

ASSAM ELECTRICITY REGULATORY COMMISSION (AERC)

TARIFF ORDER

June 27, 2024

TRUE-UP for FY 2022-23,

APR for FY 2023-24, and

Revised ARR and

Tariff for FY 2024-25

FOR

Assam Power Distribution Company Limited (APDCL)

Petition No. 29/2023

Table of Contents

<u>1</u>	INTRODUCTION1
1.1	CONSTITUTION OF THE COMMISSION
1.2	TARIFF RELATED FUNCTIONS OF THE COMMISSION
1.3	BACKGROUND2
1.4	MULTI YEAR TARIFF REGULATIONS, 2021
1.5	PROCEDURAL HISTORY
1.6	THE 33 RD MEETING OF STATE ADVISORY COMMITTEE
<u>2</u>	SUMMARY OF APDCL'S PETITION8
2.1	BACKGROUND8
2.2	TRUE-UP FOR FY 2022-23
2.3	ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2023-249
2.4	AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2024-25
2.5	PRAYERS OF APDCL 14
<u>3</u>	BRIEF SUMMARY OF THE STAKEHOLDERS' COMMENTS, RESPONSE OF APDCL AND
CON	MMISSION'S VIEW15
<u>4</u>	TRUING UP FOR FY 2022-23
4.1	METHODOLOGY FOR TRUING UP
4.2	ENERGY SALES
4.3	DISTRIBUTION LOSS
4.4	ENERGY REQUIREMENT50
4.5	POWER PURCHASE
4.6	SHARING OF (GAINS)/ LOSSES ON ACCOUNT OF EXCESS POWER PURCHASE COST DUE TO HIGHER THAN
APP	ROVED DISTRIBUTION LOSSES
4.7	O&M Expenses

4.8	SHARING OF LOSSES/(GAINS)ON ACCOUNT OF O&M EXPENSES	. 65
4.9	CAPITAL INVESTMENT & CAPITALISATION	. 68
4.10	DEPRECIATION	. 69
4.11	INTEREST AND FINANCE CHARGES	. 72
4.12	INTEREST ON WORKING CAPITAL (IOWC)	. 74
4.13	INTEREST ON CONSUMER SECURITY DEPOSIT (CSD)	. 76
4.14	OTHER DEBITS	. 77
4.15	EXCEPTIONAL ITEMS	. 77
4.16	RETURN ON EQUITY	. 78
4.17	OTHER INCOME	. 81
4.18	NON-TARIFF INCOME	. 82
4.19	REVENUE GRANT/SUBSIDY	. 84
4.20	REVENUE FROM SALE OF POWER	. 85
4.21	ARR AND REVENUE GAP/(SURPLUS) AFTER TRUING UP OF FY 2022-23	. 86
<u>5</u>	ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2023-24	<u>. 88</u>
5.1	INTRODUCTION	. 88
5.2	ENERGY SALES	. 89
5.3	DISTRIBUTION LOSS	. 92
5.4	ENERGY BALANCE	. 93
5.5	POWER PURCHASE	. 95
5.6	OPERATION AND MAINTENANCE (O&M) EXPENSES	107
5.7	CAPITAL INVESTMENT AND FINANCING OF CAPITAL INVESTMENT	111
5.8	DEPRECIATION	113
5.9	INTEREST AND FINANCE CHARGES	115
5.10	INTEREST ON WORKING CAPITAL	117
5.11	INTEREST ON CONSUMERS' SECURITY DEPOSIT	118
5.12		
	OTHER DEBITS	118
5.13	OTHER DEBITS	
		119

5.16	REVENUE FROM SALE OF POWER
5.17	POWER PURCHASE SUBSIDY FROM GOA
5.18	AGGREGATE REVENUE REQUIREMENT (ARR) AND REVENUE GAP/(SURPLUS)126
<u>6</u>	AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2024-25128
6.1	Introduction
6.2	ENERGY SALES
6.3	CATEGORY-WISE PROJECTED ENERGY SALES
6.4	DISTRIBUTION LOSS
6.5	ENERGY BALANCE
6.6	POWER PURCHASE
6.7	OPERATION AND MAINTENANCE (O&M) EXPENSES
6.8	CAPITAL EXPENDITURE AND CAPITALISATION
6.9	DEPRECIATION
6.10	INTEREST AND FINANCE CHARGES
6.11	INTEREST ON WORKING CAPITAL
6.12	INTEREST ON CONSUMERS' SECURITY DEPOSIT
6.13	OTHER DEBITS
6.14	RETURN ON EQUITY
6.15	Non-Tariff Income
6.16	OTHER INCOME
6.17	REVENUE FROM SALE OF ELECTRICITY
6.18	AGGREGATE REVENUE REQUIREMENT (ARR) AND REVENUE GAP/(SURPLUS)
<u>7</u>	CUMULATIVE REVENUE GAP TILL FY 2024-25 AND TARIFF FOR FY 2024-25163
7.1	CUMULATIVE REVENUE GAP
7.2	TARIFF PHILOSOPHY AND DESIGN FOR FY 2024-25
7.3	CATEGORY-WISE CROSS-SUBSIDY
7.4	FUEL PRICE AND POWER PURCHASE ADJUSTMENT CHARGES (FPPPA)
7.5	GREEN ENERGY TARIFF

<u>8</u>	WHEELING CHARGES AND CROSS-SUBSIDY SURCHARGE	181
8.1	INTRODUCTION	181
8.2	ALLOCATION MATRIX	181
8.3	Wheeling Charges	183
8.4	APPLICABLE WHEELING LOSSES	184
8.5	CROSS-SUBSIDY SURCHARGE (CSS)	184
8.6	APPLICABILITY OF TARIFF	186
<u>9</u>	DIRECTIVES	187
<u>10</u>	TARIFF SCHEDULE	195
<u>11</u>	ANNEXURE-1	210

LIST OF TABLES

Table 1: True Up for FY 2022-23 as submitted by APDCL (Rs. Crore)8
Table 2: APR for FY 2023-24 as submitted by APDCL (Rs. Crore)10
Table 3: ARR for FY 2024-25 as submitted by APDCL (Rs. Crore)11
Table 4: Revenue Gap as projected by APDCL till FY 2024-25 (Rs. Crore)11
Table 5: Energy Sales for FY 2022-23 as submitted by APDCL (MU)45
Table 6: Energy Sales for FY 2022-23 approved by the Commission (MU)47
Table 7: Energy Requirement approved by the Commission after True-Up for FY 2022-23
Table 8: Power Purchase approved by the Commission after True-Up for FY 2022-23 (MU)
Table 9: Sharing of Efficiency Gain/(Loss) approved by the Commission on account of Distribution Losses after True-Up for FY 2022-23 (Rs. Crore)
Table 10: Normative O&M Expenses for FY 2022-23 as submitted by APDCL (Rs. Crore)
Table 11: Approved Employee Expenses for FY 2022-23 (Rs. Crore)63
Table 12: Approved R&M Expenses for FY 2022-23 (Rs. Crore)63
Table 13: Approved A&G Expenses for FY 2022-23 (Rs. Crore)64
Table 14: Normative O&M Expenses approved by Commission for FY 2022-23 (Rs. Crore)
Table 15: Sharing of losses/(gains) for O&M Expenses as submitted by APDCL for FY 2022-23 (Rs. Crore)
Table 16: Sharing of losses/(gains) for O&M Expenses approved by the Commission for FY 2022-23 (Rs. Crore)
Table 17: Capitalisation and Funding approved by the Commission for FY 2022-23 (Rs. Crore)69
Table 18: Depreciation as submitted by APDCL for FY 2022-23 (Rs. Crore)70
Table 19: Depreciation approved for FY 2022-23 (Rs. Crore)71

Table 20: Interest and Finance Charges as submitted by APDCL for FY 2022-2372
Table 21: Approved Interest & Financing Charges for FY 2022-23 (Rs. Crore)73
Table 22: Approved Interest & Financing Charges for FY 2022-23 (Rs. Crore)74
Table 23: loWC approved by the Commission for FY 2022-23 (Rs. Crore)75
Table 24: Interest on CSD approved for FY 2022-23 (Rs. Crore)76
Table 25: Return on Equity for FY 2022-23 (Rs Crore)79
Table 26: Conversion of Grant to Equity approved by the Commission for FY 2022-23 (Rs Crore)
Table 27: RoE approved by the Commission for FY 2022-23 (Rs. Crore)80
Table 28: Other Income for FY 2022-23 as submitted by APDCL (Rs Crore)81
Table 29: Other Income approved by the Commission for FY 2022-23 (Rs. Crore)82
Table 30: Non-Tariff Income for FY 2022-23 (Rs Crore)82
Table 31: Non-Tariff Income approved by the Commission for FY 2022-23 (Rs. Crore).83
Table 32: ARR & Revenue Gap/(Surplus) approved in the Truing up for FY 2022-23 (Rs Crore)
Table 33: Category-wise Energy Sales Projected by APDCL for FY 2023-24 (MU)89
Table 34: Energy Sales considered by the Commission for FY 2023-24 (MU)91
Table 35: Distribution Losses considered by the Commission for FY 2023-2493
Table 36: Energy Balance for FY 2023-24 as projected by APDCL (MU)94
Table 37: Energy Balance for FY 2023-24 considered by the Commission (MU)95
Table 38: RPO trajectory notified by MoP97
Table 39: Storage trajectory notified by MoP98
Table 40: Power Purchase for FY 2023-24 as submitted by APDCL (Rs. Crore)100
Table 41: Power Purchase Quantum and Cost approved by the Commission for the FY 2023-24
Table 42: O&M Expenses projected for FY 2023-24 by APDCL (Rs. Crore)107

Table 43: Employee Expenses projected for FY 2023-24 by APDCL (Rs. Crore)107
Table 44: R&M Expenses for FY 2023-24 as submitted by APDCL (Rs. Crore)108
Table 45: A&G Expenses for FY 2023-24 as submitted by APDCL (Rs. Crore)108
Table 46: Employee Expenses considered for FY 2023-24 (Rs. Crore)109
Table 47: Approved R&M Expenses for FY 2023-24 (Rs. Crore)110
Table 48: A&G Expenses considered for FY 2023-24 (Rs. Crore)111
Table 49: Proposed financing of Capitalization for FY 2023-24 (Rs. Crore)111
Table 50: Actual Capitalization for FY 2020-21 to FY 2022-23 (Rs. Crore)112
Table 51: Approved Capitalization and Funding for FY 2023-24 (Rs. Crore)112
Table 52: Depreciation calculation for FY 2023-24 as submitted by APDCL (Rs. Crore)
Table 53: Depreciation claimed by APDCL for FY 2023-24 (Rs. Crore)114
Table 54: Depreciation approved by the Commission for FY 2023-24 (Rs. Crore)115
Table 55: Interest and Finance Charges as submitted by APDCL for FY 2023-24 (Rs. Crore)
Table 56: Interest and Finance Charges as approved by the Commission for FY 2023-24 (Rs. Crore)
Table 57: Interest on Working Capital for FY 2023-24 (Rs Crore)117
Table 58: IoWC approved by the Commission for FY 2023-24 (Rs. Crore)118
Table 59: Return on Equity projected by APDCL for FY 2023-24 (Rs. Crore)119
Table 60: Equity Addition allowed by the Commission due to Conversion of Grant to Equity in FY 2023-24 (Rs. Crore)
Table 61: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore) 121
Table 62: Non-Tariff Income as submitted by APDCL for FY 2023-24 (Rs. Crore)122
Table 63: Non-Tariff Income as approved by the Commission for FY 2023-24 (Rs. Crore)
Table 64: Other Income as submitted by APDCL for FY 2023-24 (Rs. Crore)124

Table 65: Other Income as approved by the Commission for FY 2023-24 (Rs. Crore).125
Table 66: ARR & Revenue Gap/(Surplus) considered by the Commission for FY 2023-24 (Rs. Crore)
Table 67:Category-wise Energy Sales Projected by APDCL for FY 2024-25 (MU)128
Table 68: Category-wise Energy Sales Projected by the Commission for the FY 2024-25 (MU)
Table 69: Energy Balance for FY 2024-25 as Projected by APDCL (MU)132
Table 70: Energy Balance for FY 2024-25 approved by the Commission (MU)132
Table 71: Power Purchase Projected by APDCL for FY 2024-25135
Table 72: Power Purchase Quantum and Cost approved by the Commission for the FY 2024-25
Table 73: Employee Expenses for FY 2024-25 (Rs Crore)
Table 74: R&M Expenses from FY 2024-25 (Rs Crore)
Table 75: A&G Expenses from FY 2024-25 (Rs Crore)143
Table 76: O&M Expenses for FY 2024-25 (Rs Crore)144
Table 77: Approved Employee Expenses for the FY 2024-25 (Rs. Crore)145
Table 78: Approved R&M Expenses for FY 2024-25 (Rs. Crore)145
Table 79: Approved A&G Expenses for the FY 2024-25 (Rs. Crore)146
Table 80: Total O&M expenses approved for FY 2024-25 (Rs. Crore)147
Table 81: Financing of the Projected Capitalisation for the FY 2024-25 (Rs. Crore)147
Table 82: Financing of the Projected Capitalisation for the FY 2024-25 (Rs. Crore)148
Table 83: Depreciation claimed by APDCL for the FY 2024-25 (Rs. Crore)148
Table 84: Depreciation approved for FY 2024-25 (Rs. Crore)
Table 85: Interest and Finance Charges as submitted by APDCL for FY 2024-25 (Rs. Crore)
Table 86 : Approved Interest on Loan Capital for FY 2024-25 (Rs. Crore)151
Table 87: IoWC from FY 2024-25 as projected by APDCL (Rs Crore)152

Table 88: IoWC approved by the Commission for FY 2024-25 (Rs. Crore)153
Table 89: Return on Equity from FY 2024-25 (Rs Crore)
Table 90: Equity Addition allowed by the Commission due to Conversion of Grant to Equity for the FY 2024-25 (Rs. Crore)
Table 91: Return on Equity approved by the Commission for FY 2024-25 (Rs. Crore) 156
Table 92: Non-Tariff Income as submitted by APDCL for FY 2024-25 (Rs. Crore)157
Table 93: Non-Tariff Income approved for FY 2024-25 (Rs. Crore)
Table 94: Other Income claimed by APDCL for FY 2024-25 (Rs Crore)159
Table 95: Other Income approved by the Commission for FY 2024-25 (Rs. Crore)160
Table 96: Revenue from Sale of Electricity for FY 2024-25 (Rs. Crore)161
Table 97: ARR for APDCL approved by the Commission for FY 2024-25 (Rs. Crore) .161
Table 98: Cumulative Revenue Requirement for FY 2024-25 as submitted by APDCL (Rs. Crore)
Table 99: Cumulative Revenue Gap for FY 2024-25 approved by the Commission (Rs.
Crore)165
Table 100: ACoS Projected by APDCL for FY 2024-25169
Table 101: Re-stated ACoS Projected by APDCL for FY 2024-25169
Table 102: Category-wise FPPPA being levied by APDCL at present170
Table 103: ACoS approved by the Commission for FY 2024-25
Table 104: Full Cost Tariff approved by the Commission for FY 2024-25173
Table 105: Category-wise Cross-Subsidy approved for FY 2024-25176
Table 106: Computation of Green Energy Tariff for FY 2024-25178
Table 107: Separation of ARR for Wires and Retail Supply Business for FY 2024-25 as submitted by APDCL (Rs. Crore)
Table 108: Allocation Matrix for Separation of ARR for Wires Business and Retail Supply Business for FY 2024-25

Table 109: Separation of ARR for Wires Business and Retail Supply Business for FY 2024-25 (Rs. crore)
Table 110: Wheeling Charges as submitted by APDCL for FY 2024-25183
Table 111: Wheeling Charges approved by the Commission for FY 2024-25184
Table 112: Wheeling Losses approved by the Commission for FY 2024-25184
Table 113: Category-wise CSS computed by APDCL for FY 2024-25 (Rs/kWh)185
Table 114: Category-wise CSS approved by the Commission for FY 2024-25 (Rs/kWh)
186

List of Abbreviations

A&G	Administrative & General
ABC	Aerial Bunched Conductor
ABITA	Assam Branch of Indian Tea Association
ABT	Availability Based Tariff
ABP	Average Basic Pay
ABR	Average Billing Rate
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
ADB	Asian Development Bank
AEGCL	Assam Electricity Grid Corporation Limited
AERC	Assam Electricity Regulatory Commission
APDCL	Assam Power Distribution Company Limited
APDRP	Accelerated Power Development & Reforms Programme
APGCL	Assam Power Generation Corporation Limited
APM	Administered Pricing Mechanism
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
APSEIP	Assam Power Sector Enhancement Investment Programme
APSIP	Assam Power Sector Investment Programme
APTEL	Appellate Tribunal for Electricity
ASEB	Assam State Electricity Board
AT&C	Aggregate Technical and Commercial
BPL	Below Poverty Line
CAGR	Compounded Annual Growth Rate
CAIDI	Customer Average Interruption Duration Index
CAIFI	Customer Average Interruption Frequency Index
CBDF	Collection Based Distribution Franchisee
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Station

COD	Date of Commercial Operation
	·
CPC	Central Pay Commission
CPI	Consumer Price Index
CPSU	Central Public Sector Utility
CSD	Consumer Security Deposit
CSS	Cross-subsidy Surcharge
CTU	Central Transmission Utility
CWIP	Capital Work In Progress
DA	Dearness Allowance
D/C	Double Circuit
DD	Demand Draft
DDUGJY	Deendayal Upadhyay Gram Jyoti Yojana
DEEP	Discovery of Efficient Electricity Price
DELP	Domestic Efficient Lighting Programme
DISCOM	Distribution Company
DMS	Distribution Management System
DPR	Detailed Project Report
DSM	Demand Side Management
DT/DTR	Distribution Transformer
EA, 2003	The Electricity Act, 2003
EE	Energy Efficiency
EHV	Extra High Voltage
EPC	Engineering Procurement & Construction
ERP	Enterprise Resource Planning
FINER	Federation of Industry & Commerce of North Eastern Region
FPPPA	Fuel Price and Power Purchase Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GoA	Government of Assam
Gol	Government of India
GPF	General Provident Fund
HEP	Hydro Electric Project

HH	Household
HP	Horse Power
HT	High Tension
HV	High Voltage
HVCMS	High Value Consumer Management System
IEX	Indian Energy Exchange
IOCL	Indian Oil Corporation Limited
IPDS	Integrated Power Development Scheme
ISTS	Inter-State Transmission System
IT	Information Technology
IWC/IoWC	Interest on Working Capital
JICA	Japan International Cooperation Agency
JNNSM	Jawaharlal Nehru National Solar Mission
kV	kilo Volt
kVA	kilo Volt Ampere
kW	kilo Watt
kWh	kilo Watt Hour
LED	Light Emitting Diode
LOA	Letter of Award
LT	Low Tension
LV	Low Voltage
MIS	Management Information System
MNRE	Ministry of New and Renewable Energy
MoP	Ministry of Power
MOU	Memorandum of Understanding
MRI	Meter Reading Instruments
MU	Million Unit
MW	Mega Watt
MYT	Multi-Year Tariff
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	National Electricity Policy
NERPSIP	North Eastern Region Power System Improvement Project

NESSIA	North Eastern Small Scale Industries Association
NHPC	NHPC Ltd.
NLCPR	Non-lapsable Central Pool of Resources
NTPC	NTPC Ltd.
O&M	Operation and Maintenance
OA	Open Access
OEM	Original Equipment Manufacturer
OPGW	Optical Ground Wire
PFA	Power for All
PFC	Power Finance Corporation Limited
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PTCIL	PTC India Limited
R&M	Repairs and Maintenance
RAPDRP	Restructured Accelerated Power Development & Reforms
KAPDKP	Programme
REC	Renewable Energy Certificate
RDSS	Revamped Distribution Sector Scheme
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
ROE	Return on Equity
ROW	Right of Way
RPO	Renewable Purchase Obligation
Rs.	Indian Rupees
SAC	State Advisory Committee
SAIDI	System Average Interruption Duration Index
SBI MCLR	State Bank of India Marginal Cost of Lending Rate
S/C	Single Circuit
SECI	Solar Energy Corporation of India Limited
SHEP	Small Hydro Electric Project
SLDC	State Load Dispatch Centre
SOP	Standards of Performance

SPV	Special Purpose Vehicle
STU	State Transmission Utility
TBCB	Tariff Based Competitive Bidding
TOD	Time of Day
TVS	Technical Validation Session
UDAY	Ujwal DISCOM Assurance Yojana
UI	Unscheduled Interchange
VCoS	Voltage-wise Cost of Supply
WB	The World Bank
WPI	Wholesale Price Index

ASSAM ELECTRICITY REGULATORY COMMISSION

Guwahati

Present

Shri K. S. Krishna, Chairperson Shri S. N. Kalita, Member Shri A. Bhattacharyya, Member Petition No. 29/2023

Assam Power Distribution Company Limited (APDCL) - Petitioner

ORDER

(Passed on June 27, 2024)

- (1) APDCL filed a Petition for approval of True Up for FY 2022-23, APR for FY 2023-24, and Revised ARR and Tariff for FY 2024-25 on November 30, 2023. The same was registered as Petition No 29/2023.
- (2) The Commission held an Admissibility Hearing on December 15, 2023 and admitted the Petition, subject to submission of additional data and clarifications, as sought vide letter dated December 13, 2023.
- (3) In accordance with Section 64 of the Electricity Act 2003 (Act or EA 2003), the Commission directed APDCL to publish a summary of the ARR and Tariff filings in local newspapers to ensure due public participation.
- (4) Accordingly, a Public Notice was issued by APDCL inviting objections/suggestions from stakeholders to be submitted on or before January 22, 2024. The Notice was published in five (5) leading newspapers of the State, and short notices were also published in five (5) of the leading newspapers of the State, as shown in the Table below:

Date	Name of Newspaper	Content Published
22.12.2023	The Assam Tribune	Public Notice in English
	The Times of India	Public Notice in English
	The Sentinel	Public Notice in English
23.12.2023	Amar Asom	Public Notice in Assamese
23.12.2023	Dainik Janambhumi	Public Notice in Assamese
24.12.2023	Asomiya Pratidin	Short Notice in Assamese
	Dainik Jugasankhya	Short Notice in Bangla
	Purbanchal Prahari	Short Notice in Hindi
	Bodosa	Short Notice in Bodo
	Thekar	Short Notice in Karbi

- (5) A copy of the Petition and other relevant documents were also made available to the consumers and other interested Parties at the office of the Managing Director of APDCL, and offices of the Deputy General Manager of each Electrical Circle of APDCL. A copy of the Petition was also made available on the websites of the Commission and APDCL.
- (6) In response to the Commission's letter dated December 13, 2023, APDCL submitted their replies on December 28, 2023.
- (7) The Commission observed that there were some inconsistencies and discrepancies in the replies submitted by APDCL. In order to clarify the same, a Technical Validation Session (TVS) was conducted on January 8, 2024. The Commission sought more clarifications on the Petition from APDCL vide letter dated January 9, 2024 and email dated January 19, 2024 and the replies were submitted by APDCL on January 17, 2024 and January 24, 2024.
- (8) The Petitions were also discussed in the meeting of the State Advisory Committee (SAC) (constituted under Section 87 of the Electricity Act, 2003) held on January 10, 2024 at Bidyut Niyamak Bhawan, Six Mile, Guwahati.
- (9) The Commission received written suggestions and objections from eleven (11) stakeholders on the Petitions filed by APDCL. The stakeholders were notified about the place, date and time of Hearing, to enable them to take part in the Hearing. A newspaper notice was also published inviting participation from the general public as well as the

Respondents. The Hearing was held at Bidyut Niyamak Bhawan, Six Mile, Guwahati on February 29, 2024 as scheduled. All stakeholders/respondents who participated in the Hearing were given the opportunity to express their views on the Petitions. The details are discussed in the relevant Chapters of this Tariff Order.

- (10) The Commission, now in exercise of its powers vested under Sections, 61, 62, 86 and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf and taking into consideration the submissions made by the Petitioner, objections and suggestions received from respondents/stakeholders and all other relevant materials on record, has carried out the True-up for FY 2022-23, APR for FY 2023-24, approval of revised ARR and determination of distribution and retail supply tariff for FY 2024-25, as detailed in subsequent Chapters of this Order.
- (11) Before implementation of this Order, the Commission directs APDCL to publish a Public Notice intimating the revised distribution and retail supply tariff in English and Vernacular newspapers and on the website of APDCL.
- (12) The approved Retail Supply Tariffs, Wheeling Charges and Cross-Subsidy Surcharge for FY 2024-25 shall be effective from July 1, 2024 and shall continue until replaced by another Order by the Commission.
- (13) Accordingly, the Petition No.29/2023 stands disposed of.

Sd/- Sd/- Sd/
(A. Bhattacharyya) (S.N. Kalita) (K.S. Krishna)

Member, AERC Member, AERC Chairperson, AERC

1 INTRODUCTION

1.1 Constitution of the Commission

- 1.1.1 The Assam Electricity Regulatory Commission (hereinafter referred to as the AERC or the Commission) was established under the Electricity Regulatory Commissions Act, 1998 (14 of 1998) on February 28, 2001. The first proviso of Section 82(1) of the Electricity Act, 2003 (hereinafter referred as the Act or the EA, 2003) has ensured continuity of the Commission under the Electricity Act, 2003.
- 1.1.2 The Commission is mandated to exercise the powers and functions conferred under Section 181 of the EA 2003 (36 of 2003) and to exercise the functions conferred on it under Section 61, 62 and 86 of the Act from June 10, 2003.

1.2 Tariff related Functions of the Commission

- 1.2.1 Under Section 86 of the Act, the Commission has the following tariff related functions:
 - (a) To determine the tariff for electricity, wholesale, bulk or retail, as the case may be:
 - (b) To regulate power purchase and procurement process of the distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
 - (c) To promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act;
- 1.2.2 Under Section 61 of the Act in the determination of tariffs, the Commission is to be guided by the following:
 - (a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

- (b) That the electricity generation, transmission, distribution and supply are conducted on commercial principles;
- (c) That factors, which would encourage efficiency, economical use of the resources, good performance, optimum investments, and other matters which the State Commission considers appropriate for the purpose of this Act;
- (d) The interests of the consumers are safeguarded and at the same time, the consumers pay for the use of electricity in a reasonable manner based on their customer category cost of supply;
- (e) That the tariff progressively reflects the cost of supply of electricity at an adequate and improving level of efficiency and gradually reduces cross subsidies:
- (f) The National Electricity Plan formulated by the Central Government including the National Electricity Policy and Tariff Policy.
- 1.2.3 In accordance with the provisions of the Act, the Commission shall not show undue preference to any consumer of electricity in determining the tariff, but may differentiate according to the consumers' load factor, power factor, voltage, total consumption of energy during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required (Section 62 of the Act).
- 1.2.4 If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission, the State Government shall pay the amount to compensate the person affected by the grant of subsidy in the manner the Commission may direct as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government (Section 65 of the Act).

1.3 Background

1.3.1 In pursuance of Notification Memo No. PEL151/2003/Pt./165 dated December 10, 2004 of the Government of Assam, three Distribution Companies were formed as a successor to the ASEB. Vide subsequent Notification No. PEL.41/2006/199 dated May 13, 2009, all these three Distribution Companies

were merged into one and in accordance with the Assam State Reform (Transfer and merger of Distribution Functions and undertakings) Scheme, 2009 and Certificate of Incorporation dated October 23, 2009, the present Distribution Company, viz., Assam Power Distribution Company Limited (APDCL) was formed.

1.3.2 Presently, APDCL is undertaking all the functions as a Distribution Licensee within the State of Assam.

1.4 Multi Year Tariff Regulations, 2021

- 1.4.1 The Commission, in exercise of the powers conferred under Section 61 read with Section 181(2) (zd) of the Act, has notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2021 (herein after referred as "the MYT Regulations, 2021") on September 18, 2021. These Regulations are applicable for the determination of Tariff for Generation, Transmission, SLDC, Wheeling and Retail Supply for the Control Period of three financial years from April 1, 2022 onwards up to March 31, 2025. These Regulations are applicable to all existing and future Generating Companies, Transmission Licensees, and Distribution Licensees within the State of Assam.
- 1.4.2 Regulation 4.2 of the MYT Regulations, 2021, specifies the MYT framework for the Control Period from FY 2022-23 to FY 2024-25, as reproduced below:
 - "4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business, and Retail Supply Business:
 - (i) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;
 - (ii) A detailed Capital Investment Plan for each year of the Control Period, shall be

submitted by the applicant for the Commission's approval;

- (iii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval;
- (iv) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;
- (v) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station
- (vi) Annual Performance review vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors beyond the control of the applicant (uncontrollable items) shall be undertaken by the Commission;
- (vii) True up of the past years based on audited annual accounts of the licensees and the Generation companies.
- (viii) The mechanism for pass-through of approved gains or losses on account of uncontrollable items as specified by the Commission in these Regulations;
- (ix) The mechanism for sharing of approved gains or losses arising out of controllable items as specified by the Commission in these Regulations;
- (x) Tariff determination for Generating Companies, SLDC, Transmission Licensee and Distribution Wheeling Business and Retail Supply Business, for each financial year within the Control period based on the approved forecast. The tariff shall be reviewed at the time of the true-up and annual performance review.
- (xi) There will be no true-up of the controllable items except on account of Force Majeure events or on account of variations attributable to uncontrollable items. The variations in the controllable items, as defined in regulation 10, over and above the norms specified will be governed by incentive and penalty framework specified in these

regulations.

(xii) The tariff determined by the Commission and the directions given in the MYT order shall be the quid pro quo and mutually inclusive. The tariff determined shall, within the time period specified in the order, be subject to the compliance of the directions by the generating company and the licensees to the satisfaction of the Commission. Non-compliance of directions given in the tariff order may also lead to invocation of the provisions of section 142 of the Act.

(xiii) The tariff determined by the Commission shall continue to operate till it is modified or revised by the Commission."

1.5 Procedural History

- 1.5.1 APDCL is required to file an application for true-up for previous year, i.e., FY 2022-23 and APR of FY 2023-24, and revised ARR and tariff for ensuing year, i.e., FY 2024-25, as per the MYT Regulations, 2021, not less than 120 days before the close of the current year.
- 1.5.2 APDCL filed its Petition for approval of True-up for FY 2022-23, APR for FY 2023-24, Revised ARR and Tariff for FY 2024-25 (Petition No. 29/2023) on November 30, 2023. The Commission sought additional data and clarifications on the Tariff Petition vide letter dated December 13, 2023.
- 1.5.3 The Commission held an Admissibility Hearing on December 15, 2023. Thereafter, in accordance with Section 64 of the EA 2003, the Commission directed APDCL to publish a summary of the ARR and Tariff filings in local dailies to ensure due public participation. A copy of the Petition and other relevant documents were also made available to the consumers and other interested Parties at the office of the Managing Director of APDCL, and offices of the Deputy General Manager of each circle of APDCL. A copy of the Petition was also made available on the websites of the Commission (www.aerc.gov.in) and APDCL. (www.apdcl.org).
- 1.5.4 Accordingly, a Public Notice was issued by APDCL inviting objections/suggestions from objectors to be submitted on or before January 22,

2024. The notice was published in five (5) leading newspapers of the State, and short notice was published in five (5) of the leading newspapers of the State, as shown in the Table below:

Date	Name of Newspaper	Content Published
22.12.2023	The Assam Tribune	Public Notice in English
	The Times of India	Public Notice in English
	The Sentinel	Public Notice in English
23.12.2023	Amar Asom	Public Notice in Assamese
23.12.2023	Dainik Janambhumi	Public Notice in Assamese
24.12.2023	Asomiya Pratidin	Short Notice in Assamese
	Dainik Jugasankhya	Short Notice in Bangla
	Purbanchal Prahari	Short Notice in Hindi
	Bodosa	Short Notice in Bodo
	Thekar	Short Notice in Karbi

- 1.5.5 The replies to the queries raised by the Commission was submitted by APDCL on December 28, 2023.
- 1.5.6 The Commission observed that there were some inconsistencies and discrepancies in the replies submitted by APDCL. In order to clarify the same, a Technical Validation Session (TVS) was conducted on January 8, 2024. The Commission sought more clarifications on the Petition from APDCL vide letter dated January 9, 2024 and email dated January 19, 2024 and the replies were submitted by APDCL on January 17, 2024 and January 24, 2024.
- 1.5.7 The Commission received suggestions and objections from eleven (11) stakeholders on the Petitions filed by APDCL. The Commission considered the objections received and sent communication to the stakeholders to take part in Hearing process by presenting their views in person before the Commission. The stakeholders were notified about the place, date and time of Hearing, to enable them to take part in the Hearing. The Hearing was held at Bidyut Niyamak Bhawan, Six Mile, Guwahati, on February 29, 2024 as scheduled. All stakeholders/respondents who participated in the Hearing were given the

- opportunity to express their views on the Petitions.
- 1.5.8 All the written representations submitted to the Commission and oral submissions made before the Commission in the Hearing and the responses of APDCL have been carefully considered while issuing this Tariff Order. The major issues raised by different consumers and consumer groups along with the response of APDCL and views of the Commission are elaborated in Chapter 3 of this Order.

1.6 The 33rd Meeting of State Advisory Committee

1.6.1 Meeting of the State Advisory Committee (SAC) (constituted under Section 87 of the Act) was convened on January 10, 2024. During the 33rd SAC meeting held on January 10, 2024, the Tariff Petitions filed by APGCL, AEGCL, SLDC and APDCL for FY 2024-25 were discussed. The Minutes of the 33rd SAC Meeting are attached as **Annexure 1**.

2 Summary of APDCL's Petition

2.1 Background

2.1.1 APDCL submitted the Petition on November 30, 2023 seeking approval for True up for FY 2022-23, APR for FY 2023-24, Revised ARR for FY 2024-25, and Tariff for FY 2024-25.

2.2 True-up for FY 2022-23

2.2.1 APDCL submitted the True-up for FY 2022-23 based on the statement of accounts duly audited by the Statutory Auditor. The summary of ARR and Revenue Gap/(Surplus) claimed by APDCL for FY 2022-23 is shown in the following Table:

Table 1: True Up for FY 2022-23 as submitted by APDCL (Rs. Crore)

SI. No	Particulars	Approved	APDCL Submission
1	Cost of power purchase	6031.15	8478.85
2	Operation & Maintenance Expenses	1190.36	1,306.00
2.1	Employee Cost	835.92	934.34
2.2	Repair & Maintenance	278.52	267.97
2.3	Administrative & General Expenses	75.92	103.69
3	Depreciation	46.82	73.35
4	Interest and Finance Charge	21.99	4.45
5	Interest on Working Capital	8.85	-
6	Other Debits incl. Provision for Bad Debt	16.60	22.29
7	Interest on Consumer security deposit	30.17	65.95
8	Exceptional Items, if any		(5.85)
9	Sub Total (1+2+(3 to 8))	7345.94	9945.04
10	Return on Equity	193.09	168.07
11	Total Expenditure (9 to 10)	7539.03	10113.11
12	Less Non-Tariff Income	418.21	417.59

SI.	Particulars	Approved	APDCL
	Fai liculai 5	Approved	Submission
13	Sharing of efficiency gain/(losses)		
	a) Reduction in Power Purchase cost due to		
	incremental losses	-	(54.46)
	b) Sharing of gains/(losses) on account of		(13.51)
	O&M expenses	_	(13.51)
14	Aggregate Revenue Requirement	7120.82	9627.54
15	Revenue with approved Tariff (including	6979.96	7262.27
'	Targeted Subsidy)	037 3.30	1202.21
16	Other Income (Consumer Related)	302.32	676.16
17	Total Revenue before Other Subsidy (15+16)	7282.28	7938.43
18	Other subsidy/Revenue Grant		
	a. Tariff subsidy on Power purchase	400.00	346.40
19	Total Revenue after subsidy	7682.28	8284.83
20	Revenue Gap/(Surplus) for FY 2022-23	-	1342.71
	True up adjustment		
	Revenue Gap/(Surplus) from True up for FY	457.20	457.20
21	2020-21	107.20	101.20
	Net Carrying Cost	104.26	104.26
	Sub-total (21): True Up adjustment	561.46	561.46
22	Gross Surplus (+)/Shortfall (-)	0.00	1904.17

2.3 Annual Performance Review (APR) for FY 2023-24

2.3.1 APDCL submitted the APR for FY 2023-24, based on the actuals of the first half (H1) of the year and projections for the second half (H2) of the year, as shown in the Table below:

Table 2: APR for FY 2023-24 as submitted by APDCL (Rs. Crore)

CL No.	Portioulers	Ammunicad	APDCL
SI. No.	Particulars	Approved	Submission
1	Cost of power purchase	6409.29	8929.60
2	Operation & Maintenance Expenses	1364.41	1388.70
2.1	Employee Cost	948.46	981.63
2.2	Repair & Maintenance	305.36	295.46
2.3	Administrative & General Expenses	110.59	111.61
3	Depreciation	173.01	88.36
4	Interest and Finance Charge	3.62	13.05
5	Interest on Working Capital	0.00	15.19
6	Other Debits incl. Provision for Bad Debt	6.80	11.14
7	Interest on Consumer security deposit	52.68	65.95
8	Exceptional Items, if any	457.09	457.09
9	Sub Total (1+2+(3 to 8))	8466.90	10969.08
10	Return on Equity	162.84	244.39
11	Total Expenditure (9 to 10)	8629.74	11213.47
12	Less Non-Tariff Income	471.64	391.12
13	Aggregate Revenue Requirement	8158.10	10822.35
14	Revenue with approved Tariff (including Targeted Subsidy)	7831.10	8522.21
15	Other Income (Consumer Related)	109.55	712.51
16	Total Revenue Before Other Subsidy	7940.65	9234.72
17	Other subsidy/Revenue Grant		
	a. Tariff subsidy on Power purchase		
	b. Cross subsidy support on FPPPA		200.00
18	Total Revenue after subsidy	7940.65	9434.72
19	Revenue Gap/(Surplus) for FY 2023-24	217.45	1387.64
	True up adjustment		
20	Revenue Gap/(Surplus) from True up for FY	(91.27)	(91.27)
20	2021-22	(31.21)	(31.27)
	Net Carrying Cost	(126.18)	(126.18)

SI. No.	Particulars	Approved	APDCL Submission
	Sub-Total (21) : True Up adjustment	(217.45)	(217.45)
21	Gross Revenue Gap/(Surplus)	0.00	1170.19

2.4 Aggregate Revenue Requirement (ARR) for FY 2024-25

2.4.1 APDCL has projected the ARR for FY 2024-25 as detailed in the Table below:

Table 3: ARR for FY 2024-25 as submitted by APDCL (Rs. Crore)

SI. No.	Particulars	Amount
1	Power Purchase Expenses	9,678.06
2	O&M Expenses	1,522.71
	a) Employee Expenses	1038.87
	b) R&M Expenses	360.11
	c) A&G Expenses	123.73
3	Depreciation	151.09
4	Interest and Finance Charges	3.71
5	Interest on Working Capital	35.26
6	Interest on CSD	65.95
7	Return on Equity	341.00
8	Other Debits, incl. Provisioning for Bad Debts	5.57
9	Total Expenditure	11,803.35
10	Less: Non-Tariff Income	369.00
11	Less: Other Income	1312.43
12	Aggregate Revenue Requirement	10,121.92

2.4.2 APDCL has thus estimated the total Revenue Gap as shown in the Table below:

Table 4: Revenue Gap as projected by APDCL till FY 2024-25 (Rs. Crore)

SI. No.	Particulars	Rate of Interest	Amount (Rs. Crore)
1	True up for FY 2022-23		
2	Gross revenue Gap after true-up for FY 2022-23		1,904.17

SI. No.	Particulars	Rate of Interest	Amount (Rs. Crore)
3	Less, allowed recovery in FY 23-24		457.09
4	Net claimed in this petition		1,447.08
5	Carrying/(Holding) cost for FY 2022-23 (half Year)	10.00%	72.35
6	Carrying/(Holding) cost for FY 2023-24 (full Year)	11.28%	163.23
7	Carrying/(Holding) cost for FY 2024-25 (half Year)	11.53%	83.42
8	Total carrying cost		319.01
9	Grand total:		1,766.09
10	Annual Performance Review for FY 2023-24		
11	Gross revenue Gap		1,170.19
12	Carrying/(Holding) cost for FY 2023-24 (half Year)	11.28%	132
13	Carrying/(Holding) cost for FY 2024-25 (half Year)	11.53%	134.92
14	Total carrying cost		266.92
15	Gross Revenue Gap for FY 2023-24		1,437.11
16	Stand-alone ARR for FY 2024-25		10121.92
17	Cumulative revenue requirement (9+15+16)		13325.12

- 2.4.3 APDCL proposed retail sale of 10,678 MU during FY 2024-25. Thus, average cost of supply to recover entire cumulative amount of Rs. 13325.12 Crore during FY 2024-25 is projected as Rs. 12.48 per kWh.
 - 2.4.4 APDCL submitted that at present, FPPPA is levied at Rs. 1.29 per kWh (with cross-subsidy support from State Government on differential amount for categories with reduced FPPPA). Thus, effective ABR prevailing at present over approved level of ACoS is Rs. 9.31 per kWh (without Government subsidy and FPPPA).
 - 2.4.5 APDCL submitted that recovery of entire amount of Revenue Gap will lead to an average increase in retail tariff by 34% on prevailing rate.
 - 2.4.6 APDCL also submitted that delayed recovery of dues will have adverse effect to the Utility on discharge of its obligations. The increase is primarily driven by massive increase in cost of power purchase due to exorbitant hike in prices of natural gas catering to ~24% of energy requirement of APDCL. It is also

- important to note that the same is being sustained even after change of pricing mechanism by MoPNG.
- 2.4.7 APDCL further submitted that at the existing tariff structure, total estimated revenue recovery is as under:

Particulars	Amount (Rs. Cr.)
Revenue from consumers (at differential FPPPA)	9750.55
Cross-subsidy support from State Government	468.63
Total	10219.18

- 2.4.8 As such, there will still be a small surplus of Rs. 97.26 Crore on stand-alone ARR for FY 2024-25 at the prevalent tariff profile on estimated sales keeping aside the amounts pertaining to True up for FY 2022-23 and APR for FY 2023-24.
- 2.4.9 Meanwhile, the enhanced FPPPA of Rs. 1.29 per unit was implemented from the month of October, 2023 and certainly another hike of such magnitude within a period of only six months will attract apprehensions from all classes of consumers.
- 2.4.10 As mentioned above, in the event of approval of continuance of the present tariff structure, the petitioner will be able to recover the current dues and some portion of earlier dues also.
- 2.4.11 In this context, it is also to be noted that with the prevailing socio-economic structure, consumer profile of Assam is heavily loaded (more than 92%) with domestic consumers. Such adverse consumer mix has already resulted in significantly higher tariff for a miniscule group of industrial/commercial consumers. The same is already creating hurdle in the way of industrialization in the State of Assam. As per Regulations, APDCL is left with no option but to claim the entire amount. However, being sensitive to consumers so as to avoid sudden tariff shock, APDCL is proposing continuation of the prevailing tariff structure (with applicable FPPPA) with prayer to the Commission to allow a suitable mechanism to recover the dues pertaining to true up Petition with carrying cost

- without creating any regulatory assets.
- 2.4.12 APDCL further submitted that being sensitive to its valued consumers, amount pertaining to APR for FY 2023-24 with associated carrying cost is not claimed herein.

