumers who are supplied power at High Voltage for any of the purposes above other than (i) & (j) above.

Consumption Slab (kWh)	Fixed Charge / Demand Charge ^{\$\$}	Wheeling Charge (Rs/kWh)	Energy Charge (Rs/kWh)
0-100 units	85	2.21	3.45
100-300 units	125	2.21	5.55
301-500 units	125	2.21	7.45
Above 500 units	150	2.21	8.55

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption	Fixed Charge /	Wheeling Charge	Energy Charge
Slab (kWh)	Demand Charge ^{\$\$}	(Rs/kWh)	(Rs/kWh)
0-100 units	90	2.60	3.15
100-300 units	135	2.60	5.40
301-500 units	135	2.60	7.10
Above 500 units	160	2.60	8.15

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

- a) \$\$: The above Fixed Charges are for single-phase connections. A Fixed Charge of Rs. 150 per month will be levied on Residential consumers availing 3-phase supply. An Additional Fixed Charge of Rs. 150 per 10 kW load or part thereof above 10 kW load shall also be payable for FY 2023-24. This amount will increase to Rs. 160 per month and per 10 KW, respectively, in FY 2024-25
- b) Professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., occupying premises exclusively for conducting their profession, shall not be eligible for this Tariff, and will be charged at the Tariff applicable to the respective categories.

LT II: LT - Non-Residential or Commercial

Applicability:

A. 0-20kW

This Tariff category is applicable for electricity used at Low/Medium voltage in non-residential, non-industrial and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/ leisure and water pumping in, but not limited to, the following premises:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls and Showrooms, Exhibition Centres;
- b) Warehouses / Godowns;
- c) Combined lighting and power supply for facilities relating to Entertainment, including film studios, cinemas and theatres (including multiplexes), Hospitality, Leisure, Meeting/Town Halls, and places of Recreation and Public Entertainment;
- d) Offices, including Commercial Establishments;

- e) Marriage Halls, Resorts, Hotels / Restaurants / Canteens / Cafeterias, Icecream parlours, Coffee / Tea Shops, Guest Houses, Internet / Cyber Cafes, Telephone Booths not covered under the LT I category, and Fax / Photocopy shops;
- f) Automobile and all other types of repairs, servicing and maintenance centres (unless specifically covered under another tariff category); Retail Gas Filling, Petrol Pumps and Service Stations, including Garages;
- g) Toll Collection plazas;
- h) Tailoring Shops, Computer Training Institutes, Private Training centres, Typing Institutes, Photo Laboratories, Beauty Parlours and Saloons, Mobile Shoppe's;
- Banks and ATM centres, Telephone Exchanges, TV Stations, Microwave Stations, Radio Stations;
- j) Common facilities, like Water Pumping / Lifts / Fire-Fighting Pumps and other equipment / Street and other common area lighting, etc., in Commercial Complexes;
- k) Sports Clubs/facilities, Health Clubs/facilities, Gymnasiums, Swimming Pools not covered under any other category;
- External illumination of monuments/ historical/ heritage buildings approved by Maharashtra Tourism Development Corporation (MTDC) or the concerned Local Authority;
- m) Construction of all types of structures/ infrastructures such as buildings, bridges, fly-overs, dams, Power Stations, roads, Aerodromes, tunnels for laying of pipelines for all purposes;

Residential LT consumers with consumption above 500 units per month (current month of supply) and who undertake construction or renovation activity in their existing premises shall not require a separate Temporary category connection, and shall be billed at the LT-II Commercial Tariff rate;

- n) Milk Collection Centres; Standalone milk refrigeration, storage centres;
- o) Sewage Treatment Plants/ Common Effluent Treatment Plants for Commercial Complexes not covered under the LT – Public Services or LT – Industry categories;
- p) Advertisements, hoardings (including hoardings fixed on lamp posts/installed along roadsides), and other commercial illumination such as external flood-lights, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such establishments.

q) Temporary supply for any of the activity not covered under Residential category.

Provided that Temporary supply consumer shall pay 1.5 time applicable fixed/demand charges and 1.25 time applicable energy charge.

Provided further that temporary supply for operating Fire-Fighting pumps and equipment in residential or other premises shall be charged as per the Tariff category applicable to such premises.

B. $20 \text{ kW} \text{ and } \le 50 \text{ kW} \text{ and } (C) > 50 \text{ kW}$

Applicability:

As per the applicability described in LT II (A) and for the Sanctioned Load in the range applicable in this sub-category, i.e., LT II (B) and LT II (C).