2.5 Prayers of APDCL

- 2.5.1 APDCL, in its Petition, has prayed as reproduced below:
 - 1. "To admit the petition for True-Up of ARR for FY 2022-23.
 - 2. To approve the amount of revenue gap on True-Up of ARR for FY 2022-23.
 - 3. To admit the petition for Annual Performance Review for FY 2023-24.
 - 4. To approve the amount of revenue gap for Annual Performance Review for FY 2023-24.
 - 5. To admit the petition for Annual Revenue Requirement for FY 2024-25.
 - 6. To approve the amount of Aggregate Revenue Requirement for FY 2024-25...."

3 Brief Summary of the Stakeholders' Comments, Response of APDCL and Commission's View

3.1.1 The Commission received objections/suggestions from the following nine (9) stakeholders on the Petition filed by APDCL.

SI. No.	Name of objector
1	All Assam Electricity Consumers Association (AAECA)
2.	Assam Branch of India Tea Association (ABITA)
3.	All India Manufacturers Organisation, Assam State Board (AIMO)
4.	Assam Oxygen Manufacturers Association (AOMA)
5.	Bharti Airtel Limited (Airtel)
6.	Cellular Operators Association of India (COAI)
7.	Consumer Advocacy Cell (CAC)
8.	Federation of Industries and Commerce of North Eastern Region (FINER)
9.	Star Cement (SC)

- 3.1.2 APDCL submitted its responses to the objections/suggestions received from the above stakeholders.
- 3.1.3 The Commission considered the objections / suggestions received and notified the Respondents to take part in the Hearing process by presenting their views in person before the Commission, if they so desired.
- 3.1.4 The Commission held Hearing at the Bidyut Niyamak Bhawan, Six Mile, Guwahati on, 29th February, 2024.
- 3.1.5 The Respondents attended the Hearing and submitted their views/ suggestions. M/s Eco Tech Agri Limited had submitted a Petition to the Commission on 12.01.2024. As the matter was related to change in consumer tariff category, the Commission decided to take up the Petition together with other responses dealing with similar subjects. In addition to the above respondents, Purvottar Prant of Laghu Udyog Bharati (LUB) made written and oral submissions on

APDCL's Petition during the Public Hearing.

- 3.1.6 All the written representations submitted to the Commission and the oral submission made before the Commission in the hearing and the responses of APDCL have been carefully considered while issuing this Tariff Order.
- 3.1.7 The objections/suggestions made by the stakeholders and responses of the Petitioner are briefly dealt with in this Chapter. The major issues raised by the objectors are discussed below along with the response of the Petitioner (APDCL) and views of the Commission.
- 3.1.8 While all the objections/suggestions have been given due consideration by the Commission, only major responses/objections received on the Petition and also those raised during the course of Hearing have been grouped and addressed issue-wise, in order to avoid repetition.

Issue 1: Energy Sale

Stakeholders' Comments

ABITA submitted that the actual sales for FY 2022-23 are 8% higher than the sales in FY 2020-21, 1% higher than the sales approved in the MYT Order, and 2% higher than the sales approved in the APR for FY 2022-23. ABITA requested the Commission to review the sales in categories where the sales have gone up by more than 10%, e.g., LT Commercial (17%), General Purpose-Non-Commercial & Non-Domestic Users (13%), HT Commercial (30%), Public Water Works (40%), Bulk Supply Government (42%), and HT Categories (27%). ABITA also requested the Commission to direct APDCL to submit actual category-wise revenue and check if the average tariff recorded in the accounts are in line with the approved tariffs.

Reply of APDCL

No specific response.

Commission's View

Noted. The category-wise sales approved by the Commission for FY 2022-23 are detailed in the relevant Chapter of this Order. The Commission has also verified that the Average Billing Rate (ABR) based on actual sales and actual revenue is in line with the tariff approved by the Commission for FY 2022-23, after considering the FPPPA.

Issue 2: Distribution loss

Stakeholders' Comments

ABITA and FINER submitted that APDCL has submitted actual distribution loss of 16.22% for truing up of FY 2022-23, which is even higher than the distribution loss target set for FY 2019-20. ABITA submitted that the deviation between actual distribution loss level and the targets set by the Commission was ~5.5% in FY 2013-14, which reduced over the period up to around ~0.5% in FY 2017-18. However, the under-achievement has increased to ~3.05% in FY 2019-20 and FY 2020-21, while the year-on-year reduction target was 0.25% up to FY 2018-19 and only 0.5% in FY 2020-21, FY 2021-22 and 0% in FY 2022-23. The loss targets set by the Commission are very reasonable and relaxed as compared to various other State Commissions, in spite of that APDCL could not achieve these milestones.

ABITA and FINER submitted that the justifications given by APDCL against the underachievement are not tenable. ABITA submitted that there has been an increase in number of consumers through various schemes such as RGGVY/SAUBHAGYA scheme. However, coupled with these schemes, technological and infrastructure improvement-oriented schemes under R-APDRP and IPDS have supported the Distribution Licensees in achieving substantial technical and commercial loss reduction. The Respondents highlighted that APDCL has committed to AT&C loss target of 15% by end of FY 2019-20 as part of UDAY Scheme. Therefore, the Respondents requested the Commission to consider the loss level of 15.00% for FY 2022-23, while computing the disallowance in power purchase cost.

CAC submitted that APDCL has claimed that low HT-LT ratio is a key factor contributing to higher distribution losses. However, the Commission has amended the Supply Code Regulations allowing the consumer to avail 30 kVA load without any transformer, which is contradictory to APDCL's admission on low HT-LT ratio. Therefore, APDCL should approach the Commission on the subject for rectification.

CAC submitted that APDCL should undertake a drive for reduction of technical and commercial losses, backed by the following distinct strategy:

I. A Circle-wise system study with the objective of designing an optimum distribution system is necessary.

- II. The revamping, renovation and augmentation projects should be undertaken on the basis of findings of such studies.
- III. An identification of the potential areas of pilferage could be done by judicious application of findings of the system study.

LUB submitted that high losses in the distribution system and failure to achieve the targeted losses in successive years, is a major concern. From the report "Benchmarking of Distribution Utilities" 2020 by NITI Ayog, it is seen that HT/LT ratio is around 0.3 against national average of 0.69. Paschim Gujarat Vij Company Limited (PGVCL) has the best ratio of 1.72. With such low HT/LT ratio, even the loss percentage shown in the Petition seems to be difficult to achieve. APDCL should critically examine the causes for HT/LT ratio in APDCL not improving to the desired level despite many centrally funded schemes being implemented over more than one decade.

Reply of APDCL

APDCL submitted that it is making continuous efforts to ensure quality and reliable power supply to its valued consumers with optimal use of its limited resources in right earnest. Implementation of UDAY was significantly affected by subsequent roll out of universal household electrification programme SAUBHAGYA.

Replying to CAC submissions, APDCL submitted that metering of all nodal points vis-à-vis proper energy auditing are one of the prime parameters under RDSS and the same is under implementation. The Petitioner informed that various measures are already in place to take care of the collection aspects. One of the major and positive innovation in this aspect was engagement of pre-paid wallet-based collection agents.

APDCL further submitted that loss due to inefficiency has to be absorbed by APDCL as per the Regulations and requested the Commission to consider submission of the Petitioner taking due cognizance to ground realities.

Commission's View

Distribution Losses are a controllable parameter. The Commission has considered the approved Distribution Loss level, and disallowed 2/3rd of the excess power purchase cost in the true-up of FY 2022-23 as per the MYT Regulations, 2021.

Issue 3: Power Purchase

Stakeholders' Comments

ABITA observed that APDCL has submitted Rs. 8479 Crore as power purchase cost for FY 2022-23 as against Rs. 6031 Crore approved in the Tariff Order for FY 2022-23 and Rs. 7787 Crore approved in the APR of FY 2022-23, which is Rs. 2448 Crore and Rs. 692 Crore, respectively, higher than the figures approved by the Commission in the Tariff Orders for FY 2022-23 and FY 2023-24, respectively. The Respondent further submitted that APDCL has sold 1,087 MU under seasonal export, which is very high, and amounts to 9% of the energy requirement and 12% of the total energy sales. While APDCL has purchased this power @Rs. 6.62/kWh, the sale of surplus power was at 21% discounted rate @Rs. 5.25/kWh, resulting in straightforward loss of Rs. 148 Crore due to poor management of power purchase and sales. ABITA also pointed out that as per NERLDC compendium report, the short-term power purchase by Assam is 1548.48 MU during 2022-23. and requested the Commission not to allow power purchase quantum higher than the requirement for sales in Assam and also factor in losses on account of seasonal export. ABITA also requested the Commission to direct the Petitioner to plan its power procurement in advance and undertake procurement through DEEP Portal to ensure that short-term power is procured at competitive rates.

FINER observed that despite having adequate long term tied up capacity with Generating Companies, the Petitioner is procuring expensive power on short-term basis. The Petitioner is exporting seasonal power of 1087.10 MU at Rs. 3.92/kWh, while procuring short-term power at Rs. 6.79/kWh. The Respondent requested the Commission to conduct prudence check on the power procurement plan of the Petitioner.

FINER further observed that the Petitioner has shown expense of Rs. 1,878.90 Crore for procuring 3,008.70 MU from NTPC Bongaigaon TPS, which translates to Rs. 6.24/kWh for FY 2024-25. The Petitioner's submission indicates that the Utility has fulfilled around 33% of power requirement from BTPS. The Respondent mentioned that the Petitions pertaining to tariff are pending adjudication before CERC, which is expected to reduce the rate of BTPS by Rs. 1.2/kWh to Rs. 1.5/kWh. FINER requested the Commission to take note of the same. The Respondent requested the Commission to disallow the Late Payment Surcharge paid by the Petitioner to the tune of Rs. 0.10 Crore, Rs. 130.85 Crore owing to NTPC BTPS power procurement cost adjustment, Rs. 313.31 Crore on account of excess cost on short-term purchase, and Rs. 71.18 Crore on account of Surplus Power.

Hence, the Respondent requested the Commission to allow the Power Purchase Cost of Rs 7,963.42 Crore only as against the claim of Rs. 8,478.85 Crore.

FINER submitted that in view of the Kirit Parekh panel's recommendations, the Commission may acknowledge the gravity of high fuel costs on the consumers of the country and take into due consideration the impact of high fuel costs onto the consumers of the State. FINER suggested that to optimize the power portfolio, options such as sourcing of RE power/ hybrid RE power/ Medium-term RTC power especially suited to serve the long-term as well as short-term needs may be adopted. The Respondent requested the Commission to disallow any cost burden towards short-term products beyond the approved ceiling rate.

CAC submitted that there is an abnormal rise in per unit cost of power as compared to the projections. Therefore, application of Al driven software has become a necessity to ensure 24x7 real time monitoring of power distribution by APDCL in consonance with the original plan of procurement.

LUB requested the Commission to review the projected power purchase cost in the ARR and if feasible, reduce the projected power purchase cost to the extent of excess cost considered for power purchase from gas-based power stations so as to reduce the increase in tariff proposed for FY 2024-25.

Reply of APDCL

APDCL submitted that the typical demand-supply position of Assam necessitates additional procurement to the extent of around 850 MW during the evening peak hours (around 6 hours a day) throughout the year. Market dependence for ~ 20% of demand exposes APDCL to both availability as well as price volatilities. Meanwhile, demand of electricity is experiencing massive growth with restoration of all economic activities after almost two years of COVID disruptions. The Ministry of Power had to intervene through CERC to reduce the ceiling price on Energy Exchange at Rs. 12/kWh from Rs. 20/kWh to give some respite. APDCL has no alternative but to procure from open market to meet the demand.

The Petitioner submitted that any addition/reduction in the rate of power from NTPC Bongaigaon is subject to adjustment after final disposal of Petition by CERC.

Commission's View

The Commission has trued up the power purchase cost based on the Audited Accounts

and prudence check. The Delayed Payment Charges incurred by APDCL have been disallowed in the true-up for FY 2022-23.

The Commission is of the view that the purchase of short-term power purchase and sale of surplus power during different hours of the day are dependent on the prevalent demand-supply position. A directive for optimisation of power purchase cost has been issued in this Order.

The detailed analysis of power purchase expenses is elaborated in the relevant Chapters of this Order. Any change in power purchase rates would be adjusted through the FPPPA mechanism and in the truing up exercise for that respective year.

Issue 4: Sharing of gain / (Loss) on account of excess power purchase

Stakeholders' Comments

FINER highlighted that as per MYT Regulations, 2021, Distribution Losses are categorized as a controllable factor and the mechanism for sharing of loss on account of controllable parameters is also specified. FINER observed that because of inefficiencies of the Petitioner, the distribution losses are higher at 16.22% and additional energy to the extent of 143 MU had to be purchased due to higher distribution losses. Citing the example of State Electricity Regulatory Commissions of Uttar Pradesh and Odisha, FINER requested the Commission to apply "Power to remove difficulties" to disallow the mechanism of sharing of losses on account of controllable parameters in order to protect the interest of the consumers.

CAC submitted that the total excess distribution losses over that approved by the Commission is shared between the consumers and APDCL in the proportion of 1/3:2/3. CAC observed that APDCL cannot sustain such deficit without government grants. It is a recurring process and later on, such grants are converted into equity with 14% return to be paid by the consumer.

Reply of APDCL

The Petitioner submitted that sharing of efficiency gains and losses has been computed in accordance with the MYT Regulations, 2021.

Commission's View

The Commission has approved sharing of gains/ losses in case of controllable parameters

including Distribution Loss in the true-up of FY 2022-23 in accordance with the MYT Regulations, 2021 and the detailed ruling of the Commission is available in Chapter 4 of this Order.

As regards the apprehension that any Grants given by the State Government for meeting the deficit of APDCL may also be converted to equity, it is clarified that only the Grants given by the State Government against capital assets have been considered for conversion to equity, and that too limited to 30% of the GFA less remaining grants.

Issue 5: Energy Balance

Stakeholders' Comments

ABITA submitted that APDCL has not been able to achieve the target distribution losses, and has claimed power purchase requirement considering the actual distribution losses. The Respondent requested the Commission to approve only the energy requirement corresponding to the approved distribution loss levels.

Reply of APDCL

The Petitioner submitted that the admissible amount for inefficiency in respect of approved losses only has been adjusted.

Commission's View

The Commission has considered the allowable energy requirement at approved distribution loss as discussed in the relevant chapters of this Order. Further, the Commission has approved sharing of losses on account of excess Distribution Loss in the true-up of FY 2022-23 in accordance with the MYT Regulations, 2021, as detailed in Chapter 4 of this Order.

Issue 6: O&M Expenses

Stakeholders' comments

FINER submitted that normative expenses are significantly higher as compared to audited O&M expenses. FINER requested the Commission to allow the lower actual and audited O&M expenses in the interest of the consumers.

ABITA submitted that APDCL has claimed Rs 934.34 Crore as employee expenses, which includes Rs 67.52 Crore towards provision of DCRG under NPS. ABITA requested the Commission to allow the employee expenses and R&M expenses on the basis of actuals as per the books of accounts for FY 2022-23. ABITA submitted that the provision of DCRG under NPS may be allowed after prudence check by the Commission. ABITA requested the Commission to review the large increase in the components of A&G expenses as against the justifications submitted by the Petitioner.

Reply of APDCL

APDCL submitted that as a regulated entity, the O&M expenses have been claimed in accordance with the MYT Regulations, 2021 and on the basis of audited accounts. All detailed calculations and justification for the expenses are submitted to the Commission for prudence check.

Commission's View

The Commission has allowed normative O&M expenses in accordance with the MYT Regulations, 2021 and considered the actual component-wise O&M expenses for FY 2022-23 after prudence check, as elaborated in Chapter 4 of this Order. The efficiency gains//losses on account of variation between the normative and actual O&M expenses has been done in accordance with the MYT Regulations, 2021, as detailed in Chapter 4 of this Order.

Issue 7: Capitalization

Stakeholders' Comments

FINER submitted that against the Capitalization of Rs. 1620.90 Crore approved for FY 2022-23 in the MYT Order; the Petitioner has claimed capitalisation of Rs. 753.83 Crore. No explanation as to why the approved Capitalization could not be achieved is provided by the Petitioner. The Respondent also submitted that despite capitalising more than Rs. 750 Crore worth of assets, the Petitioner failed to control the distribution losses.

ABITA submitted that actual capitalisation submitted by APDCL during FY 2022-23 is Rs. 754 Crore as against Rs. 1340 Crore approved in the APR in the Order dated March 29, 2023. However, APDCL has not provided the actual scheme-wise capital expenditure and capitalisation achieved in FY 2022-23, scheme-wise funding of capitalized works with

break-up of grant, loans, consumer contribution, equity etc., cost benefit analysis of all the schemes undertaken and reasons for increase/ decrease in the cost against approval as also the reasons for delay in execution of the projects. Therefore, ABITA requested the Commission to thoroughly look in to the Capitalization, Capital Expenditure, Grants, Consumer Contributions to arrive at means of financing and also direct APDCL to submit the details of works carried out under various schemes against the asset addition.

Reply of APDCL

APDCL submitted that all details of capital expenditure and capitalisation have been submitted to the Commission. Actual capitalisation as per audited accounts may be considered as per the MYT Regulations, 2021.

Commission's View

Noted. The details of approved capital expenditure and capitalization for FY 2022-23 are discussed in Chapter 4 of this Order.

Issue 8: Depreciation

Stakeholders' Comments

FINER and ABITA submitted that the Petitioner has claimed depreciation amounting to Rs. 73.35 Crore for FY 2022-23. FINER submitted that the Petitioner has added the depreciation on assets created out of consumer contribution, which is not in line with the provisions specified in the MYT Regulations, 2021 and therefore, should not be considered.

The respondents requested the Commission to consider the actual capitalization (after excluding assets created from grants and consumer contribution) for FY 2022-23 for the purpose of computation of depreciation.

Reply of APDCL

APDCL submitted that it has claimed depreciation as per the MYT Regulations, 2021.

Commission's View

Depreciation has been allowed by the Commission for FY 2022-23 in accordance with the MYT Regulations, 2021, as discussed in Chapter 4 of this Order.

Issue 9: Interest and Finance Charges

Stakeholders' Comments

ABITA has proposed total interest and finance charges of Rs. 9.15 Crore on average loan for FY 2022-23 against APDCL's normative claim of Interest on Loan of Rs. 4.45 Crore by applying actual rate of interest @8.41% on the closing loan.

Reply of APDCL

The Petitioner requested not to take cognizance of the submission by respondent.

Commission's View

The Commission has allowed the normative interest on loan and finance charges for FY 2022-23 in accordance with the MYT Regulations, 2021, as discussed in Chapter 4 of this Order.

Issue 10: Return on Equity (RoE)

Stakeholders' Comments

FINER submitted that the Petitioner has claimed net equity addition of Rs. 361.04 Crore in FY 2022-23 without any reasoning/justification for the same.

ABITA submitted that APDCL has claimed an amount of Rs. 168.07 Crore towards RoE considering addition of Rs. 361.04 Crore during the year. However, there is no mention of funding of capitalization through Equity of Rs. 361.04 Crore anywhere in the petition. ABITA prayed to disallow any ROE on the loans/ grants converted to equity and share application money yet to be converted to equity, equity not utilized for funding of capitalization, equity that has not taken the colour of actual equity in terms of the MYT Regulations, 2021 and audited financials.

CAC submitted that the process of conversion of grant into equity by the Government is being continued. The Commission approved equity addition of Rs 25.41 Crore for FY 2022-23 against which equity addition of Rs 361.4 Crore has been claimed by APDCL in True up. For FY 2023-24, additional equity addition of Rs.729.32 Crore has been claimed. CAC asked APDCL regarding whether such equity is in capital account or converted equity from the revenue account.

Reply of APDCL

APDCL submitted that the RoE has been claimed in strict adherence to the principles adopted by the Commission in previous Orders.

Commission's View

The Commission's analysis and ruling on the computation of RoE is elaborated in relevant Chapters of this Order. The Commission has followed the same methodology for computing the equity addition due to conversion of Grants to equity as adopted in previous Orders.

Issue 11: Revenue

Stakeholders' Comments

ABITA submitted that APDCL has submitted that it has earned Rs. 676.16 Crore towards other income and Rs. 417.59 Crore towards Non-Tariff income. Further, the Petitioner has considered grant/subsidy amount of Rs. 346.40 Crore as support for respective purposes as well as Rs. 284.43 Crore of targeted subsidy in the true-up of ARR for FY 2022-23. However, there are some discrepancies in the revenue considered by APDCL for Trueup of 2022-23 based on the audited financials. On reconciliation, it can be seen that APDCL has not taken into account Rs. 72.2 Crore towards loss funding and Rs. 478.42 Crore towards Deferred Grants/Consumer Contribution. Moreover, APDCL has also not taken into account Rs. 266.62 Crore towards Miscellaneous Receipts in the Other Income as per audited accounts. APDCL has submitted the reason for non-consideration of such amount as being a book adjustment for "Installation Charges for New service connection" for past years without any cash flow. ABITA submitted that the actual Employee Cost as per audited statements for FY 2022-23 after adjusting for Terminal Benefits is Rs. 683.59 Crore only. ABITA requested the Commission to take into account these numbers while carrying out the prudence check including all other cost heads while approving True-up for FY 2022-23, APR for FY 2023-24 and ARR for FY 2024-25.

FINER highlighted that as per Auditor's comments, the Petitioner's accounts have understated revenue to the tune of Rs. 74.36 Crore and Rs. 1.36 Crore. FINER submitted that the Petitioner has waived off Rs. 7.37 Crore worth of Penalty, which was to be charged to the contractors. Such penalty, if recovered by the Petitioner would have been

considered as revenue, thus impacting the Revenue Gap/Surplus for FY 2022-23. As per Government of Assam notification dated 4.02.2005, the Petitioner was supposed to claim 72.04% of the total GPF amount paid to its employees during FY 2022-23 from the pension fund. However, no such claim was made by the Petitioner, resulting in understatement of revenue by Rs. 34.25 Crore.

CAC submitted that APDCL has shown some arrear amount receivable from the consumers. CAC submitted that APDCL should clarify if any payment from the Government of Assam on account of electricity consumption is also pending or has this been included in the above-mentioned arrears.

Reply of APDCL

The Petitioner submitted that detailed item-wise classification of other income and non-tariff income has been elaborated in the respective chapters of the Tariff Petition. Recognition of deferred grants is a book entry necessitated by IndAS. The benefits of such grants have already been passed on to the consumers since respective years of receipt. APDCL further stated that any adjustment on the basis of the audit observation, if required, will be taken care of in next year as standard practice with consequent adjustment in relevant tariff petitions.

Replying to CAC, the Petitioner submitted that no revenue grant can be converted to equity and ROE has been claimed in consonance with the principles adopted by the Commission in the earlier orders. APDCL also submitted that details of outstanding dues against Government consumers are elaborated in the Annual Statement of Accounts.

Commission's View

The revenue from sale of power and Other Income and Non-Tariff Income considered by the Commission in the true-up for FY 2022-23 have been elaborated in Chapter 4 of this Order. The Commission's views on the Miscellaneous Receipts of Rs. 266.62 Crore against "Installation Charges for New service connection" have been elaborated in Chapter 4 of this Order.

Issue 12: Revenue Subsidy

Stakeholders' Comments

FINER submitted that the Petitioner has considered Rs. 346.40 Crore towards tariff

subsidy from Government of Assam against the approved amount of Rs. 400 Crore during the APR of FY 2022-23. The Respondent requested the Commission to consider the amount of Rs 400 Crore as tariff subsidy.

Reply of APDCL

APDCL contended that the actual amount of subsidy amount received during FY 2022-23 has been considered.

Commission's View

The treatment of Subsidy from the State Government for FY 2022-23 has been elaborated in Chapter 4 of this Order.

Issue 13: ARR and Revenue Gap/(Surplus)

Stakeholders' Comments

FINER submitted that the allowable Revenue Gap for FY 2022-23 is Rs. 511.90 Crore as against 1766 Crore proposed by the Petitioner, and Revenue Surplus for FY 2024-25 is Rs. 726 Crore. The Respondent requested the Commission that the benefit of surplus available in the ARR must be passed on to the consumers of the State and the proposal of the Petitioner for increase in retail tariff should be rejected outright.

ABITA recalculated the ARR and Revenue Gap/(Surplus) showing cumulative revenue requirement of Rs. 1,478 Crore as against APDCL projection of Rs. 13,192 Crore till FY 2024-25 after taking into account Carrying/(Holding) cost for the interim period(s). As regards APDCL's proposal to continue the existing tariff along with FPPPA mechanism, ABITA submitted that the Commission should only allow FPPPA as an alternative for partly minimizing the impact of periodic fuel price fluctuations. APDCL should not be allowed to take FPPPA or any other mechanism for granted to increase the retail tariff. Otherwise, the transparent process of tariff determination in terms of MYT Regulations, 2021 would be vitiated.

CAC submitted that the existing practice of True up on normative basis is not a correct approach to evaluate the performance of the Utility. This matter has snowballed now as reflected in the True up for 2022-23, which shows a huge deficit of Rs. 1766 Crore as

cumulative deficit of APDCL. The True up should display an extra column for actual expenditure as per the audited accounts for the purpose of comparison. It is necessary to assess the performance of the utility and to adopt appropriate measures for course correction. CAC requested the Commission to take cognizance of this.

AAECA submitted that APDCL has submitted Revenue Gap of Rs 1904.17 Crore in the true-up for FY 2022-23, which was estimated as Rs 1379.64 Crore in the APR in the last Tariff Order. The actual Revenue Gap has been increasing year on year, which is not in the interest of the consumers. Further, AAECA submitted that the projected ARR for FY 2024-25 has also increased by Rs 2530.46 Crore to Rs 10121.92 Crore as compared to approved ARR of Rs 7591.46 Crore for FY2023-24. The Respondent submitted that this increase is due to uneconomical use of resources and inefficiency of APDCL and is therefore, not justified. AAECA requested that the FPPPA levied @Rs 1.29/unit should be withdrawn in FY 2024-25.

LUB, during the Public Hearing, contended that showing retail tariff for FY 2023-24 merged with the FPPPA as "Existing Tariff" is misleading. FPPPA cannot be termed as "Tariff" as fixing of the same has not been passed through the regulatory process under Section 64 of the Act including public scrutiny, etc., specified therein. LUB further submitted that APDCL has factually misrepresented the existing billing rates against some consumer categories in the Tariff Petition.

Reply of APDCL

The Petitioner submitted that the Respondents have submitted the ARR vis-à-vis Revenue Gap on the premise of some arbitrary calculation and requested the Commission to reject the claim of the Respondents in the interest of justice.

Replying to AAECA, APDCL submitted that every year is different in itself. As such, mere comparison of values of two years without detailed analysis is not appropriate. The petitioner has elaborated in detail with reasons for each amount claimed, and no excessive claims have been made.

Commission's View

It is clarified that the Act expressly allows recovery of FPPPA in addition to the tariff

determined by the Commission in the Tariff Order, and extant FPPPA being levied to the consumers is clearly a part of the existing tariff, as the consumers are paying the same in addition to the tariff determined by the Commission in the Tariff Order.

The Revenue Gap/Surplus for FY 2022-23 and the ARR for FY 2024-25 have been determined after necessary prudence check and in accordance with the MYT Regulations, 2021, as elaborated in the relevant Chapters of this Order.

Issue 14: High Tariff for Tea Category

Stakeholders' Comments

ABITA submitted that the tariff applicable for Tea & Coffee Estates/Plantations is among the highest in the State. ABITA appreciated the Time-of-Day Tariff with night time concession in the previous Tariff Order. ABITA requested the Commission to align the tariff with Average Cost of Supply (ACoS) considering the availability of Revenue Surplus, so that the tea manufacturers are relieved from the extra burden of cross-subsidization. ABITA prayed to disallow any upward increase in the tariff for Tea, Coffee & Rubber category for FY 2024-25 as the same will render the affected manufacturing units in the State of Assam unviable.

Reply of APDCL

APDCL submitted that Assam has more than 92% domestic consumers and without much presence of other industry due to various factors, Tea is a natural industry. Accordingly, Tea, Coffee & Rubber category is treated separately since long. Considering the ultimate impact on the supply chain vis-à-vis terms of the Tariff Policy and purchasing power of consumers in Assam, the proposal has been submitted with cross-subsidy very much within the permissible limit.

Commission's View

The Commission has approved the category-wise tariffs and has ensured that the tariffs are within +/-20% of ACoS for most consumer categories, as elaborated in the relevant Chapter of this Order.

Issue 15: Tariff Charges

Stakeholders' Comments

ABITA requested the Commission to provide relief to the Tea & Coffee Estates category through reduction in fixed and energy charges, considering the sustained losses to the tea industry year over year post global COVID-19 pandemic in 2020.

SCL submitted that the Petitioner has presently been billing FPPPA @Rs. 1.29/unit to the consumers over and above the Energy Charges of Rs. 7.05/unit for HT Industries-II (above 150 kVA). This has resulted in effective Energy Charge of Rs. 8.34/unit. SCL submitted that the tariff being charged by the DISCOM is not at all competitive vis-à-vis tariff charged by various Discoms' across India. The Respondent observed that the Licensee has multiple PPAs wherein the power purchase rate is higher than Rs. 6.00/kWh, which is ultimately resulting in increased retail tariff. Quoting the Hon'ble Supreme Court Judgment in Civil Appeal No. 6503 of 2022 [Jaipur Vidyut Vitran Nigam Ltd (Appellant) Vs MB Power (Madhya Pradesh) Limited (Respondent)], SCL submitted that the Commission is bound to take into consideration the protection of consumer interest and submitted that the Commission may provide for a much more cost-effective tariff to allow the industries within the State to sustain.

AAECA opposed the proposed increase in tariff rates and submitted that many of the directives in the last Tariff Order were meant to increase the efficiency in operations of APDCL and had the Company followed these directives, no increase in tariff would be necessary. Therefore, AAECA requested the Commission not to allow any hike in tariff.

AIMO submitted that instead of seeking an increase in tariff, APDCL should decrease the tariff as economics rule says that higher the scale of production less the cost of production and distribution. AIMO proposed that the domestic and industrial consumers must be separated and industry should be given priority in supply of power and should not be penalized for inefficiency of the system. Instead of transferring the burden of higher tariff on this small essential group of consumers, the burden must be taken by the Government under their welfare schemes or under some other means but not on Industrial customers. The Respondent also proposed that during the night hours, the tariff should also be reduced, which will be beneficial for the Discom and industrial consumers. AIMO contended that gas-based electricity generation is a small part of production and will not have much impact on their purchases from the open market, so, the FPPA on the entire

supply is unjustified. The Respondent stated that the Fixed Charges and Energy Charges must be reduced year-on-year by reducing the inefficiencies and increasing Industrial and commercial consumer base.

Reply of APDCL

APDCL submitted that in principle, energy charge is to be levied for recovery of energy component of power purchase cost. Fixed charge is primarily the charge for recovery of the fixed part of the power purchase cost, transmission charges, O&M of distribution network and equipment, and linked to the connected load. Operation and maintenance cost of electricity infrastructure has been increasing manifold due to price rise of all commodities, which determine the cost of supply in distribution sector. The tariff proposal has been prepared after prudent analysis. Against estimated fixed cost of around 60%, only 18% recovery is proposed in the form of Fixed Charges. The proposal was submitted on the premise of improved supply conditions to consumers and tea gardens.

In response to SCL, APDCL submitted that electricity tariff for large industrial segment in Assam is relatively lesser than 16 other States of India. It is important to note that retail tariff of any Distribution Licensee is dependent on many localized factors, some of which have been elaborated in the Petition. The Petitioner further submitted that reference of Civil Appeal No.6503 of 2022 is totally irrelevant to the argument proposed.

Replying to AAECA, APDCL submitted that directives are issued by the Commission to the Petitioner on various grounds inter-alia enhancement of operational efficiency. APDCL stated that the directives do not indicate existence of operation inefficiency as inferred by the Respondent, rather, such directives are for improvement in the efficiency level.

Commission's view

The Commission has determined the category-wise tariffs and the details are elaborated in the relevant Chapters of this Order. In the previous Tariff Order, the Commission had increased the Fixed/Demand Charges in order to improve the recovery of fixed costs through the Fixed Charges. Hence, in the present Order, the Fixed Charges have been retained at existing levels.

Issue 16: Determination of Tariff based on Voltage-wise Cost of Supply

Stakeholders' Comments

ABITA requested the Commission to determine tariff based on voltage-level cost of supply. This would enable cost reflective tariff in the State. ABITA submitted that the existing voltage-wise cost of supply may be based on number of assumptions but unless the Commission implements the same, the Petitioner would not be providing sufficient information in this regard. Therefore, ABITA requested the Commission not to wait indefinitely for accurate data and introduce voltage-wise tariff structure in the State.

Reply of APDCL

The Petitioner submitted that it has no issue if tariff is determined based on VCoS, subject to adequate commercial safeguard to the utility. The Petitioner further submitted that implementation of VCoS based tariff will be very challenging at this juncture, considering the typical consumer mix of Assam, rationalization of tariff as per Tariff Policy, and purchasing power parity. Adequate metering arrangement at every nodal point will be undertaken in RDSS for proper determination of VCoS. Therefore, it would be prudent to deliberate on the matter after full implementation of RDSS and considering overall implications.

Commission's view

Noted. The Commission has determined the category-wise tariffs based on ACoS, and ensured that the category-wise tariffs are within <u>+</u>20% of ACoS for most categories, in accordance with the Tariff Policy.

Issue 17: Load factor Rebate

Stakeholders' Comments

FINER submitted that many Distribution Companies in India have started giving a Load Factor rebate to industries for maintaining Load Factor above average Load Factor. This helps the Discom in planning the load requirement and optimum utilization of resources. FINER submitted that it is already evident from the Petition that surplus power is sold at rates less than the average power purchase cost (APPC). Such quantum of power may be sold by the Distribution Licensee to its own consumers at Tariff with suitable rebate so

that the industries get incentivized and Discoms also benefit.

Reply of APDCL

Being a regulated utility, APDCL is complying with the Regulations and admissible rebates are allowed.

Commission's view

Noted. APDCL may consider the suggestion and propose Load Factor rebates for industries in the next MYT Petition, as appropriate, after considering all relevant aspects.

Issue 18: Coordination among the Utilities

Stakeholders' Comments

CAC observed that proper coordination is required between APDCL and AEGCL in the matter of voltage issue and evacuation of power from various sources, for which the Commission directed the Utilities to form a Co-ordination Committee. CAC therefore, requested the Commission to ensure that the Committee formed carries out the functions as may be necessary.

Reply of APDCL

APDCL has not submitted any specific reply.

Commission's view

The Commission takes periodic review of the compliance of directives, and notes that the Co-ordination Committee meets periodically for ensuring co-ordination between the Utilities, as desired.

Issue 19: Timely payment and Bank Guarantee (BG)

Stakeholders' Comments

FINER submitted that the consumers should be given a discount for timely payment of dues so as to improve the cash flow of the Company.

Reply of APDCL

APDCL remarked that submission of the respondent calls for amendment of the prevailing Regulations and is beyond the scope of the Petition.

Commission's view

Noted.

Issue 20: Cross-subsidy and Cross-Subsidy Surcharge

Stakeholders' Comments

ABITA submitted that the current level of cross-subsidy in the State of Assam is very high in comparison to other States where average realization for historically cross-subsidized categories have progressively moved towards cost of supply/average cost of supply thereby easing off the burden of high tariff on the historically cross-subsidizing categories. ABITA submitted that the current levels of tariff are not aligned with the ACoS for Jeevan Dhara and Domestic A categories and there is a continuance of a large component of cross subsidy. Further, with the substantial increase in sales to these subsidized categories, the requirement for cross-subsidy is increasing. ABITA requested the Commission to approve tariff for these categories in line with ACoS and the State Government may consider providing adequate tariff subsidy, if it desires so. Also, ABITA submitted that the cross-subsidy being recovered from the Tea and Coffee plantations is amongst the highest. ABITA requested the Commission to reduce the high level of cross-subsidy for Tea Estates, as such large level of cross-subsidy is hampering the viability of this industry.

SCL submitted that the determination of Cross-Subsidy Surcharge (CSS) needs to be done in a manner that while it compensates the Distribution Licensee, it does not constrain introduction of competition through Open Access. Also, Section 42 of the Act provides that CSS has to be progressively reduced in a manner specified by the State Commission Therefore, SCL requested the Commission to comply with the statutory mandate and not only restrict the rates of CSS within 20% of the ABR but also draw up a plan for progressively reducing CSS in the future.

Reply of APDCL

APDCL submitted that the tariff proposal has been made with due care to keep the crosssubsidy levels within ±20% of ACoS to the extent possible. The CSS for large industrial segment in Assam is very competitive as compared to many other States.

Commission's View

The cross subsidy has been reduced over time. The Commission has determined tariffs for FY 2024-25 such that the cross subsidy for most categories is within the band of \pm 20% of ACOS, as stipulated in the Tariff Policy, while at the same time ensuring the revenue gap is met and that no category is subjected to tariff shock. The CSS has been determined for all the applicable consumer categories based on the approach adopted by the Commission in earlier Orders, with the ceiling of CSS linked to 20% of ACoS rather than 20% of ABR, in accordance with the Ministry of Power (MoP) Rules. The details are elaborated in the relevant Chapter of this Order.

Issue 21: Electricity (Amendment) Rules, 2024

Stakeholders' Comments

SCL submitted that the MoP has amended the Electricity Rules on 10.01.2024 and inserted certain clauses relevant to the determination of Retail Tariff. The Respondent requested the Commission to consider the same while determining tariff.

Reply of APDCL

APDCL submitted that the above points are matter of records and does not warrant any specific response at this junction.

Commission's View

The Commission has determined the category-wise tariff as well as related aspects, in line with the MoP Rules, and given certain directions in this regard to APDCL in some aspects.

Issue 22: APDCL Manpower

Stakeholders' Comments

CAC highlighted that pragmatic manpower planning by the field officials of APDCL for skilled workers in APDCL is required to sustain its operations and carry out maintenance activities. Many new installations have been added to its existing distribution system and APDCL has been facing a huge manpower shortage, and outsourcing of work is being resorted to. An estimated 7000 workers are presently working in APDCL since last 10

years. Such an irregular system is causing seeming unrest among the workers which is reflected in various protests organized by their unions. CAC suggested that this needs to be resolved urgently.

LUB submitted that number of employees per thousand consumers in APDCL is around 1.27. Inadequate manpower has been shown in several places in the Petition as a major constraint for achieving the desired levels of performance. With application of IT & AI in distribution system, metering, billing and revenue realization, employee requirement needs to be critically reviewed before going for any further employment.

Reply of APDCL

The Petitioner submitted that recruitment against various posts could not materialize due to various uncontrollable factors. However, the process is expected to get completed soon. APDCL further submitted that the suggestion from the Respondent is welcome. However, being a fully State Government owned utility, the Petitioner has very limited role in this aspect.

Commission's View

Noted. It is understood that APDCL has recently recruited additional manpower after completing the recruitment process.

Issue 23: Energy Banking and Energy Storage System

Stakeholders' Comments

FINER submitted that energy banking allows to save the excess energy and draw upon it when there is a higher demand. Many States in India have entered into such arrangement and benefitted. FINER observed that during the high demand period, the Discom has procured short-term power @ Rs. 6.79/kWh, however, during the lean period, the Discom has sold the excess energy in short-term market @ Rs. 3.92/kWh. This indicates that APDCL is facing both the scenario of energy surplus and deficit. This would create an opportunity to explore energy banking options and reduce the burden of power purchase based on the optimal banking mechanism.

FINER further submitted that Energy Storage Systems (ESS) capture and store energy for later use, playing a vital role in modernizing the power grid and optimizing energy

management. ESS can be deployed at different scales, from small residential systems to large-scale grid installations and can offer a multitude of benefits for DISCOMs, playing a crucial role in modernizing the grid and optimizing operations.

FINER, therefore requested the Commission that considering the unsustainable power procurement plan of APDCL, the Company may be directed to explore the options of Energy Banking and ESS.

Reply of APDCL

The Petitioner submitted that all options have been explored but with no avail due to non-availability of any entities with reciprocal requirement. The Petitioner has also ventured into a Joint Venture agreement with OTPC for development of 250 MW BESS project for overall value addition to the supply chain.

Commission's View

Noted.

Issue 24: Inclusion of Sugarcane Based Industry in HT Category VI

Stakeholders' Comments

Eco Tech and FINER submitted that the sugarcane-based industry shares a similar seasonal nature as Tea, Coffee & Rubber category. The sugarcane industry has witnessed growth in the State of Assam over the past few years and operates primarily from November to May, with a hiatus during the non-seasonal months from June to October. Therefore, inclusion of the sugarcane industry in the same category as Tea, Coffee, and Rubber, i.e., as HT VI Category, would allow declaration of separate Contract Demand for both seasonal and non-seasonal periods. FINER submitted that such reclassification is expected not only to benefit the industry but also contribute significantly to the equitable and efficient utilization of resources for both the sugarcane industry and APDCL. Eco Tech submitted excerpts from Andhra Pradesh, Maharashtra and Gujarat Tariff Orders where sugarcane-based Industries are classified as seasonal Industry. The Respondents requested the Commission for consideration of the same.

Reply of APDCL

APDCL submitted that the Petitioner endorses the concern by the Respondents and

clarity on the classification like other States will be helpful for uniform operation. Proposition of the Respondents may be considered with detailed mention of admissible industries to be covered under Regulation 2.2.3 (ii) (b) of AERC (Electricity Supply Code) Regulations 2017 as seasonal users.

Commission's View

No change in categorisation has been approved at this stage. The Commission will take a view on this matter in the next MYT Order after considering impact on cross-subsidy and tariff.

Issue 25: Industrialization

Stakeholders' Comments

FINER submitted that the power tariff in Assam is among top 5 in India and it will not be lucrative for any industry to have a plant here, if the power prices are so high. FINER further submitted that increase in tariff would result in uncompetitive cost of production for the industrial consumers in the State and the industries would be forced to shut down their operations. FINER requested the Commission to reduce the tariff, which shall ultimately help development of the State.

AIMO submitted that the tariff hike for all the industrial categories when the industrial scenario in the State is in dismal position, cannot be justified. AIMO observed that in view of prolonged power failures as well as low voltage, industrial consumers are forced to install and run captive gensets, which further adds to their high cost of production making them uncompetitive in the market. The Respondent suggested that Fixed Charge should be curtailed for that portion of the period during which power is not supplied. AIMO requested the Commission not to hike any tariff as the tariff hike proposals are not at all justified.

Reply of APDCL

APDCL submitted that cross-subsidy is a reality in the retail tariff design and depends on many factors inter-alia, socio-economic profile, load profile, energy mix, etc. APDCL contended that fixed cost recovery was very low historically and exact matching may lead to massive increase in Fixed Charges with decline in Energy Charges. The Petitioner further submitted that power supply profile in Assam has improved significantly over the

years and the Respondent may avail compensation in the event of unjustified supply curtailment exercising the powers conferred under Electricity (Rights of Consumers) Rules as amended from time to time.

Commission's View

Noted.

Issue 26: Special Category for Oxygen Plants

Stakeholders' Comments

AOMO submitted that Oxygen gas is a lifesaving drug and its importance came into prominence during the Covid pandemic. In Assam, there are 7 oxygen plants and the combined manufacturing capacity of these plants is about 70 MT per day. Oxygen production is critically dependent upon good quality power, and are continuous process plants with load factor of more than 80%. AOMO further submitted that Bihar ERC introduced a new tariff category for oxygen manufacturers at a concessional tariff. Also, many State Governments like Maharashtra, Madhya Pradesh, Andhra Pradesh, Delhi, etc., have extended concessional power tariff to Oxygen plants.

AOMO submitted that the Commission has provided a 20% rebate to Oxygen manufacturers under HT-II category in the last Tariff Order. AOMO requested the Commission to create a separate HT tariff category for manufacture of Oxygen, at the same tariff as per last Tariff Order.

Reply of APDCL

The Petitioner submitted that reduction of tariff for any class of consumer will have to be recovered from other class(es) of consumers to ensure financial sustainability of the Utility. APDCL stated that the Respondent may explore for same financial support on the basis of the energy bills paid from the State Government. APDCL further submitted that simplification vis-a-vis reduction in tariff categories is being promoted by the MoP. As such, creation of a new tariff category for such a small number of consumers may not be prudent.

Commission's View

No separate category has been approved at this stage. The Commission has retained the rebate of 20% for the Oxygen manufacturing units, as elaborated in the Tariff Schedule

of this Order.

Issue 27: Audit Report

Stakeholders' Comments

FINER submitted critical observations from the audit report, which include non-maintenance of proper records regarding intangible assets, non-conduct of physical verification of assets on annual basis, actual outstanding loans, government grants, and matters related to revenue from operations.

Reply of APDCL

APDCL observed that any adjustment on the basis of the audit observation, if required, will be addressed in the next year as per standard practice.

Commission's View

Noted.

Issue 28: Creation of Separate Category/ Slab for Telecom Service Providers

Stakeholders' Comments

COAI and Airtel submitted that the telecom industry is being charged commercial rates as against industrial rates, resulting in excessive financial burden on the telecom industry, which works round the clock like any other industry. The respondents submitted that the Telecom Regulatory Authority of India (TRAI) in its report titled, "Recommendations on Use of Street Furniture for Small Cell and Aerial Fiber Deployment" dated 29.11.2022, recommended that it is justified that telecom sites be provided electricity connection at industrial/utility tariffs. The Respondents further submitted the Government of Maharashtra, as part of their IT/ITES Policy notified the applicability of industrial tariff to the telecommunication towers. The Maharashtra Electricity Regulatory Commission (MERC) after taking into consideration the IT/ITES Policy of the Government of Maharashtra, categorized Telecommunication Towers in the Industry category, vide its Order dated 30.03.2020. COAI requested the Commission to categorise the telecom industry in Assam under industrial category, in order to facilitate affordability of telecom services and the roll out of 5G services, while facilitating the march towards the vision of

achieving a Digital Assam.

Reply of APDCL

APDCL submitted that the recommendations of COAI mentioned are very generic with the perspective of the telecom sector and are yet to attain the status of any binding legislation. Categorisation of consumers under different categories is the prerogative of the Commission. APDCL further submitted that the telecom sector cannot shy away from the commercial nature of their operations with the predominant object being to make maximum profit. Quoting judgments of Hon'ble APTEL, APDCL submitted that categorization of consumers is essentially a State-specific exercise and requested the Commission to consider the submissions by the Petitioner in the greater interest of justice.

Commission's View

This matter is sub-judice before the Hon'ble APTEL. No change in categorisation of the telecom towers has been approved at this stage.

Issue 29: O & M Regulatory Fund

Stakeholders' Comments

FINER submitted that historical trends indicate a significant variance between the normative O&M expenses approved by the Commission and the actual O&M expenses incurred by the Petitioner. This variance, observed over past periods, suggests that the O&M norms are on the higher side. Further, despite benefiting from the gain sharing mechanism due to the disparity between normative and actual O&M expenses, the Petitioner has consistently fallen short of achieving the approved/ desired operational parameters.

In view of the above, the Respondent proposed introduction of an O&M Regulatory Fund by the Commission. This Fund would essentially involve comprise the amount arising from the difference between normative and actual O&M expenses of the Petitioner. The accumulated Fund could then be judiciously utilized for the development of capital works related to the distribution network and the Petitioner would be required to submit the detailed utilization of such Fund before the Commission for prudence check.

FINER observed that this approach not only promotes financial prudence but also ensures that Utilities are better equipped to enhance their distribution systems and meet the desired operational parameters. Besides, such a framework would relieve consumers from additional financial burden, ensuring that the gains from the gain sharing mechanism are channeled towards meaningful investments in the improvement of the power infrastructure, thereby benefiting all stakeholders involved.

Reply of APDCL

The Petitioner submitted that the Respondent's proposal for creation of O&M regulatory Fund to be funded by presumptive savings on O&M expenses will only put financial burden on the Petitioner without serving benefit to anyone.

Commission's View

The Commission has computed the sharing of efficiency gains/losses on account of O&M expenses, in accordance with the MYT Regulations, 2021 as elaborated in Chapter 4 of this Order.

Issue 30: Cross-Subsidy Surcharge for Railways

Stakeholders' Comments

During the public hearing, FINER submitted that the Hon'ble APTEL in a recent ruling dated February 12, 2024 in Appeal No.276/2015, has overturned the Deemed Licensee status previously accorded to the Indian Railways in the matter of electricity distribution. FINER further submitted that the recent Judgment necessitates a thorough review of existing practices and policies to ensure alignment with evolving legal standards and regulatory requirement. In view of the above, FINER requested the Commission to examine the matter and grant approval for Open Access charges for Railways.

Commission's View

The Commission has determined the cross-subsidy surcharge for all HT categories including Railways in this Tariff Order, as elaborated in the Tariff Philosophy Chapter.

4 Truing up for FY 2022-23

4.1 Methodology for Truing Up

- 4.1.1 The Commission had approved the ARR for APDCL for FY 2022-23 in the Tariff Order dated March 21, 2022.
- 4.1.2 APDCL submitted the Truing-up Petition for FY 2022-23 on November 30, 2023 based on audited annual accounts and the provisions of MYT Regulations, 2021.
- 4.1.3 The Commission approves the cost parameters through approval of the ARR at the beginning of the year, keeping in view the data available at that point of time. The cost approvals for each of the items are based on projection of expenses and revenue before beginning of the year and the provisions of MYT Regulations, 2021, wherever applicable. However, the projections might vary over the course of the year.
- 4.1.4 The actual cost/values for certain elements/parameters may vary as against the approved cost during the year due to various controllable and uncontrollable factors. The Licensee may end up with higher or lower expenditure, as the case may be, at the end of the year as against the approved cost.
- 4.1.5 The Commission analyses the actual expenditure for the previous year/years based on the audited Annual Accounts of the Licensee and allows/disallows the recovery of the actual expenditure through the ensuing year's tariff, subject to prudence check.
- 4.1.6 The Commission has carried out the Truing up for FY 2022-23 based on the submissions of APDCL, audited Annual Accounts for FY 2022-23 and provisions of MYT Regulations, 2021.
- 4.1.7 The Commission has analysed all the elements of actual expenditure and revenue of APDCL for FY 2022-23 and undertaken the truing-up of expenses and revenue in accordance with the MYT Regulations, 2021. The Commission has approved the sharing of gains and losses on account of controllable factors between APDCL and the consumers, in accordance with the MYT Regulations, 2021.

4.2 Energy Sales

4.2.1 APDCL submitted the actual category-wise energy sales in its Truing Up Petition and stated that the actual sales were 9203 MU for FY 2022-23, as against approved sales of 9068 MU, as shown in the Table below:

Table 5: Energy Sales for FY 2022-23 as submitted by APDCL (MU)

SI. No.	Category	Approved	Actual
	LT CATEGORY		
1	Jeevan Dhara	479	244.46
2	Domestic A	3932	3758.74
3	Domestic B	504	502.84
4	Commercial	952	923.79
5	General Purpose (Non-Commercial & Non-Domestic Users)		141.19
6	General Purpose (Govt. Primary & Secondary/ Higher	141	14.09
	Secondary Schools)		14.00
7	Public Lighting	18	22.70
8	Agriculture	63	34.82
9	Small Industries (Rural)	98	78.15
10	Small Industries (Urban)	36	30.24
11	Temporary Supply	6	2.76
12	Electric Vehicle Charging Station (LT)		1.98
	HT CATEGORY		
13	Domestic	21	22.40
14	Commercial	411	471.04
15	Public Water Works	92	134.96
16	Bulk Supply (Govt. Education)	80	104.48
17	Bulk Supply (Others)	380	470.88
18	HT Small Industries	18	15.08
19	HT-I Industries (above 50 kVA to 150 kVA)	106	78.18
20	HT-II Industries above 150 kVA (Option I: TOD)	1171	1181.39
21	HT-II Industries above 150 kVA (Option II: Non-TOD)	1171	195.03
22	Tea, Coffee & Rubber	478	575.90

SI. No.	Category	Approved	Actual
23	Oil & Coal	65	92.27
24	HT Irrigation (above 25kW) (30 kVA)	15	19.98
25	HT Temporary Supply	1	0.15
26	HT Electric Crematorium	1	0.55
27	HT Railway Traction		84.20
28	HT Electric Vehicle Charging Station		0.30
	TOTAL	9068	9202.55

- 4.2.2 APDCL submitted that the actual sales have shown a meagre increase of 1.48% visà-vis approved energy sales as per the Tariff Order. However, total sales in FY 2022-23 has experienced around 8 % growth over FY 2021-22.
- 4.2.3 APDCL submitted that the incremental consumption is driven by more consumption on part of C&I consumers with resumption of normalcy and growth in business activities after a disruptive FY 2020-21. However, there is significant (~9%) decline in consumption by low-end household users as compared to the approved sales.
- 4.2.4 APDCL requested the Commission to approve actual retail energy sales of 9202.55 MU (excluding OA consumption) for true-up for FY 2022-23, since, it is uncontrollable.

Commission's Analysis

- 4.2.5 The Commission has analysed the category-wise and total sales submitted by APDCL in the Petition and sought clarifications regarding the opening number of consumers in the Jeevan Dhara and Domestic A category, monthly addition and migration, and closing number of consumers in these two categories. APDCL submitted the necessary details and also clarified that quite a few 'ghost consumers' were deleted from the records, as a result of which, the net addition of consumers in certain months of FY 2022-23 would be different from the new consumer addition and migration from other category. The Commission accepted the above explanation and the actual category-wise sales as submitted by APDCL.
- 4.2.6 The category-wise sales approved by the Commission after true-up of FY 2022-23 is

as shown in the Table below:

Table 6: Energy Sales for FY 2022-23 approved by the Commission (MU)

SI.		Approved		Approved
No.	Category	in Tariff	Actual	after True-
NO.		Order		Up
	LT CATEGORY			
1	Jeevan Dhara	479	244.46	244.46
2	Domestic A	3932	3758.74	3758.74
3	Domestic B	504	502.84	502.84
4	Commercial	952	923.79	923.79
5	General Purpose (Non-Commercial &		141.19	141.19
	Non-Domestic Users)	141	141.13	141.13
6	General Purpose (Govt. Primary &	171	14.09	14.09
	Secondary/ Higher Secondary Schools)		14.00	14.03
7	Public Lighting	18	22.70	22.70
8	Agriculture	63	34.82	34.82
9	Small Industries (Rural)	98	78.15	78.15
10	Small Industries (Urban)	36	30.24	30.24
11	Temporary Supply	6	2.76	2.76
12	Electric Vehicle Charging Station (LT)		1.98	1.98
	HT CATEGORY			
13	Domestic	21	22.40	22.40
14	Commercial	411	471.04	471.04
15	Public Water Works	92	134.96	134.96
16	Bulk Supply (Govt. Education)	80	104.48	104.48
17	Bulk Supply (Others)	380	470.88	470.88
18	HT Small Industries	18	15.08	15.08
19	HT-I Industries (above 50 kVA to 150	106	78.18	78.18
	kVA)	100	70.10	70.10
20	HT-II Industries above 150 kVA (Option	1171	1181.39	1181.39
	I: TOD)	1171	1101.00	1101.00

SI. No.	Category	Approved in Tariff Order	Actual	Approved after True- Up
21	HT-II Industries above 150 kVA (Option II: Non-TOD)		195.03	195.03
22	Tea, Coffee & Rubber	478	575.90	575.90
23	Oil & Coal	65	92.27	92.27
24	HT Irrigation (above 25 kW) (30 kVA)	15	19.98	19.98
25	HT Temporary Supply	1	0.15	0.15
26	HT Electric Crematorium	1	0.55	0.55
27	HT Railway Traction		84.20	84.20
28	HT Electric Vehicle Charging Station		0.30	0.30
	TOTAL	9068	9202.55	9202.55

Accordingly, the Commission approves the total energy sales of 9,203 MU in the Truing up for FY 2022-23.

4.3 Distribution Loss

- 4.3.1 APDCL, in its Petition, submitted that it has achieved distribution loss level of 16.22% in FY 2022-23 as against the approved level of 15.00%. The actual distribution loss for FY 2022-23 has been arrived at by considering the actual quantum of power purchase, losses in inter-State and intra-State transmission and actual retail sales to the consumers.
- 4.3.2 APDCL submitted that though it has not been able to achieve the approved level of Distribution Losses in FY 2022-23, APDCL has achieved significant Loss reduction over the period from FY 2005-06 to FY 2021-22.
- 4.3.3 APDCL submitted that over the years the utility has been able to bring down the losses gradually barring FY 2009-10, FY 2011-12 and FY 2018-19. In all these years, the increment over respective previous years is primarily on account of enhancement of LT networks under RGGVY/DDUGJY/SAUBHAGYA without adequate HT infrastructure.

- 4.3.4 APDCL submitted that the ratio of primary line length to its concerned secondary distribution line length is one of the important factors that influence the performance of primary distribution. Over the years, large scale expansion of the rural electrification programme has resulted in considerable expansion of Low Tension (LT) distribution network. The size of the distribution transformers has been constantly increasing to meet the increasing demand due to load growth.
- 4.3.5 APDCL submitted that infrastructure vis-a-vis load/consumer profile play pivotal role in system losses. Consumer profile of Assam is heavily skewed towards low-end consumers spread across far flung areas. As a result, the length of LT lines/circuits is also increasing, resulting in high losses in LT lines, excessive voltage drops, frequent faults on LT network and higher rate of failure of distribution transformers. Such situation coupled with limited financial resources has resulted in disproportionate LT:HT ratio with very large length of LT lines as compared to High Tension (HT) lines resulting in high LT/ HT ratios. The LT-HT ratio of APDCL in infrastructure terms is far from the desired level of 1:1.2.
- 4.3.6 APDCL submitted that it is getting much more difficult to reduce the distribution losses now at the same rate as achieved in the past years. The reason is massive increase in low end domestic consumer base under SAUBHAGYA vis-à-vis constrained human resources. The sales mix is also getting adverse every year as LT sales is increasing on account of extensive rural electrification and HT sales are not increasing at the same rate as it is impacted due to other factors like open access, lack of industrial growth in the State, etc.
- 4.3.7 APDCL submitted that as mentioned above, HT: LT ratio has a key impact on overall distribution losses of the utility and with the present trend of inverse HT: LT ratio, there is a need to revisit the distribution loss target. Losses increase with increase in LT consumption at the same performance levels. APDCL requested the Commission to review the Distribution loss targets based on the actual achievements and the above concerns, while undertaking the truing up exercise
- 4.3.8 APDCL requested the Commission to approve actual distribution loss of 16.22% for FY 2022-23, considering the actual distribution loss levels of previous years, manifold increase in LV consumers, and deferred implementation of various schemes as per the approved capital investment plan.

Commission's Analysis

- 4.3.9 The Commission analysed the information submitted by APDCL regarding Distribution Losses. It is observed that APDCL's contention that the worsening HT:LT ratio increases Distribution Losses, though correct in theory, is not borne out by APDCL's own performance over the last 2-3 years. Though LT:HT ratio has worsened over the past 2-3 years, APDCL has reported improvement in Distribution Losses from 19.70% (FY 2018-19) to 16.22 % (FY 2022-23). Further, the Circle-wise Distribution Loss data submitted by APDCL shows that there are some Circles with very high loss levels, which need to be targeted, to achieve the Loss levels approved by the Commission.
- 4.3.10 The Commission has considered the approved Distribution Loss level for FY 2022-23 of 15 %, for the purpose of truing up for FY 2022-23, as approved in the Tariff Order dated March 21, 2022. The efficiency loss on account of higher than approved Distribution Losses, in terms of excess power purchase expenses, has been shared between APDCL and the consumers, as discussed subsequently in this Chapter.

4.4 Energy Requirement

4.4.1 APDCL submitted that based on actual sales, actual distribution losses and inter-State and intra-State transmission losses, the actual energy requirement for FY 2022-23 was 12813.04 MU against the approved energy requirement of 11747 MU.

Commission's Analysis

- 4.4.2 In the truing up for FY 2022-23, the Commission has approved the energy requirement on the basis of approved sales, approved Distribution Losses, actual Transmission Loss of AEGCL, and PGCIL Losses on external power purchase.
- 4.4.3 It may be noted that though the quantum of Surplus Power sold outside the State has been considered while computing the Energy Balance, the revenue from the same has been considered under Other Income, as discussed subsequently in this Order. Further, APDCL has considered the PGCIL losses on the entire quantum of purchase. The Commission has derived the effective PGCIL losses for the entire quantum of purchase, based on NLDC data as submitted by APDCL, which shows that the average 52-week ISTS loss is 3.11%, which is applicable only on power purchase from

outside the State. Further, though APDCL has indicated the intra-State Transmission Loss as 3.53% in its Energy Balance, APDCL has actually considered the intra-State Transmission Loss of 3.4%. The Commission has considered the actual intra-State Transmission Loss as submitted by AEGCL.

4.4.4 The gross energy requirement for FY 2022-23 as approved by the Commission in the MYT Order, as submitted by APDCL, and as approved in the truing up are shown in the following Table:

Table 7: Energy Requirement approved by the Commission after True-Up for FY 2022-23

SI.	Particulars	Tariff Order	APDCL	Approved
No.	i ai liculai s	railli Ordei	Petition	after True-Up
1	Energy sales	9,068	9,203	9,203
2	Distribution Loss (%)	15.00%	16.22%	15.00%
3	Distribution Loss (MU)	1,600	1,782.22	1,624
4	Energy Requirement at T<>D periphery	10,668	10,985	10,827
5	Intra State Transmission Loss (MU)	3.27%	3.53%	3.33%
6	Intra State Transmission Loss (%)	361	387.59	373
7	Energy input to Transmission System	11,029	11,372.36	11,199
8	Inter-State Pooled Loss (%)	1.90%	3.11%	1.62%
9	Inter-State Pooled Loss (MU)	224	353.58	203
10	Seasonal Export	494	1,087.10	1,087
11	Total Energy Requirement	11,747	12,813.04	12,489

Therefore, the Commission approves Energy Requirement of 12,489 MU for sale of 9,203 MU to retail consumers in the truing up for FY 2022-23.

4.5 Power Purchase

4.5.1 APDCL submitted that the power procurement of APDCL is predominantly dependent on the State Generating Stations of APGCL and Central Generating Stations to meet its base load. Around 31% of power is allocated from hydro

- power stations with seasonal volatility. As such, in order to meet the peak demand of the State, APDCL is required to procure additional power on short-term basis through traders or from open market.
- 4.5.2 APDCL submitted that during FY 2022-23, it has incurred net cost of Rs. 8478.85 Crore (inclusive of transmission charges) for purchase of 12813 MU as against the approved cost of Rs. 6031.15 Crore (inclusive of transmission charges) for 11747 MU. The total power purchase cost for FY 2022-23 comprises the basic power purchase cost, and Transmission Charges payable to PGCIL and AEGCL (inclusive of special charge on BST).
- 4.5.3 APDCL submitted that the weighted average rate for purchase of power for FY 2022-23 is Rs. 6.62 per kWh against the approved rate of Rs. 5.13 per kWh.
- 4.5.4 APDCL submitted that the massive hike is driven by manifold increase in the prices of power from natural gas-based stations of APGCL and NEEPCO governed by the prices as fixed by Ministry of Petroleum and Natural Gas, Govt. of India.
- 4.5.5 APDCL submitted the impact of such hike in Energy Charge Rate (ECR) (in Rs./kWh) of power for APGCL thermal power stations during FY 2022-23 as shown below:

Stations	Approved ECR	Actual ECR	Increase in
Stations	(Rs/kWh)	(Rs/kWh)	Rate (%)
NTPS	2.49	7.24	191%
NRPP	1.25	3.54	183%
LTPS	2.88	7.73	168%
LRPP	1.89	6.00	217%
Wtd. Avg.	2.36	7.89	235%

4.5.6 APDCL submitted that similar case exists for NEEPCO stations also, as shown in the Table below:

Stations	Approved ECR (Rs/kWh)	Actual ECR (Rs/kWh)	Increase in Rate (%)
AGBPP	3.65	7.50	105%
AGTPP	4.22	6.84	62%

Ctations	Approved ECR	Actual ECR	Increase in
Stations	(Rs/kWh)	(Rs/kWh)	Rate (%)
Wtd. Avg.	3.82	7.31	92%

APDCL further mentioned that as Hon'ble Commission approved total rates for these stations (i.e. FCR+ECR), comparison is made on the basis of the same and not only on ECR like APGCL.

- 4.5.7 APDCL submitted that though the actual quantum of purchase from gas thermal stations of APGCL and NEEPCO was similar in FY 2021-22 (2922 MU) and FY 2022-23 (2918 MU), there is a huge variation in cost from FY 2021-22 (Rs. 900 Crore) to FY 2022-23 (Rs. 2227 Crore). These stations contributed 18% of the total power purchase cost in FY 2021-22, which increased to 30% in FY 2022-23, though the share of quantum of power only reduced from 24% to 23% of total purchase quantum.
- 4.5.8 APDCL submitted that the prices in the open market were persistently on higher side due to surge in demand across the country. Also, APDCL always faces power shortfall during the peak hours throughout the year and relatively higher prices for these hours has led to additional cost for such procurement.
- 4.5.9 APDCL submitted that Merit Order Dispatch (MOD) principle was adhered to in all procurement process subject to must-run profiles, Technical Minimum and market availability to meet the increasing demand. Also, various supplementary bills against different CGS Stations/PGCIL as per Orders issued by CERC from time to time are accounted for on admittance.
- 4.5.10 APDCL requested the Commission to approve the actual power purchase cost of Rs 8,478.85 Crore during true-up of ARR for FY 2022-23.

Commission's Analysis

- 4.5.11 The Commission asked APDCL to submit the source-wise breakup of power purchase cost into fixed cost, variable cost and other costs, if any, for the total power purchase quantum of 12813 MU as submitted in the Petition.
- 4.5.12 The Commission further observed that the cost of power purchase from APGCL for FY 2022-23 as claimed by APDCL is different from the revenue from sale of power shown by APGCL. Similarly, the Transmission Charges and SLDC

- Charges claimed by APDCL for FY 2022-23 is different from the revenue from Transmission Charges and SLDC Charges shown by AEGCL.
- 4.5.13 The Commission asked APDCL to clarify whether any amount of Delayed Payment Charges has been claimed under the power purchase cost in the true-up for FY 2022-23, and if so, the amount of DPC claimed for FY 2022-23. APDCL submitted that delayed payment surcharge of Rs. 10.09 lakh is included under the power purchase cost in the true up for FY 2022-23.
- 4.5.14 As the true-up for AEGCL and APGCL has been done by considering the Revenue reported in their Audited Accounts for FY 2022-23, the Commission has considered the respective amounts shown as revenue by APGCL and AEGCL as the cost of power purchase from APGCL by APDCL and the Transmission Charges paid/payable to AEGCL by APDCL, respectively.
- 4.5.15 As regards the Trading Purchase, the Commission asked APDCL to confirm that all such purchase have been made through Competitive Bidding in accordance with the Competitive Bidding Guidelines notified by the Government of India and also to submit the documentary evidence of competitive bidding carried out for trading purchase along with the rates discovered in competitive bidding. APDCL submitted that during FY 2022-23, APDCL has procured power to meet seasonal deficit through Power Exchange only at market clearing price determined through the collective bidding procedure.
- 4.5.16 APDCL was also asked to clarify regarding the incidence of power purchase expenses of Rs. 46.02 Crore, Rs.1.35 Crore, and Rs. 6.93 Crore incurred against Kopili-I, Kopili-II, and Khandong, respectively, though no energy has been purchased from these sources. APDCL submitted that monthly bills on NERLDC fees and charges are to be paid on tied up/allocated capacities irrespective of flow of energy. Moreover, bills were raised on the basis of CERC Orders on disposal on revised AFC with interest, additional O&M expenses, materialization of deferred tax liability etc. (Petition No. 398/GT/2020, 372/GT/2019, 372/GT/2019 etc.)
- 4.5.17 The Commission notes that APDCL has incurred a Delayed Payment Charge of Rs. 10.09 lakh. The Commission is of the opinion that penal charges like Delayed Payment Charges should not be passed onto consumers. Hence, DPC charges

- of Rs. 10.09 lakh has been reduced from power purchase cost of APDCL.
- 4.5.18 The remaining source-wise purchases have been accepted by the Commission as submitted by APDCL. The summary of power purchase quantum and cost as approved in the Tariff Order for FY 2022-23, actual quantum and cost as submitted by APDCL in its True-Up Petition, and the quantum and cost approved by the Commission after true-up are summarized in the Tables below:

Table 8: Power Purchase approved by the Commission after True-Up for FY 2022-23 (MU)

		T	ariff Order		AP	DCL Petition	n	Appro	ved after T	rue-Up
SI. No	Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
		MU	Rs. Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh
1	APGCL	2162.25	754.24	3.49	2120.93	1,383.62	6.52	2,120.93	1,383.62	6.52
2	NEEPCO (HYDRO)									
	KOPILI I	-	-	-	1	46.02	-	-	46.02	-
	KOPILI II	-	-	-	-	1.35	-	-	1.35	-
	KHANDONG	147.04	25.97	1.77	-	6.93	-	-	6.93	-
	RHEP	506.99	132.42	2.61	590.18	247.21	4.19	590.18	247.21	4.19
	DHEP	60.39	39.79	6.59	74.27	71.23	9.59	74.27	71.23	9.59
3	NEEPCO (HYDRO) New									
	KAMENG HEP	248.24	100.45	4.05	311.72	124.99	4.01	311.72	124.99	4.01
4	NEEPCO (TH)									
	AGBPP	982.92	358.96	3.65	941.06	705.54	7.50	941.06	705.54	7.50
	AGTPP	401.64	169.33	4.22	371.68	254.27	6.84	371.68	254.27	6.84
	AGTPP 2	-	-	-	-	-	-	-	-	-
5	NHPC Loktak HEP	172.38	57.94	3.36	137.47	54.28	3.95	137.47	54.28	3.95
6	NHPC New									
	SUBANSIRI HEP	190.33	139.89	7.35	-	-	-	-	-	-
7	NTPC (Existing)									
	FARAKKA	214.16	96.24	4.49	227.58	132.60	5.83	227.58	132.60	5.83
	KAHELGAON - I	103.87	36.49	3.51	97.01	52.01	5.36	97.01	52.01	5.36
	KAHELGAON -II	455.10	155.18	3.41	495.20	241.52	4.88	495.20	241.52	4.88
	TALCHER	148.39	42.71	2.88	150.37	48.71	3.24	150.37	48.71	3.24
8	NTPC (New) BTPS	2511.18	1476.24	5.88	3008.70	1,878.90	6.24	3,008.70	1,878.90	6.24

		Т	ariff Order		AP	DCL Petitic	n	Appro	ved after T	rue-Up
SI. No	Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
		MU	Rs. Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh
9	NTPC BTPS III	-	-	1	-		•	-	-	-
10	Pohmura SHEP	-	-	-	-	-	-	-	-	-
11	MeECL	-	-		-			-	-	-
12	Pare HEP	183.77	100.65	5.48	210.79	120.13	5.70	210.79	120.13	5.70
13	Suryatap Solar	6.12	5.38	8.79	5.82	5.11	8.78	5.82	5.11	8.78
	Maheshwari MEPL Solar	-	-	-	-	-	-	-	-	-
15	JNNSM Bundled Solar power	6.09	7.62	12.51	6.87	8.96	13.04	6.87	8.96	13.04
16	SECI Solar	37.79	23.54	6.23	39.24	24.67	6.29	39.24	24.67	6.29
17	JNNSM Bundled Coal power	28.24	10.54	3.73	31.93	17.13	5.37	31.93	17.13	5.37
18	Bilateral Sources/Traders	-	-	-	-	-	-	-	-	-
19	Power Exchanges	0.00	0.00	4.64	1457.72	989.82	6.79	1,457.72	989.82	6.79
20	OTPC Palatana	1339.65	462.23	3.45	1575.27	515.43	3.27	1,575.27	515.43	3.27
21	HHPCPL (Champawati)	8.60	3.69	4.29	10.20	4.20	4.11	10.20	4.20	4.11
22	Wind Power PTC	115.19	40.66	3.53	106.21	37.49	3.53	106.21	37.49	3.53
23	SECI Wind	148.50	40.40	2.72	143.41	39.01	2.72	143.41	39.01	2.72
24	Mangdechhu	594.33	255.37	4.30	485.03	226.33	4.67	485.03	226.33	4.67
25	PTC Nikachu	-	-	-	-	-	-	-	-	-
26	SPV Assam (Azure Power)	140.82	46.86	3.33	131.09	44.12	3.37	131.09	44.12	3.37
27	Punatsangchhu HEP-I	-	-	-	-	-	-	-	-	-
28	Punatsangchhu HEP-II	206.30	86.44	4.19	-	-	-	-	-	-
29	Amguri Solar Park	99.40	39.56	3.98	86.55	32.03	3.70	86.55	32.03	3.70
	Patanjali Solar	-	-	-	-	-	-	-	-	-
	Neyveli UP PL	-	-	-	-	-	-	-	-	-

		T	ariff Order		AP	DCL Petition	n	Appro	ved after T	rue-Up
SI. No	Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
		MU	Rs. Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh	MU	Rs.Cr	Rs./kWh
30	Solar RE Power Purchase - balance to meet RPO	218.74	72.79	3.33	0.61	0.20	3.32	0.61	0.20	3.32
	Non-Solar RE Power									
31	Purchase - balance to meet RPO	308.89	84.03	2.72	-	-	-	-	-	-
35	UI Pool/Deviation Settlement Mechanism	-	-	-	-3.88	-10.14	26.14	-3.88	-10.14	26.14
	Sub-total:	11,747.31	4,865.61	4.14	12,813.04	7,303.65	5.70	12,813.02	7,303.65	5.70
37	AEGCL Transmission Charges	1	459.48	0.39	-	438.06	-	-	428.92	-
38	SLDC Charges	-	6.50	-	-	-	-	-	-	1
39	PGCIL Transmission Charges	-	699.56	-	-	737.14	-	-	737.14	-
	TOTAL	11,747.31	6,031.15	5.13	12,813.04	8,478.85	6.62	12,813.02	8,469.71	11,747.31
41	Less: Delayed Payment Surcharge	-	-	-	-	-	-	-	0.10	-
42	Net Power Purchase	11,747.31	6,031.15	5.13	12,813.04	8,478.85	6.62	12,813.02	8,469.61	6.61

Therefore, the Commission approves Power Purchase Expenses of Rs. 8,469.61 Cr after Truing up for FY 2022-23.

4.6 Sharing of (Gains)/ Losses on account of excess Power Purchase cost due to higher than approved Distribution Losses

4.6.1 APDCL has proposed to share the efficiency loss on account of excess power purchase costs due to actual Distribution Losses in FY 2022-23 being higher than the approved Distribution Losses. APDCL has computed the total excess power purchase cost as Rs. 81.70 Crore, with APDCL's share of the losses as Rs. 54.46 Crore considered in accordance with the MYT Regulations, 2021.

Commission's Analysis

4.6.2 As the actual Distribution Losses are higher than the approved Distribution Losses for FY 2022-23, the efficiency loss on account of higher than approved Distribution Losses, in terms of excess power purchase expenses, have been shared between APDCL and the consumers, as shown in the Table below:

Table 9: Sharing of Efficiency Gain/(Loss) approved by the Commission on account of Distribution Losses after True-Up for FY 2022-23 (Rs. Crore)

SI.	Particulars	Units	APDCL	Approved
No			Petition	after True-
				Up
1	Total Power Purchase	MU	12,813	12,813
2	Sale of Surplus Power	MU	1,087	1,087
3	Actual Energy Purchased for sale within State	MU	11,726	11,726
4	Allowable Energy Purchase for sale within	MU	11,583	11,384
	State at approved Distribution Loss	IVIO	11,565	11,364
5	Excess Energy Purchase	MU	143.32	342
6	Average power purchase rate	Rs/kWh	5.70	5.70
7	Excess Power Purchase Cost	Rs. Cr	(81.70)	(194.86)
8	Share of (loss)/gain to be borne by APDCL	Rs. Cr	(54.46)	(129.91)
9	Share of (loss)/gain to be borne by consumers	Rs. Cr	(27.23)	(64.95)

Therefore, the Commission disallows two third of the excess power purchase cost, i.e., Rs. 129.91 Crore in the truing up for FY 2022-23, which will be borne

by APDCL, and one third of the excess power purchase cost, i.e., Rs. 64.95 Crore is passed on to the consumers as per the MYT Regulations, 2021.

4.7 O&M Expenses

4.7.1 APDCL has claimed normative O&M expenses of Rs.1306.00 Crore against the approved O&M expenses of Rs. 1190.36 Crore for FY 2022-23, as shown in the Table below:

Table 10: Normative O&M Expenses for FY 2022-23 as submitted by APDCL (Rs. Crore)

SI. No.	Particulars	Tariff Order	APDCL
1	Employee Expenses	835.92	934.34
2	R&M Expenses	278.52	267.97
3	A&G Expenses	75.92	103.69
4	Total O&M Expenses	1190.36	1306.00

Employee Expenses

- 4.7.2 APDCL submitted that Employee Expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of contribution for pension and gratuity funding, leave encashment, and other staff welfare expenses.
- 4.7.3 APDCL submitted that the normative employee expenses for FY 2022-23 have been computed considering the approved normative employee cost for FY 2021-22 as base value. An amount of Rs. 67.52 Crore as instalment against DCRG for NPS employees is considered in line with the consideration by the Commission in the APR for FY 2022-23.
- 4.7.4 APDCL requested the Commission to approve the normative employee expenses of Rs. 934.34 Crore for FY 2022-23 including the provision of DCRG under NPS. APDCL submitted the actual employee expenses as Rs. 758.47 Crore for FY 2022-23.

Repair & Maintenance (R&M) Expenses

- 4.7.5 APDCL submitted that R&M Expenses are an integral part to ensure utility's commitment towards reliable and quality power supply by way of regular maintenance of its infrastructure. APDCL submitted that R&M Expenses are directly related to volume of operation carried out. Manifold expansion of network with implementation of various electrification programmes, viz., RGGVY/DDUGJY, SAUBHAGYA, IPDS, TDF and EAP necessitate extensive coverage for such works. However, adequate maintenance of assets could not be carried out in time due to restricted allowance in tariff for many previous years.
- 4.7.6 APDCL submitted that regular maintenance of assets is a pre-requisite to ensure reliable supply. APDCL has been trying its best to ensure uninterrupted operations of the system and has accordingly been undertaking necessary expenditure for R&M activities. Considering this fact, the expenditure incurred on R&M activities are uncontrollable in nature.
- 4.7.7 APDCL requested the Commission to approve the normative R&M expenses of Rs. 267.97 Crore for FY 2022-23 linked to K-factor and WPI index as per MYT Regulations, 2021. APDCL submitted the actual R&M expenses as Rs. 346.97 Crore for FY 2022-23.

4.7.8 Administrative and General (A&G) Expenses

- 4.7.9 APDCL submitted that A&G Expenses comprise rents, taxes, various statutory charges, telephone and other communication expenses, professional charges, legal charges, conveyance and travelling allowance, etc.
- 4.7.10 APDCL submitted that statutory fees have been claimed to the extent of actual payment of Rs 3.49 Crore against approval of Rs. 1.89 Crore.
- 4.7.11 APDCL requested the Commission to allow normative A&G expenses of Rs. 103.69 Crore for FY 2022-23. APDCL submitted the actual A&G expenses as Rs. 92.50 Crore for FY 2022-23.

- 4.7.12 The Commission has allowed O&M Expenses on normative basis in the MYT Order. For the purpose of truing up for FY 2022-23, the Commission has computed the normative O&M Expenses as per the MYT Regulations, 2021. Any variation between normative O&M Expenses and actual O&M Expenses has been considered under sharing of gains/losses on account of controllable items as per the MYT Regulations, 2021.
- 4.7.13 For computation of normative employee expenses for FY 2022-23, the Commission has adopted the following approach:
 - a) The base employee expenses for FY 2021-22 have been considered as Rs. 790.95 Crore, based on the average employee expenses for the previous 5 years, duly escalated, as per the MYT Regulations, 2021;
 - b) The base employee expenses for FY 2021-22 have been escalated by the Consumer Price Index (CPI) inflation computed as average increase of CPI for the period from FY 2019-20 to FY 2021-22, which works out to 5.89%, to determine the employee expenses for FY 2022-23;
 - c) Considering that there has not been any net addition to the employee base in FY 2022-23, 0% growth factor has been considered.
- 4.7.14 The Commission asked APDCL to clarify whether any expenditure has been incurred against DCRG for NPS employees in FY 2022-23. APDCL, submitted that Expenditure booked against the DCRG for NPS employees during FY 2022-23 is detailed in Note No. 34 of the Annual Statement of Accounts.
- 4.7.15 The Commission in the last Tariff Order dated 29th March 2023 has approved recovery of the DCRG under NPS of Rs 337.62 Crore over a period of 5 years starting from FY 2021-22 as this is a one-time provisioning against several past years. Therefore, 1/5th impact (Rs. 67.52 Crore) has been approved for FY 2022-23 also, with the balance to be spread till FY 2025-26.
- 4.7.16 The normative employee expenses approved in the true-up for FY 2022-23 are shown in the following Table:

Table 11: Approved Employee Expenses for FY 2022-23 (Rs. Crore)

Particulars	Tariff	APDCL	Approved
	Order	Petition	after true-
			up
Employee Expenses for Previous	792.13	818.58	790.95
Year			
Growth Factor	0%	0%	0%
CPI Inflation	5.53%	5.89%	5.89%
Employee Expenses	835.92	866.82	837.57
Add: Provision for DCRG under NPS		67.52	67.52
Total Employee Expenses	835.92	934.34	905.09

Therefore, the Commission approves Normative Employee Expenses of Rs. 905.09 Crore in the truing up for FY 2022-23.