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab (kWh)	Fixed Charge / Demand	Wheeling	Energy Charge
	Charge	Charge	(Rs/kWh)
		(Rs/kWh)	
(A) 0-20 kW	Rs. 445 per month	2.21	6.05
(B) \geq 20 kW and \leq 50 kW	Rs. 375 per kVA month	2.21	6.20
(C) > 50 kW	Rs. 375 per kVA month	2.21	6.45
TOD Tariffs (in addition to	above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab (kWh)	Fixed Charge / Demand	Wheeling	Energy Charge	
	Charge	Charge	(Rs/kWh)	
		(Rs/kWh)		
(A) 0-20 kW	Rs. 475 per month	2.60	5.75	
(B) >20 kW and \leq 50 kW	Rs. 400 per kVA month	2.60	6.00	
(C) > 50 kW	Rs. 400 per kVA month	2.60	6.20	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	

Consumption Slab (kWh)	Fixed Charge / Demand	Wheeling	Energy Charge
	Charge	Charge	(Rs/kWh)
		(Rs/kWh)	
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

The ToD Tariff is applicable to the LT-II (B) and (C) categories, and optionally available to LT- II (A) category consumers having ToD meter installed.

LT III: LT- Industry:

LT III (A): LT - Industry upto 20 kW load LT III (B): LT - Industry, above 20 kW load

Applicability:

This Tariff category is applicable for electricity for Industrial use, at Low/Medium Voltage, for purposes of manufacturing and processing, including electricity used within such premises for general lighting, heating/cooling, etc.

It is also applicable for use of electricity / power supply for Administrative Offices / Canteens, Recreation Hall / Sports Club or facilities / Health Club or facilities/ Gymnasium / Swimming Pool exclusively meant for employees of the industry; lifts, water pumps, fire- fighting pumps and equipment, street and common area lighting; Research and Development units, etc. —

Provided that all such facilities are situated within the same industrial premises and supplied power from the same point of supply;

This Tariff category shall also be applicable for use of electricity / power supply by an Information Technology (IT) or IT-enabled Services (ITeS) Unit as defined in the applicable IT/ITeS Policy of Government of Maharashtra.

This Tariff Category shall be also applicable to integrated logistics parks under Government of Maharashtra Policy, 2018.

It shall also be applicable for use of electricity / power supply for (but not limited to) the following purposes:

- a) Dhobi/Laundry activities
- b) Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mill, Saw Mill, Cattle / Poultry Feed Manufacturing plants;

- c) Ice Factory, Ice-cream manufacturing units, Milk Processing and Chilling Plants (Dairy);
- d) Engineering Workshops, Engineering Goods Manufacturing units; Printing Presses; Transformer Repair Workshops; Tyre Remoulding/Retreading units; and Vulcanizing units, Rubber product manufacturing, Packaging material manufacturing,
- e) Ordinance / Ammunition Factories of Defence Establishments;
- f) Mining, Quarrying and Stone Crushing units;
- g) Garment Manufacturing units;
- h) Soap and cosmetics, Deodorant manufacturing, etc.
- i) LPG/CNG bottling plants and associated retail gas filing stations, etc.;
- j) Sewage Treatment Plant/ Common Effluent Treatment Plant for industries, and not covered under the LT – Public Service category;
- k) Start-up power for Generating Plants, i.e. the power required for trial run of a Power Plant during commissioning of the Unit and its Auxiliaries, and for its start-up after planned or forced outage (but not for construction);
- 1) Brick Kiln (Bhatti), Biomass Pellet;
- m) Biotechnology Industries covered under the Biotechnology Policy of Government of Maharashtra;
- n) Cold Storages not covered under LT V (B) Agriculture (Others), Packaged Drinking water plant;
- o) Food (including seafood and meat) Processing units, Khandsari / Jaggery Manufacturing Units;
- p) Stand-alone Research and Development units
- q) Telecommunications Towers and associated telecom infrastructure but does not cover offices/outlets etc.
- r) Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc., connected at Low/Medium Tension only.
- s) Auxiliary Power Supply to EHV/Distribution Substations (but not for construction)
- t) Ready-mix Concrete or hot mix plants.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge / Demand	Wheeling	Energy Charge		
(kWh)	Charge	Charge	(Rs/kWh)		
		(Rs/kWh)			
LT III(A): 0-20 kW	Rs. 445 per month	2.21	5.85		
LT III(B): Above 20kW	Rs. 375 per kVA month	2.21	6.15		
TOD Tariffs (Optional - in	TOD Tariffs (Optional - in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge / Demand	Wheeling	Energy Charge		
(kWh)	Charge	Charge	(Rs/kWh)		
		(Rs/kWh)			
LT III(A): 0-20 kW	Rs. 475 per month	2.60	5.80		
LT III(B): Above 20kW	Rs. 400 per kVA month	2.60	5.95		
TOD Tariffs (Optional - in	TOD Tariffs (Optional - in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

a) The ToD Tariff is compulsorily applicable to LT III (B) (i.e., above 20 kW), and optionally available to LT- III (A) (i.e., up to 20 kW) having ToD meter installed.

LT IV: Public Services

LT IV (A): LT - Government Educational Institutions and Hospitals

Applicability:

This Tariff category is applicable for electricity supply at Low/Medium Voltage for Educational Institutions, such as Schools and Colleges; Health Care facilities, such as

Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Bank and Pathology Laboratories; Libraries and public reading rooms - of the State or Central Government or Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.;

It shall also be applicable for electricity used for Hostels / Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Hospitals, provided that they are situated in the same premises and are meant primarily for their students / faculty/ employees/ patients.

This Tariff is also applicable for electricity supply at Public Sanitary Conveniences;

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 445 per month	2.21	6.20
TOD Tariffs (in addition	on to above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 465 per month	2.60	6.20
TOD Tariffs (in addition	on to above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

a) The ToD Tariff is compulsorily applicable to the LT IV (A) category with Contract Demand/Sanctioned Load above 20 kW; and optionally available to the LT IV (A) category with Contract Demand/Sanctioned Load up to 20 kW having ToD meter installed.

LT IV (B): LT - Public Services - Others

Applicability:

This Tariff category is applicable for electricity supply at Low/Medium Voltage for:

- a) Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks, Laboratories; Libraries and public reading rooms - other than those of the State or Central Government or Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.
- b) Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for their students/faculty/employees/ patients;
- c) All offices of Government and Municipal/ Local Authorities/ Local Self-Government bodies, such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats; Police Stations and Police Chowkies; Post Offices; Armed Forces/Defence and Para-Military establishments;
- d) Service-oriented Spiritual Organisations;
- e) Accommodation facilities provided by religious trusts registered under Maharashtra Public Trust Act for devotees;
- f) State or Municipal/Local Authority Transport establishments, including their Workshops
- g) Fire Service Stations; Jails, Prisons; Courts;
- h) Airports;
- i) Ports, Jetties and provision for Shore Power Supply;
- j) Railway/Metro/Monorail Stations, including Shops, Workshops, Yards, etc, if the supply is at Low/ Medium Voltage.
- k) All Students Hostels affiliated to Educational Institutions not covered under LT Public Service - Government;
- 1) All other Students' or Working Men/Women's Hostels;
- m) Other types of Homes/Hostels, such as (i) Homes/Hostels for Destitutes, Disabled Persons (physically or mentally handicapped persons, etc.) and

- mentally ill persons (ii) Remand Homes (iii) Dharamshalas, (iv) Rescue Homes, (v) Orphanages subject to verification and confirmation by the Distribution Licensee's concerned Zonal Chief Engineer or equivalent;
- n) Dam operation including Lighting and other activities, etc.
- o) Pumping of water, purification of water and allied activities relating to Public Water Supply Schemes, Sewage Treatment Plants and waste processing unit.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge		
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)		
All Units	Rs. 445 per month	2.21	6.60		
TOD Tariffs (in addit	TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge		
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)		
All Units	Rs. 475 per month	2.60	6.60		
TOD Tariffs (in addit	TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

a) The ToD Tariff is compulsorily applicable to the LT IV (B) category with Contract Demand/Sanctioned Load above 20 kW; and optionally available to the LT IV (B) category with Contract Demand/Sanctioned Load up to 20 kW having ToD meter installed.

LT V: LT – Electric Vehicle (EV) Charging Stations

Applicability:

This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for electric vehicle.

In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. The Consumer has an option to seek a separate connection for EV charging under this category.

Electricity consumption for other facilities at Charging Station such as restaurant, rest rooms, convenience stores, etc., shall be charged at tariff applicable to Commercial Category.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge		
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)		
All Units	Rs. 75 per kVA	2.21	5.04		
TOD Tariffs (in additi	TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge		
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)		
All Units	Rs. 80 per kVA	2.60	5.15		
TOD Tariffs (in additi	TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

LT VI (A): LT - Agriculture - Pumpsets

Applicability:

This Tariff category is applicable for motive power supplied for agricultural metered pumping loads, and for one lamp of wattage up to 40 to be connected to the motive power circuit for use in pump-houses at Low/Medium Voltage.

This tariff is also applicable for floriculture, horticulture, nursery and plantation.

It is also applicable for power supply for cane crushers and/or fodder cutters for self-use for agricultural processing operations, but not for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or a change of belt drive.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 40 per HP	2.21	4.30

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 45 per HP	2.60	4.30

Note:

a) Consumers who avail power supply at High Voltage for the above purposes shall also be billed as per this Tariff category.

LT VI (B): LT – Agriculture– Others

Applicability:

This Tariff category is applicable for use of electricity / power supply at Low / Medium Voltage for:

- a) Pre-cooling plants and cold storage units for Agricultural Products processed or otherwise;
- b) Poultries exclusively undertaking layer and broiler activities, including Hatcheries;
- c) High-Technology Agriculture (i.e. Tissue Culture, Green House,

Mushroom cultivation activities), provided the power supply is exclusively utilized for purposes directly concerned with the crop cultivation process, and not for any engineering or industrial process;

- d) Aquaculture, Sericulture, Cattle Breeding Farms, etc.
- e) Tabela, which involves no associated industrial/commercial activity of sales counter, milk processing or Dairy/Chilling plant.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 95 per kW	2.21	6.10

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kWh)	Demand Charge	(Rs/kWh)	(Rs/kWh)
All Units	Rs. 100 per kW	2.60	6.10

Note:

a) Consumers who avail power supply at High Voltage for the above purposes shall also be billed as per this Tariff category.