- 4.7.17 For computation of normative R&M Expenses for FY 2022-23, the Commission has considered the following approach:
 - a) Average increase of WPI for the period from FY 2019-20 to FY 2021-22, i.e., 5.32%, has been considered for computation of R&M expenses for FY 2022-23;
 - b) The Commission has adopted the K-factor of 3.10% as approved for the Control Period;
 - c) Since, K-factor has been considered on the basis of average GFA, for computation of R&M expenses for FY 2022-23, average GFA for the previous year has been considered.
- 4.7.18 The normative R&M expenses approved in the true-up for FY 2022-23 are shown in the following Table:

Table 12: Approved R&M Expenses for FY 2022-23 (Rs. Crore)

Particulars	Tariff Order	APDCL	Approved after
T ditiodidi 5	raini Ordoi	Petition	True-up
Average GFA for previous year	8616.62	8,207.25	8,184.28

Particulars	Tariff Order	APDCL	Approved after	
i articulars	Tariii Ordei	Petition	True-up	
K Factor	3.10%	3.10%	3.10%	
WPI Inflation	4.13%	5.32%	5.32%	
R&M Expenses	278.52	267.97	267.22	

Accordingly, the Commission approves normative R&M Expenses of Rs. 267.22 Crore in the truing up for FY 2022-23.

- 4.7.19 For computation of normative A&G expenses for FY 2022-23, the Commission has adopted the following approach:
 - a) The base A&G expenses for FY 2021-22 have been considered as Rs. 95.14 Crore, based on the average A&G expenses for the previous 5 years, duly escalated, as per the MYT Regulations, 2021;
 - b) The base A&G for FY 2021-22 have been escalated by the Wholesale Price Index (WPI) inflation computed as average increase of WPI for the period from FY 2019-20 to FY 2021-22, which works out to 5.32%, to determine the A&G expenses for FY 2022-23;
 - c) The statutory fees have been considered separately at actuals, based on the details provided by APDCL and the audited accounts for FY 2022-23. Only the AERC fees and NSDL Fees have been considered, while 'Other Fees & Subscriptions' have not been considered under Statutory Fees.
- 4.7.20 The normative A&G expenses approved in the true-up for FY 202223 is shown in the following Table:

Table 13: Approved A&G Expenses for FY 2022-23 (Rs. Crore)

Particulars	Tariff Order	APDCL Petition	Approved after true-up
A&G Expenses for Previous Year	71.09	95.14	95.14
WPI Inflation	4.13%	5.32%	5.32%
Statutory Fees	1.89	3.49	3.25
A&G Expenses	75.92	103.69	103.45

Therefore, the Commission approves normative A&G Expenses of Rs.103.45 Crore in the true-up for FY 2022-23.

4.7.21 The normative O&M expenses approved by the Commission for FY 2022-23 is shown in the following Table:

Table 14: Normative O&M Expenses approved by Commission for FY 2022-23 (Rs. Crore)

SI.	Particulars	Tariff Order	APDCL	Approved after
No.			Petition	Truing up
1	Employee Expenses	835.92	934.34	905.09
2	R&M Expenses	278.52	267.97	267.22
3	A&G Expenses	75.92	103.69	103.45
	Total	1,190.36	1306.00	1,275.77

4.8 Sharing of losses/(gains)on account of O&M Expenses

- 4.8.1 APDCL submitted that as per the MYT Regulations, 2021, O&M Expenses (excluding terminal liabilities with regard to employees on account of changes in pay scales or dearness allowances due to inflation) is a controllable factor. Hence, terminal benefit allowances are excluded for deriving sharing of gains/losses on O&M expenses.
- 4.8.2 APDCL submitted that in view of the lower actual expenses than normative expenses, Rs. 13.51 Crore (1/3rd of the net savings) is proposed to be passed on to the consumers as deduction from the ARR in adherence to the governing Regulations.

Table 15: Sharing of losses/(gains) for O&M Expenses as submitted by APDCL for FY 2022-23 (Rs. Crore)

SI.	Particulars	Actual	Normative b	(Gains)/ Losses	1/3 of (Gains)/Losses
NO.		а		c = (b-a)	d = c x 1/3
1	Employee Cost	758.47	934.34		
	Less: Provision on NPS	0.00	67.52		

SI.	Particulars	Actual	Normative	(Gains)/ Losses	1/3 of (Gains)/Losses
NO.	No.	а	b	c = (b-a)	d = c x 1/3
	Less: Terminal Benefits	74.87	74.87		
	Employee Cost excl. Terminal Benefits & ROP	683.59	791.95	(108.35)	(36.12)
2	R&M Expenses	346.97	267.97	79.01	26.34
3	A&G Expenses	92.50	103.69	(11.19)	(3.73)
4	TOTAL	1197.94	1306.00	(40.53)	(13.51)

- 4.8.3 The Commission has examined the prudence of each head of actual O&M expenses based on the Audited Accounts of APDCL, as under:
 - a) APDCL has claimed actual Employee expenses of Rs. 758.47 Crore as per the Audited Accounts, which has been accepted by the Commission after prudence check in the true-up for FY 2022-23;
 - b) APDCL has claimed actual R&M expenses as Rs. 346.97 Crore, as per the Audited Accounts. The Commission observes that expense of Rs. 161.79 Crore against 'Expenditure on Revenue Billing & Collection' paid to outsourced agencies has been booked under R&M. However, these expenses should correctly be booked under A&G expenses, as these are outsourcing expenses. Hence, the Commission has reduced the actual R&M expenses by Rs. 161.79 Crore, and considered the same under actual A&G expenses. Hence, the Commission approves actual R&M expenses of Rs. 185.18 Crore in the true-up for FY 2022-23;
 - c) APDCL has claimed actual A&G expenses as Rs. 92.50 Crore, as per the Audited Accounts. Based on replies submitted by APDCL to queries raised by the Commission, it is observed that the actual A&G expenses include 'Miscellaneous Expenses' of Rs. 3.11 Crore comprising CSR expenses and other heads, which have been disallowed by the Commission. The Commission

has also disallowed 'Rounding off' expenses of Rs. 0.02 Crore, and 'Sundry Debit balances written off' of Rs. 0.03 Crore. As regards expenses of Rs. 0.07 Crore claimed against 'Service tax & GST', the Commission has allowed only 'Other Taxes' of Rs. 19,112, and all other expenses are disallowed, as they are penalties on GST or Interest on delayed payment of taxes. Further, the Commission has added the expense of Rs. 161.79 Crore against 'Expenditure on Revenue Billing & Collection' paid to outsourced agencies, to the actual A&G expenses. Hence, the Commission approves actual A&G expenses as Rs. 267.47 Crore.

- 4.8.4 The Commission has computed sharing of gains or losses after excluding terminal liabilities from normative as well as actual employee expenses. Accordingly, terminal liabilities are allowed on actual basis.
- 4.8.5 The sharing of losses/(gains)on account of O&M Expenses is shown in the following Table:

Table 16: Sharing of losses/(gains) for O&M Expenses approved by the Commission for FY 2022-23 (Rs. Crore)

SI.	Particulars	Actual	Normative	(Gains)/	1/3 of
				Losses	(Gains)/
					Losses
		а	b	c = -(b-a)	$d = c \times 1/3$
1	Employee Cost	758.47	905.09		
	Less: Provision for DCRG under NPS	-	67.52		
	Less: Terminal Benefits*	74.87	74.87		
	Employee Cost excl. Terminal Benefits	683.59	762.70	(79.11)	(26.37)
2	Repair & Maintenance	185.18	267.22	(82.04)	(27.35)
3	Administrative & General Expenses	267.47	103.45	164.01	54.67
	TOTAL	1,136.24	1,133.37	2.86	0.95

Since, actual O&M expenses are higher than the normative expenses, the net loss of Rs. 0.95 Crore has been shared and passed on through ARR.

4.9 Capital Investment & Capitalisation

4.9.1 APDCL submitted that actual Capitalisation achieved during FY 2022-23 is Rs. 753.83 Crore as shown in the Table below, and requested the Commission to approve the same in the true-up for FY 2022-23.

SI. No.	Particulars	Amount
А	Opening Balance of CWIP	5177.42
В	Fresh CAPEX during the year	2132.53
С	Investment capitalised out of opening CWIP	753.83
D	Investment capitalised out of fresh investment	1 00.00
	Total Capitalisation during the year (C+D)	753.83
	Closing Balance of CWIP (A + B - C - D)	6556.12

- 4.9.2 The actual capitalisation claimed by APDCL in FY 2022-23 is Rs. 753.83 Crore, which is much lower than the amount estimated by APDCL in its APR Petition of Rs. 1691.93 Crore, and much lower than the amount approved by the Commission in the APR Order of Rs. 1340 Crore.
- 4.9.3 The Commission asked APDCL to clarify the discrepancy in the value of Net Asset Addition, as it has been considered as Rs. 735.71 Crore for computation of depreciation. APDCL submitted that the amount of Rs. 735.71 Crore is the sum of 734.46 Crore and Rs. 1.25 Crore of intangible asset reflected at Note 3 of the Audited Accounts.
- 4.9.4 APDCL was asked to submit the actual scheme-wise funding of capitalised works with break-up of Grants, Loans, Consumer Contribution, Equity, etc. APDCL submitted the details of capital expenditure and capitalization against the schemes approved in the

Tariff Order, and the actual scheme-wise funding of the capitalised works.

4.9.5 The Commission has verified the actual capitalisation achieved in FY 2022-23 from the Audited Accounts of APDCL for FY 2022-23. **The Commission has hence, approved the actual Capitalisation in FY 2022-23 as Rs. 735.71 Crore**. The funding of the capitalisation has been considered as submitted by APDCL, as shown in the Table below:

Table 17: Capitalisation and Funding approved by the Commission for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	APDCL Petition	Approved after Truing up
1	Total Capitalisation	735.71	735.71
	Funding		
2	Grant	722.40	722.40
3	Equity	-	-
4	Debt	13.31	13.31

4.10 Depreciation

- 4.10.1 The Commission had approved depreciation of Rs. 46.82 Crore for FY 2022-23. APDCL submitted that as per Audited Accounts, Opening GFA for FY 2022-23 is Rs. 8465.90 Crore.
- 4.10.2 APDCL submitted that the truing up claim has been made after re-calculating the depreciation as per the MYT Regulations, 2021. APDCL submitted that depreciation has been calculated taking into consideration the opening as well as addition of assets during the year as per statement of accounts.

Table 18: Depreciation as submitted by APDCL for FY 2022-23 (Rs. Crore)

Particulars	As on 01.04.22	Net addition during the year	On Opening Balance	On Addition	Total
Land & Rights					
i) Land owned under full title	18.97	0.65	-	-	-
ii) Leasehold land	2.84		0.08	-	0.08
SUB TOTAL	21.81	0.65	0.08	-	80.0
Building	58.72	1.65	0.96	0.02	0.98
Other Civil Works	71.14	3.02	1.52	0.05	1.57
Plant & Machinery	828.12	4.46	29.17	0.11	29.28
Lines & Cable Network	1,711.80	340.37	60.24	8.09	68.32
Vehicles	27.24	-	0.74	1	0.74
Furniture & Fixtures	19.75	1.01	0.53	0.03	0.56
Office Equipment	81.51	7.56	3.24	0.22	3.45
SUB TOTAL	2,820.10	358.74	96.47	8.51	104.98
Add: Consumers contribution deducted from service connection under O.H.lines & cable network	233.81		11.11		11.11
Add: Assets not belonging to the entity	5,411.99	376.98		-	-
TOTAL	8,465.90	735.71	107.58	8.51	116.09

Particulars	Non- Depreciable Land	Depreciable
Opening GFA	18.97	2,801.13
Opening CWIP	-	3,475.11
Grant	-	1,891.10
Depreciation charged	-	104.98
Average rate		3.75%
Apportioned GFA after adjustment of grant		1,957.12
Apportioned depreciation claimed		73.35

- 4.10.3 The Commission has considered the opening GFA for FY 2022-23 as per the closing GFA approved in the True up of FY 2021-22, vide Tariff Order dated March 29, 2023. The Commission has computed depreciation as per scheduled rates specified in the MYT Regulations, 2021.
- 4.10.4 As per the MYT Regulations, 2021, the total depreciation during the life of the asset shall not exceed 90% of the original cost of GFA. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation on assets where depreciation is in excess of 90% of the original cost of asset under different asset heads. The Commission has not considered depreciation on assets funded through grants in accordance with MYT Regulations, 2021, and in accordance with the Commission's own Orders.
- 4.10.5 Accordingly, the Commission has approved depreciation in the truing up for FY 2022-23 as per MYT Regulations, 2021, as given in the Table below:

Table 19: Depreciation approved for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation allowed after truing up
1	Land owned	18.97	0.65	0.00%	-
2	Leasehold Land	2.84		3.34%	0.09
3	Building	58.72	1.65	3.34%	1.99
4	Plant & Machinery	828.13	4.46	5.28%	32.52
5	Vehicle	27.24		5.28%	1.46
6	Furniture & Fixtures	19.75	1.01	6.33%	0.64
7	Office Equipment	52.53	7.56	6.33%	2.96
8	Other Civil Work	71.14	3.02	3.34%	2.43
9	Lines & Cable Network	1,711.81	340.37	5.28%	78.24
	Total	2,791.13	358.73		120.34

SI. No.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation allowed after truing up
10	Assets built through Grants/CC	233.81			
11	Assets not belonging to entity	5,412.00	376.98		
12	Less: Depreciation for Grants/CC				59.68
13	Net Total	8,436.94	735.71		60.66

Therefore, the Commission approves Depreciation of Rs. 60.66 Crore in the truing up for FY 2022-23.

4.11 Interest and Finance Charges

- 4.11.1 APDCL has claimed interest on loan capital for the year on normative basis. APDCL added that it has not claimed interest on GPF and NPS, etc, in accordance with the approach adopted by the Commission in previous Tariff Orders.
- 4.11.2 The net interest expenses claimed by APDCL in the Truing up for FY 2022-23 are shown in the Table below:

Table 20: Interest and Finance Charges as submitted by APDCL for FY 2022-23 (Rs. Crore)

Particulars	Tariff Order	APDCL
Opening normative loan	227.06	112.98
Addition of normative loan during the year	32.40	13.31
Normative Repayment during the year	46.82	73.35
Net Normative Closing Loan	212.65	52.94
Rate of Interest	10%	8.41%
Interest Expenses	21.99	4.45

Particulars	Tariff Order	APDCL
Interest and Financing Charges	-	-
Billdesk charges for collection revenue	-	-
Total Interest and Financing Charges	21.99	4.45

- 4.11.3 The Commission has approved Interest on loan capital for FY 2022-23 on normative basis as per MYT Regulations, 2021. The closing net normative loan approved in the Truing up of FY 2021-22 has been considered as the opening net normative loan of FY 2022-23.
- 4.11.4 The Commission has sought clarifications from APDCL regarding the basis and computation for addition of normative loan of Rs. 13.31 Crore in FY 2022-23 with respect to the GFA addition during the year, and funding pattern of such addition to GFA in FY 2022-23. APDCL submitted that addition of normative loan quantum pertains to assets capitalised out of debt funds as per State Owned Priority Development (SOPD scheme) of Rs 13.31 Crore. APDCL further submitted that all these funds are provided as loan by Government of Assam.
- 4.11.5 The Commission has computed normative interest for FY 2022-23 on the average balance of loan during FY 2022-23, in accordance with the established practice in this regard. The interest rate for FY 2022-23 has been considered as 8.80%, based on reply submitted by APDCL to the data gaps after TVS.
- 4.11.6 The Interest and Financing Charges as approved by the Commission in the truing up for FY 2022-23 is shown in the following Table:

Table 21: Approved Interest & Financing Charges for FY 2022-23 (Rs. Crore)

Particulars	Tariff Order	APDCL	Approved after True-up
Opening normative loan	227.06	112.98	153.25
Addition of normative loan during year	32.40	13.31	13.31
Normative Repayment during the year	46.82	73.35	60.66

Particulars	Tariff Order	APDCL	Approved after True-up
Net Normative Closing Loan	212.65	52.94	105.90
Average Loan	219.85	82.96	129.58
Rate of Interest	10%	8.41%	8.80%
Interest Expenses	21.99	4.45	11.40

Therefore, the Commission approves Interest on Loans of Rs. 11.40 Crore in the truing up for FY 2022-23.

4.12 Interest on Working Capital (IoWC)

4.12.1 APDCL submitted that as against Rs 8.85 Crore approved in the Tariff Order, normative IoWC claimed for FY 2022-23 is Nil, as shown below

Table 22: Approved Interest & Financing Charges for FY 2022-23 (Rs. Crore)

Particulars	Tariff	APDCL
Faiticulais	Order	Petition
O&M Expenses-One month	99.20	108.83
2-month Receivables	1229.99	1210.38
Maintenance spares @ 15% of O&M Expenses	178.55	195.90
Less: One-month Power Purchase Cost	502.60	624.09
Less: Consumer Security Deposit	916.64	926.89
Total Working Capital	88.50	(35.87)
Rate of Interest on WC	10.00%	10.00%
Interest on WC	8.85	0.00

4.12.2 APDCL submitted that no claim has been made on account of Interest on Working Capital during true-up of ARR for FY 2022-23.

Commission's Analysis

4.12.3 The Commission has computed IoWC in accordance with the MYT Regulations, 2021.

The normative O&M expenses approved after true-up for FY 2022-23 in this Order

have been considered. The working capital requirement towards two months of receivables has been considered based on the actual revenue earned by APDCL in FY 2022-23. The average amount of Consumer Security Deposit (CSD) for FY 2022-23 has been taken from the Audited Accounts, after deducting the CSD of the permanently disconnected consumers, in accordance with the approach adopted in previous years.

- 4.12.4 The amount towards one-month of power purchase cost has been reduced from the normative working capital requirement. In accordance with the previous approach, the Commission has reduced the cost of power purchase from Power Exchange, as approved after true-up, while computing the working capital requirement, as APDCL does not get one-month credit for payment of these bills. The rate of Interest has been considered equal to the weighted average SBI MCLR Rate in FY 2022-23 of 7.80% plus 300 basis points, i.e., 10.80%.
- 4.12.5 The Commission asked APDCL to clarify the basis for considering Consumer Security Deposit (CSD) as Rs. 926.89 Crore, while computing IoWC, as Note 17 of the Audited Accounts shows CSD as Rs. 962.62 Crore. APDCL submitted that the amount of Rs. 35.73 Crore has not been considered as the same are pertaining to dues receivable from Permanently disconnected consumers which was deducted from Rs. 962.62 Crore at Note 17 of Accounts for the purpose of determination of working capital.
- 4.12.6 The loWC approved by the Commission in the truing up for FY 2022-23 is shown in the following Table:

Table 23: loWC approved by the Commission for FY 2022-23 (Rs. Crore)

SI.	Particulars	Tariff	APDCL	Approved after
No.	Particulars	Order	Petition	True-up
1	O&M Expenses for 1 Month	99.20	108.83	100.69
2	Maintenance spares @ 15% of O&M Expenses	178.55	195.90	181.24
3	2 months equivalent of expected revenue from sale of electricity	1229.99	1210.38	1,210.38

SI.	Particulars	Tariff	APDCL	Approved after
No.		Order	Petition	True-up
4	Less: 1 month of Power Purchase Cost	502.60	624.09	623.32
5	Less: Amount held as CSD	916.64	926.89	934.57
6	Total Working Capital Required	88.50	-35.87	(65.59)
7	Interest rate	10.00%	10.00%	10.80%
8	Interest on Working Capital	8.85	0.00	0.00

4.12.7 Therefore, Interest on Working Capital is approved as Nil in the truing up for FY 2022-23, as the net working capital requirement is negative.

4.13 Interest on Consumer Security Deposit (CSD)

- 4.13.1 APDCL submitted that the Commission had approved Rs. 30.17 Crore as interest on CSD for FY 2022-23. The actual interest liability on CSD as per the Audited Accounts for FY 2022-23 is Rs. 65.95 Crore.
- 4.13.2 APDCL submitted that the amount of interest on CSD were liquidated with energy bills for respective consumers. Actual payment/adjustment during the year is Rs. 410.79 Crore. APDCL submitted that as the actual liquidation/adjustment is a huge amount, the amount is claimed only to the extent of actual liability during the year, i.e., Rs. 65.95 Crore and the balance amount of Rs. 344.84 Crore (Rs. 410.79 Crore Rs. 65.95 Crore) shall be recovered in subsequent periods.

Commission's Analysis

4.13.3 The Commission has approved the actual interest paid by APDCL on CSD in the trueup for FY 2022-23, as shown in the Table below:

Table 24: Interest on CSD approved for FY 2022-23 (Rs. Crore)

Particulars	Tariff Order	APDCL	Approved after True-up
Interest on CSD	30.17	65.95	65.95

The Commission approves the actual interest on CSD of Rs. 65.95 Crore paid by APDCL to the consumers, in the truing up for FY 2022-23.

4.14 Other Debits

4.14.1 APDCL submitted that the Commission had approved an amount of Rs. 16.60 Crore as provision for bad and doubtful debts for FY 2022-23. APDCL has claimed an amount of Rs. 22.29 Crore, equivalent to 1% of amount receivable as on 31.03.2023, in the True-up Petition.

Commission's Analysis

4.14.2 The Commission has allowed the actual provision for bad and doubtful debts of Rs 22.29 Crore as claimed by APDCL, based on the audited accounts for FY 2022-23, as the same is within 1% of the Receivables and the cumulative provisioning is within 5% of the Receivables.

Therefore, under Other Debits, the Commission approves Rs. 22.29 Crore in the truing up for FY 2022-23.

4.15 Exceptional Items

- 4.15.1 APDCL submitted that the Commission has not allowed any amount on this head in its earlier Tariff Orders. APDCL submitted that although an amount of Rs. 266.24 Crore is booked under "Miscellaneous Receipts" on account of book adjustment for "Installation Charges for New service connection" for past years, the same has not been considered as the same is a mere book adjustment without any cash flow.
- 4.15.2 APDCL submitted that an amount of Rs. (5.85) Crore on account of "Remeasurement of Defined Benefit Plans" is considered to be adjusted in the ARR.

Commission's Analysis

4.15.3 As regards the Miscellaneous Receipts, the Commission asked APDCL to clarify in which years has the amount of Rs. 266.24 Crore been considered as receipt in the regulatory proceedings. APDCL submitted that APDCL (erstwhile ASEB) before bifurcation had received payments from consumers towards providing Service Connection to the consumers. Amounts received from consumers on this head were kept as liability against respective GLs with subsequent recognition of income in books of accounts on release of the connections. Massive free electrification programmes since 2005 carried out under various flagship programmes like RGGVY, DDUGJY, SAUBHAGYA were without provision of any such charges to utility as a part of the project cost. All such arrangements were carried out on part of the OPEX without any receipt against the same. However, mere accounting procedure was followed for service connection year on year as a convention without receiving any fund. Audit has been pointing out the same since FY 2007-08 (for different Companies at that point of time). To address the long pending audit observations, the rectification entry was passed during the year.

- 4.15.4 The Commission is of the view that the Miscellaneous Receipts of Rs. 266.24 Crore have to be considered as Income of APDCL. The Regulatory Accounts are being prepared on accrual basis, irrespective of the amount of cash received or spent by APDCL. Also, there is no way to confirm whether APDCL has actually received cash against these entries in the past. It is a fact that APDCL has booked such amount as Revenue in its books of accounts, and the same has not been passed on to the consumers in the previous Tariff Orders. This amount has to be considered as Income of APDCL, and adjusted against the ARR of APDCL for FY 2022-23. Hence, the Commission has considered the Miscellaneous Receipts of Rs. 266.24 Crore as Non-Tariff Income, as discussed subsequently.
- 4.15.5 The Commission has considered the amount of Rs. (5.85) Crore under Exceptional Items on account of "Remeasurement of Defined Benefit Plans" in the true-up for FY 2022-23.

Therefore, the Commission considers exceptional amount of Rs. (5.85) Crore in the truing up for FY 2022-23.

4.16 Return on Equity

4.16.1 APDCL submitted that the Commission had considered equity base of Rs.474.41 Crore and allowed return @14% as Rs. 193.09 Crore on the equity base for FY 2022-

4.16.2 APDCL requested the Commission to allow RoE amounting to Rs 168.07 Crore in the True-Up of FY 2022-23, based on the principle adopted by the Commission in the previous Order, as shown in the Table below:

Table 25: Return on Equity for FY 2022-23 (Rs Crore)

Particulars	Approved	Actual
Opening Equity	1366.5	1019.95
Net Addition during the Year	25.41	361.04
Closing Equity	1391.91	1380.99
Average Equity	1379.205	1200.47
Opening GFA		8465.90
Normative Equity		2539.77
Admissible Equity for RoE		1200.47
Rate of Return on Equity	14.00%	14.00%
Return on Equity	193.09	168.07

- 4.16.3 The Commission asked APDCL to submit the basis and computation for addition of equity of Rs. 361.04 Crore, as the GFA addition during the year is only Rs. 358.73 Crore, and equity addition is considered as 30% of GFA addition. APDCL submitted that the admissible equity is derived as per the rationale approved by the Commission in earlier Orders. APDCL submitted that GoA has converted Grants of Rs. 3359.32 Crore to equity. Hence, after consideration of normative equity of 30% of total asset value, balance Rs. 361.04 Crore has been added to the equity.
- 4.16.4 The Commission has approved RoE for FY 2022-23 as per the MYT Regulations, 2021. The equity as on April 1, 2022 has been considered equal to the closing equity approved in the Truing up for FY 2021-22. The addition of equity has been considered as Nil, as approved by the Commission in this Order.

4.16.5 The addition to equity on account of conversion of grant to equity is limited to 30% of GFA. The conversion of Grant to equity allowed by the Commission for FY 2022-23 is shown in the Table below:

Table 26: Conversion of Grant to Equity approved by the Commission for FY 2022-23 (Rs. Crore)

Particulars	Amount
Opening GFA	8436.55
Average Grant towards GFA	7714.60
If conversion of Rs. 3359.02 Crore of grant considered	3359.32
Net Grant towards GFA	4355.28
Net assets to be funded	4081.27
Maximum Equity that can be considered	1224.38
Equity already considered	1019.95
Equity that can be additionally allowed	204.43

- 4.16.6 Thus, the Commission has considered additional equity of Rs. 204.43 Crore due to conversion of Grant to equity in FY 2022-23.
- 4.16.7 The RoE allowed by the Commission at 14% of the equity capital of APDCL is shown in the following Table:

Table 27: RoE approved by the Commission for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	Tariff Order	APDCL	Approved
1	Opening Equity Balance	1366.50	1,019.95	1019.95
2	Addition During the Year	25.41	361.04	204.43
3	Closing Equity Balance	1,391.91	1,380.99	1,224.38
4	Average Equity Balance	1,379.21	1,200.47	1,122.17
5	Rate of Return (%)	14.00%	14.00%	14.00%
6	Return on Equity	193.09	168.07	157.10

Therefore, the Commission approves RoE of Rs.157.10 Crore in the truing up for FY 2022-23.

4.17 Other Income

4.17.1 APDCL submitted that the Commission had approved Other Income of Rs. 302.32 Crore in the Tariff Order for FY 2022-23, against which APDCL has submitted Other Income of Rs. 676.16 Crore for FY 2022-23, as shown in the Table below:

Table 28: Other Income for FY 2022-23 as submitted by APDCL (Rs Crore)

SI. No.	Particulars	Amount
1	Interest on loans to staff	0
2	Interest on HB advances to staff	0
3	Receipt from sale of LED bulb, Tube light, Fan, etc.	0.05
4	Interest from banks and Investment	61.81
5	Gain on sale of fixed assets	0.00
6	Rent from residential buildings	0.38
7	Miscellaneous receipts	37.11
8	Income from Sale of Scrap	0.00
9	Receipt from Pension Trust	5.76
10	Income on seasonal Export of surplus power	571.06
	Total	676.16

Commission's Analysis

4.17.2 The Commission has considered the actual Other Income as per the Audited Accounts in the true up for FY 2022-23, except for 'Revenue from Sale of LEDs, Tube light, Fan, etc.', which has been considered net of cost of such equipment, as shown in the Table below:

Table 29: Other Income approved by the Commission for FY 2022-23 (Rs. Crore)

SI.	Particulars	Tariff	APDCL	Approved
No.	r ai ilculai s	Order	Petition	after true up
1	Interest on fixed deposits	77.74	61.81	61.81
2	Income from Trading	156.21	571.06	571.05
3	Income from Sale of Scrap	0.12		-
4	Revenue from sale of LED's, Tube light Fan, etc.	0.02	0.05	-4.30
5	Rent from residential buildings	0.02	0.38	0.38
6	Receipt from Pension Trust	50.13	5.76	5.76
7	Miscellaneous receipts	18.08	37.11	37.11
	Total	302.32	676.16	671.81

Therefore, the Commission approves Other Income of Rs. 671.81 Crore in the true up for FY 2022-23.

4.18 Non-Tariff Income

4.18.1 APDCL submitted that it has accrued Rs. 417.59 Crore of Non-Tariff Income (NTI) during FY 2022-23 against approved amount of Rs. 418.21 Crore, as shown in the Table below:

Table 30: Non-Tariff Income for FY 2022-23 (Rs Crore)

SI. No.	Particulars	Amount
1	Rentals from Meters, Service Lines, Capacitors etc.	22.66
2	Income from recoveries on account of theft of energy/ Malpractices	0.00
3	Delayed payment charges from Consumers	278.54
4	Misc. recoveries	46.18
5	Rebate on prompt payment of Power purchase bills	39.30
5	Cross Subsidy surcharge on Open Access Consumer	3.47
6	Wheeling charges collected	2.35

SI. No.	Particulars Particulars	Amount
7	Short Term Open Access (STOA) credit	20.22
8	Income From SCED	4.86
	Total	417.59

- 4.18.2 In line with the approach adopted in the previous Orders, the Commission has not considered the rebate received on prompt payment of power purchase bills, as NTI. As discussed earlier under Section 4.15 'Exceptional Items', the Commission has considered the Miscellaneous Receipts of Rs. 266.24 Crore as Non-Tariff Income.
- 4.18.3 The Commission has considered all other heads of Non-Tariff Income as per the Audited Accounts, in the true up for FY 2022-23. The amount of Non-Tariff Income considered in the MYT Order, amount claimed by APDCL in the true up Petition and amount approved in the true up, is shown in the Table below:

Table 31: Non-Tariff Income approved by the Commission for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	Tariff	APDCL	Approved
31. 140.		Order	Petition	after true-up
1	Meter Rent	25.05	22.66	22.66
2	Compensation charges for theft of energy/malpractices	0.83	0.00	0.00
3	Rental receipt of plant and equipment	-	-	-
4	Cross Subsidy surcharge on Open Access Consumer	14.73	3.47	3.47
5	Wheeling Charges collected	4.99	2.35	2.35
6	Short-term Open Access Credit	59.08	20.22	20.22
7	Rebate on PP bills		39.30	-
8	Receipts from renting plant and machinery			
9	Miscellaneous Recoveries	26.48	46.18	46.18

SI. No.	Particulars	Tariff	APDCL	Approved
		Order	Petition	after true-up
10	Miscellaneous Receipt against Service			266.24
	connections			200.24
11	Other Miscellaneous and General			
	Charges	-		
	a) Delayed payment charges	283.09	278.54	278.54
	b) Transformer Maintenance			
	c) Income on Reactive Power	0.25		-
	d) Income from SCED	3.70	4.86	4.86
	Grand Total	418.21	417.59	644.52

4.18.4 Therefore, the Commission approves Non-Tariff Income of Rs. 644.52 Crore in the truing up for FY 2022-23.

4.19 Revenue Grant/Subsidy

- 4.19.1 APDCL submitted that the Commission has approved the tariff on gross basis without factoring the targeted subsidy allowed to various category of consumers by the Government of Assam (GoA). Total amount of targeted subsidy booked during FY 2022-23 as per the statement of accounts is Rs. 284.43 Crore.
- 4.19.2 APDCL submitted that the Commission has considered Rs. 400 Crore tariff subsidy from GoA. However, only Rs. 346.40 Crore has been received against the same which has been considered.
- 4.19.3 APDCL submitted that in addition to the above, Govt. of Assam has also provided an amount of Rs. 72.20 Crore as Operation Fund Requirement (OFR) (Future loss funding) as per the UDAY MoU during FY 2022-23. The same is not considered for passing on in line with previous considerations on OFR by the Commission.
- 4.19.4 APDCL requested the Commission to considered grant/subsidy amount of Rs. 346.40 Crores as well as targeted subsidy of Rs. 284.43 Crore, in the true-up of ARR for FY 2022-23.

Commission's Analysis

- 4.19.5 The amount of Rs 284.43 Crore received from GoA against targeted subsidy for FY 2022-23 has been considered by the Commission as a part of revenue from sale of power.
- 4.19.6 As regards the Revenue Grant to facilitate liquidation of outstanding power purchase liabilities, while APDCL has received only Rs. 346.40 Crore out of the total amount of Rs. 400 Crore committed by the GoA, the Commission has considered the total amount of Rs. 400 Crore as subsidy support from GoA. It is for APDCL to ensure that the subsidy amount committed by GoA in the Budget is received.
- 4.19.7 In response to the Commission's queries, APDCL also submitted that it had received incentive of Rs. 3.16 Crore from Ministry of New & Renewable Energy (MNRE) for expeditious implementation of Rooftop Solar projects in its licence area.
- 4.19.8 The Commission accordingly considers Other Subsidy of Rs. 400 Crore and MNRE incentive of Rs. 3.16 Crore in the Truing Up for FY 2022-23.

4.20 Revenue from Sale of Power

- 4.20.1 APDCL submitted that against the approved revenue Rs. 6434.21 Crore, the actual revenue from sale of power within the State amounted to Rs. 7262.27 Crore (including targeted subsidy, FPPPA, etc.). The deviation in revenue is attributable to higher sales over approved level and implementation of FPPPA (both ways).
- 4.20.2 Considering the above, APDCL requested the Commission to allow the actual revenue from sale of power within the state as per the statement of accounts for FY 2022-23 amounting to Rs. 7262.27 Crore (inclusive of targeted subsidy, FPPPA etc in the trueup of ARR for FY 2022-23.

- 4.20.3 APDCL, in its Petition, has claimed Revenue from Sale of power as per the Audited Accounts, i.e., Rs. 7262.27 Crore (including targeted subsidy of Rs. 284.43 Crore from Govt. of Assam).
- 4.20.4 Accordingly, the Commission approves the revenue of Rs 7262.27 Crore in the

4.21 ARR and Revenue Gap/(Surplus) after Truing Up of FY 2022-23

4.21.1 Considering the above heads of expense and revenue approved after truing up for FY 2022-23, the Net ARR and Revenue Gap/(Surplus) for FY 2022-23 is shown in the following Table:

Table 32: ARR & Revenue Gap/(Surplus) approved in the Truing up for FY 2022-23 (Rs. Crore)

SI.	Particulars	Tariff Order	APDCL	Approved
No				
1	Power Purchase Expenses	6031.15	8,478.85	8,469.61
2	O&M Expenses	1190.36	1,306.00	1,275.77
a)	Employee Expenses	835.92	934.34	905.09
b)	R&M Expenses	278.52	267.97	267.22
c)	A&G Expenses	75.92	103.69	103.45
3	Depreciation	46.82	73.35	60.66
4	Interest and Finance Charges	21.99	4.45	11.40
5	Interest on Working Capital	8.85	-	-
6	Interest on CSD	30.17	65.95	65.95
7	Return on Equity	193.09	168.07	157.10
8	Income Tax	-	-	-
9	Other Debits, incl. Provisioning for	16.60	22.29	22.29
	Bad Debts			
10	Exceptional Items, if any	-	(5.85)	(5.85)
11	Reduction in Power Purchase cost	-	(54.46)	(129.91)
	due to excess losses		(55)	(120.01)
12	Sharing of gains/(losses) on		(13.51)	0.95
	account of O&M expenses		(10.01)	0.00
13	Total Expenditure	7,539.02	10,045.14	9,927.98
14	Less: Non-Tariff Income	418.21	417.59	644.52
15	Less: Other Income	302.32	676.16	671.81

SI.	Particulars	Tariff Order	APDCL	Approved
No				
16	Aggregate Revenue Requirement	6,818.49	8,951.39	8,611.65
17	Revenue Gap with Carrying Cost	561.46	561.46	561.46
	after True Up of FY 2020-21			
18	Net Revenue Requirement	7,379.96	9,512.85	9,173.11
19	Revenue at Approved/Existing Tariff			
	including State Government	6,979.96	7,262.27	7,262.27
	Targeted Subsidy			
20	Other Subsidy for Power Purchase	400.00	346.40	400.00
21	MNRE Incentive	-	-	3.16
22	Total Revenue incl. subsidy	7,379.96	7,608.67	7,665.43
23	Revenue Gap/(Surplus)	-	1,904.17	1,507.68

The Commission approves a Revenue Gap of Rs. 1507.68 Crore after truing up for FY 2022-23 and the same has been considered for adjustment during FY 2024-25, with the associated carrying cost.

5 Annual Performance Review (APR) for FY 2023-24

5.1 Introduction

- 5.1.1 The Commission vide its MYT Order dated March 29, 2023 had approved the revised ARR for FY 2023-24. This Chapter deals with APR for FY 2023-24 in accordance with the provisions of MYT Regulations, 2021, based on the submissions made by APDCL.
- 5.1.2 Regulation 9.3 of the MYT Regulations, 2021 specifies that the Commission shall undertake the APR and True-up for the respective years of the Control Period from FY 2022-23 to FY 2024-25, as reproduced below:
 - "9.3 The scope of the **Annual Performance review** and True up shall be a comparison of the actual performance of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the following:

. . .

- b) **Annual Performance Review**: a comparison of the performance targets estimated to be achieved for the current financial year (based on 6 months actual data) with the approved forecast for that financial year including adjusting trajectories of uncontrollable if needed." (emphasis added)
- 5.1.3 APDCL submitted the APR Petition for FY 2023-24, supported by actual information available till September 2023 and estimated values for the next six months of FY 2023-24.
- 5.1.4 The main objective of APR is to compare the actual performance for FY 2023-24 visà-vis forecast approved in the Tariff Order dated March 29, 2023 for FY 2023-24. The Revenue Gap/(Surplus) arising out of APR for FY 2023-24 has not been passed on to the consumers, and the same shall be considered at the time of Truing-up only.
- 5.1.5 In this Chapter, the Commission has analysed the revised estimate of all the

components of ARR vis-à-vis values approved in Tariff Order for FY 2023-24. The Commission has computed the Revenue Gap/(Surplus) as an indication of the performance in FY 2023-24. No sharing of (gains)/ losses has been undertaken at this stage and the same shall be considered at the time of Truing up for FY 2023-24.

5.2 Energy Sales

- 5.2.1 The Commission vide Tariff Order for FY 2023-24, had approved energy sales of 9765 MU. APDCL has estimated energy sales for FY 2023-24, based on the actual sales during first half (H1) of FY 2023-24 and projected sales for next half, considering practicability of the estimates.
- 5.2.2 APDCL submitted that there is an increase of around 142 MU in revised energy sales vis-à-vis approved energy sales.
- 5.2.3 APDCL requested the Commission to approve the revised energy sales of 9907 MU in the APR for FY 2023-24. APDCL has projected the category-wise energy sales for FY 2023-24 as shown in the Table below:

Table 33: Category-wise Energy Sales Projected by APDCL for FY 2023-24 (MU)

SI.	Category	Approved	Revised
No.			Estimate
	LT GROUP		
1	Jeevan Dhara	403	275
2	Domestic A	4,636	3,906
3	Domestic-B above 5 kW to 30 kW	602	560
4	Commercial Load above 0.5 to 30 kW	837	1,013
5	General Load upto 30 kW (Non-Commercial & Non- Domestic)	141	152
6	General Load up to 30 kW (Govt.	8	15
	Primary/Sec./Hr.Sec. Schools)		10
7	Public Lighting	25	24

SI.	Category	Approved	Revised
No.			Estimate
8	Agriculture up to 7.5 HP	43	37
9	Small Industries Rural up to 30 kW	83	81
10	Small Industries Urban	30	31
11	EV Charging station	0	2
12	Temporary	18	3
	LT TOTAL	6,829	6,100
	HT GROUP		
1	HT Domestic 30 kW and above	20	25
2	HT commercial 30 kW & above	449	517
3	Public Water works	96	157
4	Bulk Supply-Govt. Edu Inst	88	116
5	Bulk Supply-Others	458	496
6	HT Small Industries upto 50 kW	17	15
7	HT Industries-1 50kw to 150 kW	76	81
8	HT Industries-II above 150 kW (Option 1 - ToD)	938	1,348
9	HT Industries-II above 150 kW (Option 2 - Non-ToD)	142	223
10	Tea, Coff & Rub (Total)	503	615
11	Oil & Coal	128	97
12	HT Irrigation Load above 7.5 hp	20	23
13	HT Temporary	-	0
14	HT EV Charging	0.17	93
15	HT Railway Traction	0.61	1
16	HT Electric crematorium	0.01	0
	HT Total	2,936	3,807
	All Total	9,765	9,907

5.2.4 The estimations of sales in second half (H2) of FY 2023-24 made by APDCL is not consistent with past trend. Overall LT sales (as well as sales to most categories) in H2

of FY 2023-24 has been projected much lower than actual LT sales in H1 of FY 2023-24, especially when H1 sales are much higher than that in H1 of FY 2022-23. The sale in Jeevan Dhara category in H2 of FY 2023-24 has been projected much higher than actual Jeevan Dhara sales in H1 of FY 2023-24, and the trend noticed in FY 2022-23 is different. Similarly, the Domestic A sales in H2 of FY 2023-24 has been projected much lower than actual Domestic A sales in H1 of FY 2023-24.