EXTRA HIGH TENSION (EHT) and HIGH TENSION (HT) TARIFF

EHT I and HT I: HT – Industry

Applicability:

This Tariff category is applicable for electricity for Industrial use at Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22kV/11 kV) for purposes of manufacturing and processing, including electricity used within such premises for general lighting, heating/cooling, etc.

It is also applicable for use of electricity / power supply for Administrative Offices / Canteen, Recreation Hall / Sports Club or facilities / Health Club or facilities/ Gymnasium / Swimming Pool exclusively meant for employees of the industry; lifts, water pumps, fire-fighting pumps and equipment, street and common area lighting; Research and Development units, etc.

Provided that all such facilities are situated within the same industrial premises and supplied power from the same point of supply.

This Tariff category shall be applicable for use of electricity / power supply by an Information Technology (IT) or IT-enabled Services (ITeS) Unit as defined in the applicable IT/ITes Policy of Government of Maharashtra.

This Tariff Category shall be also applicable to integrated logistics parks under Government of Maharashtra Policy, 2018.

It shall also be applicable for use of electricity / power supply for (but not limited to) the following purposes:

- a) Dhobi and Laundry activities
- b) Flour Mills, Dal Mills, Rice Mills, Poha Mills, Masala Mills, Saw Mills, Cattle / Poultry Feed Manufacturing plants;
- c) Ice Factories, Ice-cream manufacturing units, Milk Processing and Chilling Plants (Dairy);
- d) Engineering Workshops, Engineering Goods manufacturing units; Printing Presses; Transformer Repair Workshops; Tyre Remoulding/Retreading units, and Vulcanizing units, Rubber product manufacturing, Packaging material manufacturing;
- e) Ordinance / Ammunition Factories of Defence Establishments;
- f) Mining, Quarrying and Stone Crushing units;
- g) Garment Manufacturing units;
- h) Soap and cosmetics, Deodorant manufacturing, etc.
- i) LPG/CNG bottling plants, and associated retail filling stations;
- j) Sewage Treatment Plant/ Common Effluent Treatment Plant for industries, and not covered under the HT Public Services (Others);
- k) Start-up power for Generating Plants, i.e., the power required for trial run of a Power Plant during commissioning of the Unit and its Auxiliaries, and for its start-up after planned or forced outage (but not for construction);
- 1) Brick Kiln (Bhatti) / Biomass Pellet;
- m) Biotechnology Industries covered under the Biotechnology Policy of Government of Maharashtra;
- n) Cold Storages not covered under LT V (B) Agriculture (Others);
- o) Food (including Seafood and meat) Processing units.

- p) Stand-alone Research and Development units
- q) Seed manufacturing.
- r) Dedicated Water Supply Schemes to Power Plants
- s) Auxiliary Power Supply to EHV/Distribution Substations (but not for construction)
- t) Telecommunications Towers and associated telecom infrastructure but does not cover offices/outlets etc.
- u) Ready-mix Concrete or hot mix plants

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
EHV	Rs. 375 per kVA	-	6.60
HV	Rs. 375 per kVA	0.97	6.60
TOD Tariffs (in additi	on to above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
EHV	Rs. 400 per kVA	-	6.55
HV	Rs. 400 per kVA	1.14	6.55
TOD Tariffs (in additi	on to above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

a) Demand Charge shall be applicable at the rate of 25% of the above rates on the start-up demand contracted by the Power Plant (as referred to at (h) above) with the Distribution Licensee.

EHT II and HT II: HT- Commercial

Applicability:

This Tariff category is applicable for electricity used at Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22 kV/11 kV) in non-residential, non-industrial and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, entertainment/leisure and water pumping in, but not limited to, the following premises:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls and Showrooms;
- b) Warehouses/Godowns
- c) Combined lighting and power services for facilities relating to Entertainment, including film studios, cinemas and theatres (including multiplexes), Hospitality, Leisure, Meeting/Town Halls, and places of Recreation and Public Entertainment;
- d) Offices, including Commercial Establishments;
- e) Marriage Halls, Resorts, Hotels / Restaurants / Canteens / Cafeterias, Ice-cream parlours, Coffee Shops, Guest Houses, Internet / Cyber Cafes, Telephone Booths and Fax / Photocopy shops;
- f) Automobile and all other types of repairs, servicing and maintenance centres (unless specifically covered under another Tariff category); Retail Gas Filling Stations, Petrol Pumps & Service Stations, including Garages, Toll Collection plazas;
- g) Tailoring Shops, Computer Training Institutes, Typing Institutes, Private Training centres, Photo Laboratories, Beauty Parlours and Saloons;
- h) Banks and ATM centres, Telephone Exchanges, TV Stations, Micro Wave Stations, Radio Stations;
- i) Common facilities, like Water Pumping / Lifts / Fire-Fighting Pumps and other equipment / Street and other common area Lighting, etc., in Commercial Complexes;
- j) Sports Clubs/facilities, Health Clubs/facilities, Gymnasiums, Swimming Pools not covered under any other category;
- k) External illumination of monuments/ historical/heritage buildings approved by Maharashtra Tourism Development Corporation (MTDC) or the concerned Local Authority;
- 1) Construction of all types of structures/ infrastructures such as buildings, bridges, flyovers, dams, Power Stations, roads, Aerodromes, tunnels for laying

of pipelines for all purposes;

Note:

Residential HT consumers with consumption above 500 units per month (current month of supply) and who undertake construction or renovation activity in their existing premises shall not require a separate Temporary category connection but be billed at the HT-II Commercial Tariff;

- m) Milk Collection Centres, standalone milk refrigeration and storage centres;
- n) Sewage Treatment Plant/ Common Effluent Treatment Plant for Commercial Complexes, not covered under the Public Services or Industrial category;
- o) Advertisements, hoardings (including hoardings fixed on lamp posts/installed along roadsides), and other commercial illumination such as external floodlights, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such establishments
- p) Temporary supply for any of the activity not covered under any other HT category

Provided that Temporary supply consumer shall pay 1.5 time applicable fixed/demand charges and 1.25-time applicable energy charge.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
EHV	Rs. 375 per kVA	-	6.70
HV	Rs. 375 per kVA	0.97	6.70
TOD Tariffs (in additi	on to above base Tariff)		
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge	
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)	
EHV	Rs. 400 per kVA	-	6.70	
HV	Rs. 400 per kVA	1.14	6.70	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

a) A consumer in the HT II category requiring single-point supply for the purpose of downstream consumption by separately identifiable entities shall have to operate as a Franchisee authorised as such by the Distribution Licensee; or such downstream entities shall be required to take separate individual connections and be charged under the Tariff category applicable to them.

EHT III and HT III: HT - Group Housing Society (Residential)

Applicability:

Entities supplied electricity at a single point at High Voltage (33 kV/11 kV) for residential purposes in accordance with the Electricity (Removal of Difficulties) Eighth Order, 2005, in the following cases:

- a) a Co-operative Group Housing Society which owns the premises, for making electricity available to the members of such Society residing in the same premises for residential purposes;
- b) a person, for making electricity available to its employees residing in the same premises for residential purposes.
- c) Serving Armed Forces/Paramilitary forces residential establishments. These consumers shall be eligible for 20% discount on energy charges including FAC. This 20% discount is also applicable to defence.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab (kVAh)	Fixed Charge / Demand Charge	Wheeling Charge (Rs/kVAh)	Energy Charge (Rs/kVAh)
EHV	Rs. 375 per kVA	-	6.05
HV	Rs. 375 per kVA	0.97	6.05

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab (kVAh)	Fixed Charge / Demand Charge	Wheeling Charge (Rs/kVAh)	Energy Charge (Rs/kVAh)
EHV	Rs. 400 per kVA	-	6.05
HV	Rs. 400 per kVA	1.14	6.05

EHT IV and HT IV- Railways/Metro/Monorail

This Tariff category is applicable to power supply at Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22 kV/11 kV) for Railways, Metro and Monorail, including Stations and Shops, Workshops, Yards, etc.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab (kVAh)	Fixed Charge / Demand Charge	Wheeling Charge (Rs/kVAh)	Energy Charge (Rs/kVAh)
EHV	Rs. 375 per kVA	-	6.15
HV	Rs. 375 per kVA	0.97	6.15

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab (kVAh)	Fixed Charge / Demand Charge	Wheeling Charge (Rs/kVAh)	Energy Charge (Rs/kVAh)
EHV	Rs. 400 per kVA	-	6.15
HV	Rs. 400 per kVA	1.14	6.15

EHT V and HT V - Public Services

EHT V- (A) and HT V – (A): HT - Government Educational Institutions and Hospitals

Applicability:

This Tariff category is applicable for electricity supply at Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22 kV/11 kV) for Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks and Pathology Laboratories; Libraries and public reading rooms - of the State or Central Government, Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats, etc.;

It shall also be applicable for electricity used for Hostel, Sports Clubs and facilities / Health Clubs and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for the students / faculty/ employees/ patients of such Educational Institutions and Hospitals.