5.2.5 In view of the above, the Commission has estimated energy sales for FY 2023-24, based on the actual performance during first half (H1) of FY 2023-24 plus energy sales in second half (H2) calculated as average percent of H1 for the previous two years, i.e., FY 2021-22 and FY 2022-23. The category-wise sales estimated by APDCL and approved by the Commission in the APR for FY 2023-24 are given in the Table below:

Table 34: Energy Sales considered by the Commission for FY 2023-24 (MU)

SI. No.	Consumer Category	Tariff Order	APDCL	Approved in APR
	LT GROUP			
1	Jeevan Dhara	403	275	194
2	Domestic A	4,636	3,906	4,198
3	Domestic-B above 5 kW to 30 kW	602	560	615
4	Commercial Load above 0.5 to 30 kW	837	1,013	1,119
5	General Load upto 30 kW (Non-Comml & Non- Domestic)	141	152	214
6	General Load upto 30 kW (Govt. Primary/Sec./Hr.Sec. Schools)	8	15	25
7	Public Lighting	25	24	22
8	Agriculture up to 7.5 hp	43	37	58
9	Small Industries Rural up to 30 kW	83	81	89
10	Small Industries Urban	30	31	34
11	EV Charging station	0	2	3
12	Temporary	18	3	6
	LT TOTAL	6,829	6,100	6,578
	HT GROUP			

SI. No.	Consumer Category	Tariff Order	APDCL	Approved in APR
1.	HT Domestic 30 kW and above	20	25	23
2	HT commercial 30 kW & above	449	517	526
3	Public Water works	96	157	236
4	Bulk Supply-Govt. Edu Inst	88	116	117
5	Bulk Supply-Others	458	496	485
6	HT Small Industries upto 50 kW	17	15	14
7	HT Industries-1 50kw to 150 kW	76	81	84
8	HT Industries-II above 150 kW (Option 1 - ToD)	938	1,348	1,268
9	HT Industries-II above 150 kW (Option 2 - Non- ToD)	142	223	203
10	Tea, Coff & Rub (Total)	503	615	544
11	Oil & Coal	128	97	133
12	HT Irrigation Load above 7.5 hp	20	23	30
13	HT Temporary	-	0	1
14	HT EV Charging	0.17	93	90
15	HT Railway Traction	0.61	1	1
16	HT Electric crematorium	0.01	0	0.2
	HT Total	2,936	3,807	3,754
	All Total	9,765	9,907	10,333

Therefore, the Commission has estimated total sales of 10,333 MU in the APR for FY 2023-24.

5.3 Distribution Loss

- 5.3.1 The Commission in the Tariff Order dated March 29, 2023 had approved Distribution Loss of 14.75% for FY 2023-24. APDCL has estimated the Distribution Loss for FY 2023-24 as 15.80% in line with trajectory considered under RDSS.
- 5.3.2 APDCL submitted that over the years, it has been able to reduce the losses gradually

except for the years with massive rural electrification, i.e., FY 2009-10, FY 2011-12, and FY 2018-19. The Petitioner further submitted that IT interventions like implementation of AI based software to do away with human interventions is yielding dividends.

5.3.3 APDCL requested the Commission to approve the Distribution Loss of 15.80 % in the APR of FY 2023-24 in line with trajectory approved under RDSS.

Commission's Analysis

- 5.3.4 The Commission has already elaborated on the issue of Distribution Loss in this Order, while Truing up for FY 2022-23. The Commission is of the view that APDCL has reported close to approved distribution loss levels till FY 2017-18, even when there was significant increase in the LT consumers on account of household electrification.
- 5.3.5 In the Tariff Order dated March 29, 2023, the Commission had approved Distribution Loss of 14.75% for FY 2023-24. The Commission, based on the contentions of APDCL such as inverse LT:HT ratio and massive electrification under SAUBHAGYA, had approved such Distribution Loss levels for APDCL. Therefore, the approved Distribution Loss of 14.75% already takes into account the aspects mentioned by APDCL.
- 5.3.6 The Commission has therefore, considered the Distribution Loss for FY 2023-24 as approved in the Tariff Order dated March 29, 2023 as shown in the Table below:

Table 35: Distribution Losses considered by the Commission for FY 2023-24

Particulars Tariff Order dt. 29.03.2023 Distribution Loss (%) 14.75%		APDCL Projection	Approved in APR	
Distribution Loss (%)	14.75%	15.80%	14.75%	

5.4 Energy Balance

5.4.1 APDCL has considered the revised estimates for energy requirement for FY 2023-24 based on the revised estimates of energy sales, projected Distribution Losses and

associated inter-State and intra-State transmission losses. APDCL has submitted that it has considered the intra-State transmission losses as 3.25%, as approved in the Tariff Order dated March 29, 2023. The inter-State (PGCIL) losses have been projected as 2.75% for FY 2023-24.

5.4.2 The estimated Energy Balance for FY 2023-24 as submitted by APDCL is shown in the following Table:

Table 36: Energy Balance for FY 2023-24 as projected by APDCL (MU)

Sr. No.	Particulars	Tariff Order dated 29.03.2023	APDCL
1	Retail Energy Sale	9,765	9,907
2	Distribution loss (%)	14.75%	15.80%
3	Distribution loss	1,690	1,859
4	Energy requirement at DISCOM periphery	11,454	11,766
5	STU Loss (%)	3.25%	3.25%
6	STU Loss	385	395
7	Energy requirement at STU periphery	11,839	12,161
8	CTU Loss (%)	1.74%	2.75%
9	CTU Loss	210	385
10	Seasonal Export	-	1,454
11	Energy requirement	12,048	14,000

Commission's Analysis

5.4.3 The Commission has approved the Energy Balance in the APR for FY 2023-24 based on the estimated sales, approved Distribution Loss, approved Transmission Loss trajectory for AEGCL, and proportionate PGCIL Losses on external power purchase. The Energy Balance approved by the Commission in the APR for FY 2023-24 is shown in the Table below:

Table 37: Energy Balance for FY 2023-24 considered by the Commission (MU)

SI.	Particulars	Tariff Order	APDCL	Approved
No.				in APR
1	Energy sales	9,765	9,907	10,333
2	Distribution Loss (%)	14.75%	15.80%	14.75%
3	Distribution Loss	1,689	1,859	1,788
4	Energy Requirement at T<>D periphery	11,454	11,766	12,120
5	Intra-State Transmission Loss	3.25%	3.25%	3.25%
6	Intra-State Transmission Loss (%)	385	395	407
7	Energy input to Transmission System	11,839	12,161	12,528
8	Inter-State Pooled Loss (%)	1.74%	2.75%	1.62%
9	Inter-State Pooled Loss	210	385	227
10	Seasonal Export		1,454	1,220
11	Total Energy Requirement	12,048	14,000	13,974

Therefore, the Commission considers total Power Purchase Requirement of 13,974 MU in the APR for FY 2023-24.

5.5 Power Purchase

- 5.5.1 APDCL submitted that it is largely dependent on APGCL and CGS Stations for meeting the Base Load. However, to meet the Peak Demand of the State, APDCL has tied up with short-term sources like traders and also purchases power from Power Exchanges.
- 5.5.2 The power purchase quantum and cost for FY 2023-24 have been estimated based on actuals for first six months of the year and estimated for second half of the year.
- 5.5.3 APDCL submitted that it has projected the source-wise power purchase for FY 2023-24 based on the following assumptions:
 - ➤ APGCL: APDCL has firm allocation of power from the State Generating Stations of APGCL. Thermal plants of APGCL include NTPS, LTPS, LRPP and NRPP. Hydro plants of APGCL supplying power to APDCL are MeHEP and KLHEP. For

- projecting the energy availability from these stations, APDCL has considered gross energy availability based on allocated capacity and historical Plant Load Factor (PLF), and Auxiliary consumption for these plants in recent past with the status of operation. The tariff for these generating stations has been considered as per the latest Tariff Order of APGCL.
- ➤ Central Generating Stations (NER): The key CGS of North Eastern Region (NER) supplying power to APDCL include plants of NEEPCO, NHPC, OTPC and NTPC (Thermal). The share allocation of the various plants of CGS (NER) has been considered based on the latest Regional Energy Accounts (REA), while PLF has been considered based on past year's actuals. Operational norms have been considered as approved by Central Electricity Regulatory Commission (CERC) in respective Tariff Orders. The cost for the CGS has been considered as per the latest CERC orders for the respective plants.
- Central Generating Stations (Eastern Region): The share allocation of the various plants of CGS (ER) has been considered based on the latest Regional Energy Accounts (REA). Operational parameters of these plants have been considered based on the actual generation. APDCL is allocated power from Farakka I & II, Kahalgaon I, Kahalgaon II and Talcher of NTPC located in ER. Moreover 5 MW from NTPC ER Stations are also allocated as Bundled power with Solar under JNNSM. The cost for the CGS has been considered as per the latest CERC Orders for the respective plants.
- ➤ Other Sources: For HHPCL, PLF and auxiliary consumption is considered as per the Commission's Order dated April 12, 2013. Similarly, levelized tariff is considered @ Rs 4.11/kWh, as approved in this Order.
- Power available from NVVNL Solar Bundled (JNNSM) and NVVNL Coal Bundled (JNNSM) has been considered based on FY 2022-23 (True up) and actuals for FY 2023-24 (H1). For Suryataap Solar, normative parameters have been considered and rate is as per latest Tariff Order of the Commission (Rs. 8.78/kWh). For SECI (Solar) JNNSM, energy charge rate has been considered on the basis of FY 2022-23 (True up) and actuals for FY 2023-24 (H1).

- Considering the increase in demand vis-a-vis perennial low availability from already tied up sources, 179 MW from NTPC Dadri TPP has been arranged for a period of one year from October, 2023. The same is considered on the basis of actual bill for October, 2023.
- ➤ APDCL has already moved for allocation of 495 MW of power from 3 x 660 MW Neyveli Uttar Pradesh Power Limited (NUPPL), a joint venture between NLC India and Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited. Availability of the same is considered from 01.01.2024 as per latest available information.
- Shortfall of peak demand has been estimated to be mitigated through IEX platform considering the reasonable rates.
- > Deviation Settlement Mechanism is a practical aspect of all power transaction on real time basis and hence considered at a nominal level.
- Impact of sustained high price of natural gas as fixed by Ministry of Petroleum and Natural Gas, Govt. of India is clearly visible for APGCL and NEEPCO gas-based stations. APDCL requested the Commission to take due cognizance of this aspect considering the magnitude of financial implication vis-à-vis impact on power supply.
- Renewable sources: APDCL has projected to meet the Renewable Purchase Obligation (RPO) by mix of purchase power from wind, solar power projects and allocation from large hydro power stations, some of which are still in the pipeline. The AERC (Renewable Purchase Obligation and Compliance) Regulations, 2022 [RPO Regulations, 2022] notified on 18.04.2022 has aligned the trajectory with the Ministry of Power Order No. 23/03/2016-R&R dated 29.01.2021. The revised trajectory notified on 22.07.22 by Ministry of Power is as under:

Table 38: RPO trajectory notified by MoP

Year	Wind RPO	НРО	HPO Other RPO	
2022-23	0.81%	0.35%	0.35% 23.44%	
2023-24	1.60%	0.66%	24.81%	27.07%
2024-25	2.46%	1.08%	26.37%	29.91%

Year	Wind RPO	НРО	HPO Other RPO	
2025-26	3.36%	1.48%	28.17%	33.01%
2026-27	4.29%	1.80% 29.86%		35.95%
2027-28	5.23%	2.15%	31.43%	38.81%
2028-29	6.16%	2.51%	32.69%	41.36%
2029-30	6.94%	2.82%	33.57%	43.33%

Wherein, Wind RPO- energy from WPP commissioned after 31.03.22

HPO- energy from LHP (incl. PSP) commissioned after 08.03.19

Other RPO- all sources not covered above i.e., Solar, hydro (other than LHP after 08.03.19), Biomass etc.

5.5.4 The Storage Obligation trajectory has also been included as under:

Table 39: Storage trajectory notified by MoP

Year	Energy storage
2023-24	1.00%
2024-25	1.50%
2025-26	2.00%
2026-27	2.50%
2027-28	3.00%
2028-29	3.50%
2029-30	4.00%

Wherein, at least 85% energy storage in the Energy Storage System (ESS) shall be with energy procured from RE sources.

- 5.5.5 In view of the paradigm shift in the Regulations, entire procurement plan has to be adjusted with massive cost implication with the typical load profile.
- 5.5.6 APDCL is participating and procuring power through G-DAM/G-TAM within its constrained resources. APDCL requested permission to continue with the prevailing RE power arrangements.
 - > Inter-State and Intra-State charges: PGCIL Transmission Charges have been

	projected based on actual RTA available. The AEGCL Transmission Charges and SLDC Charges have been considered same as approved in latest Tariff Order of AEGCL and SLDC.
5.5.7	APDCL requested the Commission to approve the revised estimates of the power purchase quantum and cost of the utility in the APR for FY 2023-24 as shown below:

Table 40: Power Purchase for FY 2023-24 as submitted by APDCL (Rs. Crore)

		Tariff Order			APDCL Petition		
Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate	
	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	
APGCL	2172.14	776.44	3.57	2,077.04	1,346.22	6.48	
NEEPCO (HYDRO)				-	-		
KOPILI I		0.25		257.26	54.48	2.12	
KOPILI II		0.22		56.89	12.38	2.18	
KHANDONG		0.62		-	0.10		
RHEP	564.95	144.85	2.56	528.91	261.07	4.94	
DHEP	73.17	68.23	9.32	70.92	65.70	9.26	
NEEPCO (HYDRO) New				-			
KAMENG HEP	312.52	125.12	4.00	291.70	117.02	4.01	
NEEPCO (TH)				-			
AGBPP	945.21	345.19	3.65	946.02	727.85	7.69	
AGTPP	363.32	153.18	4.22	354.54	260.26	7.34	
NHPC Loktak HEP	144.96	57.41	3.96	76.51	38.24	5.00	
NTPC (Existing)				-			
FARAKKA	235.78	111.82	4.74	243.16	129.93	5.34	
KAHELGAON - I	116.91	54.35	4.65	100.56	46.44	4.62	
KAHELGAON -II	548.51	251.22	4.58	501.36	207.74	4.14	
	APGCL NEEPCO (HYDRO) KOPILI II KOPILI II KHANDONG RHEP DHEP NEEPCO (HYDRO) New KAMENG HEP NEEPCO (TH) AGBPP AGTPP NHPC Loktak HEP NTPC (Existing) FARAKKA KAHELGAON - I	Quantum MU APGCL 2172.14 NEEPCO (HYDRO) KOPILI II KHANDONG RHEP 564.95 DHEP 73.17 NEEPCO (HYDRO) New KAMENG HEP 312.52 NEEPCO (TH) AGBPP 945.21 AGTPP 363.32 NHPC Loktak HEP 144.96 NTPC (Existing) FARAKKA 235.78 KAHELGAON - I 116.91	Quantum Total Cost MU Rs. Crore APGCL 2172.14 776.44 NEEPCO (HYDRO) KOPILI II 0.25 KOPILI III 0.22 KHANDONG 0.62 RHEP 564.95 144.85 DHEP 73.17 68.23 NEEPCO (HYDRO) New KAMENG HEP 312.52 125.12 NEEPCO (TH) AGTPP 363.32 153.18 NHPC Loktak HEP 144.96 57.41 NTPC (Existing) FARAKKA 235.78 111.82 KAHELGAON - I 116.91 54.35	Agency/Source Quantum Total Cost Rate MU Rs. Crore Rs./kWh APGCL 2172.14 776.44 3.57 NEEPCO (HYDRO) 0.25 0.25 KOPILI II 0.22 0.22 KHANDONG 0.62 0.62 RHEP 564.95 144.85 2.56 DHEP 73.17 68.23 9.32 NEEPCO (HYDRO) New 0.00 0.00 0.00 0.00 KAMENG HEP 312.52 125.12 4.00 0.00	Agency/Source Quantum Total Cost Rate Quantum MU Rs. Crore Rs./kWh MU APGCL 2172.14 776.44 3.57 2,077.04 NEEPCO (HYDRO) - - - - KOPILI II 0.25 257.26 - KOPILI III 0.22 56.89 - KHANDONG 0.62 - - RHEP 564.95 144.85 2.56 528.91 DHEP 73.17 68.23 9.32 70.92 NEEPCO (HYDRO) New - - - KAMENG HEP 312.52 125.12 4.00 291.70 NEEPCO (TH) - - - AGBPP 945.21 345.19 3.65 946.02 AGTPP 363.32 153.18 4.22 354.54 NHPC Loktak HEP 144.96 57.41 3.96 76.51 NTPC (Existing) - - - -	Agency/Source Quantum Total Cost Rate Quantum Total Cost APGCL 2172.14 776.44 3.57 2,077.04 1,346.22 NEEPCO (HYDRO) 0.25 257.26 54.48 KOPILI II 0.25 257.26 54.48 KOPILI III 0.22 56.89 12.38 KHANDONG 0.62 56.99 12.38 KHAPE 564.95 144.85 2.56 528.91 261.07 DHEP 73.17 68.23 9.32 70.92 65.70 NEEPCO (HYDRO) New 10.10 12.52 125.12 4.00 291.70 117.02 NEEPCO (TH) 312.52 125.12 4.00 291.70 117.02 NEEPCO (TH) 363.32 153.18 4.22 354.54 260.26 AGBPP 945.21 345.19 3.65 946.02 727.85 AGTPP 363.32 153.18 4.22 354.54 260.26 NHPC Loktak HEP 144.96 <t< td=""></t<>	

			Tariff Order			PDCL Petition	
SI. No.	Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
	TALCHER	143.48	40.31	2.81	162.16	46.81	2.89
	Dadri				727.94	355.07	4.88
8	NTPC (New) BTPS	3090.37	1896.64	6.14	3,020.80	1,856.45	6.15
12	Pare HEP	200.11	100.13	5.00	187.31	105.07	5.61
13	Suryatap Solar	6.00	5.27	8.79	6.31	5.54	8.78
15	JNNSM Bundled Solar power	6.98	8.56	12.27	6.52	8.60	13.20
16	SECI Solar	38.22	23.18	6.07	37.49	24.07	6.42
17	JNNSM Bundled Coal power	2.72	5.78	21.24	33.59	16.78	5.00
18	Bilateral Sources/Traders	-	-	-	-	-	
19	Power Exchanges	(1,742.43)	(970.53)	5.57	1,244.20	735.30	5.91
20	OTPC Palatana	1496.84	420.76	2.81	1,588.83	547.01	3.44
21	HHPCPL (Champawati)	8.73	4.08	4.67	9.39	3.86	4.11
22	Wind Power PTC	104.06	36.73	3.53	115.79	40.87	3.53
23	SECI Wind	144.76	39.37	2.72	147.37	40.09	2.72
24	Mangdechhu	502.91	233.49	4.64	412.37	219.73	5.33
25	PTC Nikachu	46.67	16.26	3.48	-	-	
26	SPV Assam (Azure Power)	116.26	38.74	3.33	160.79	53.98	3.36
27	Punatsangchhu HEP-I	-	-	-	-	-	

			Tariff Order		APDCL Petition			
SI. No.	Agency/Source	Quantum	Total Cost	Rate	Quantum	Total Cost	Rate	
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	
28	Punatsangchhu HEP-II	-	-	-	-	-		
29	Amguri Solar Park	70.95	28.24	3.98	118.77	47.28	3.98	
	Patanjali Solar	-	-	-	-			
	Neyveli UPPL	2334.05	1054.99	4.52	376.76	170.29	4.52	
30	Addnl Solar RE Purchase to meet RPO	0.29	0.10	3.45	-	-	-	
31	Addnl Non-Solar RE Purchase to meet RPO	-	0.00	-	-	-	-	
	Sub-total::	12,048.46	5,071.00	4.21	13,861.28	7,544.23	5.44	
33	Renewable Energy Certificate (Solar)					5.81		
34	Renewable Energy Certificate (Non-Solar)							
35	UI Pool/Deviation Settlement Mechanism				138.50	88.71	6.41	
	Sub-total::	12,048.46	5,071.00	4.21	13,999.78	7,638.75	5.46	
37	AEGCL Transmission Charges		658.88			F00 00		
38	SLDC Charges		10.11			588.82		
39	PGCIL Transmission Charges		669.30			702.03		
42	Net Power Purchase	12,048.46	6,409.29	5.32	13,999.78	8,929.60	6.38	

- 5.5.8 The Commission has accepted APDCL's submissions regarding projected energy availability from existing and new generating stations. The quantum of power purchase from APGCL is kept in line with the generation approved for APGCL including generation from Myntriang SHEP in the APR of FY 2023-24. The quantum of purchase from Power Exchanges have been revised based on the revised energy requirement.
- 5.5.9 The Commission has considered the rate of purchase from various sources based on the following approach:
 - a) Cost of power purchase from APGCL has been revised as proposed by APDCL due to hike in generation cost of the thermal stations of APGCL;
 - b) The Transmission Charges payable to AEGCL and SLDC Charges have been considered based on the Tariff approved for FY 2023-24.
 - The Commission has accepted the fixed charges and energy charges considered by APDCL for CGS (NER and ER);
 - d) The Commission has considered the actual fixed and variable cost in H1 of FY 2023-24 for other sources, for estimating power purchase cost for FY 2023-24;
 - e) The Commission has considered the balance quantum of purchase from Power Exchange to meet the total energy requirement of APDCL, as approved in the Energy Balance earlier in this Order. The Commission has considered average rate of actual procured during H1 and estimated for H2 for whole procurement of whole year for APR purpose.
- 5.5.10 The source-wise power purchase quantum and costs provisionally approved by the Commission in the APR for FY 2023-24, is shown in the Table below:

Table 41: Power Purchase Quantum and Cost approved by the Commission for the FY 2023-24

		Tariff Or	Tariff Order dated 29.03.2023		APDCL Petition			Approved after APR		
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
1	APGCL	2172.14	776.44	3.57	2,077.04	1,346.22	6.48	2,024.12	1,311.92	6.48
2	NEEPCO (HYDRO)				-	-				
	KOPILI I		0.25		257.26	54.48	2.12	257.26	54.48	2.12
	KOPILI II		0.22		56.89	12.38	2.18	56.89	12.38	2.18
	KHANDONG		0.62		-	0.10		-	0.10	
	RHEP	564.95	144.85	2.56	528.91	261.07	4.94	528.91	221.55	4.19
	DHEP	73.17	68.23	9.32	70.92	65.70	9.26	70.92	68.02	9.59
3	NEEPCO (HYDRO) New									
	KAMENG HEP	312.52	125.12	4.00	291.70	117.02	4.01	291.70	117.02	4.01
4	NEEPCO (TH)									
	AGBPP	945.21	345.19	3.65	946.02	727.85	7.69	946.02	727.85	7.69
	AGTPP	363.32	153.18	4.22	354.54	260.26	7.34	354.54	260.26	7.34
5	NHPC Loktak HEP	144.96	57.41	3.96	76.51	38.24	5.00	76.51	38.24	5.00
7	NTPC (Existing)				-					
	FARAKKA	235.78	111.82	4.74	243.16	129.93	5.34	243.16	129.93	5.34
	KAHELGAON - I	116.91	54.35	4.65	100.56	46.44	4.62	100.56	46.44	4.62

			Tariff Order dated 29.03.2023		APDCL Petition			Approved after APR		
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
	KAHELGAON -II	548.51	251.22	4.58	501.36	207.74	4.14	501.36	207.74	4.14
	TALCHER	143.48	40.31	2.81	162.16	46.81	2.89	162.16	46.81	2.89
	Dadri				727.94	355.07	4.88	727.94	355.07	4.88
8	NTPC (New) BTPS	3090.37	1896.64	6.14	3,020.80	1,856.45	6.15	3,020.80	1,856.45	6.15
12	Pare HEP	200.11	100.13	5.00	187.31	105.07	5.61	187.31	105.07	5.61
13	Suryatap Solar	6.00	5.27	8.79	6.31	5.54	8.78	6.31	5.54	8.78
15	JNNSM Bundled Solar power	6.98	8.56	12.27	6.52	8.60	13.20	6.52	8.60	13.20
16	SECI Solar	38.22	23.18	6.07	37.49	24.07	6.42	37.49	24.07	6.42
17	JNNSM Bundled Coal power	2.72	5.78	21.24	33.59	16.78	5.00	33.59	16.78	5.00
18	Bilateral Sources/Traders				-	-		-	-	
19	Power Exchanges	-1,742.43	-970.53	5.57	1,244.20	735.30	5.91	1,291.43	763.21	5.91
20	OTPC Palatana	1496.84	420.76	2.81	1,588.83	547.01	3.44	1,588.83	547.01	3.44
21	HHPCPL (Champawati)	8.73	4.08	4.67	9.39	3.86	4.11	9.39	3.86	4.11
22	Wind Power PTC	104.06	36.73	3.53	115.79	40.87	3.53	115.79	40.87	3.53
23	SECI Wind	144.76	39.37	2.72	147.37	40.09	2.72	147.37	40.09	2.72
24	Mangdechhu	502.91	233.49	4.64	412.37	219.73	5.33	412.37	219.73	5.33
25	PTC Nikachu	46.67	16.26	3.48	-	-				
26	SPV Assam (Azure Power)	116.26	38.74	3.33	160.79	53.98	3.36	160.79	53.98	3.36

		Tariff Or	der dated 29	.03.2023	Α	PDCL Petition	on	Appr	oved after A	PR
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
29	Amguri Solar Park	70.95	28.24	3.98	118.77	47.28	3.98	118.77	47.28	3.98
	Neyveli UPPL	2334.05	1054.99	4.52	376.76	170.29	4.52	376.76	170.29	4.52
30	Solar RE Power Purchase - balance to meet RPO	0.29	0.10	3.45	-	-		-	-	
31	Non-Solar RE Power Purchase - balance to meet RPO		0.00		-					
	Sub-total::	12,048.46	5,071.00	4.21	13,861.28	7,544.23	5.44	13,855.58	7,500.63	5.41
33	Renewable Energy Certificate (Solar)					5.81			5.81	
35	UI Pool/Deviation Settlement Mechanism				138.50	88.71	6.41	118.76	74.03	6.23
	Sub-total::	12,048.46	5,071.00	4.21	13,999.78	7,638.75	5.46	13,974.34	7,580.48	5.42
37	AEGCL Transmission Charges		658.88			E00.00			585.70	
38	SLDC Charges		10.11			588.82			9.05	
39	PGCIL Transmission Charges		669.30			702.03			702.03	
	Total:	12,048.46	6,409.29	5.32	13,999.78	8,929.60	6.38	13,974.34	8,877.26	6.35
42	Net Power Purchase	12,048.46	6,409.29	5.32	13,999.78	8,929.60	6.38	13,974.34	8,877.26	6.35

Therefore, the Commission considers total Power Purchase Cost of Rs. 8877.26 Crore in the APR for FY 2023-24.

5.6 Operation and Maintenance (O&M) Expenses

5.6.1 The O&M expenses comprise Employee Expenses, R&M expenses, and A&G expenses. APDCL submitted the normative O&M expenses for FY 2023-24, as shown in the Table below:

Table 42: O&M Expenses projected for FY 2023-24 by APDCL (Rs. Crore)

Particulars	Tariff Order dt. 29.03.2023	APDCL
Employee expenses	948.46	981.63
R&M Expenses	305.36	295.46
A&G expenses	110.59	111.61
Total O&M Expenses	1364.40	1388.70

Employee Expenses

- 5.6.2 APDCL has adopted the following approach for estimating Employee Cost:
 - a) The employee expenses considered in the true-up for FY 2022-23 have been considered as base expenses for FY 2022-23;
 - b) CPI inflation has been computed as average increase of CPI index for the period from FY 2019-21 to FY 2021-23, which works out to 5.46% to arrive at the employee expenses for FY 2023-24;
 - c) With no recruitment, no growth factor has been considered.
- 5.6.3 The Employee Cost as projected by APDCL for FY 2023-24 is shown in the table below.

Table 43: Employee Expenses projected for FY 2023-24 by APDCL (Rs. Crore)

Particulars	Tariff Order dt. 29.03.23	APDCL
Employee Expenses of Previous year	837.57	866.82
Growth Factor	0%	0%
CPI Inflation	5.18%	5.46%
Employee Expenses	880.96	914.11

Particulars	Tariff Order dt. 29.03.23	APDCL
Add: Provision	67.52	67.52
Total Employee Expenses	948.46	981.63

APDCL has projected the normative Employee expenses of Rs. 981.63 Crore, for FY 2023-24.

Repair and Maintenance (R&M) Expenses

5.6.4 APDCL has projected R&M expenses based on the MYT Regulations, 2021. APDCL has considered the 'K' factor as 3.10% and the WPI has been considered as 7.89%. APDCL has projected R&M expenses at Rs. 295.45 Crore for FY 2023-24 as shown in the Table below:

Table 44: R&M Expenses for FY 2023-24 as submitted by APDCL (Rs. Crore)

Particulars	Tariff Order dt. 29.03.2023	APDCL
Average GFA of previous year	9,106.94	8,833.76
K factor	3.10%	3.10%
WPI inflation	8.02%	7.89%
R&M Expenses	305.36	295.45

Administrative and General (A&G) Expenses

5.6.5 APDCL has projected A&G expenditure based on the MYT Regulations, 2021. The Petitioner has considered WPI of 7.89% for FY 2023-24. APDCL has projected A&G expenditure at Rs.111.61 Crore for FY 2023-24 as shown in the Table below:

Table 45: A&G Expenses for FY 2023-24 as submitted by APDCL (Rs. Crore)

Particulars	Tariff Order dt. 29.03.23	APDCL
A&G Expenses for previous year	100.21	100.20
WPI inflation	8.02%	7.89%
Statutory Fees	2.35	3.50
A&G Expense	110.59	111.61

5.6.6 The Commission has computed the normative O&M Expenses for FY 2023-24 as per the MYT Regulations, 2021. Any variation between normative O&M expenses and actual O&M Expenses shall be considered under sharing of gains and losses on account of controllable items as the MYT Regulations, 2021 at the time of truing up for FY 2023-24.

Employee Expenses

- 5.6.7 For computation of employee expenses for FY 2023-24, the Commission has adopted the following approach:
 - a) The base employee expenses of Rs. 837.57 Crore approved in the true-up for FY 2022-23 has been escalated by average CPI escalation factor of 5.40% from FY 2020-21 to FY 2022-23 to derive the employee expenses for FY 2023-24;
 - b) The growth factor has been considered as 0%, due to no recruitment.
 - c) 1/5th of the provisioning of Rs. 337.62 Crore against DCRG for NPS employees has been considered.
- 5.6.8 Accordingly, the normative employee expenses approved in the APR for FY 2023-24 are shown in the following Table:

Table 46: Employee Expenses considered for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order	APDCL	Approved
i articulars	dt. 29.03.23	Petition	after APR
Employee Expenses for Previous Year	837.57	866.82	837.57
Growth Factor	0%	0%	0%
CPI Inflation	5.18%	5.46%	5.40%
Employee Expenses	880.96	914.11	882.81
Add: Provision for DCRG under NPS	67.52	67.52	67.52
Total Employee Expenses	948.46	981.63	950.33

Accordingly, the Commission approves Employee Expenses of Rs. 950.33 Cr in the APR for FY 2023-24.

R&M Expenses

- 5.6.9 For computation of R&M Expenses for FY 2023-24, the Commission has considered the following approach:
 - a) The Commission has considered the average increase in WPI index of 7.90% from FY 2020-21 to FY 2022-23 for escalation of R&M expenses;
 - b) K-factor has been considered as 3.10% as approved in the Tariff Order;
 - c) Since, K-factor has been computed on the basis of average GFA, for working out R&M expenses for FY 2023-24, average GFA of previous year has been considered.
- 5.6.10 The normative R&M expenses approved for FY 2023-24 are shown in the following Table:

Table 47: Approved R&M Expenses for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order dt. 29.03.23	APDCL Petition	Approved after APR	
Average GFA for previous year	9106.94	8,836.76	8,804.80	
K Factor	3.10%	3.10%	3.10%	
WPI Inflation	8.02%	7.89%	7.90%	
R&M Expenses	305.36	295.56	294.50	

Therefore, the Commission approves R&M Expenses of Rs. 294.50 Crore in the APR for FY 2023-24.

A&G Expenses

- 5.6.11 For computation of A&G expenses for FY 2023-24, the Commission has adopted the following approach:
 - a) The A&G expenses approved after Truing up for FY 2022-23 have been considered as base expenses for FY 2023-24;
 - b) Similar to R&M expenses, WPI inflation has been considered as 7.90%;
 - c) The actual statutory fees of Rs. 3.25 crore of FY 2022-23 have been considered as a separate pass-through item, and added to the normative A&G expenses computed for FY 2023-24.

5.6.12 The normative A&G expenses approved in the APR for FY 2023-24 are shown in the following Table:

Table 48: A&G Expenses considered for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order	APDCL	Approved	
	dt. 29.03.23	Petition	after APR	
A&G Expenses for Previous Year	100.21	100.20	100.21	
WPI Inflation	8.02%	7.89%	7.90%	
Statutory Fees (pass through at actuals)	2.35	3.50	3.25	
A&G Expenses	110.59	111.60	111.37	

Therefore, the Commission approves A&G Expenses of Rs. 111.37 Crore in the APR for FY 2023-24.

5.7 Capital Investment and Financing of Capital Investment

- 5.7.1 APDCL submitted that it has estimated the capital expenditure and capitalisation in the APR for FY 2023-24 based on the estimates of the capital expenditure works carried out till date vis-à-vis sanction and budgetary allocation and pending Capital Works in Progress (CWIP).
- 5.7.2 APDCL has projected the capital expenditure and capitalisation for FY 2023-24 as Rs. 1324.62 Crore and Rs. 2488.29 Crore, respectively, as shown in the Table below:

Table 49: Proposed financing of Capitalization for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Amount
Α	Opening Balance of CWIP	6556.12
В	Fresh CAPEX during the year	1324.62
С	Investment capitalised out of opening CWIP	2488.29
D	Investment capitalised out of fresh investment	2 100.20
	Total Capitalisation during the year (C+D)	2488.29
	Closing Balance of CWIP (A + B - C - D)	5392.45
Е	Funding of Capitalisation	2488.29
	Debt	190.53
	Grant	2297.77

5.7.3 The Commission has analysed the actual capitalization achieved by APDCL in the past three years, i.e., FY 2020-21 to FY 2022-23, as shown in the Table below:

Table 50: Actual Capitalization for FY 2020-21 to FY 2022-23 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Actual Capitalisation	2,158.17	505.32	735.71

- 5.7.4 As seen from the above Table, based on the actual capitalization of last three years, capitalisation was high at Rs. 2158.17 Crore in FY 2020-21, which reduced to Rs 505.32 Crore in FY 2021-22, and has increased slightly to Rs. 735.71 Crore in FY 2022-23. Hence, the Commission has considered capitalisation for FY 2023-24 based on average capitalisation for last 3 years, i.e., Rs 1,133.07 Crore, which has been rounded off to Rs. 1,130 Crore.
- 5.7.5 It is clarified that APDCL is at liberty to achieve capitalisation higher than the considered amount. The Commission will approve the actual Capitalisation at the time of truing up, subject to prudence check.
- 5.7.6 The Commission has not considered any equity funding of the estimated capitalisation, based on APDCL's submissions, and has considered the capitalisation to be funded proportionately through Grants and Debt based on APDCL submission.
- 5.7.7 The Capitalisation and funding of Capitalisation approved by the Commission in the APR of FY 2023-24, is given in the Table below:

Table 51: Approved Capitalization and Funding for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order dt. 29.03.23	APDCL Petition	Approved after APR
Grant	-	2297.77	1043.48
Equity	-	-	-
Debt	-	190.53	86.52
Total Capitalisation	1,340.00	2488.29	1,130.00

Therefore, the Commission provisionally approves Capitalisation of Rs. 1,130 Crore in the APR for FY 2023-24.

5.8 Depreciation

- 5.8.1 The Commission had approved depreciation of Rs. 173.01 Crore for FY 2023-24 in the Tariff Order dated 29th March 2023.
- 5.8.2 APDCL submitted that Depreciation has been claimed in accordance with the MYT Regulations, 2021, after apportionment of depreciation for assets created out of Consumer Contribution and Grants. APDCL added that fully depreciated assets have been excluded from the asset base for the purpose of calculating depreciation and rates of depreciation notified in the MYT Regulations have been considered. Total amount of depreciation claimed by APDCL is Rs. 88.36 crore for FY 2023-24, as shown in the Table below:

Table 52: Depreciation calculation for FY 2023-24 as submitted by APDCL (Rs. Crore)

Particulars	As on 01.04.23	Net addition during the year	On OB	On Addition	Total
Land & Rights					
Land owned under full title	19.62	0.07	1	-	-
Leasehold land	2.84	-	0.08	-	0.08
SUB TOTAL	22.46	0.07	0.08	-	0.08
Building	60.38	1.97	0.01	0.03	1.04
Other Civil Works	74.16	13.46	1.61	0.2	1.81
Plant & Machinery	832.59	135.04	28.99	3.21	32.2
Lines & Cable Network	2,052.18	353.13	75.9	8.39	84.29
Vehicles	27.24	-	0.73	-	0.73
Furniture & Fixtures	20.75	1.4	0.57	0.04	0.61
Office Equipment	89.08	18.82	3.68	0.54	4.21
SUB TOTAL	3,178.83	523.9	112.58	12.41	124.98
Add: Consumers contribution deducted from service connection under O.H. lines & cable network	233.81	-	11.11	-	11.11

Particulars	As on 01.04.23	Net addition during the year	On OB	On Addition	Total
Add: Assets not belonging to the entity	5,788.97	1,964.39		1	-
GRAND TOTAL	9,201.62	2,488.29	123.69	12.41	136.1

Table 53: Depreciation claimed by APDCL for FY 2023-24 (Rs. Crore)

Particulars	Non- depreciable Land	Depreciable	Non- depreciable	Total
Opening GFA	19.62	3,159.22	6,022.78	9,201.62
Opening CWIP	-	4,061.94	2,494.19	6,556.12
Grant	-	2,115.95	7,170.46	9,286.42
Depreciation charged	-	124.98	-	124.98
Average rate		3.96%		
Apportioned GFA after adjustment of grant		2,233.50		
Apportioned depreciation claimed		88.36		

- 5.8.3 For computation of depreciation, the Commission has considered the closing GFA for FY 2022-23 as approved in this Order, as the Opening GFA for FY 2023-24. The capitalisation approved for FY 2023-24 has been considered as asset addition during the year. The Commission has considered the scheduled depreciation rates as specified in MYT Regulations, 2021.
- 5.8.4 As per the MYT Regulations, 2021, the total depreciation during the life of the asset shall not exceed 90% of the original cost of GFA. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation on assets where depreciation is in excess of 90% of the original cost of asset under different asset heads. The Commission has not considered depreciation on assets funded through grants in

- accordance with MYT Regulations, 2021.
- 5.8.5 In view of the above, the Commission has approved depreciation for FY 2023-24 as per MYT Regulations, 2021, as given in the Table below:

Table 54: Depreciation approved by the Commission for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2021
1	Land owned	19.62	0.05	0.00%	-
2	Leasehold Land	2.84		3.34%	0.09
3	Building	60.37	1.53	3.34%	2.04
4	Plant & Machinery	832.59	104.72	5.28%	35.40
5	Vehicle	27.24		5.28%	1.45
6	Furnitures & Fixtures	20.76	1.09	6.33%	0.68
7	Office Equipment	60.09	14.59	6.33%	3.59
8	Other Civil Work	74.16	10.44	3.34%	2.66
9	Lines & Cable Network	2,052.18	273.85	5.28%	94.45
	Total	3,149.86	406.27		140.37
10	Less: Depreciation on	5,788.98	723.73		75.69
	Grants/Consumer Contribution	3,700.90	123.13		75.09
11	Net Total	9,172.65	1,130.00		64.68

Accordingly, the Commission considers depreciation of Rs. 64.68 Crore in the APR for FY 2023-24.

5.9 Interest and Finance Charges

5.9.1 APDCL submitted that the interest and finance charges have been claimed in line with the approach followed in Tariff Orders with addition of bank charges and facilitation charges paid to aggregator for online payment by consumers in line with approval of

the Commission.

5.9.2 APDCL submitted interest and finance charges for FY 2023-24 as shown in the Table below:

Table 55: Interest and Finance Charges as submitted by APDCL for FY 2023-24 (Rs. Crore)

Particulars	Amount
Opening normative loan	52.94
Addition of normative loan during the year	190.53
Normative Repayment during the year	88.36
Net Normative Closing Loan	155.11
Rate of Interest	8.41%
Interest on Debt Capital	13.05

- 5.9.3 Interest on loan for FY 2023-24 is allowed on normative basis as per the MYT Regulations, 2021. Accordingly, the normative closing loan for FY 2022-23 of Rs. 105.90 Crore is considered as the normative loan outstanding as on April 1, 2023.
- 5.9.4 The addition to loan has been considered based on the funding of capitalisation as approved earlier. The loan repayment has been considered equivalent to depreciation approved for FY 2023-24 in this Order. The Commission has considered the Interest rate of 8.80%, i.e., same rate as approved in the true-up for FY 2022-23.
- 5.9.5 The interest on loan capital approved by the Commission in the APR for FY 2023-24 is shown in the following Table:

Table 56: Interest and Finance Charges as approved by the Commission for FY 2023-24 (Rs. Crore)

SI.	Particulars	Tariff Order dt.	APDCL	Approved
No.	Particulars	29.03.2023	Petition	after APR
1	Opening Normative Loan	86.09	52.94	105.90
2	Loan Addition	17.00	190.53	86.52
3	Loan Repayment	103.09	88.36	64.68
4	Closing Normative Loan	0.00	155.11	127.74

SI.	Dordinularo	Tariff Order dt.	APDCL	Approved
No.	Particulars Particulars	29.03.2023	Petition	after APR
5	Average Loan	43.04	1	116.82
6	Interest Rate	8.41%	8.41%	8.80%
7	Interest Amount	3.62	13.05	10.28

Therefore, the Commission considers Interest on Loans of Rs. 10.28 Crore in the APR of FY 2023-24.

5.10 Interest on Working Capital

5.10.1 APDCL has claimed Rs. 51.08 Crore on account of Interest on Working Capital in the APR for FY 2023-24 in accordance with the MYT Regulations, 2021, as shown in the Table below:

Table 57: Interest on Working Capital for FY 2023-24 (Rs Crore)

Particulars	Approved	Revised Estimate
O&M Expenses-One month	108.07	115.72
2-month Receivables	1305.19	1738.56
Maintenance spares @ 15% of O&M Expenses	194.53	208.30
Less: One-month Power Purchase Cost	614.99	682.86
Less: Consumer Security Deposit	1033.85	926.89
Total Working Capital	(41.04)	452.84
Rate of Interest on Working Capital	10.58%	11.28%
Interest on Working Capital	0.00	51.08

Commission's Analysis

5.10.2 The Commission has computed the normative IoWC for FY 2023-24 in accordance with the MYT Regulations, 2021, as shown in the Table below:

Table 58: loWC approved by the Commission for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order dt. 29.03.2023	APDCL Petition	Approved after APR
O&M Expenses for one month	108.07	115.72	107.39
Maintenance spares @ 15% of O&M Expenses	194.53	208.30	193.30
2-month Receivables	1,305.19	1,738.56	1,616.94
Less: One-month Power Purchase Cost	614.99	682.86	675.69
Less: Consumer Security Deposit	1,033.85	926.89	942.26
Total Working Capital	(41.04)	452.84	299.69
Rate of Interest on WC	10.58%	11.28%	11.53%
Interest on Working Capital	-	51.08	34.56

The Commission considers IoWC of Rs 34.56 Crore in the APR for FY 2023-24.

5.11 Interest on Consumers' Security Deposit

5.11.1 APDCL submitted that with successful roll out of software facilitating automatic adjustment of interest on security deposit in energy bills, the liquidation of liability on such account has significantly increased. Considering the improving trend, APDCL requested the Commission to allow an amount of Rs. 65.95 Crore (as claimed as actuals for FY 2022-23).

Commission's Analysis

5.11.2 The Commission has considered the submission of APDCL for FY 2023-24. The Commission approves Interest on CSD of Rs. 65.95 Crore in the APR for FY 2023-24.

5.12 Other Debits

5.12.1 The Commission approved Rs. 6.80 Crore as 'Other Debits' in the MYT Order. APDCL submitted that due to improving revenue collection trend of arrears, the petitioner has claimed 50% of claim made under true up petition for FY 2022-23.

- under the head of 'Other Debits'.
- 5.12.2 APDCL requested for approval of an amount of Rs. 11.14 Crore under the head of 'Other Debits' in the APR of FY 2023-24.

5.12.3 The Commission has considered the Other Debits including provision for bad & doubtful debts at the same level as claimed by APDCL. The provision for bad & doubtful debts will be finally approved at the time of truing up when actual data is available.

Therefore, the Commission allowed other debits including provision for bad & doubtful debts of Rs 11.14 Crore in the APR of FY 2023-24.

5.13 Return on Equity

- 5.13.1 APDCL submitted that RoE for FY 2023-24 has been computed in line with methodology adopted by the Commission in its previous Orders. The Petitioner has claimed RoE at the base rate of 14%. However, APDCL requested the Commission to consider additional rates if actual capitalisation target is achieved at the time of Truing up.
- 5.13.2 The RoE projected by APDCL for FY 23-24 is shown in the Table below:

Table 59: Return on Equity projected by APDCL for FY 2023-24 (Rs. Crore)

Particulars	Tariff Order	APDCL
i articulars	dt. 29.03.2023	Projections
Opening Equity	1,151.84	1380.99
Net Addition during the Year	22.65	729.32
Closing Equity	1174.49	2110.31
Average Equity	1163.165	1745.65
GFA at the beginning of the year		9201.62
Normative equity for RoE		2760.48
Admissible Equity for RoE		1745.65
Rate of Return on Equity	14.00%	14.00%
Return on Equity	162.84	244.39

- 5.13.3 The Commission has approved the Return on Equity in accordance with the MYT Regulations, 2021. The Commission has considered the closing equity of FY 2022-23 as trued up in this Order, as the opening equity for FY 2023-24.
- 5.13.4 In this regard, it should be noted that the capitalisation till date has been approved based on the typical funding of 90:10 Grant:Debt, with zero equity funding. The applicable MYT Regulations specify that the Debt:Equity funding of capitalisation is to be considered, after reducing the capital cost to the extent of funding from Grant/Consumer Contribution. Further, equity funding can be considered up to maximum of 30% of the balance capitalisation to be funded, irrespective of the actual equity invested by the Licensee.
- 5.13.5 The conversion of Grants to Equity by the GoA in FY 2023-24 has to accordingly be considered in accordance with the Commission's MYT Regulations, 2021. The GoA has converted Grants worth Rs. 3,359.32 Crore to equity, out of the total average Grants of Rs. 8,597.53 Crore in FY 2023-24. Hence, the balance Grant funding available to fund the Average GFA of Rs. 9,172.26 Crore works out to Rs. 5,238.21 Crore, i.e., the GFA to be funded by Debt:Equity is Rs. 3,934.05 Crore. Considering maximum 30% equity funding, the maximum equity funding allowable works out to Rs. 1,180.21 Crore. As the Opening Equity of Rs. 1,224.28 Crore has already been allowed by the Commission till FY 2022-23, the additional equity that can be considered for tariff computation purposes in FY 2023-24, on account of conversion of Grants to Equity, thus, works out to Nil. Further, no conversion of loan to equity has been considered, as the maximum permissible equity has already been allowed, as shown in the Table below:

Table 60: Equity Addition allowed by the Commission due to Conversion of Grant to Equity in FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	Approved in APR
1	Opening GFA	9,172.26
2	Average Grant towards GFA	8,597.53
3	Grants converted to Equity	3359.32
4	Net Grant towards GFA	5,238.21

8	Equity that can be additionally allowed	
7	Equity already allowed	1,224.38
6	Maximum Equity that can be considered	1,180.21
5	Net GFA to be funded	3,934.05

- 5.13.6 The Commission has accordingly considered 'Nil' equity addition in FY 2023-24, and approved the RoE in accordance with MYT Regulations, 2021. The Commission has considered the addition of Nil equity towards new Capitalisation for FY 2023-24, based on the funding of capitalisation approved in this Order.
- 5.13.7 The Commission has approved the RoE in accordance with MYT Regulations, 2021 at 14%, as shown in the Table below:

Table 61: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore)

SI.	Particulars	MYT Order dt.	APDCL	Approved
No.	Particulars	29.03.2023	Petition	after APR
1	Opening Equity Balance	1151.84	1380.99	1224.38
2	Addition due to Capitalisation	22.65		-
3	Addition due to conversion of Grant to equity		729.32	-
4	Closing Equity Balance	1,174.49	2,110.31	1,224.38
5	Average Equity Balance	1,163.17	1,745.65	1,224.38
6	Rate of Return (%)	14.00%	14.00%	14.00%
7	Return on Equity	162.84	244.39	171.41

Therefore, the Commission considers RoE of Rs. 171.41 Crore in the APR of FY 2023-24.

5.14 Non-Tariff Income

5.14.1 APDCL submitted that the Non-Tariff Income (NTI) for FY 2023-24 has been projected by escalating various heads of actual NTI for FY 2022-23 by 5% except

- for the Delayed Payment Surcharge, which has been reduced considering the decline in arrears.
- 5.14.2 APDCL requested the Commission to approve NTI of Rs 391.12 Crore for FY 2023-24, as shown in the Table below:

Table 62: Non-Tariff Income as submitted by APDCL for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Amount
1	Rentals from Meters, Service Lines, Capacitors etc.	23.80
2	Income from recoveries on account of theft of energy/ Malpractices	
3	Delayed payment charges from Consumers	245.12
4	Misc. recoveries	48.49
5	Rebate on prompt payment of Power purchase bills	41.27
5	Cross Subsidy surcharge on Open Access Consumer	3.64
6	Wheeling charges collected	2.46
7	Short Term Open Access (STOA) credit	21.23
8	Income on Reactive Power	0.00
9	Income From SCED	5.10
_	Total	391.12

- 5.14.3 The Commission has not considered rebate on Power Purchase bills, in line with the approach outlined in the true-up Chapter. The actual income under all other heads of NTI in FY 2022-23 except Delayed Payment Surcharge has been escalated by 5%, to estimate the NTI for FY 2023-24. Since the extent of reduction in Delayed Payment Surcharge cannot be projected, hence, it has been considered at the same level as in True-up for FY 2022-23. This will be considered at actuals during the true-up for the FY 2023-24.
- 5.14.4 The Non-Tariff Income considered by the Commission for FY 2023-24 is shown in the Table below:

Table 63: Non-Tariff Income as approved by the Commission for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Tariff Order dt. 29.03.2023	APDCL Petition	Approved after APR
1	Meter Rent	28.49	23.80	23.79
2	Compensation charges for theft of energy/malpractices	0.21	0.00	0.00
3	Rental receipt of plant and equipment	-	1	-
4	Cross Subsidy surcharge on Open Access Consumers	8.26	3.64	3.64
5	Wheeling Charges collected	5.28	2.46	2.47
6	Short-term Open Access Credit	39.75	21.23	21.23
7	Rebate on PP bills		41.27	-
8	Receipts from renting plant and machinery	-	-	-
9	Miscellaneous Recoveries	42.27	48.49	48.49
10	Other Miscellaneous and General			
	Charges (specify)			
	a) Delayed payment charges	344.37	245.12	278.54
	b) Transformer Maintenance	-	-	-
	c) Income on Reactive Power	-	-	-
	d) Income from SCED	3.02	5.10	5.10
	Grand Total	471.64	391.12	383.27

Therefore, the Commission considers Non-Tariff Income of Rs. 383.27 Crore in the APR of FY 2023-24.

5.15 Other Income

- 5.15.1 APDCL submitted that all heads of 'Other Income' are estimated on the basis of actuals for FY 2022-except for the following:
 - a) Miscellaneous receipt is escalated by 5%;
 - b) Seasonal export is based on surplus energy estimate for FY 2023-24 level, at Rs. 614.10 Crore:

- c) With high attrition ratio, receipt from Pension Trust is considered with 12% decline.
- 5.15.2 Accordingly, APDCL has estimated Other Income as Rs 712.51 Crore, as shown in the table below:

Table 64: Other Income as submitted by APDCL for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Amount
1	Interest on loans to staff	0.00
2	Interest on HB advances to staff	0.00
3	Receipt from sale of LED bulb, Tubelight, Fan, etc.	0.05
4	Interest from banks and Investment	54.39
5	Gain on sale of fixed assets	0.00
6	Rent from residential buildings	0.39
7	Miscellaneous receipts	38.96
8	Income from Sale of Scrap	0.00
9	Receipt from Pension Trust	4.60
10	Income on seasonal Export of surplus power	614.10
	Total	712.51

- 5.15.3 The Commission has projected the Other Income for FY 2023-24, by considering an increase of 5% over the Trued-Up Other Income during FY 2022-23, except for Interest on Fixed Deposits and income from sale of scrap, which have been considered at FY 2022-23 levels. The revenue from sale of surplus power/Trading has been considered based on estimated surplus quantum and considering the rate for sale of surplus power same as in FY 2022-23. The Commission has accepted APDCL's projection of a 12% decline in the receipt from the Pension Trust.
- 5.15.4 The Commission has approved Other Income in the APR for FY 2023-24 as shown in the Table below:

Table 65: Other Income as approved by the Commission for FY 2023-24 (Rs. Crore)

SI. No.	Particulars	Tariff Order dt. 29.03.2023	APDCL Petition	Approved after APR
1 2	Interest on fixed deposits Income from Trading	48.30	54.39	61.81
4	Revenue from Sale of Scrap Tubelight, Fan, etc.	2.09	0.05	0.05
5	Rent from residential buildings	0.02	0.39	0.40
6	Receipt from Pension Trust	30.64	4.60	5.07
7	Miscellaneous receipts Total	28.50 109.55	38.96 712.51	38.97 747.24

Accordingly, the Commission has considered Other Income of Rs. 747.24 Crore in the APR for FY 2023-24.

5.16 Revenue from Sale of Power

- 5.16.1 APDCL submitted that the Commission had approved amount of Rs. 7,831.10 Crore as revenue from retail consumers for FY 2023-24 in the Tariff Order. The revenue from sale of electricity for FY 2023-24 has been considered based on actual tariff rate vis-à-vis consumer profile and FPPPA levied.
- 5.16.2 APDCL submitted that for the purposes of estimating the revenue from sale of electricity at existing tariff, APDCL has considered the full-cost tariff, without considering any targeted subsidy.
- 5.16.3 APDCL requested the Commission to allow an amount of Rs. 8,522.21 Crore as revenue from sale of power in the APR for FY 2023-24. APDCL submitted that the amount is estimated on the basis of actual consumption and profile.

Commission's Analysis

5.16.4 The Commission has estimated the Revenue from sale of electricity at existing tariff

based on the tariff approved in the Tariff Order dated 29th March 2023, and the projected category-wise sales for FY 2023-24. The Commission has considered the full-cost tariff, without considering any Targeted Subsidy, for the purposes of estimating the revenue from sale of electricity at existing tariff. FPPPA levied during the year has also been included and actual amount shall be adjusted during true -up for FY 2023-24 in the ARR of FY 2025-26.

5.16.5 The Revenue from Sale of Electricity from existing tariff has been computed by the Commission as Rs. 9701.58 Crore in the APR for FY 2023-24.

5.17 Power Purchase Subsidy from GoA

5.17.1 APDCL has considered an amount of Rs 200 Crore as cross subsidy support for levy of differential FPPPA to different class of consumers for FY 2023-24 as considered in the State Budget for the year.

Commission's Analysis

5.17.2 The Commission has considered of Rs 200 Crore as cross subsidy support from GoA for FY 2023-24, based on the subsidy committed by GoA for the year.

5.18 Aggregate Revenue Requirement (ARR) and Revenue Gap/(Surplus)

5.18.1 Considering the above heads of expense and revenue provisionally approved in the APR for FY 2023-24, the summary of ARR and Revenue Gap/(Surplus) approved by the Commission in the APR for FY 2023-24 is given in the Table below:

Table 66: ARR & Revenue Gap/(Surplus) considered by the Commission for FY 2023-24 (Rs. Crore)

SI.	Particulars	Tariff Order dt.	APDCL	Approved
No.	rai liculai 5	29.03.2023	Petition	after APR
1	Power Purchase Expenses	6,409.29	8,929.60	8,877.26
2	O&M Expenses	1,364.41	1,388.70	1,356.20
a)	Employee Expenses	948.46	981.63	950.33
b)	R&M Expenses	305.36	295.46	294.50

SI.	Dortioulore	Tariff Order dt.	APDCL	Approved
No.	Particulars	29.03.2023	Petition	after APR
c)	A&G Expenses	110.59	111.61	111.37
3	Depreciation	173.01	88.36	64.68
4	Interest and Finance Charges	3.62	13.05	10.28
5	Interest on Working Capital	-	15.19	34.56
6	Interest on CSD	52.68	65.95	65.95
7	Return on Equity	162.84	244.39	171.41
8	Other Debits, incl. Provisioning for Bad Debts	6.80	11.14	11.14
9	Exceptional Items	457.09	457.09	457.09
	Total Expenditure	8,629.74	11,213.47	11,048.57
10	Less: Non-Tariff Income	471.64	391.12	383.27
11	Less: Other Income	109.55	712.51	747.24
12	Aggregate Revenue Requirement	8,048.55	10,109.84	9,918.06
13	Revenue Gap/(Surplus) with CC after True Up of FY 2021-22	(217.45)	(217.45)	(217.45)
14	Net Revenue Requirement	7,831.10	9,892.39	9,700.61
15	Revenue at Approved Tariff	7,831.10	8,522.21	9,701.65
16	Other Subsidy / Support from State Government	-	200.00	200.00
17	Total Revenue incl. subsidy	7,831.10	8,722.21	9,901.65
18	Revenue Gap/(Surplus)	-	1,170.19	(201.04)

Accordingly, the Commission has arrived at a Revenue Surplus of Rs 201.04 Crore in the APR of FY 2023-24. The same has not been adjusted in this Order, as this is only a provisional number. The Revenue Gap/(Surplus) after true-up for FY 2023-24 shall be adjusted in the ARR of FY 2025-26.

6 Aggregate Revenue Requirement (ARR) for FY 2024-25

6.1 Introduction

6.1.1 This Chapter deals with determination of ARR for APDCL for FY 2024-25 in accordance with the provisions of MYT Regulations, 2021.

6.2 Energy Sales

- 6.2.1 Appropriate estimation of category-wise energy sales for the Control Period is essential to arrive at the quantum of power to be purchased and the likely revenue from sale of energy.
- 6.2.2 The following section examines in detail the consumer category-wise energy sales projected by APDCL in its Tariff Petition for FY 2024-25 and the category-wise sales approved by the Commission.

6.3 Category-Wise Projected Energy Sales

- 6.3.1 APDCL submitted that the Commission had approved energy sales of 10,576 MU in the ARR for FY 2024-25 vide MYT Order dated March 21, 2022. The projections of energy sales for FY 2024-25 have been revised based on actual energy sales for FY 2022-23, FY 2023-24 (H1) and historical growth trajectory.
- 6.3.2 The category-wise sales projected by APDCL are given in the Table below:

Table 67: Category-wise Energy Sales Projected by APDCL for FY 2024-25 (MU)

CATEGORY	Quantum
JEEVAN DHARA	250.00
DOMESTIC A 0.5 Kw to 5 KW	4,116.21
Domestic-B above 5 kw to 30 kW	623.57
Commercial Load above 0.5 to 30 kW	1,111.70
General Load upto 30 kW	181.13
Public Lighting	26.39
Agriculture upto 7.5hp	38.39
Small Industries Rural upto 30 kW	84.69
Small Industries Urban	31.36
Temporary	2.81

CATEGORY	Quantum
Electric Vehicle Charging Station (LT)	2.18
LT TOTAL	6,468.44
HT Domestic 30 kW and above	27.10
HT commercial 30 kW & above	567.97
Public Water works	181.75
Bulk Supply-Govt. Edu Inst	129.12
Bulk Supply-Others	521.44
HT Small Industries upto 50 kw	15.56
HT Industries-1 50kw to 150 kw	83.90
HT Industries-II above 150 kw	1,793.03
Tea Coff & Rub	657.16
Oil & Coal	102.54
HT Irrigation Load above 7.5 hp	27.44
HT Temporary Supply	0.15
HT Electric Crematorium	0.56
HT Railway Traction	101.88
HT Electric Vehicle Charging Station	0.35
HT TOTAL	4,209.96
All Total	10,678.40

6.3.3 The Petitioner requested the Commission to approve the revised energy sales of 10,678.40 MU in the ARR for FY 2024-25.

Commission's Analysis

6.3.4 The sales to Jeevan Dhara consumers have been projected based on the 5-year CAGR for Domestic A category, as there has been lot of migration from Jeevan Dhara to Domestic A category, and there is no clear trend for Jeevan Dhara category, on account of the release of new connections under Saubhagya I and II and migration to Domestic A. The release of new connections is not expected to continue, whereas the migration to Domestic A is likely to continue, as the consumption levels of Jeevan Dhara consumers increase. For Domestic - A category, Domestic B, Commercial and General Load categories, the 5-year CAGR has been considered.

- 6.3.5 The Commission has considered the estimated category-wise sales for FY 2023-24 as the base. The growth rate is arrived at after analysing the 2-year, 3-year, 4-year, 5-year CAGR along with the Y-o-Y growth seen in sales to different consumer categories.
- 6.3.6 Reasonable estimates about the growth rates of the various consumer categories have been made to arrive at the energy sales forecast for the Control Period. In case the growth trend is recent years is negative, 0% growth rate has been considered for these consumer categories.
- 6.3.7 The growth rate considered for projecting the sales to different categories and the category-wise sales projected by the Commission for the FY 2024-25 are given in the Table below:

Table 68: Category-wise Energy Sales Projected by the Commission for the FY 2024-25 (MU)

Consumer Category	Growth Rate	Sales
JEEVAN DHARA	0%	194
DOMESTIC A Total	6%	4,431
Domestic-B above 5 kW to 30 kW	13%	693
Commercial Load above 0.5 to 30 kW	8%	1,209
General Load upto 30 kW (Non-Comml & Non-Domestic)	7%	230
General Load upto 30 kW (Govt. Primary/Sec./Hr.Sec. Schools)	7%	27
Public Lighting	9%	25
Agriculture upto 7.5 HP	6%	61
Small Industries Rural upto 30 kW	4%	92
Small Industries Urban	3%	35
LT Electric Vehicles Charging Stations	5%	3
Temporary	0%	6
LT TOTAL	10%	7,007
HT Domestic 30 kW and above	4%	24
HT commercial 30 kW & above	10%	578
Public Water works	14%	269
Bulk Supply Govt. Edu Inst	11%	130
Bulk Supply Others	7%	521

Consumer Category	Growth Rate	Sales
HT Small Industries upto 50 kW	0%	14
HT Industries-I 50 kW to 150 kW	3%	87
HT Industries-II above 150 kW (Option 1 - ToD)	12%	1,415
HT Industries-II above 150 kW (Option 2 - Non-ToD)	12%	226
Tea Coffee & Rubber	9%	592
Oil & Coal	12%	149
HT Irrigation Load above 7.5 HP	10%	32
HT Temporary	0%	1
HT Railway Traction	10%	99
HT Electric Crematorium	1%	1
HT Electric Vehicle Charging Station	8%	0
HT TOTAL	11%	4,138
TOTAL ENERGY SALES	8%	11,145

Therefore, the Commission approves total sales of 11,145 MU for FY 2024-25.

6.4 Distribution Loss

6.4.1 APDCL submitted that the Commission in the MYT Order dated March 21, 2022 had approved Distribution Loss of 14.50% for FY 2024-25. APDCL has considered the Distribution Loss for FY 2024-25 in line with approved level.

Commission's Analysis

6.4.2 The Commission deems it fit to consider the Distribution Loss as per the MYT Order.

Accordingly, the Distribution Loss of 14.50% is approved for FY 2024-25.

6.5 **Energy Balance**

6.5.1 APDCL submitted the revised estimate for energy requirement for FY 2024-25 based on the revised estimates of the energy sales, projected Distribution Losses and approved inter-State and intra-State Transmission Losses.

6.5.2 The Energy Balance as projected by APDCL is shown in the following Table:

Table 69: Energy Balance for FY 2024-25 as Projected by APDCL (MU)

Particulars	MYT Order dt. 21.03.2022	APDCL
Energy Sales	10,576	10,678
Distribution Loss (%)	14.50%	14.50%
Distribution Loss (MU)	1,794	1,811
Energy Requirement at T<>D Periphery	12,370	12,489
Intra-State (AEGCL) Transmission Loss (%)	3.23%	3.23%
Energy input to Transmission System	413	417
Energy Input to Transmission System	12,782	12,906
Inter-State (PGCIL) Pooled Loss (%)	1.90%	2.75%
Inter-State (PGCIL) Pooled Loss (MU)	259	451
Seasonal Export	569	3,049
Total Energy Requirement	13,610	16,406

Commission's Analysis

6.5.3 The Commission has approved the Energy Balance for the Control Period based on the projected sales, approved Distribution Loss trajectory, approved Transmission Loss trajectory for AEGCL, and estimated PGCIL Losses, as shown in the Table below:

Table 70: Energy Balance for FY 2024-25 approved by the Commission (MU)

Particulars	MYT Order dt. 21.03.2022	APDCL	Approved
Energy Sales	10,576	10,678	11,145
Distribution Loss (%)	14.50%	14.50%	14.50%
Distribution Loss (MU)	1,794	1,811	1,890
Energy Requirement at T<>D Periphery	12,370	12,489	13,035
Intra-State (AEGCL) Transmission Loss (%)	3.23%	3.23%	3.23%
Energy input to Transmission System	413	417	435
Energy Input to Transmission System	12,782	12,906	13,470
Inter-State (PGCIL) Pooled Loss (%)	1.90%	2.75%	1.62%

Particulars	MYT Order dt. 21.03.2022	APDCL	Approved
Inter-State (PGCIL) Pooled Loss (MU)	259	451	264
Seasonal Export	569	3,049	2,566
Total Energy Requirement	13,610	16,406	16,299.56

Therefore, the Commission approves total Energy Requirement of 16,299.56 MU for FY 2024-25. The revenue from the projected seasonal export of energy has been considered under Other Income.

6.6 Power Purchase

- 6.6.1 APDCL submitted that it is largely dependent on APGCL and Central Generating Stations to meet the Base Load, however, to meet the Peak demand of the State, APDCL sources power from short-term sources like Traders and Power Exchanges to meet the deficit.
- 6.6.2 APDCL submitted that the power purchase quantum and cost for the year has been estimated based on actuals for FY 2022-23 and H1 for FY 2023-24 and estimations as discussed below.
 - ➤ APGCL: APDCL has firm allocation from all the existing thermal power plants of APGCL namely NTPS, NRPP, LTPS and LRPP and hydro plants namely MSHEP and KLHEP. The Petitioner has estimated the gross energy availability from the existing stations based on the allocated capacity and the actual PLF, and Auxiliary consumptions for these plants. Also, the fixed as well as variable cost for the State Generating Stations has been considered as per the latest available information.
 - Central Generating Stations (NER): The key Central Generating Stations of North Eastern Region (NER) supplying power to APDCL include plants of NEEPCO, NHPC, OTPC and NTPC (Thermal). The share allocation of the various plants of CGS (NER) has been considered based on the latest REA. PLF has been considered based on the past year's actuals vis-à-vis shut down of plants. Kopili-I, Kopili II and Khandong Stations of NEEPCO has resumed generation and generation is estimated on the basis of historical performance at operative time in earlier years. Operational norms are considered based on the values as approved by CERC in respective Tariff Orders of the plants.

- ➤ Rate of power purchase for the Central Generating Stations has been considered as per the latest available information for the respective plants.
- ➤ Central Generating Stations (ER): APDCL submitted that the Company is allocated power from Farakka I & II, Kahalgaon I, Kahalgaon II and Talcher of NTPC located at Eastern Region. The share allocation of the various plants of CGS (ER) has been considered based on the latest REA. Operational parameters of these plants have been considered based on the actual generation.
- ➤ Rate of power purchase for the Central Generating Stations has been considered as per the latest available information for the respective plants.
- ➤ Other Sources: APDCL submitted that for HHPCL, PLF and auxiliary consumption have been considered as per the Commission's Order dated April 12, 2013. Based on this, the generation from this source has been projected. The levelised tariff has been considered for this plant as determined in the above order at Rs. 4.11/kWh.
- ➤ Generation from NVVNL Solar Bundled (JNNSM) and NVVNL Coal Bundled (JNNSM) for FY 2022-23 and FY 2023-24 (H1) has been considered on the basis of latest available information.
- ➤ For Suryataap Solar (SEIPL), normative parameters of the PLF and auxiliary consumption as approved by the Commission have been considered. The rate for SEIPL has been considered as Rs. 8.78 per kWh as per latest AERC order.
- For SECI (Solar) JNNSM, energy charge rate has been considered as per the terms of the PSA.
- For Mangdechchu (Bhutan), the agreement tariff (including trading margin of 7 paisa) has been considered.
- ➤ Power from Nikachchu HEP (Bhutan) is estimated from 01.01.2024 as per latest available information and cost is estimated as per the terms of the PSA.
- ➤ APDCL has already moved for allocation of 495 MW of power from 3x660MW Neyveli Uttar Pradesh Power Limited (NUPPL), a joint venture between NLC India and Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited. Availability of the same is considered as per latest available information.
- Shortfall of peak demand is estimated to be mitigated through IEX platform.
- Deviation Settlement Mechanism is a practical aspect of all power transaction on real time basis and is hence, considered at a nominal level.
- Impact of sustained high price of natural gas as fixed by Ministry of Petroleum and Natural Gas, Govt. of India is clearly visible for APGCL and NEEPCO gas-based

- stations. With the global development of affairs, the prices are expected to increase further. APDCL requested the Commission to take due cognizance to this aspect considering the magnitude of financial implication vis-à-vis impact on power supply.
- ➤ Renewable Sources: APDCL submitted that with a paradigm shift in the Commission's Regulations after aligning the RPO trajectory with the Ministry of Power Order dated 29.01.2021, entire procurement plan has to be adjusted with massive cost implication with the typical load profile.
- ➤ Similar concerns were also raised by other stakeholders and some amendment was notified in September, 2022. Latest amendment to the same was notified on 20th October, 2023.
- ➤ However, APDCL is participating and procuring real powes through G-DAM/G-TAM within its constrained resources.
- ➤ Meanwhile, with active intervention from the State Government, various RE power projects are being considered for implementation by APDCL on its own. Petitions on the same will be submitted in due course before the Commission.
- ➤ Transmission Inter State and Intra State Charges APDCL submitted that it has to pay Transmission Charges to PGCIL for use of transmission facilities enabling power drawal from national grid.
- ➤ The Petitioner requested the Commission to kindly approve the Transmission and other charges for FY 2024-25 as submitted.
- 6.6.3 The following Table shows the power purchase quantum and cost submitted by APDCL for FY 2024-25:

Table 71: Power Purchase Projected by APDCL for FY 2024-25

SI. No.	Agency/ Source	Quantity (MU)	Total (Rs. Cr.)	Rate (Rs./kWh)
1	APGCL	2,077.04	1,346.22	6.48
2	NEEPCO (HYDRO)	-		
	KOPILI I	565.51	119.32	2.11
	KOPILI II	57.60	12.33	2.14
	KHANDONG	141.73	28.35	2.00
	RHEP	528.91	261.07	4.94
	DHEP	70.92	65.70	9.26
3	NEEPCO (HYDRO)	-		

SI. No.	Agency/ Source	Quantity (MU)	Total (Rs. Cr.)	Rate (Rs./kWh)
	KAMENG HEP	291.70	117.02	4.01
4	NEEPCO (TH)	-	-	
	AGBPP	946.02	727.85	7.69
	AGTPP	354.54	260.26	7.34
5	NHPC Loktak HEP	76.51	38.24	5.00
7	NTPC (Existing)			
	FARAKKA	243.16	129.93	5.34
	KAHELGAON - I	100.56	46.44	4.62
	KAHELGAON -II	501.36	207.74	4.14
	TALCHER	162.16	46.81	2.89
	DADRI	727.94	355.07	4.88
8	NTPC (New) BTPS	3,020.80	1,856.45	6.15
9	Pare HEP	187.31	105.07	5.61
10	Suryatap Solar	6.31	5.54	8.78
11	JNNSM Bundled- Solar power	6.52	8.60	13.20
12	SECI Solar	37.49	24.07	6.42
13	JNNSM Bundled- Coal power	33.59	16.78	5.00
14	Power Exchanges	-	-	-
15	OTPC Palatana	1,588.83	547.01	3.44
16	HHPCPL (Champawati)	9.39	3.86	4.11
17	Wind Power PTC	115.79	40.87	3.53
18	SECI Wind	147.37	40.09	2.72
19	Mangdechhu	412.37	219.73	5.33
20	PTC Nikachu	491.71	166.82	3.39
21	SPV Assam (Azure Power)	160.79	53.98	3.36
29	Amguri Solar Park	118.77	47.28	3.98
	Neyveli UP PL	3,084.50	1,394.19	4.52
	Sub-total::	16,267.22	8,292.69	5.10
33	Renewable Energy Certificate (Solar)	-	5.81	-
35	UI Pool/Deviation Settlement Mechanism	138.50	88.71	-
	Sub-total::	16,405.72	8,387.21	5.11
37	AEGCL Transmission Charges	-	588.82	-

SI. No.	Agency/ Source	Quantity (MU)	Total (Rs. Cr.)	Rate (Rs./kWh)
38	SLDC Charges	-	-	-
39	PGCIL Transmission Charges	-	702.03	-
	TOTAL	16,405.72	9,678.06	5.90

- 6.6.4 The Commission has accepted APDCL's projection of quantum and cost of purchase from various sources, except for the following:
 - a) The quantum and cost of power purchase from APGCL has been considered in line with the generation and rate approved for APGCL in the Tariff Order for FY 2024-25;
 - b) The Commission has accepted APDCL's submissions regarding projected energy availability from new generating stations and capacity increases from existing sources:
 - c) For the other sources of power purchase, the Commission has considered the quantum of power purchase as projected by APDCL, while the rate of purchase has been considered at the same level as estimated for FY 2023-24;
 - d) The Transmission Charges payable to AEGCL and SLDC Charges have been considered as approved for AEGCL and SLDC in the respective Tariff Orders;
 - e) The PGCIL Charges have been considered at same level as estimated for FY 2023-24;
 - f) As the quantum and cost of drawal under Deviation Settlement Mechanism cannot be projected, the Commission has considered Nil quantum for FY 2024-25, and the actuals shall be considered at the time of true-up for FY 2024-25;
 - g) The rate for power purchase from APGCL's Myntriang hydro station has been considered as Rs. 3.86/kWh, as approved by the Commission in the Tariff Order dated 16th May 2024 in Petition No. 8/2022.
- 6.6.5 The source-wise power purchase quantum and costs approved by the Commission for 2024-25, is shown in the Table below:

Table 72: Power Purchase Quantum and Cost approved by the Commission for the FY 2024-25

CI		Approved in MYT Order dated 21.03.22		APDCL			Approved			
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
1	APGCL	2162.25	747.67	3.46	2077.04	1346.22	6.48	2109.39	1267.27	6.01
2	NEEPCO (HYDRO)									
	KOPILI I	475.71	124.64	2.62	565.51	119.32	2.11	565.51	119.76	2.12
	KOPILI II				57.60	12.33	2.14	57.60	12.53	2.18
	KHANDONG	147.04	25.97	1.77	141.73	28.35	2.00	141.73	28.35	2.00
	RHEP	506.99	132.42	2.61	528.91	261.07	4.94	528.91	139.30	2.63
	DHEP	60.39	39.79	6.59	70.92	65.70	9.26	70.92	43.93	6.19
3	NEEPCO (HYDRO) New									
	KAMENG HEP	248.24	100.45	4.05	291.70	117.02	4.01	291.70	117.02	4.01
4	NEEPCO (TH)									
	AGBPP	982.92	358.96	3.65	946.02	727.85	7.69	946.02	727.85	7.69
	AGTPP	401.64	169.33	4.22	354.54	260.26	7.34	354.54	260.26	7.34
	AGTPP 2									
5	NHPC Loktak HEP	172.38	57.94	3.36	76.51	38.24	5.00	76.51	38.24	5.00
6	NHPC New									
	SUBANSIRI HEP	190.33	139.89	7.35	-	-	-	-	-	-

01		Approved in MYT Order dated 21.03.22		APDCL			Approved			
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
7	NTPC (Existing)									
	FARAKKA	214.16	96.24	4.49	243.16	129.93	5.34	243.16	129.93	5.34
	KAHELGAON - I	103.87	36.49	3.51	100.56	46.44	4.62	100.56	46.44	4.62
	KAHELGAON -II	455.10	155.18	3.41	501.36	207.74	4.14	501.36	207.74	4.14
	TALCHER	148.39	42.71	2.88	162.16	46.81	2.89	162.16	46.81	2.89
	Dadri				727.94	355.07	4.88	727.94	355.07	4.88
8	NTPC (New) BTPS	2511.18	1476.24	5.88	3020.80	1856.45	6.15	3020.80	1856.45	6.15
12	Pare HEP	183.77	100.65	5.48	187.31	105.07	5.61	187.31	105.07	5.61
13	Suryatap Solar	6.12	5.38	8.79	6.31	5.54	8.78	6.31	5.54	8.78
14	JNNSM Bundled Solar power	6.09	7.62	12.51	6.52	8.60	13.19	6.52	8.60	13.20
15	SECI Solar	37.79	23.54	6.23	37.49	24.07	6.42	37.49	24.07	6.42
16	JNNSM Bundled Coal power	28.24	10.54	3.73	33.59	16.78	5.00	33.59	16.78	5.00
17	Bilateral Sources/Traders	-	-	-	-	-	-	-	-	-
18	Power Exchanges	0.00	0.00	4.64	-	-	-	-	-	-
19	OTPC Palatana	1339.65	462.23	3.45	1588.83	547.01	3.44	1588.83	547.01	3.44
20	HHPCPL (Champawati)	8.60	3.69	4.29	9.39	3.86	4.11	9.39	3.86	4.11
21	Wind Power PTC	115.19	40.66	3.53	115.79	40.87	3.53	115.79	40.87	3.53
22	SECI Wind	148.50	40.40	2.72	147.37	40.09	2.72	147.37	40.09	2.72

01			Approved in MYT Order dated 21.03.22		APDCL			Approved		
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
23	Mangdechhu	594.33	255.37	4.30	412.37	219.73	5.33	412.37	219.73	5.33
24	PTC Nikachu	491.71	171.84	3.49	491.71	166.82	3.39	491.71	166.82	3.39
25	SPV Assam (Azure Power)	140.82	46.86	3.33	160.79	53.98	3.36	160.79	53.98	3.36
26	Punatsangchhu HEP-I	968.29	405.71	4.19	-	-	-	-	-	-
27	Punatsangchhu HEP-II	206.30	86.44	4.19	-	-	-	-	-	-
28	Amguri Solar Park	99.40	39.56	3.98	118.77	47.28	3.98	118.77	47.28	3.98
29	Neyveli UP PL	-	-	-	3084.50	1394.19	4.52	3084.50	1394.19	4.52
30	Solar RE Power Purchase	184.49	61.39	3.33	-	-	-	-	-	-
31	Non-Solar RE Power Purchase	270.36	73.55	2.72	-	-	-	-	-	-
32	Power Swapping Arrangement	-	-	-	-	-	-	-	-	-
	Sub-total::	13,610.25	5,539.35	4.07	16267.22	8292.69	5.10	16,299.56	8,177.18	5.02
33	Renewable Energy Certificate (Solar)	-	-	-	-	5.81	-	-	-	
35	UI Pool/Deviation Settlement Mechanism	-	-	-	138.50	88.71	6.41	-	-	-
	Sub-total::	13,610.25	5,539.35	4.07	16,405.72	8,387.21	5.11	16,390.96	8,177.18	5.02
37	AEGCL Transmission Charges	-	524.71	-	-	588.82	-	-	668.27	-
38	SLDC Charges	-	7.36	-	-	333.02	-	-	15.04	-

OI.			Approved in MYT Order dated 21.03.22		APDCL		Approved			
SI. No.	Agency/ Source	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate	Total Quantum	Total Cost	Rate
		MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh	MU	Rs. Crore	Rs./kWh
39	PGCIL Transmission Charges	-	699.56	-	-	702.03	1	-	702.03	-
42	Net Power Purchase	13,610.25	6,770.99	4.97	16,405.72	9,678.06	5.90	16,390.96	9,562.52	5.87

Therefore, the Commission approves total Power Purchase Expenses of Rs. 9562.52 Crore for FY 2024-25.

The Average Pooled Power Cost (APPC) for FY 2024-25, applicable for settlement of energy in case of gross/net metering by Rooftop Solar installation, and settlement of energy charges for REC purchases, shall be Rs 5.33 kWh.

6.7 Operation and Maintenance (O&M) Expenses

6.7.1 The O&M expenses comprise Employee Expenses, R&M expenses and A&G expenses and each of these components are discussed below:

Employee Expenses

6.7.2 APDCL submitted that employee expenses comprising salaries, dearness allowance, bonus, terminal benefits in the form of contribution for pension and gratuity funding, leave encashment, and staff welfare expenses have been projected on normative basis as per the MYT Regulations, 2021.

The following approach has been adopted:

- a) The employee expenses submitted in APR for FY 2023-24 have been considered as base expenses for the FY 2024-25;
- b) CPI inflation has been computed as average increase of CPI index for the period from FY 2021-22 to FY 2023-24 (up to September 2023), which works out to 5.21%;
- c) Growth factor is considered at 1% considering the proposed recruitment of manpower and no growth in last two years.
- 6.7.3 The normative employee expenses projected by APDCL for FY 2024-25 are as shown below:

Table 73: Employee Expenses for FY 2024-25 (Rs Crore)

Particulars	Approved	Projected
Employee Expenses for Previous Year	882.13	914.11
Growth Factor	0%	1%
CPI Inflation	5.53%	5.21%
Employee Expenses	930.89	971.35
Add: Revision of Pay Impact (ROP 17)		67.52
Total Employee Expenses	930.89	1038.87

Repair and Maintenance (R&M) Expenses

6.7.4 APDCL submitted that R&M Expenses are incurred for daily upkeep of the distribution network and forms an integral part of the company's efforts towards

- reliable and quality power supply.
- 6.7.5 APDCL further submitted that R&M expenses have been projected based on the MYT Regulations, 2021. The Petitioner has considered the value of 'K' as 3.10% as approved in the MYT Order and WPI as 11.21% (on the basis of index till October 2023).
- 6.7.6 APDCL has projected R&M expenses for FY 2024-25 as shown below:

Table 74: R&M Expenses from FY 2024-25 (Rs Crore)

Particulars	MYT Order dt.	APDCL
	21.03.22	
Average GFA for past two years	11,731.62	10,445.76
K Factor	3.10%	3.10%
WPI Inflation	4.13%	11.21%
R&M Expenses	379.21	360.11

Administrative and General (A&G) Expenses

- 6.7.7 APDCL submitted that A&G expenses comprise rents, taxes, various statutory charges, telephone and other communication expenses, professional charges, legal charges, conveyance & travelling allowance etc.
- 6.7.8 APDCL further submitted that A&G expenses are being claimed in accordance with the MYT Regulations 2021. The Petitioner has considered WPI of 11.21%. Provision of statutory fees is provided at the same level as considered in the APR for FY 2023-24.
- 6.7.9 The A&G expenses projected for FY 2024-25 are as shown below.

Table 75: A&G Expenses from FY 2024-25 (Rs Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL
A&G Expenses for Previous Year	77.09	108.11
WPI Inflation	4.13%	11.21%
Statutory Fees	1.89	3.50
A&G Expenses	82.16	123.73

Total O&M Expenses

6.7.10 The total O&M expenses claimed by the Petitioner for FY 2024-25 are as shown below:

Table 76: O&M Expenses for FY 2024-25 (Rs Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL
Employee Expenses	930.89	1038.87
R&M Expenses	379.21	360.11
A&G Expenses	82.16	123.73
Total O&M Expenses	1392.27	1522.71

APDCL requested the Commission to allow the total O&M expenses as shown above for FY 2024-25.