This Tariff is also applicable for electricity supply at Public Sanitary Conveniences.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge	
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)	
EHV	Rs. 375 per kVA	-	6.80	
HV	Rs. 375 per kVA	0.97	6.80	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	
0900 to 1200 hours			0.50	
1200 to 1800 hours			0.00	
1800 to 2200 hours			1.00	
2200 to 0600 hours			-0.75	

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge	
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)	
EHV	Rs. 400 per kVA	-	6.80	
HV	Rs. 400 per kVA	1.14	6.80	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	
0900 to 1200 hours			0.50	
1200 to 1800 hours			0.00	
1800 to 2200 hours			1.00	
2200 to 0600 hours			-0.75	

EHT V – (B) and HT V - (B): Public Service - Others

This Tariff category is applicable for electricity supply at Extra High Voltage (220 kV/132 kV/110 kV) and High Voltage (33 kV/22 kV/11 kV) for:

- a) Educational Institutions, such as Schools and Colleges; Health Care facilities, such as Hospitals, Dispensaries, Clinics, Primary Health Care Centres, Diagnostic Centres, Blood Banks, and Pathology Laboratories; Libraries and public reading rooms - other than those of the State or Central Government, Local Self-Government bodies such as Municipalities, Zilla Parishads, Panchayat Samitties, Gram Panchayats, etc.
- b) Sports Clubs and facilities / Health Clubs, Student / working Men / Women hostel and facilities / Gymnasium / Swimming Pools attached to such Educational Institutions / Health Care facilities, provided that they are situated in the same premises and are meant primarily for their students / faculty/ employees/ patients;
- c) All offices of Government and Municipal/ Local Authorities/ Local Self Government bodies, such as Municipalities, Zilla Parishads, Panchayat Samitis, Gram Panchayats; Police Stations and Police Chowkies; Post Offices; Armed Forces / Defence and Para- Military establishments;
- d) Service-oriented Spiritual Organisations;
- e) Accommodation facilities provided by religious trusts registered under Maharashtra Public Trust Act for devotees. State or Municipal/Local Authority Transport establishments, including their Workshops;
- f) Fire Service Stations; Jails, Prisons; Courts;
- g) Airports;
- h) Ports, Jetties and provision for Shore Power Supply.
- i) Pumping of water, purification of water and allied activities relating to Public Water Supply Schemes, Sewage Treatment Plants;
- j) Waste processing units and Water ATM not covered under HT IV category;
- k) Dam operation including Lighting and other activities, etc
- l) lighting of public streets/ thorough fares which are open for use by the general public
- m) Provided that Street lights in residential complexes, commercial complexes, industrial premises, etc. will be billed at the Tariff of the respective applicable categories.

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge	
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)	
EHV	Rs. 375 per kVA	-	7.23	
HV	Rs. 375 per kVA	0.97	7.23	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge	
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)	
EHV	Rs. 400 per kVA	-	7.74	
HV	Rs. 400 per kVA	1.14	7.74	
TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00	
0900 to 1200 hours			0.50	
1200 to 1800 hours			0.00	
1800 to 2200 hours			1.00	
2200 to 0600 hours			-0.75	

EHT VI and HT VI: HT – Electric Vehicle (EV) Charging Stations

Applicability:

This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for Electric Vehicle.

In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. The Consumer has an option to seek a separate connection for EV charging under this category.

Electricity consumption for other facilities at Charging Station such as restaurant, rest rooms, convenience stores, etc., shall be charged at tariff applicable to Commercial Category

Tariff w.e.f. 1 April, 2023 to 31 March, 2024

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge		
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)		
EHV	Rs. 75 per kVA		6.53		
HV	Rs. 75 per kVA	0.97	6.53		
TOD Tariffs (in addit	TOD Tariffs (in addition to above base Tariff)				
0600 to 0900 hours			0.00		
0900 to 1200 hours			0.50		
1200 to 1800 hours			0.00		
1800 to 2200 hours			1.00		
2200 to 0600 hours			-0.75		

Tariff w.e.f. 1 April, 2024 to 31 March, 2025

Consumption Slab	Fixed Charge /	Wheeling Charge	Energy Charge
(kVAh)	Demand Charge	(Rs/kVAh)	(Rs/kVAh)
EHV	Rs. 80 per kVA		6.86
HV	Rs. 80 per kVA	1.14	6.86
TOD Tariffs (in addition to above base Tariff)			
0600 to 0900 hours			0.00
0900 to 1200 hours			0.50
1200 to 1800 hours			0.00
1800 to 2200 hours			1.00
2200 to 0600 hours			-0.75

MISCELLANEOUS AND GENERAL CHARGES

Fuel Adjustment Charge (FAC) Component of Z-factor Charge

The Fuel Adjustment Charge (FAC) component of the Z-factor Charge will be determined in accordance with the formula specified in the relevant Multi Year Tariff Regulations and any directions that may be given by the Commission from time to time, and will be applicable to all consumer categories for their entire consumption.

In case of any variation in the fuel prices and power purchase prices, the Distribution Licensee shall pass on the adjustments through the FAC component of the Z-factor Charge accordingly.