- 6.7.11 The Commission has computed the normative O&M Expenses for FY 2024-25 as per the MYT Regulations, 2021. Any variation between normative O&M expenses and actual O&M Expenses shall be considered under sharing of gains and losses on account of controllable items as per the MYT Regulations, 2021 at the time of truing up for FY 2024-25, based on prudence check.
- 6.7.12 For computation of employee expenses for FY 2024-25, the Commission has adopted the following approach:
 - a) The employee expenses computed in the APR of FY 2023-24 have been considered as base expenses;
 - b) CPI inflation has been computed as average increase of CPI index for the period from FY 2021-22 to FY 2023-24, which works out to 5.32%;
 - c) Growth factor is considered at 1%, in view of the projected recruitment of new employees.
 - d) The Commission has considered recovery of 1/5th of the Provision for DCRG under NPS amounting to Rs. 67.52 Crore for FY 2024-25, with the balance spread till FY 2025-26.

6.7.13 The normative employee expenses approved for FY 2024-25 are shown in the following Table:

Table 77: Approved Employee Expenses for the FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Employee Expenses for Previous	882.13	914.11	882.81
Year			
Growth Factor	0%	1%	1%
CPI Inflation	5.53%	5.21%	5.32%
Employee Expenses	930.89	971.35	939.11
Add: Provision for DCRG under NPS	-	67.52	67.52
Employee Expenses	930.89	1,038.87	1,006.63

Therefore, the Commission approves Employee Expenses of Rs. 1,006.63 Crore for FY 2024-25.

- 6.7.14 For computation of R&M Expenses for FY 2024-25, the Commission has considered the following approach:
 - a) Average GFA of previous year has been considered as approved in APR of FY 2023-24;
 - b) WPI inflation has been computed as average increase of WPI index for period from FY 2021-22 to FY 2023-24, which works out to 7.23 %;
 - c) K-factor of 3.10% has been considered as approved in the MYT Order.
 - 6.7.15 The normative R&M expenses approved for FY 2024-25 are shown in the following Table:

Table 78: Approved R&M Expenses for FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Average GFA for previous year	11,731.62	10,445.76	9,737.65
K Factor	3.10%	3.10%	3.10%

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
WPI Inflation	4.13%	11.21%	7.23%
R&M Expenses	379.21	360.11	323.71

Therefore, the Commission approves R&M Expenses of Rs. 323.71 Crore FY 2024-25.

- 6.7.16 For computation of A&G expenses for FY 2024-25, the Commission has adopted the following approach:
 - a) The A&G expenses approved in APR of FY 2023-24 have been considered as base expenses;
 - b) WPI inflation has been computed as average increase of WPI index for period from FY 2021-22 to FY 2023-24, which works out to 7.23 %;
 - c) The statutory fees of Rs. 3.25 Crore estimated in the APR for FY 2023-24 have been considered as a separate pass-through item, and added to the normative A&G expenses computed for FY 2024-25 as above.
- 6.7.17 The approved A&G expenses for FY 2024-25 are shown in the following Table:

Table 79: Approved A&G Expenses for the FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
A&G Expenses for Previous Year	77.09	108.11	108.12
WPI Inflation	4.13%	11.21%	7.23%
Statutory Fees (pass through at actuals)	1.89	3.50	3.25
A&G Expenses	82.16	123.73	119.19

Therefore, the Commission approves A&G Expenses of Rs. 119.19 Crore for FY 2024-25.

Total O&M Expenses Approved

6.7.18 The total O&M expenses approved by the Commission for FY 2024-25 is as under:

Table 80: Total O&M expenses approved for FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.2022	APDCL	Approved
Employee Expenses	930.89	1,038.87	1,006.63
R&M Expenses	379.21	360.11	323.71
A&G Expenses	82.16	123.73	119.19
Total O&M Expenses	1392.27	1,522.70	1,449.53

6.8 Capital Expenditure and Capitalisation

- 6.8.1 APDCL submitted that based on the works carried on till date, and the budgetary allocation for FY 2023-24 vis-à-vis pending CWIP, the capital expenditure and capitalisation for FY 2024-25 is projected as Rs. 2,156.37 Crore and Rs. 1,356.61 Crore, respectively.
- 6.8.2 APDCL has proposed the financing of the said capitalisation as under:

Table 81: Financing of the Projected Capitalisation for the FY 2024-25 (Rs. Crore)

SI. No.	Particulars	Amount	
А	Opening Balance of CWIP	5392.45	
В	Fresh CAPEX during the year	2156.37	
С	Investment capitalised out of opening CWIP	1356.61	
D	Investment capitalised out of fresh investment	1000.01	
	Closing Balance of CWIP (A + B - C - D)	6192.21	
E	Funding of Capitalisation	1356.61	
	Debt	40.07	
	Grant	1316.53	

- 6.8.3 APDCL has proposed capitalization of Rs.1,356.61 Crore as against the approved capitalization of Rs. 1,620 Crore.
- 6.8.4 It is observed that APDCL has been projecting huge capitalization at the time of ARR and achieving much lower capitalization. The Commission has therefore,

- considered capitalization for FY 2024-25 in line with the capitalization estimated in the APR for FY 2023-24.
- 6.8.5 The Commission hence, approves the capitalization of Rs.1,130 Crore for FY 2024-25. The Commission has considered funding of the Capitalization through Grant and Debt in the same ratio as proposed by APDCL for FY 2024-25.
- 6.8.6 The following table shows the approved capitalization and its funding considered for FY 2024-25.

Table 82: Financing of the Projected Capitalisation for the FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Total Capitalised	1620.00	1,356.61	1,130.00
Funding of Capitalisation			
Debt		40.07	33.38
Grant		1316.53	1096.62

6.9 Depreciation

- 6.9.1 APDCL submitted that the depreciation has been claimed in accordance with the MYT Regulations, 2021, after apportionment of depreciation for assets created out of consumer contribution. Assets that have been fully depreciated have been excluded from the asset base for the purpose of calculating depreciation. Rates of depreciation as notified in the MYT Regulations, 2021 have been considered.
- 6.9.2 The depreciation proposed by APDCL for FY 2024-25 is shown in the Table below:

Table 83: Depreciation claimed by APDCL for the FY 2024-25 (Rs. Crore)

Particulars	Non- depreciable Land	Depreciable	Non- depreciable	Total
Opening GFA	19.69	3,683.04	7,987.18	11,689.91
Opening CWIP	-	4,711.82	529.79	5,241.61
Grant	-	931.95	7,509.93	8,441.88
Depreciation charged	-	169.96	-	169.96

Particulars	Non- depreciable Land	Depreciable	Non- depreciable	Total
Average rate		4.61%		
Apportioned GFA after adjustment of grant		3,274.17		
Apportioned depreciation claimed		151.09		

6.9.3 The Petitioner requested the Commission to approve depreciation of Rs. 151.09 Crore for FY 2024-25.

- 6.9.4 For computation of depreciation, the Commission has considered the closing GFA for FY 2023-24 as approved in this Order, as the Opening GFA for FY 2024-25. The Capitalisation approved for tariff determination has been considered as asset addition during the year. The Commission has considered the scheduled depreciation rates as specified in MYT Regulations, 2021.
- 6.9.5 As per the Regulation 33 of the MYT Regulations, 2021, the total depreciation during the life of the asset shall not exceed 90% of the original cost of GFA. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation on assets where depreciation is in excess of 90% of the original cost of asset under different asset heads. The Commission has not considered depreciation on assets funded through grants/consumer contributions in accordance with Regulation 33 of the MYT Regulations, 2021.
- 6.9.6 In view of the above, the Commission approves depreciation for FY 2024-25 as per MYT Regulations, 2021, as given in the Tables below:

Table 84: Depreciation approved for FY 2024-25 (Rs. Crore)

SI.	Particulars	Opening	Addition	Rate of	Closing	Average	Depreciation
No.		GFA	during	dep.	Balance	Balance	as per MYT
			the year				Regulations,
							2021
1	Land owned	19.68	6.05	0.00%	25.72	22.70	-
2	Leasehold Land	2.84		3.34%	2.84	2.84	0.09
3	Building	61.90	1.52	3.34%	63.42	62.66	2.09
4	Plant & Machinery	937.31	98.73	5.28%	1,036.04	986.67	40.77
5	Vehicle	27.24		5.28%	27.24	27.24	1.45
6	Furnitures & Fixtures	21.84	1.09	6.33%	22.93	22.39	0.71
7	Office Equipment	74.68	14.60	6.33%	89.28	81.98	4.08
8	Other Civil Work	84.60	10.44	3.34%	95.04	89.82	3.00
9	Lines & Cable Network	2,326.03	273.84	5.28%	2,599.88	2,462.95	108.91
	Total	3,556.13	406.27		3,962.40	3,759.25	161.12
10	Less: Depreciation for Grants/CC	233.81			233.81	233.81	93.75
11	Net Total	10,302.65	1,130.00		11,432.65	10,867.65	67.37

Therefore, the Commission approves Depreciation of Rs.67.37 Crore for FY 2024-25 after deducting depreciation on grants.

6.10 Interest and Finance Charges

- 6.10.1 APDCL submitted that the interest and finance charges have been claimed in line with the approach followed in Tariff Orders with addition of bank charges and facilitation charges paid to aggregator for online payment by consumers.
- 6.10.2 Accordingly, APDCL submitted interest and finance charges for FY 2024-25 as shown in the Table below:

Table 85: Interest and Finance Charges as submitted by APDCL for FY 2024-25 (Rs. Crore)

Particulars	Amount
Opening normative loan	155.11
Addition of normative loan during the year	40.07
Normative Repayment during the year	151.09
Net Normative Closing Loan	44.09
Rate of Interest	8.41%
Interest on Debt Capital	3.71

6.10.3 The Petitioner requested the Commission to allow recovery of actual cost incurred as interest on GPF as well as NPS at an opportune time so as to safeguard the financial viability of the utility.

- 6.10.4 The normative closing balance of loan approved in APR for FY 2023-24 has been considered as the normative opening balance of loan for FY 2024-25.
- 6.10.5 The Commission has considered the addition of loan as the balance amount after deducting grant/ consumers' contribution of the capitalization approved in FY 2024-25. Repayment has been considered equal to the depreciation approved for the year.
- 6.10.6 The Commission has considered interest rate of 8.80% for FY 2024-25, same as considered in the APR for FY 2023-24. The Other Financing Charges and Bill desk Charges have not been considered separately under Interest & Financing Charges, as the same are included in the normative A&G expenses. The interest on loan capital as approved by the Commission for FY 2023-24 is shown in the following Table:

Table 86 : Approved Interest on Loan Capital for FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Opening Loan	194.76	155.11	127.74
New Loan	32.40	40.07	33.38

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Loans Repayment	53.57	151.09	67.37
Closing Loan	173.59	44.09	93.75
Average Loans	184.17	99.60	110.74
Interest Rate	10.00%	8.41%	8.80%
Interest Amount	18.42	3.71	9.74

Therefore, the Commission approves Interest on Loans of Rs. 9.74 Crore for FY 2024-25.

6.11 Interest on Working Capital

- 6.11.1 APDCL submitted that the interest on working capital has been calculated on normative basis in line with the formula specified in the MYT Regulations, 2021.
- 6.11.2 The computation of normative IoWC as submitted by APDCL is as shown in the Table below:

Table 87: loWC from FY 2024-25 as projected by APDCL (Rs Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL
O&M Expenses - One month	116.02	126.89
2-month Receivables	1283.76	1683.90
Maintenance spares @ 15% of O&M Expenses	208.84	228.41
Less: One-month Power Purchase Cost	564.25	806.51
Less: Consumer Security Deposit	1100.49	926.89
Total Working Capital	(56.12)	305.80
Rate of Interest on WC	10.58%	11.53%
Interest on Working Capital	0.00	35.26

6.11.3 The Petitioner requested the Commission to allow recovery of Rs. 35.26 Crore on account of Interest on Working Capital in the ARR for FY 2024-25.

Commission's Analysis

- 6.11.4 The Commission has computed IoWC in accordance with the MYT Regulations, 2021. The rate of Interest has been considered equal to State Bank of India MCLR Rate (one-year tenor) prevailing for last available 6 months plus 300 basis points, i.e., 11.53%.
- 6.11.5 The Interest on Working Capital approved by the Commission for FY 2024-25 is shown in the following Table:

Table 88: IoWC approved by the Commission for FY 2024-25 (Rs. Crore)

Particulars	MYT Order		
	dtd.	APDCL	Approved
	21.03.22		
O&M Expenses for 1 Month	116.02	126.89	115.17
Maintenance spares @ 15% of O&M Expenses	208.84	228.41	207.30
2 months equivalent of expected revenue from	1,283.76	1,683.90	1,683.90
sale of electricity			
Less: 1 month of Power Purchase Cost	564.25	806.51	796.88
Less: Amount held as Consumer Security	1,100.49	926.69	942.26
Deposit	.,	0_0.00	00
Total Working Capital Required	(56.12)	305.99	267.23
Interest rate	10.00%	11.53%	11.53%
Interest on Working Capital	-	35.26	30.82

Therefore, the Commission approves IoWC of Rs 30.82 Crore for FY 2024-25.

6.12 Interest on Consumers' Security Deposit

- 6.12.1 APDCL submitted that with successful roll out of software facilitating automatic adjustment of interest on security deposit in energy bills, the liquidation of liability on such account has significantly increased.
- 6.12.2 Further, with implementation of smart metering on pre-payment mode, adjustment of the same on the date of switchover is mandatory.
- 6.12.3 APDCL has claimed Rs. 65.95 Crore as Interest on consumer security deposit for

FY 2024-25 in line with the amount actually paid to the consumers as per Audited Accounts for FY 2022-23.

Commission's Analysis

6.12.4 The Commission has considered Interest on Consumer Security Deposit as claimed by APDCL.

Therefore, the Commission approves Interest on CSD of Rs. 65.95 Crore for FY 2024-25.

6.13 Other Debits

- 6.13.1 The Commission did not approve any amount as 'Other debit' in the MYT Order dated 21.03.2022. APDCL submitted that with improving revenue collection trend of arrears, Other Debits are claimed as 25% of claim made under true up petition for FY 2022-23.
- 6.13.2 Accordingly, APDCL requested the Commission to approve an amount of Rs. 5.57 Crore under the head of 'Other Debits' for FY 2024-25.

Commission's Analysis

6.13.3 The Commission allows 'Other Debits' including provisioning of bad debts of Rs.
5.57 Crore for FY 2024-25 as it is within the limit of provisioning of bad debts according to MYT Regulations, 2021.

6.14 Return on Equity

- 6.14.1 APDCL submitted that RoE has been claimed in line with methodology adopted by the Commission in the previous order.
- 6.14.2 APDCL claimed RoE amounting to Rs. 341 Crore for FY 2024-25 against MYT approval of Rs. 196.91 Crore. At present the RoE is considered only on base rate of 14%. However, the Petitioner requested the Commission to allow additional rate of RoE as per the Regulations on the basis of actual capitalization target achievement at the time of truing up.

Table 89: Return on Equity from FY 2024-25 (Rs Crore)

Particulars	MYT Order dtd.	APDCL
	21.03.22	
Opening Equity	1401.63	2110.31
Net Addition during the Year	9.72	650.75
Closing Equity	1411.35	2761.06
Average Equity	1406.49	2435.68
Opening GFA		11689.91
Normative Equity		3506.97
Admissible Equity for RoE		2435.68
Rate of Return on Equity	14.00%	14.00%
Return on Equity	196.91	341.00

- 6.14.3 The Commission has approved the Return on Equity in accordance with Regulation 34 of the MYT Regulations, 2021.
- 6.14.4 As stated in the APR for FY 2023-24, equity funding can be considered up to maximum of 30% of the balance capitalisation to be funded, irrespective of the actual equity invested by the Licensee. The conversion of Grants to Equity by the GoA in FY 2024-25 has accordingly been considered in accordance with the Commission's MYT Regulations, 2021. The GoA converted Grants worth Rs. 3359.32 Crore to equity, out of the total average Grants of Rs. 9667.58 Crore in FY 2024-25. The GoA has also converted outstanding loan of Rs. 930.91 Crore to equity. Considering maximum 30% equity funding, the Commission has computed additional equity as shown in the Table below. Additional equity allowable is Nil, and therefore, no additional equity has been considered in the ARR for FY 2024-25 for tariff computation purpose, on account of conversion of Grants to Equity. Further, no conversion of loan to equity has been considered, as the maximum permissible equity has already been allowed.
- 6.14.5 The Commission has computed the maximum permissible additional equity for FY 2024-25, as shown in the Table below:

Table 90: Equity Addition allowed by the Commission due to Conversion of Grant to Equity for the FY 2024-25 (Rs. Crore)

SI. No.	Particulars	Approved
1	Opening GFA	10,302.26
2	Average Grant towards GFA	9,667.58
3	Grants converted to Equity	3,359.32
4	Net Grant towards GFA	6,308.26
5	Net GFA to be funded	3,994.00
6	Maximum Equity that can be considered	1,198.20
7	Equity that can be additionally allowed	-

- 6.14.6 The Commission has accordingly considered 'Nil' equity addition for FY 2024-25 on account of conversion of grants to equity by the State Government.
- 6.14.7 The Commission has not considered any addition of equity against capitalisation during the year based on the funding of capitalisation approved in this Order. Therefore, the approved Return on Equity at 14% for FY 2024-25 is shown in the Table below:

Table 91: Return on Equity approved by the Commission for FY 2024-25 (Rs. Crore)

Particulars	MYT Order dtd. 21.03.22	APDCL	Approved
Opening Equity Balance	1401.63	2110.31	1224.38
Addition due to Capitalisation	9.72	-	-
Addition due to conversion of Grant to equity	-	650.75	-
Closing Equity Balance	1,411.35	2,761.06	1,224.38
Average Equity Balance	1,406.49	2,435.69	1,224.38
Rate of Return (%)	14.00%	14.00%	14.00%
Return on Equity	196.91	341.00	171.41

Therefore, the Commission approves RoE of Rs. 171.41 Crore for FY 2024-25.

6.15 Non-Tariff Income

- 6.15.1 APDCL submitted that NTI for FY 2024-25 has been projected by escalating various heads of actual NTI for FY 2022-23 and minor adjustments.
- 6.15.2 The NTI projected by APDCL for FY 2024-25 is depicted in the table below.

Table 92: Non-Tariff Income as submitted by APDCL for FY 2024-25 (Rs. Crore)

Particulars	Amount
Rentals from Meters, Service Lines, Capacitors etc.	24.99
Income from recoveries on account of theft of energy/ Malpractices	0.00
Delayed payment charges from Consumers	215.70
Misc. recoveries	50.92
Rebate on prompt payment of Power purchase bills	43.33
Cross Subsidy surcharge on Open Access Consumer	3.82
Wheeling charges collected	2.59
Short Term Open Access (STOA) credit	22.29
Income on Reactive Power	0.00
Income From SCED	5.36
Total	369.00

- 6.15.3 The Commission has considered annual increase of 5% over the NTI approved for FY 2023-24 for projecting NTI for FY 2024-25.
- 6.15.4 The Commission has not considered the rebate on Power Purchase bills as NTI, in line with the approach adopted in earlier Orders. Further, the amount of Delayed Payment Surcharge has been retained same as the actuals received in FY 2022-23 and approved in APR for FY 2023-24. The amount shall be considered at actuals during the true up for the respective years.
- 6.15.5 The Commission approves NTI for FY 2024-25 as shown in the Table below:

Table 93: Non-Tariff Income approved for FY 2024-25 (Rs. Crore)

Particulars	MYT Order	APDCL	Approved
	dtd. 21.03.22		
Meter Rent	27.62	24.99	24.98
Compensation charges for theft of	0.91	0.00	0.00
energy/malpractices	0.51	0.00	0.00
Rental receipt of plant and equipment	-	-	-
Cross Subsidy surcharge on Open Access	16.24	3.82	3.83
Consumer	10.24	3.02	3.03
Wheeling Charges collected	5.51	2.59	2.59
Short-term Open Access Credit	65.14	22.29	22.29
Rebate on PP bills	-	43.33	-
Receipts from renting plant and machinery	-	-	-
Miscellaneous Recoveries	29.20	50.92	50.91
Miscellaneous Receipt against Service	_		_
connections		-	
Other Miscellaneous and General			
Charges			
a) Delayed payment charges	283.09	215.70	278.54
b) Transformer Maintenance	-	-	-
c) Income on Reactive Power	0.28	-	-
d) Income from SCED	4.08	5.36	5.36
Grand Total	432.06	369.00	388.51

Therefore, the Commission approves Non-Tariff Income of Rs 388.51 Crore for FY 2024-25.

6.16 Other Income

- 6.16.1 APDCL submitted that it has projected 'Other Income' by considering the actuals for FY 2022-23 except for the following:
 - Miscellaneous receipt is escalated by 5%.

- Seasonal export is based on surplus energy estimate for FY 2024-25 at IEX price of Rs. 4 per kWh (off-peak/night hours)
- With high attrition ratio, receipt from Pension Trust is considered at reduced rate.
- 6.16.2 APDCL requested the Commission to allow 'Other Income' for FY 2024-25 as shown in the Table below:

Table 94: Other Income claimed by APDCL for FY 2024-25 (Rs Crore)

SI. No.	Particulars	Amount
1	Interest on loans to staff	0.00
2	Interest on HB advances to staff	0.00
3	Receipt from sale of LED bulb, Tubelight, Fan, etc.	0.06
4	Interest from banks and Investment	47.87
5	Gain on sale of fixed assets	0.00
6	Rent from residential buildings	0.41
7	Miscellaneous receipts	40.91
8	Income from Sale of Scrap	0.00
9	Receipt from Pension Trust	3.68
10	Income on seasonal Export of surplus power	1219.49
	Total	1312.43

- 6.16.3 The Commission has retained the same amount of interest of fixed charges for FY 2024-25 as in FY 2022-23 and FY 2023-24. For most other elements of "Other Income", an increase of 5% has been considered for FY 2024-25 over the estimates for FY 2023-24. The receipt from Pension Trust has been considered to be reduced, as projected by APDCL.
- 6.16.4 The Commission has considered income from trading /seasonal export based on projected surplus quantum, and the rate actually realised in FY 2022-23.
- 6.16.5 The Other Income approved by the Commission for FY 2024-25 is shown in the Table below:

Table 95: Other Income approved by the Commission for FY 2024-25 (Rs. Crore)

Particulars	MYT Order Dtd. 21.03.22	APDCL	Approved
Interest on fixed deposits	77.74	47.87	61.81
Income from Trading	179.71	1,219.49	1,347.72
Income from Sale of Scrap	0.12	-	-
Revenue from sale of LED's, Tubelight, Fan etc.	0.02	0.06	0.05
Rent from residential buildings	0.02	0.41	0.42
Receipt from Pension Trust	50.13	3.68	4.06
Miscellaneous receipts	19.93	40.91	40.91
Total	327.68	1,312.43	1,454.96

Therefore, the Commission approves 'Other Income' of Rs. 1,454.96 crore for FY 2024-25.

6.17 Revenue from sale of electricity

- 6.17.1 APDCL has submitted that the Revenue from Sale of Electricity at existing tariff has been computed based on the Tariff approved as per Tariff Order dated 29 March, 2023 and the projected category-wise sales for the FY 2024-25.
- 6.17.2 The Petitioner has considered the full-cost tariff, without considering any targeted subsidy and other subsidy for the purposes of estimating the revenue from sale of power for the FY 2024-25.
- 6.17.3 APDCL has submitted revenue at existing tariff of Rs. 9,750.55 Crore for FY 2024-25. APDCL has also considered cross-subsidy support from GoA at prevalent level as Rs. 468.63 Crore, and has thus, projected the Revenue at existing tariff as Rs. 10,219.18 Crore.

Commission's Analysis

6.17.4 The Commission has computed the Revenue from Sale of Electricity for FY 2024-25 at existing tariff based on the tariff approved in the Tariff Order dated March 29, 2023 and the approved category-wise sales for FY 2024-25.

- 6.17.5 The Commission has considered the prevalent FPPPA of Rs. 1.29/kWh, as part of the existing tariff, for computing the revenue from existing tariff, as the consumers are presently paying such FPPPA charges, in addition to the categorywise tariff approved by the Commission in the Tariff Order dated March 29, 2023. The Commission has computed the full-cost tariff, and has hence, not considered the cross-subsidy support in the form of targeted subsidy from GoA, separately.
- 6.17.6 The Revenue from Sale of Electricity from existing tariff as submitted by APDCL and as computed by the Commission for FY 2024-25 is given in the Table below:

Table 96: Revenue from Sale of Electricity for FY 2024-25 (Rs. Crore)

Particulars	APDCL	Approved
Revenue from Sale of Electricity	10,219.18	10,660.65

6.18 Aggregate Revenue Requirement (ARR) and Revenue Gap/(Surplus)

6.18.1 As discussed in earlier paragraphs, the Commission has approved the expenses for FY 2024-25 based on the principles specified in the MYT Regulations, 2021. The summary of ARR and Revenue Gap/(Surplus) as submitted by APDCL and as approved by the Commission for FY 2024-25 is given in the Table below:

Table 97: ARR for APDCL approved by the Commission for FY 2024-25 (Rs. Crore)

SI.	Particulars	MYT Order dt.	APDCL	Approved
No.	raiticulais	21.03.2022	Petition	
1	Power Purchase Expenses	6,770.99	9,678.06	9,562.52
2	O&M Expenses	1,392.26	1,522.71	1,449.53
a)	Employee Expenses	930.89	1,038.87	1,006.63
b)	R&M Expenses	379.21	360.11	323.71
c)	A&G Expenses	82.16	123.73	119.19
3	Depreciation	53.57	151.09	67.37
4	Interest and Finance Charges	18.42	3.71	9.74
5	Interest on Working Capital	-	35.26	30.82
6	Interest on CSD	30.17	65.95	65.95
7	Return on Equity	196.91	341.00	171.41

SI.	Particulars	MYT Order dt.	APDCL	Approved
No.	r ai ticulai s	21.03.2022	Petition	
8	Other Debits, incl. Provisioning for Bad Debts	-	5.57	5.57
9	Total Expenditure	8,462.32	11,803.75	11,362.91
10	Less: Non-Tariff Income	432.06	369.00	388.51
11	Less: Other Income	327.68	1,312.43	1,454.96
12	Aggregate Revenue Requirement	7,702.58	10,121.92	9,519.44
13	Revenue at Approved/Existing Tariff	-	9,750.55	10,660.65
14	State Government subsidy against FPPPA	-	468.63	-
15	Total revenue including FPPPA subsidy	-	10,219.18	10,660.65
14	Revenue Gap/(Surplus)		(97.26)	(1,141.20)

The Commission approves ARR for APDCL of Rs. 9,519.44 Crore for FY 2024-25. The Commission has projected a stand-alone Revenue Surplus of Rs. 1,141.20 Crore for FY 2024-25, based on the approved ARR and expected Revenue from existing tariff including prevalent FPPPA of Rs. 1.29/kWh.

The Cumulative Revenue Gap/(Surplus) for FY 2024-25, after adjusting the Revenue Gap/(Surplus) after truing up for FY 2022-23 is addressed in the subsequent Chapter.

7 Cumulative Revenue Gap till FY 2024-25 and Tariff for FY 2024-25

7.1 Cumulative Revenue Gap

7.1.1 APDCL has submitted the Cumulative Revenue Requirement of Rs 13,325.12 Crore for FY 2024-25. The Cumulative Revenue Requirement projected by APDCL for FY 2024-25 is given in the Table below:

Table 98: Cumulative Revenue Requirement for FY 2024-25 as submitted by APDCL (Rs. Crore)

Particulars	Rate of	Amount (Rs.
Particulars	Interest	Crore)
Revenue Gap after true-up for FY 2022-23		1904.17
Less: Recovery allowed in FY 2023-24		457.09
Net Gap claimed after true-up for FY 2022-23		1447.08
Carrying/(Holding) cost for FY 2022-23 (half Year)	10.00%	72.35
Carrying/(Holding) cost for FY 2023-24 (full Year)	11.28%	163.23
Carrying/(Holding) cost for FY 2024-25 (half Year)	11.53%	83.42
Total carrying cost		319.01
Total Revenue Gap for FY 2022-23		1766.09
Revenue Gap after APR of FY 2023-24		1170.19
Carrying/(Holding) cost for FY 2023-24 (half Year)	11.28%	132.00
Carrying/(Holding) cost for FY 2024-25 (half Year)	11.53%	134.92
Total carrying cost		266.92
Total Revenue Gap for FY 2023-24		1437.11
Aggregate Revenue Requirement for FY 2024-25		10121.92
Cumulative Revenue requirement for FY 2024-25		13325.12

- 7.1.2 APDCL submitted that the average cost of supply (ACoS) to recover entire ARR of Rs. 13,325.12 Crore during FY 2024-25 will be Rs. 12.48/kWh, as compared to the approved ACoS of Rs. 8.02/kWh for FY 2023-24 (excluding FPPPA).
- 7.1.3 APDCL submitted that at present, it is levying FPPPA of Rs. 1.29/kWh, with cross-subsidy support from GoA on differential amount for categories with reduced FPPPA. Thus, the effective prevalent Average Billing Rate (ABR) is Rs. 9.31/kWh.
- 7.1.4 APDCL submitted that recovery of the entire amount will lead to average increase in existing retail tariff by 34%. At the same time, delayed recovery of dues will have adverse effect on APDCL as regards discharge of its obligations.
- 7.1.5 APDCL submitted that the increase is primarily driven by massive increase in cost of power purchase due to exorbitant hike in prices of natural gas catering ~24% of energy requirement of APDCL. It is also important to note that the same is being sustained even after change of pricing mechanism by MoPNG.
- 7.1.6 Such massive increase over the MYT approval level of US\$ 2.90 /MMBTU has left APDCL with no option but to levy FPPPA. However, APDCL has implemented FPPPA at a gradually increasing manner to avoid sudden tariff shock to the consumers and prayed before the Commission to allow subsequent recovery of the deferred amount.
- 7.1.7 APDCL has estimated that there will be a small stand-alone surplus of Rs. 97.26 Crore for FY 2024-25 at the prevalent tariff keeping aside the amounts pertaining to True up for FY 2022-23 and APR for FY 2023-24. Further, the enhanced FPPPA of Rs. 1.29/kWh was implemented from the month of October, 2023 and another tariff hike of such magnitude within a period of six months will attract apprehensions from all classes of consumers.
- 7.1.8 APDCL submitted that with the prevailing socio-economic structure, consumer profile of Assam is heavily loaded (more than 92%) with domestic consumers. Such adverse consumer mix has already resulted in significantly higher tariff for a miniscule group of industrial/ commercial consumers. The same is already creating hurdle in the way of industrialization in the State of Assam. As per Regulation, APDCL is left with no option but to claim recovery of the entire amount. However, being sensitive to consumers so as to avoid sudden tariff shock, APDCL is proposing continuation of the prevailing tariff structure (with applicable FPPPA) with prayer to allow a suitable mechanism to recover the dues pertaining to true-up Petition with carrying cost

without creating any regulatory assets. Further, the amount pertaining to APR for FY 2023-24 with associated carrying cost is not claimed herein.

Commission's Analysis

7.1.9 The Commission has approved the Cumulative Revenue Surplus of Rs. 13.45 Crore for FY 2024-25, without considering any Power Purchase subsidy from the GoA for FY 2024-25, as shown in the Table below:

Table 99: Cumulative Revenue Gap for FY 2024-25 approved by the Commission (Rs. Crore)

Sr.		Rate of	
No.	Particulars	Interest	Revenue Gap
140.		(%)	
1	Revenue Gap/(Surplus) after Truing up of FY 2022-23		1,507.68
	Less: Revenue Gap of FY 2022-23 already passed		457.09
	through in FY 2023-24		457.09
	Carrying Cost for FY 2022-23 (Half Year)	10.80%	42.34
	Carrying Cost for FY 2023-24 (Full Year)	11.53%	37.72
	Carrying Cost for FY 2024-25 (Half Year)	11.53%	18.86
	Total carrying cost		98.92
2	Total Revenue Gap/(Surplus) for FY 2022-23 (A)		1,149.51
3	Revenue Requirement for FY 2024-25 (B)		9,519.44
4	Impact of APGCL True-Up (C)		(52.35)
5	Impact of AEGCL True-Up (D)		29.32
6	Impact of SLDC True-Up (E)		1.27
7	Cumulative Revenue Requirement for FY 2024-25 (F)		10,647.19
,	= A + B + C + D + E		10,047.19
10	Revenue from Existing Tariff in FY 2024-25 (G)		10,660.65
	Total Revenue Gap/(Surplus) for FY 2024-25 (H) =		(13.45)
11	(F) – (G)		(13.40)

7.1.10 The Commission has considered the Revenue Gap/(Surplus) approved for APGCL, AEGCL, and SLDC in their respective True-up Orders for FY 2022-23,

- along with carrying/(holding) cost, by directly passing through the same in the Cumulative Revenue Gap/(Surplus) of APDCL for FY 2024-25.
- 7.1.11 The Commission has allowed the recovery of the un-recovered FPPPA amount of Rs. 457.09 Crore for FY 2022-23 in the Tariff Order dated March 29, 2023 for FY 2023-24. Further, the Commission has computed the under-recovery of FPPPA by APDCL as Rs. 723.51 Crore, as shown in the Table below:

Particulars	Q1	Q2	Q3	Q4	Total
Ceiling FPPPA leviable	1.44	1.51	1.51	1.51	
(Rs/kWh)	1.44	1.51	1.51	1.51	
Calculated FPPPA leviable	(0.05)	1.42	1.88	2.60	
(Rs/kWh)	(0.00)	1.πΔ	1.00	2.00	
Actual FPPPA levied (Rs/kWh)	(0.05)	0.15	0.30	0.50	
Difference in FPPPA (Rs/kWh)	0.00	1.27	1.21	1.01	
Sales (MU)	1668.98	2503.48	2097.79	1398.53	7668.78
Under-recovery of FPPPA (Rs. Crore)	0.00	317.94	264.32	141.25	723.51

- 7.1.12 In this regard, according to Regulation 13 of the AERC (Terms & Conditions of Multi Year Tariff) Regulations, 2021, "in case of Distribution Licensees, the carrying cost may not be allowed on the gap in power purchase cost if the Distribution Licensee fails to recover the variation in power purchase cost in accordance with the AERC (Fuel and Power Purchase Price Adjustment Formula) Regulations, 2010 and its amendments thereof."
- 7.1.13 Also, in the Hearing Order dated 14.11.2022 on the Petition No. 10/2022, the Commission made the following observations:
 - ".....in accordance with the provisions in the aforementioned regulations, APDCL should have levied FPPPA charge for the 4th Quarter i.e. January-March 2022 from April-June 2022. However, APDCL has charged the FPPPA from June-August, 2022 and all information for FPPPA levied should have been filed within 60 days of the end of respective quarter i.e. for January-March, 2022 data for FPPPA should have been filed before the end of May 2022. APDCL submitted

the data only in October, 2022.

The Commission is of the view that such delays in levying the FPPPA charges and submission of information may lead to forfeiting any future claims on this account. The Commission reiterated that APDCL should follow the timelines as per AERC FPPPA Regulation, 2012".

- 7.1.14 In the Order dated 3rd January 2023 on Petition No. 20/2022, the Commission has noted as under:
 - "5. From the petition and additional information submitted on 19.12.2022 and 29.12.2022, respectively, it can be inferred that for the 1st Quarter of FY 2022-23, only an amount of Rs 0.30/unit was levied against FPPPA charge calculated at Rs 1.42/unit leaving an amount of Rs 242.75 Crore unrecovered. Similarly, for the 2nd Quarter of FY 2022-23, against FPPPA rate of Rs 1.09/unit, only Rs 0.30/unit was levied. Therefore, the total FPPPA that remains unrecovered by the petitioner (including carry forward of 1st Quarter) at the end of the 2nd Quarter stands at Rs 484.18 Crore.
 - Now, as per the petitioner, the total accumulated, unrecovered FPPPA by the end of November, 2022 stands at a whopping Rs 936.14 Crore....
 - 8. The Commission observes that the provision of recovery of FPPPA charges is provided in the Electricity Act-2003, the Tariff Policy and the Regulations of the Commission with a view that the same may be recovered by the licensee effectively and promptly from time to time. However, the petitioner avoided actual recovery of FPPPA to evade public resentment for the two quarters of FY 2022-23, even when no separate approval from the Commission was necessary.
 - 9. It may be mentioned here that as per Regulation 5.2 of the AERC (FPPPA) Regulations 2010,when FPPPA charges exceed 25% of the variable component of tariff, the Licensee shall make a petition to the Commission for recovery of the charges over the specified cap which shall be recovered after Commission's scrutiny and directives". The 25% of variable component of tariff is Rs 1.51/unit. FPPPA rate calculated for 1st Quarter and 2nd Quarter was Rs 1.42/ unit and Rs 1.09/unit respectively which is well below 25% of variable component of tariff

- i.e., Rs 1.51/unit. Therefore, no approval of the Commission was necessary....
- 12. The Commission directs that APDCL should take up implementation of FPPPA in accordance with the AERC (FPPPA) Regulations in letter and spirit." (emphasis added)
- 7.1.15 Hence, while computing the Carrying Cost on the Revenue Gap after true-up for FY 2022-23, the Commission has not allowed the Carrying Cost on the amount of Rs. 723.51 Crore that should have been recovered by APDCL in FY 2022-23 itself. Further, as the amount of Rs. 457.09 Crore has been allowed to be recovered in FY 2023-24, the Carrying Cost on this amount is not allowed for FY 2023-24 and FY 2024-25.
- 7.1.16 As regards the Revenue Gap claimed by APDCL as a consequence of the APR for FY 2023-24, the same is not allowable as per the MYT Regulations, 2021, and any Revenue Gap/(Surplus) has to be adjusted only after true-up for that year. Hence, the Revenue Gap/(Surplus) computed by the Commission after APR for FY 2023-24 has not been considered in the Cumulative Gap/(Surplus) for FY 2024-25.
- 7.1.17 Thus, the Cumulative Revenue Surplus after passing through all the past Revenue Gap/(Surplus) after truing up for FY 2022-23 for APGCL, AEGCL, SLDC and APDCL along with carrying cost works out to a nominal amount of Rs. 13.45 Crore. It may be noted that this nominal Revenue Surplus is after considering the prevalent FPPPA of Rs. 1.29/kWh as part of the existing retail tariff for all categories, without considering any FPPPA subsidy from the State Government.
- 7.1.18 Considering the nominal amount of Revenue Surplus of Rs. 13.45 Crore, after considering the revenue from extant FPPPA of Rs. 1.29/kWh, the Commission has retained the category-wise tariffs at the same level as approved in the Tariff Order for FY 2023-24, without any change in Fixed/Demand Charges and Energy Charges, except for merging the prevalent FPPPA of Rs. 1.29/kWh with the Energy Charge. The actual Revenue Gap/(Surplus) for FY 2024-25 shall be addressed at the time of true-up for FY 2024-25.

7.2 Tariff Philosophy and Design for FY 2024-25

- 7.2.1 APDCL has not proposed any increase in Fixed/Demand Charges and Energy Charges for any consumer category, in its Tariff Proposal, but has sought that the prevalent FPPPA be merged with the existing category-wise tariff approved in the Tariff Order for FY 2023-24.
- 7.2.2 APDCL has projected the ACoS for FY 2024-25 as Rs. 12.48/kWh, as shown in the Table below:

Table 100: ACoS Projected by APDCL for FY 2024-25

Particulars	Unit	Amount
Cumulative Revenue Requirement for FY 2024-25	Rs. Crore	13,325.12
Energy Sales for FY 2024-25	MU	10,678.40
ACoS	Rs/kWh	12.48

7.2.3 In line with the approach of not burdening the consumers further, APDCL has restated the Cumulative Revenue Requirement for FY 2024-25 to the same level as the estimated Revenue from consumers in FY 2024-25, i.e., Rs. 10,219.18 Crore, and re-computed the ACoS for FY 2024-25 as Rs. 9.57/kWh, as shown in the Table below:

Table 101: Re-stated ACoS Projected by APDCL for FY 2024-25

Particulars	Unit	Amount
Cumulative Revenue Requirement for FY 2024-25	Rs. Crore	10,219.18
Energy Sales for FY 2024-25	MU	10,678.40
ACoS	Rs/kWh	9.57

- 7.2.4 APDCL submitted that the GoA has been providing targeted subsidies for a few categories in the previous years. In the absence of any written commitment from GoA for continuance of the same in FY 2024-25, APDCL has proposed full-cost recovery tariff for FY 2024-25. In the event that the GoA continues with the category-wise tariff subsidy for FY 2024-25, the same would be adjusted in the retail tariffs being charged to the respective consumer categories.
- 7.2.5 Further, APDCL has estimated the FPPPA subsidy from GoA of Rs. 468.63 Crore,

to meet the shortfall in revenue on account of levy of lower rate of FPPPA as compared to the computed FPPPA rate of Rs. 1.29/kWh. The FPPPA rate actually being levied by APDCL at present is shown in the Table below:

Table 102: Category-wise FPPPA being levied by APDCL at present

SI.	Category/Consumption Slab	FPPPA levied (Rs/kWh)
1	LT I - Jeevan Dhara (0.5 kW & 1.5 kWh/day)	0.30
2	LT II - Domestic A (above 0.5 kW to 5 kW)	
	0 to 120 units per month	0.30
	121 to 240 units per month	0.30
	240 to 300 units per month	0.30
	301 to 500 units per month	0.50
	Balance units	1.29
3	LT III - Domestic B (above 5 kW to 30 kW)	
	0 to 300 units per month	0.30
	301 to 500 units per month	0.50
	Balance units	1.29
4	HT I – Domestic 30 kW	
	0 to 300 units per month	0.30
	301 to 500 units per month	0.50
	Balance units	1.29
All ot	her categories	1.29

Note: The consumption slabs for FPPPA subsidy are different from that approved by the Commission, for LT II category. No consumption slabs are approved by the Commission for LT III and HT I categories, and the entire consumption is charged at a single rate.