The details of the applicable ZFAC for each month shall be available on the Distribution Licensee's website www.adanielectricity.com

Electricity Duty and Tax on Sale of Electricity

Electricity Duty and Tax on Sale of Electricity shall be levied in addition to the Tariffs approved by the Commission, and in accordance with the Government of Maharashtra stipulations from time to time. The rate and the reference number of the Government Resolution/ Order under which the Electricity Duty and Tax on Sale of Electricity are applied shall be stated in the consumers' energy bills. A copy of such Resolution / Order shall be provided on the Distribution Licensee's website www.adanielectricity.com

Power Factor Computation

Where the average Power Factor measurement is not possible through the installed meter, the following formula for calculating the average Power Factor during the billing period shall be applied:

$$Average\ Power\ Factor = \underbrace{Total\ (kWh)}_{Total\ (kVAh)}$$

Wherein the kVAh is =
$$\sqrt{\sum (KWh)^2 + \sum (RkVAh Lag + RkVAh Lead)^2}$$

Further, average PF so computed can be considered as leading or lagging based on the following test:

If "RkVAh lead" > "RkVAh lag" then "Average P.F." is to be treated as "Lead P.F."

If "RkVAh lead" = < "RkVAh lag" then "Average P.F." is to be treated as "Lag P.F."

Power Factor Incentive

Applicable for LT II: Non-Residential/Commercial [LT II (B), LT II (C)] (for Contract Demand/Sanctioned Load above 20 kW), LT III (B): Industry above 20 kW, LT IV: Public Service [LT IV (A) and LT IV (B)], and LT VI – Electric Vehicle (EV) Charging Stations having contract demand/sanctioned load above 20 kW.

Whenever the average Power Factor is more than 0.95 (lag or lead) and upto 1, an incentive shall be given at the rate of the following percentages of the amount of the monthly electricity bill, excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0.0%
2	0.955 to 0.964	0.96	0.5%
3	0.965 to 0.974	0.97	1.0%
4	0.975 to 0.984	0.98	1.5%
5	0.985 to 0.994	0.99	2.5%
6	0.995 to 1.000	1.00	3.5%

<u>Note:</u> Power Factor shall be measured/computed upto 3 decimals, after universal rounding off.

Power Factor Penalty

Applicable for LT II: Non-Residential/Commercial [LT II (B), LT II (C)] (for Contract Demand/Sanctioned Load above 20 kW), LT III (B): Industry above 20 kW, LT IV: Public Service [LT IV (A) and LT IV (B)], and LT VI – Electric Vehicle (EV) Charging Stations having contract demand/sanctioned load above 20 kW.

Whenever the average PF is less than 0.9 (lag or lead), penal charges shall be levied at the rate of the following percentages of the amount of the monthly electricity bill, excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0.0%
2	0.885 to 0.894	0.89	1.0%
3	0.875 to 0.884	0.88	1.5%

Sl.	Range of Power Factor	Power Factor Level	Penalty
4	0.865 to 0.874	0.87	2.0%
5	0.855 to 0.864	0.86	2.5%
6	0.845 to 0.854	0.85	3.0%
7	0.835 to 0.844	0.84	3.5%
8	0.825 to 0.834	0.83	4.0%
9	0.815 to 0.824	0.82	4.5%
10	0.805 to 0.814	0.81	5.0%

<u>Note:</u> Power Factor shall be measured/computed upto 3 decimals, after universal rounding off.

Prompt Payment Discount

A prompt payment discount of one percent of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills within 7 days from the date of their issue.

Delayed Payment Charges

In case the electricity bill is not paid within the due date mentioned on the bill, delayed payment charges on the billed amount, including the taxes, cess, duties, etc., shall be levied on simple interest basis at the rate of 1.25% on the billed amount for the first month of delay.

Discount for digital payment

A discount of 0.25% of the monthly bill (excluding taxes and duties), subject to a cap of Rs. 500/-, shall be provided to LT category consumers for payment of electricity bills through various modes of digital payment such as credit cards, debit cards, UPI, BHIM, internet banking, mobile banking, mobile wallets, etc.

Discount for E-Bill

A discount of Rs. 10 per consumer per bill shall be provided for those opting for E-bills through written/email confirmation. No hard copy of the bills shall be generated for such consumers.

Rate of Interest on Arrears

The rate of interest chargeable on the arrears of payment of billed dues shall be as given below:

Sr. No.	Delay in Payment (months)	Interest Rate per
		annum (%)
1	Payment made after 60 days and before 90 days from the date of	12%
	billing	
2	Payment made after 90 days from the date of billing	15%

Rebate for consumers with Prepaid connections

Consumers with prepaid metered connections shall be entitled for rebate of 2% in the Energy Charge Rate (incl FAC) applicable for the consumer category.

Load Factor Incentive

Consumers having Load Factor above 75% and upto 85% will be entitled to an incentive in the form of a rebate of 0.75% on the Energy Charges for every percentage point increase in Load Factor from 75% to 85%. Consumers having a Load Factor above 85 % will be entitled to a rebate of 1% on the Energy Charges for every percentage point increase in Load Factor from 85%. The total rebate will be subject to a ceiling of 15% of the Energy Charges applicable to the consumer.

This incentive is applicable only to consumers in the Tariff categories EHT I and HT I: Industry, EHT II and HT II: Commercial and EHT V and HT V: Public Services - (A) and (B) only.

The Load Factor incentive will be available only if the consumer has no arrears with the Distribution Licensee, and payment is made within seven days from the date of the electricity bill. However, it will be available to consumers in whose case payment of arrears in instalments has been allowed by the Distribution Licensee, and such payment is being made as scheduled. The Distribution Licensee shall take a commercial decision on the schedule for such payments.

The Load Factor is to be computed as follows:

Load Factor = Consumption during the month in MU

Maximum Consumption possible during the month in MU

Maximum consumption possible = Contract Demand $(kVA) \times Unity$ Power Factor \times (Total no. of hours during the month, less actual interruptions hours recorded on meter for billing period)

In case the consumer exceeds its Contract Demand (including during the non-peak hours, i.e., 22:00 hrs to 06:00 hrs.) in any particular month, the Load Factor Incentive will not be payable to the consumer in that month.

Penalty for exceeding Contract Demand

In case a consumer (availing Demand-based Tariff) exceeds his Contract Demand, he will be billed at the applicable Demand Charge rate for the Demand actually recorded, and also be charged an additional amount at the rate of 150% of the applicable Demand Charge (only for the Demand in excess of the Contract Demand).

Under these circumstances, the consumer shall not be liable for any other action under Section 126 of the EA, 2003, since the penal additional Demand Charge provides for the penalty that the consumer is liable to pay for exceeding his Contract Demand. In case a consumer exceeds his Contract Demand on more than three occasions in a calendar year, the action to be taken would be governed by the provisions of the Supply Code Regulations.

Additional Demand Charges for Consumers having Captive Power Plant

For consumers having a Captive Power Plant, additional Demand Charges at the rate of Rs. 20/kVA/month shall be payable only on the extent of the Stand-by demand component and not on the entire Contract Demand. The additional Demand Charges will be levied on the Stand-by component only if the consumer's demand exceeds his Contract Demand.

Consumers' Security Deposit

As specified under Regulations 13 of the MERC (Supply Code Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021, Consumer shall pay Security Deposit and will be entitle for interest on such Security Deposit.

Definitions

Maximum Demand:

Maximum Demand in kilo-Watts or kilo-Volt Amperes, in relation to any period shall, unless otherwise provided in any general or specific Order of the Commission, mean twice the highest number of kilo-watt-hours or kilo-Volt Ampere hours supplied and taken during any consecutive thirty-minute blocks in that period.

Contract Demand:

Contract Demand means the demand in kilo-Watt (kW) or kilo-Volt Amperes (kVA), mutually agreed between the Distribution Licensee and the consumer as entered into in the agreement or agreed through other written communication. (For conversion of kW into kVA, the Power Factor of 0.80 shall be applied.)

Sanctioned Load:

Sanctioned Load means the load in kW mutually agreed between the Distribution Licensee and the consumer.

Billing Demand - LT Tariff categories:

Monthly Billing Demand will be the higher of the following:

- a) 65% of the actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- b) 40% of the Contract Demand.

Note:

- Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.
- In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change in Contract Demand is effected.

Billing Demand - HT Tariff categories:

Monthly Billing Demand will be the higher of the following:

- a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- b) 75% of the highest Billing Demand recorded during the preceding eleven months, subject to the limit of Contract Demand;
- c) 70% of the Contract Demand*.
- * FY 2023-24: 70%, FY 2024-25: 75%

Note:

- Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.
- In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change of Contract Demand is effected.

12 APPENDIX – 1: List of persons who attended the Technical Validation Session (TVS) held on 05 January, 2023

Sr. No.	Name of Representative	Organization
1.	Shri. Vivek Mishra	AEML-D
2.	Shri Kapil Sharma	AEML-D
3.	Shri Kishor Patil	AEML-D
4.	Shri Anupam Patra	AEML-D
5.	Shri Ganesh Balasubramanian	AEML-D
6.	Shri. Palaniappan Meyyappan	ABPS

13 APPENDIX – 2: List of persons who attended Public Hearing dated 16 February, 2023

Sr. No.	Name of Representative	Organization
1.	Shri. Vivek Mishra	AEML-D
2.	Shri. Palaniappan Meyyappan	ABPS
3.	Maharashtra State Electricity Distribution Company Limited	Licensee
4.	N. Ponrathnam	Individual
5.	Blase D'Souza	Individual
6.	Pinal Nandola	Individual
7.	Chittaranjan Sharma	Individual
8.	Chairman, Eugenie Co-op. Hsg. Soc. Ltd.	Individual