Commission's Analysis

- 7.2.6 In determining the ARR and the retail supply tariff of APDCL for FY 2024-25, the Commission has been guided by the provisions of the EA 2003, National Electricity Policy (NEP), Tariff Policy, and the MYT Regulations, 2021.
- 7.2.7 Section 61 of the EA 2003 lays down the broad principles and guidelines for determination of retail supply tariffs. The basic principle is to ensure that tariff should progressively reflect the cost of supply of electricity and gradually reduce

the cross-subsidies between categories. The EA 2003 lays down special emphasis on safeguarding of consumers' interest and also requires that the costs should be recovered in a reasonable manner. The EA 2003 mandates that tariff determination should be guided by factors which "encourage competition, efficiency, economical uses of resources, good performance and optimum investment".

- 7.2.8 The EA 2003 provides that while determining the tariff, the Commission shall not show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. The Tariff Policy notified by the Government of India provides comprehensive guidelines for determination of tariff and determination of ARR of power utilities. The Commission has followed these Guidelines, as far as possible.
- 7.2.9 The Commission has retained the category-wise tariffs at the same level as approved in the Tariff Order for FY 2023-24, without any change in Fixed/Demand Charges and Energy Charges, except for merging the prevalent FPPPA of Rs. 1.29/kWh with the Energy Charge. As stated earlier, it is noted that APDCL is levying FPPPA at reduced rates for selected categories, as detailed in Table 100, against which, the GoA is providing FPPPA subsidy. The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. Hence, though the tariff approved for Jeevan Dhara, Domestic A, Domestic B, and HT Domestic categories includes the entire FPPPA of Rs. 1.29/kWh, the consumers of these categories will continue to pay the same tariff (Fixed/Demand Charges plus Energy Charges plus lower FPPPA as mentioned in Table 100) as that presently applicable, and there will be no increase in tariff for any category, after merging the prevalent FPPPA.
- 7.2.10 APDCL should also ensure against creation of such unapproved consumption slabs for the purpose of levy of energy charges or FPPPA or

subsidy.

- 7.2.11 The Commission has computed the ACoS of Rs. 9.55/kWh based on the ARR approved for recovery in FY 2024-25.
- 7.2.12 The ACoS approved by the Commission for FY 2024-25 after inclusion of Revenue Gap of FY 2022-23 along with Carrying Cost and after adjustment of Revenue Gap/(Surplus) of APGCL, AEGCL, and SLDC after true-up for FY 2022-23 is shown in the Table below:

Table 103: ACoS approved by the Commission for FY 2024-25

Sr. No.	Particulars	Units	Approved
1	Cumulative Revenue Requirement for FY 2024-25	Rs. Crore	10,647.19
2	Total Sales for FY 2024-25	MU	11,145
3	Average Cost of Supply (ACoS)	Rs/kWh	9.55

- 7.2.13 The Commission has retained the tariff categories and tariff slabs as approved in previous Tariff Order dated March 29, 2023, except for the following changes:
 - a) The tariff for LT X: Electric Vehicle Charging Stations has been made single-part tariff comprising Energy Charges only, equal to the ACoS of Rs. 9.55/kWh, in accordance with the Guidelines issued by the Ministry of Power in this regard.
 - b) The tariff for HT XII: Electric Vehicle Charging Stations, has been made single-part tariff comprising Energy Charges only, equal to 90% of the ACoS, i.e., Rs.8.60/kWh, in accordance with the Guidelines issued by the Ministry of Power in this regard.
 - c) The ToD tariffs shall be applicable to both LT X: Electric Vehicle Charging Stations and HT XII: Electric Vehicle Charging Stations categories.
- 7.2.14 The recovery of fixed costs through the Fixed/Demand Charges is increased from 44% approved in the Tariff Order for FY 2023-24 to 50% in the present Order, on account of the change in the contribution of Fixed Costs to the ARR, though the Fixed/Demand Charges have been retained at the existing levels.
- 7.2.15 The detailed applicability and description of tariff categories has been elaborated

- in the Tariff Schedule under Chapter 10 of this Order.
- 7.2.16 The applicability of Time-of-Day (ToD) tariff and the ToD rates for peak and off-peak hour consumption have been retained as approved in the Tariff Order dated March 29, 2023, except for extending the applicability of ToD tariff to LT X: Electric Vehicle Charging Stations and HT XII: Electric Vehicle Charging Stations categories, as stated above.
- 7.2.17 The rebate of 20% has been retained to Oxygen manufacturing plants under HT-V (C) category for FY 2024-25.
- 7.2.18 In the absence of any written commitment from GoA for providing category-wise subsidy in FY 2024-25, the Commission has approved the full cost tariff for FY 2024-25, as shown in the Table below:

Table 104: Full Cost Tariff approved by the Commission for FY 2024-25

		Increase/(De	-	Revised tariffs	
SI. No.	Consumer Category	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)
	LT Category				
LT-1	Jeevan Dhara	-	-	40.00	6.34#
LT-II	Domestic A- above 0.5 kW to 5 kW	-		70.00	
	0 to 120 units per month		-	-	6.99#
	121 to 240 units per month		-	-	8.29#
	Balance units		-	-	9.19#
LT-III	Domestic-B above 5 kW to 30 kW	-	-	70.00	8.74#
LT-IV	Commercial Load above 0.5 kW to 30 kW	-	-	150.00	9.19
LT-V	General Purpose Supply				
А	Non-commercial and Non-domestic users	-	-	165.00	8.24

		Increase/(Dec		Revised tariffs		
SI. No.	Consumer Category	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)	
В	Government Primary and Secondary / Higher Secondary Schools/Charitable organisations involved in eradicating hunger specially for children	-	-	90.00	8.14	
LT-VI	Public Lighting	-	-	140.00	8.19	
LT-VII	Agriculture upto 7.5 HP	-	-	65.00	6.34	
LT-VIII(i)	Small Industries Rural upto 30 kW	-	-	70.00	6.84	
LT-VIII(ii)	Small Industries Urban upto 30 kW	-	-	80.00	7.09	
LT-IX	Temporary Supply					
	Domestic	-	-	105.00	11.18	
	Non-Domestic Non- Agriculture	-	-	155.00	13.28	
	Agriculture	-	-	65.00	6.44	
LT-X	LT Electric Vehicles Charging Stations \$	(150)	3.65	-	9.55	
	HT Category					
HT-I	HT Domestic 30 kW (35 kVA) and above	-	-	70.00	8.89#	
HT-II	HT Commercial 30 kW (35 kVA) & above	-	-	210.00	9.29	
HT-III	Public Water Works	-	-	155.00	8.04	
HT-IV	Bulk Supply 30 kW (35 kVA) and above	-				
HT-IV(i)	Educational Institutions/Charitable organisations involved in eradicating hunger specially for children	-	-	150.00	8.44	
HT-IV(ii)	Others	-	-	210.00	9.39	
HT-V(A)	HT Small Industries	-	-	90.00	7.54	

		Increase/(De	•	Revised tariffs	
SI. No.	Consumer Category	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)	Fixed Charges (Rs/kW/mth or Rs/kVA/mth)	Energy Charges (Rs. per kWh)
	up to 50 kVA				
HT-V(B)	HT Industries-1 50 kVA to 150 kVA	-	-	200.00	7.94
HT-V(C)	HT Industries-II above 150 kVA (Option 1)	-	-	280.00	8.34
	HT Industries-II above 150 kVA (Option 2)	-	-	360.00	7.94
HT-VI	Tea, Coffee & Rubber	-	-	310.00	8.29
HT-VII	Oil & Coal	-	-	320.00	9.34
HT-VIII	HT Irrigation Load above 7.5 HP	-	-	85.00	7.84
HT - IX	HT Temporary Supply	-	-	190.00	10.94
HT – X	HT Electric Crematorium	-	-	190.00	6.14
HT – XI	HT Railway Traction	-	-	320.00	8.04
HT-XII	Electric Vehicles Charging Station \$	(180)	1.20	-	8.60

Note: These are Base Tariffs; Additional ToD tariffs have been detailed in the Tariff Schedule * after including existing FPPA charges of Rs. 1.29/kWh as part of existing tariff for all categories, without considering the FPPA subsidy being provided at present by the State Government

APDCL is levying FPPPA at reduced rates for selected categories, as detailed in Table 100, against which, the GoA is providing FPPPA subsidy. The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. APDCL shall continue to bill the consumers at the prevalent tariff. The consumers of these categories will continue to pay the same tariff (Fixed/Demand Charges plus Energy Charges plus lower FPPPA as mentioned in Table 100) as that presently applicable, and there will be no increase in tariff for any category, after merging the prevalent FPPPA.

\$ approved single-part tariff in accordance with MoP Guidelines.

7.2.19 In case the GoA desires to provide further category-wise subsidy in FY 2024-25

under Section 65 of the EA 2003, after the issue of this Order, the GoA may do so under intimation to the Commission. APDCL shall levy category-wise tariffs after adjusting the amount of category-wise subsidy announced by the GoA, under intimation to the Commission along with the complete calculations in this regard. APDCL shall obtain post-facto approval of the Commission for the category-wise tariff after giving effect to the targeted subsidy, as applicable.

The detailed Tariff Schedule is given in Chapter 10.

7.3 Category-wise Cross-subsidy

7.3.1 The Commission has computed the cross-subsidy with respect to the approved ACoS and attempted to ensure that the cross-subsidies are within the limits of ±20% of the ACoS, as laid down in the Tariff Policy as well as several Judgments of the Hon'ble APTEL. The category-wise cross-subsidy approved for FY 2024-25 by the Commission in this Order are given in the Table below:

Table 105: Category-wise Cross-Subsidy approved for FY 2024-25

Sr. No.	Category of consumers	Average Billing Rate (Rs./ kWh)	Average Cost of Supply (Rs./ kWh)	Ratio of ABR to ACOS (%)	Cross-subsidy provided /(received) (%)
	LT Category				
1.	Jeevan Dhara	8.22	9.55	77.0%	-23.0%
2.	Domestic A- above 0.5 kW to 5 kW	8.40	9.55	87.9%	-12.1%
3.	Domestic-B above 5 kW to 30 kW	10.37	9.55	108.6%	8.6%
4.	Commercial Load above 0.5 kW to 30 kW	10.70	9.55	112.0%	12.0%
5.	General Purpose Supply	10.68	9.55	111.7%	11.7%
6.	Public Lighting	9.03	9.55	94.5%	-5.5%
7.	Agriculture up to 7.5	7.70	9.55	80.6%	-19.4%
8.	Small Industries Rural up to 30 kW	8.78	9.55	91.9%	-8.1%
9.	Small Industries Urban	8.56	9.55	89.6%	-10.4%
10	EV Charging Stations	9.55	9.55	100.0%	-
	HT Category				
11	HT Domestic 30 kW	10.12	9.55	105.9%	5.9%

Sr. No.	Category of consumers	Average Billing Rate (Rs./ kWh)	Average Cost of Supply (Rs./ kWh)	Ratio of ABR to ACOS (%)	Cross-subsidy provided /(received) (%)
	and above				
12	HT commercial 30 kW & above	11.39	9.55	119.2%	19.2%
13	Public Water Works	9.21	9.55	96.4%	-3.6%
14	Bulk Supply - Educational Institutions/Charitable organisations involved in eradicating hunger specially for children	9.39	9.55	98.3%	-1.7%
15.	Bulk Supply Others	11.13	9.55	116.5%	16.5%
16.	HT Small Industries up to 50 kVA	9.71	9.55	101.6%	1.6%
17.	HT Industries-1 50 kVA to 150 kVA	11.37	9.55	119.0%	19.0%
18.	HT Industries-II above 150 kVA	10.04	9.55	105.1%	5.1%
19.	Tea, Coffee & Rubber	10.45	9.55	109.4%	9.4%
20.	Oil & Coal	10.73	9.55	112.3%	12.3%
21.	HT Irrigation Load above 7.5 HP	9.58	9.55	100.3%	0.3%
22.	EV Charging Stations	8.60	9.55	90.0%	10.0%

Note: (+) Cross-subsidy provided to other consumer categories

7.3.2 As can be seen from the above Table, the Average Billing Rate for almost all categories is within the band of 80% to 120% of ACoS, which is in accordance with the Tariff Policy.

7.4 Fuel Price and Power Purchase Adjustment Charges (FPPPA)

- 7.4.1 Fuel Price and Power Purchase Adjustment shall be applicable as per the AERC (Fuel and Power Purchase Price Adjustment) Regulations, 2010 and the subsequent amendments.
- 7.4.2 APDCL shall comply with the AERC (Fuel and Power Purchase Price Adjustment) Regulations, 2010, and subsequent amendments thereof to adjust the differential cost of power purchase. The Commission may be constrained to

⁽⁻⁾ Cross-subsidy received from other consumer categories

disallow the carrying cost arising out of gap in power purchase cost if the same is on account of APDCL's failure to recover the variation in power purchase cost in accordance with the aforesaid Regulations.

7.5 Green Energy Tariff

- 7.5.1 The MoP, Government of India, has notified the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, as amended from time to time (hereinafter referred to as "MoP GEOA Rules"), wherein the MoP has stipulated that the Commission has to determine the Green Energy Tariff, to facilitate purchase of additional Green Energy by obligated entities and consumers from the Distribution Licensee.
- 7.5.2 The MoP GEOA Rules stipulate that the components for determining Tariff for Green Energy for consumer shall include:
 - a. Average Pooled Power Purchase Cost of RE
 - b. Cross Subsidy Charges, if any, and
 - Service Charge covering prudent cost of distribution licensee for providing Green Energy.
- 7.5.3 The MoP, vide letter dated 13th May 2023, further clarified that the Green Energy Tariff shall not be higher than average pooled power purchase cost of RE plus Surcharge @20% of ACOS plus (say) a reasonable margin of 25 paise.
- 7.5.4 In line with the MoP Rules, the Commission has determined the Green Energy Tariff as shown in the Table below:

Table 106: Computation of Green Energy Tariff for FY 2024-25

SI.	Particulars	Amount (Rs./kWh)
1	Average Pooled Power Purchase Cost of RE	3.94
2	Cross-Subsidy Surcharge @20% of ACOS	1.91
3	Reasonable Margin/Service Charge	0.25
	Total Green Energy Tariff	6.10

7.5.5 Thus, the computed Green Energy Tariff works out to Rs. 6.10/kWh. It has to be noted that the Green Energy Tariff has to be paid in addition to the approved

- Fixed/Demand Charges and Energy Charges for the respective consumer category. The Commission is of the view that approving the Green Energy Tariff at such a high value of Rs. 6.10/kWh would defeat the purpose and APDCL may not find anyone willing to pay additional Green Energy Tariff of Rs. 6.10/kWh for procurement of additional Green Energy.
- 7.5.6 The Distribution Licensee is required to purchase additional RE power, in addition to its existing contracts for RE power, to meet the additional requisitions for RE power given by the interested consumers. Further, in accordance with the Rules, the additional Green Energy purchased by an Obligated Entity from the Distribution Licensees shall be first considered to meet the RPO of the Obligated Entity, and any Green Energy purchased by the Obligated Entity in excess of its RPO, shall be considered to meet the RPO of the Distribution Licensees. In case of embedded consumer, who is not an Obligated Entity and does not have to meet any RPO, the entire Green Energy purchased by the Distribution Licensee against the requisition made by the consumer, shall be considered to meet the RPO of the Distribution Licensees. Thus, the purchase of additional RE power shall largely be used to meet the RPO of the Distribution Licensees.
- 7.5.7 Further, the Distribution Licensee will get additional revenue from levy of Green Energy Tariff, though its entire cost is approved in the ARR and is being recovered through the tariff approved by the Commission. The additional revenue earned by APDCL shall be considered as revenue from sale of electricity by APDCL, and shall be utilised to reduce the Revenue Gap and hence, tariff for all its consumers.
- 7.5.8 The Commission also notes that the Green Energy Tariff approved by other SERCs is in the range of Rs. 0.66/kWh to Rs. 2.30/kWh.
- 7.5.9 The Green Energy Tariff is intended to enable greater penetration of RE in the State. Also, the Green Energy Tariff is being introduced for the first time, and the response to the approved Green Energy Tariff mechanism needs to be assessed, before taking a more nuanced view on the same. In view of all the above, the Commission decides to approve the Green Energy Tariff @30% of the above-computed value, i.e., Rs. 1.83/kWh. The Commission shall

- review the same at the time of the next MYT Order based on the actual data to be submitted by APDCL in this regard, as detailed in the Directives Chapter.
- 7.5.10 The above arrangement is optional / voluntary and shall only be provided on the request of the Consumer. The consumers may procure RE power quantum of minimum 25% of their monthly consumption of electricity during any billing month. The consumers shall be permitted to increase their consumption from RE Power in steps of 5% of their monthly consumption over and above 25% up to 100% from RE sources during any billing month.
- 7.5.11 The consumers shall have to place a requisition for availing additional RE power with APDCL, at least 3 months in advance, to enable APDCL to make the necessary arrangements for purchase of RE power and accounting for the same.

8 Wheeling Charges and Cross-Subsidy Surcharge

8.1 Introduction

8.1.1 The Commission has, in the present Order, determined the Wheeling Charges and Cross-Subsidy Surcharge applicable for Open Access consumers of APDCL for FY 2023-24.

8.2 Allocation Matrix

- 8.2.1 APDCL submitted that it has retained the Allocation Matrix considered in previous Tariff Orders by the Commission for allocation of expenses between the Wires Business and Retail Supply Business for FY 2024-25.
- 8.2.2 Accordingly, APDCL has proposed the following separation of ARR for Wires and Supply Business for FY 2024-25:

Table 107: Separation of ARR for Wires and Retail Supply Business for FY 2024-25 as submitted by APDCL (Rs. Crore)

Sr. No.	Particulars	Gross Amount	Wire Business	Retail Supply Business
1	Power Purchase Expenses	9678.06	0.00	9678.06
2	Employee Expenses	1038.87	623.32	415.55
3	R&M Expenses	360.11	324.10	36.01
4	A&G Expenses	123.73	61.86	61.86
5	Depreciation	151.09	135.98	15.11
6	Interest and Finance Charges	3.71	3.34	0.37
7	Interest on Working Capital	35.26	3.53	31.73
8	Interest on CSD	65.95	0.00	65.95
9	Return on Equity	341.00	306.90	34.10
10	Provisioning for Bad & Doubtful Debts	5.57	0.00	5.57
11	Less: Non-Tariff Income	369.00	0.00	369.00
12	Less: Other Income	1312.43	131.24	1181.18
	Total ARR	10121.92	1327.78	8794.14

Commission Analysis

8.2.3 The Commission has considered the following matrix, in line with the approach adopted in its previous Orders, for allocation of expenses between the Wires Business and Retail Supply Business as shown in the Table below:

Table 108: Allocation Matrix for Separation of ARR for Wires Business and Retail Supply Business for FY 2024-25

Particulars	Wires Business (%)	Supply Business (%)
Power Purchase Expenses	0%	100%
Employee Expenses	60%	40%
R&M Expenses	90%	10%
A&G Expenses	50%	50%
Depreciation	90%	10%
Interest and Finance Charges	90%	10%
Interest on Working Capital	10%	90%
Interest on CSD	0%	100%
Return on Equity	90%	10%
Income Tax	90%	10%
Prior Period Expenses		100%
Provisioning for Bad & Doubtful Debts	0%	100%
Less: Non-Tariff Income	0%	100%
Less: Other Income	10%	90%

8.2.4 The approved ARR for APDCL for FY 2024-25 has been segregated between the Wires Business and Retail Supply Business, based on the above Allocation Matrix, as given in the Table below:

Table 109: Separation of ARR for Wires Business and Retail Supply Business for FY 2024-25 (Rs. crore)

Particulars	ARR for Wires	ARR for Supply	Total ARR
	Business	Business	(Rs.
	(Rs. Crore)	(Rs. Crore)	Crore)
Power Purchase Expenses	-	9,562.52	9,562.52
Employee Expenses	603.98	402.65	1,006.63

Particulars	ARR for Wires	ARR for Supply	Total ARR
	Business	Business	(Rs.
	(Rs. Crore)	(Rs. Crore)	Crore)
R&M Expenses	291.33	32.37	323.71
A&G Expenses	59.59	59.59	119.19
Depreciation	60.64	6.74	67.37
Interest and Finance Charges	8.77	0.97	9.74
Interest on Working Capital	3.08	27.74	30.82
Interest on CSD	-	65.95	65.95
Return on Equity	154.27	17.14	171.41
Income Tax	-	-	-
Prior Period Expenses	-	-	-
Provisioning for Bad &	_	5.57	5.57
Doubtful Debts		0.07	0.07
Less: Non-Tariff Income	-	388.51	388.51
Less: Other Income	145.50	1,309.47	1,454.96
Total ARR	1,036.17	8,483.27	9,519.44

8.3 Wheeling Charges

8.3.1 APDCL submitted that the Wheeling Charges applicable for distribution open access consumers at 33 kV voltage level for FY 2023-24 have been determined from the ARR of the Distribution Wires Business on gross basis, as shown in the Table below:

Table 110: Wheeling Charges as submitted by APDCL for FY 2024-25

Sr. No.	Particulars	Units	Proposed
1	Total Energy Input into Distribution System	MU	12,489
2	Total Wires ARR	Rs. Cr	1327.78
3	Distribution Cost for Wires Business for 33 kV Voltage level (assuming 35% of cost at 33 kV)	Rs. Cr	464.72
4	Wheeling Charges for 33 kV Voltage Level	Rs/kWh	0.37

Commission Analysis

8.3.2 The Wheeling Charges applicable for Distribution Open Access consumers at 33 kV/11 kV voltage level for FY 2024-25, has been determined from the ARR of the Distribution Wires Business, as shown in the Table below:

Table 111: Wheeling Charges approved by the Commission for FY 2024-25

Sr.	Particulars	Units	Approved
No.			
1	Total Energy Input into Distribution System	MU	13,034.53
2	Total Wires ARR	Rs. Crore	1,036.17
3	Distribution Cost for Wires Business for 33 kV Voltage level (assuming 35% of cost at 33 kV)	Rs. Crore	362.66
4	Wheeling Charges for 33 kV/11 kV Voltage Level	Rs/kWh	0.28

8.3.3 The Wheeling Charges for FY 2024-25 as determined in the above Table, are applicable for use of the distribution system of APDCL by other Licensees or generating companies or captive power plants or consumers/users who are permitted open access at 33 kV/11 kV voltage level under Section 42(2) of the EA 2003.

8.4 Applicable Wheeling Losses

The Wheeling Losses applicable for Open Access transactions for FY 2024-25 shall be as under:

Table 112: Wheeling Losses approved by the Commission for FY 2024-25

Sr. No.	Particulars	Total
1	At 33 kV level	5%
2	At 11 kV level	11%

8.5 Cross-Subsidy Surcharge (CSS)

8.5.1 The Open Access consumers are liable to pay the CSS to compensate the utility for any loss of revenue due to the shifting of the consumer to the Open Access system. Eligible consumers with a connected load of 1 MW and above shall be allowed Open

Access.

8.5.2 APDCL has computed the CSS for HT-II Commercial Category, HT-IV (i) Bulk Supply Govt. Edu. Institutions category, HT-IV (ii) Bulk Supply Others category, HT-V (C) HT Industry category, HT-VI Tea, Coffee & Rubber category, and HT-VII Oil & Coal category, as shown in the Table below:

Table 113: Category-wise CSS computed by APDCL for FY 2024-25 (Rs/kWh)

Particulars	Legend	Proposed
Average Billing Rate for HT Commercial category	А	11.38
Average Billing Rate for HT Bulk Supply - Govt. Edu. Inst.	В	9.54
category	Б	3.04
Average Billing Rate for HT Bulk Supply Others category	С	11.11
Average Billing Rate for HT-II Industry above 150 kW category	D	9.77
Average Billing Rate for Tea, Coffee & Rubber category	E	11.14
Average Billing Rate for Oil & Coal category	F	11.59
Average Cost of Supply	G	9.57
Cross-Subsidy Surcharge for HT Commercial category	H = A - G	1.81
Cross-Subsidy Surcharge for HT Bulk Supply - Govt. Edu.	I = B - G	_
Inst. Category		_
Cross-Subsidy Surcharge for HT Bulk Supply Others category	J = C - G	1.54
Cross-Subsidy Surcharge for HT-II Industry above 150 kW	K = D - G	0.20
category		0.20
Cross-Subsidy Surcharge for Tea, Coffee & Rubber category	L = E - G	1.57
Cross-Subsidy Surcharge for Oil & Coal category	M = F - G	2.02

Commission Analysis

8.5.3 The Commission has approved the CSS for FY 2024-25 for all HV categories as per the methodology adopted in the earlier Tariff Orders, and after ensuring that the CSS is not greater than 20% of the ACoS, as stipulated in the MoP Rules, as shown in the Table below:

Table 114: Category-wise CSS approved by the Commission for FY 2024-25 (Rs/kWh)

SI.	Category	ABR	ACOS	CSS
1	HT Domestic 30 kW and above	10.12	9.55	0.57
2	HT commercial 30 kW & above	11.39	9.55	1.84
3	Public Water Works	9.21	9.55	-
4	Bulk Supply Govt. Edu Inst	9.39	9.55	-
5	Bulk Supply Others	11.13	9.55	1.58
6	HT Small Industries up to 50 kW	9.71	9.55	0.15
7	HT Industries-1 50 kW to 150 kW	11.37	9.55	1.81
8	HT Industries-II above 150 kW	10.04	9.55	0.49
9	Tea, Coffee & Rubber	10.45	9.55	0.89
10	Oil & Coal	10.73	9.55	1.17
11	HT Irrigation Load above 7.5 hp	9.58	9.55	0.03
12	HT Electric Crematorium	7.27	9.55	-
13	HT Railway Traction	9.93	9.55	0.38
14	HT EV Charging Station	8.60	9.55	-

8.6 Applicability of Tariff

The approved Retail Supply Tariffs, Wheeling Charges and CSS for FY 2024-25 shall be effective from July 1, 2024 and shall continue until replaced/modified by an Order of the Commission.

Sd/- Sd/- Sd/
(A. Bhattacharyya) (S.N. Kalita) (K.S Krishna)

Member, AERC Member, AERC Chairperson, AERC

9 Directives

The Commission has issued certain directives to APDCL in the past Orders, with an objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial to the sector and the Petitioner, both in the short-term and long-term.

As regards the directives issued by the Commission in the Tariff Order dated March 29, 2023, APDCL has submitted the report to the Commission on compliance. The Commission has reviewed the compliance of directives as submitted by APDCL and the status is as follows:

Status of Directives issued in the Tariff Order dated March 29, 2023

Directive 1: Power Purchase

- Power Purchase cost is major component of the total cost of APDCL and therefore
 effective monitoring is necessary for optimisation of the Power Purchase Cost. APDCL
 is directed to submit reports to the Commission on actual power purchased from
 various sources, on quarterly basis. The Petitioner shall provide detailed justifications,
 if the price from the source exceeds the price approved in the respective Tariff Order
 or if power is procured from a source not approved by the Commission.
- Further, APDCL shall continue to explore new methods to optimise power purchase through utilisation of all tools available for purchase of power.

Status of Compliance

APDCL submitted that all plausible measures like adopting Merit Order Dispatch principle, etc., are taken to ensure optimization of power procurement cost. However, APDCL is still dependent on market procurement in peak hours with the typical load profile vis-à-vis energy mix. The Petitioner further submitted that the cost of power purchase for FY 2023-24 is severely affected by the consistently higher prices of natural gas as compared to the approved level. Additional cost implication on this account till July, 2023 was Rs. 312 Crore Such deviation contributes 74% of total incremental cost in the same period.

The Petitioner submitted that due to various factors, the market price is still very high particularly in peak hours.

Commission's Views

It is observed that while APDCL is contending that the variation in power purchase cost due to variation in fuel price is affecting it adversely, the real reason for the problems faced by APDCL is the fact that APDCL has not levied the full FPPPA that it is entitled to as per the Regulations, for various reasons.

APDCL should continue to explore possibilities for optimising its power purchase costs and tie-up reasonably priced power conventional power and Renewable Energy in the medium-term/long-term to meet the growing demand for power and ensure that the demand-supply gap is met.

Directive 2: FPPPA

- APDCL shall comply with the AERC (Fuel and Power Purchase Price Adjustment)
 Regulations, 2010 and subsequent amendments, and subsequent amendments
 thereof to adjust the differential cost of power purchase. All information including actual
 sales data required for calculation for the fuel surcharge (audited and certified by cost
 accountant/chartered accountant) shall be filed with the Commission within 60 days in
 accordance with Regulation 5.8 of the aforementioned Regulations.
- The Commission may be constrained to disallow the carrying cost arising out of gap in power purchase cost if the same is on account of APDCL's failure to recover the variation in power purchase cost in accordance with the aforesaid Regulations.

Status of Compliance

APDCL submitted that all terms of the governing Regulations read with directives from State Government from time to time are adhered to.

Commission's views

Noted. The Commission had observed that the carrying cost arising out of gap in power purchase cost on account of APDCL's failure to recover the variation in power purchase cost in accordance with the aforesaid Regulations may be disallowed. The Commission has accordingly disallowed the carrying cost to the extent of APDCL's failure in the true-up for FY 2022-23.

Directive 3: Constitution of CGRFs and Strengthening of the Institution of Electricity Ombudsman

- The AERC (Redressal of Consumer Grievances) Regulations, 2022 came into effect from October 21, 2022. Consumer Grievance Redressal Forums (CGRFs) at District and State levels need to be constituted within a period of 3 months from coming into effect of these Regulations. The Distribution Licensee is therefore, directed to constitute the CGRFs in accordance with the aforesaid Regulations in right earnest.
- For effective consumer grievance redressal, the institution of Electricity Ombudsman also needs to be strengthened. Therefore, APDCL is directed to take necessary steps to ensure financial adequacy and independence of the office of Ombudsman in accordance with the AERC (Electricity Ombudsman) Regulations, 2022.

Status of Compliance

APDCL submitted that till date, district level CGRFs for 18 districts and central CGRF have been formed, with approval of the Commission.

Commission's views

Noted. More than one and a half years have passed after notification of the CGRF Regulations. APDCL should expedite constitution of the CGRFs in remaining districts for convenience of the electricity consumers.

Directive 4: Submission of Timely Reports

- The Commission hereby directs APDCL to regularly submit reports pertaining to Consumer Grievance Redressal Forum, Standards of Performance of distribution licensee, etc., as specified in the relevant Regulations.
- The Commission further directs that the reports submitted on Standards of Performance should be accompanied with an analysis of the Standards achieved by the Company during the period of report.

Status of Compliance

APDCL submitted that all information as desired by the Commission is submitted from time to time.

Commission's views

Noted. The Petitioner should continue to submit the reports as specified in the Regulations along with all information in future.

Directive 5: Standards of Performance and Payment of Compensation

- The Commission directs APDCL to comply with the Standards of Performance laid down by the relevant AERC Regulations.
- The Company should also ensure payment of compensation in accordance with the Standards of Performance Regulations in case of non-compliance to the Standards.
 The Company should also ensure establishment of mechanism of automatic compensation as laid down in the Regulations.

Status of Compliance

APDCL submitted that the process of automatic compensation as per governing Regulations is under implementation.

Commission's views

It has been more than two years since the Regulations have been notified, and APDCL is yet to establish the mechanism for providing automatic compensation for non-compliance with the Standards specified in the Regulations. APDCL should expedite the same and ensure that the mechanism is in place within 6 months of issue of this Order.

Directive 5: ToD Tariffs

TOD tariff is to be prudently extended to more consumer categories in order to flatten
the load curve and lower consumption during the peak hours when the market price of
power is high. APDCL is therefore, directed to carry out a detailed study of hourly
consumption patterns of all HT consumer categories, based on metering data. The

purpose of the study would be to identify the contribution of each category towards the peak consumption and which categories may be incentivised to further shift their consumption to off-peak hours, seasonal variation in peak and off-peak consumption levels, etc.

 Based on the above study, APDCL shall submit a report and offer suggestions for modifications of the ToD Tariff along with the next MYT Petition.

Status of Compliance

APDCL noted for compliance.

Commission's views

In continuation of the above directive, in accordance with the amendment to the Electricity Rules by the MoP, in the next MYT Petition, APDCL should also assess the implications and propose extending the ToD tariff regime to other consumer categories, including all commercial and industrial consumers having maximum demand above 10 kW and all consumers where smart meters are installed. APDCL should also accordingly propose the solar hours and the other ToD time-slots along with the ToD tariffs, and provide the relevant category-wise consumption data for proposed different time-slots, along with its next MYT Petition.

Directive 6: Charging Infrastructure for Electric Vehicles

 The Commission directs APDCL to explore the possibility of creation of charging infrastructure for electric vehicles in its area and may come up with separate capital expenditure plan along with next MYT Petition for Commission's approval.

Status of Compliance:

APDCL noted for compliance.

Commission's views:

Noted. However, the capital expenditure plan should justify the requirement as mentioned.

Directive 7: Rationalisation of tariff categories

- During this tariff determination process, consumers belonging to differing categories requested for change in existing category or for a separate tariff slab giving their reasoning for doing the same.
- APDCL is hereby directed to carry out a study on the impact of such change in above categorisation on the revenue, tariff, cross subsidies, etc. of the Company and submit a report on the same within 3 months of the issue of this Order. APDCL may also suggest changes to the prevailing tariff categorisation with detailed reasoning in the above report.

Status of Compliance:

APDCL submitted that the report sought by the Commission has been submitted.

Commission's views:

The report submitted by APDCL mentioned that any change in existing category will lead to increase in cross-subsidy and any move of consumers from benefactor to beneficiary category will have an adverse effect on the retail tariff of the domestic consumers. As such, the Commission shall analyse the same in the next MYT Order. Also, as the matter is sub-judice before the Hon'ble APTEL, the Commission considers it appropriate to wait for the APTEL Judgment before taking any decision.

New Directives

In continuation to the directives issued in Tariff Order dated 29.03.2023, the Commission hereby issues the following new Directives to APDCL.

Directive 1: Consumer services related issues

The service lines, transformers and associated equipment need proper maintenance by the Petitioner for smooth and continuous power supply to the consumers. The Commission, therefore, directs APDCL to pay special attention for meeting the Standards of Performance (SoP) parameters as specified in AERC (Standards of Performance of Distribution Licensees), Regulations, 2021 and amendments thereof and compensation paid to consumers for default in complying with SoP.

The Ministry of Power, Government of India has issued the Electricity (Rights of Consumers) Amendment Rules, 2024 and other notification, where timelines for new connection in urban and rural areas; pre-specified connection charges up to 150 kW and issuance of simplified bills in regional languages for ease of understanding have been mentioned. The Commission has taken up the task to include these changes in the amendment to the AERC (Electricity Supply Code) Regulations, 2017. However, this would take some time and therefore, APDCL is directed to comply with the Electricity (Rights of Consumers) Amendment Rules, 2024 with regard to alignment of timelines as specified in the Rules for the benefit of the consumers.

Directive 2: Reduction in Distribution Loss

Distribution loss is a critical factor, which critically affects the cost of supply of electricity as well as the financial health of a Distribution Licensee. APDCL should identify one Division in each circle where the Distribution Loss is the highest and submit a detailed Action Plan for reduction of the same within 3 months from the issue of this order.

Directive 3: Adhering to the timelines of RDSS

The Petitioner is directed to adhere to the pre-determined timelines outlined under RDSS for achievement of distribution and consumer metering, upgradation of distribution infrastructure in terms of loss reduction, and modernization.

Directive 4: Extending ToD Tariff to Other Categories

The MoP in the Electricity (Second Amendment) Rules, 2023 has stipulated that the ToD tariff has to be extended to all consumers having maximum demand more than 10 kW after installation of Smart Meters.

Hence, APDCL is directed to undertake the necessary study and propose ToD tariff in its next MYT Petition for consumers of all categories having load more than 10 kW so that same may be implemented after installation of Smart Meters. APDCL should propose the ToD tariff in accordance with the MoP Rules, giving due consideration to the Solar Hours, along with its next MYT Petition, so that the impact of the change in ToD time slots and tariffs and extension of the ToD to other categories is clearly understood. APDCL should do a proper assessment of inter-alia, total number of consumers who will be eligible for ToD tariff, their present metering status, phasing of

Smart Meter installation, etc., and include these and other relevant aspects in its study on the subject.

Directive 5: Accounting for Additional Revenue from Green Energy Tariff

The Commission has approved Green Energy Tariff to be levied in case of consumers desiring to procure additional Green Energy from APDCL. APDCL shall maintain a separate account of the additional Green Energy procured by APDCL for this purpose, the rate of purchase of this additional Green Energy, category-wise energy sold to consumers under Green Energy Tariff mechanism, the additional revenue earned through levy of Green Energy Tariff, etc., and submit the relevant details to the Commission along with its next MYT Petition.

APDCL may also suggest any modification desired in the Green Energy Tariff mechanism along with its next MYT Petition, along with suitable justification, based on the experience of implementation of Green Energy Tariff as approved in this Order.

APDCL is directed to submit the status of compliance of above new Directives as well as existing directives, which require continued compliance, to the Commission at the end of each quarter. The Commission will review the status in the month following the end of that quarter.

Sd/- Sd/- Sd/
(A. Bhattacharyya) (S.N. Kalita) (K.S. Krishna)

Member, AERC Member, AERC Chairperson, AERC

10 Tariff Schedule

This Chapter details the tariffs applicable in the State of Assam with effect from July 1, 2024 until replaced/modified by a subsequent Order of the Commission.

For the purpose of this Schedule, the consumers are divided into two distinct groups based on voltage of supply, i.e., LT Group and HT Group. The consumers are further divided into categories based on purpose of supply and nature of supply.

Common Terms & Conditions for both, LT Group and HT Group

- (a) Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made in full on or before the due date.
- (b) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable): For all payments made by DD, the commission shall be borne by the consumers.
- (c) The Tariff does not include any tax or duty, etc., on electrical energy that may be payable at any time in accordance with any law/State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT GROUP

Supply Voltage 1 Ph, 230 V AC and 3 Ph, 415 V AC

Common Terms & Conditions for LT Group

- (a) For the purpose of determination of monthly fixed charge based on Connected Load, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.
- (b) For Jeevan Dhara consumers having Connected Load below 0.5 kW, Connected Load shall be rounded off to 0.5 kW.

Power factor penalty and rebate

[Applicable for LT IV – Commercial, LT V – General Purpose Supply, LT VIII – Small Industries, and HT I – Domestic, HT II – Commercial, HT III – Public Water Works, HT IV – Bulk Supply,

HT V (A) - Small Industries, HT V (B) – HT I Industry, HT V (C) – HT II Industry, HT VI – Tea, Coffee & Rubber, HT VII – Oil & Coal, HT VIII – Irrigation, and HT X – Electric Crematorium]

(a) Power Factor Rebate:

- a. In case, the average PF (leading or lagging) maintained by the consumer is more than 0.85 and up to 0.95, a rebate of 1% on the Energy Charges on unit consumption shall be applicable;
- b. For PF (leading or lagging) of 0.95 and above up to 0.97, a rebate of 2% on the Energy Charges on unit consumption shall be applicable;
- c. For PF (leading or lagging) of 0.97 and above up to Unity PF, a rebate of 3% on the Energy Charges on unit consumption shall be applicable.

(b) Power Factor Penalty:

a. In case average PF (leading or lagging) in a month for a consumer falls below 0.85, a penalty @1% for every 1% fall in PF (leading or lagging) from 0.85 to 0.60; plus 2% for every 1% fall below 0.60 shall be levied on total unit consumption. PF penalty shall be levied on those consumers where PF is recorded electronically.

LT Category-1 Jeevan Dhara

Applicability

This Tariff shall be applicable for supply of power to any premises exclusively for the purpose of own requirements with a Connected Load of not more than 0.5 kW and consumption up to 1.5 kWh/day or 45 kWh per month.

Consumption	Energy Charge	Fixed Charge
For consumption up to 45	Rs. 6.34/kWh#	Rs. 40 per connection per
kWh per month.		month

The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. The consumers of this category will continue to pay the same tariff as that presently applicable, and there is no increase in tariff, after merging the prevalent FPPPA.

If any Jeevan Dhara consumer consumes more than 45 units per month for 2 consecutive months, then such consumer should be transferred to Domestic A category and billed accordingly thereafter, irrespective of the number of units consumed

LT Category -II: Domestic A

Applicability

This tariff shall be applicable for supply of power to consumers having connected load below 5 kW for residential premises, exclusively for domestic purposes only. This shall also include supply of power to occupants of flats in multi-storied buildings, if the premises have not been classified under Domestic B or HT Domestic and receiving bulk power at single point without any individual metering arrangements for domestic purposes.

Consumption	Energy Charge	Fixed Charge
First 120 kWh per month	Rs. 6.99/kWh#	
From 121 – 240 kWh per Month	Rs. 8.29/kWh#	Rs. 70/kW/ month
Balance kWh	Rs. 9.19/kWh#	

The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. The consumers of this category will continue to pay the same tariff as that presently applicable, and there is no increase in tariff, after merging the prevalent FPPPA.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial, etc., the entire consumption shall be treated under that category and the respective tariff shall be applied for the entire consumption.

LT Category-III: Domestic-B

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load of 5 kW and above up to 30 kW exclusively for domestic purposes only. This shall also include bulk supply at single point for supply to occupants of flats in multi-storied buildings having

individual metering for domestic purposes.

	Energy Charge	Fixed Charge
For all consumption	Rs 8.74/kWh#	Rs. 70/kW/month

The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. The consumers of this category will continue to pay the same tariff as that presently applicable, and there is no increase in tariff, after merging the prevalent FPPPA.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial, etc., the entire consumption shall be treated under that category and the respective tariff shall be applied for the entire consumption.

LT Category-IV: LT Commercial

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load up to 30 kW to all establishments and institutions of commercial nature and connected with trading activities, including commercial offices, Government and public sector commercial installations, commercial houses, optical houses, shops, hotels, restaurants, bars, refreshment stalls, showcases of advertisements, theatres, cinema halls, guest houses, laundries, dry-cleaners, Railway stations, public and private bus-stands not covered under any other category of consumers, copy works, X-ray installations, private nursing homes/clinical laboratories, photographic studios, battery charging units, workshops, petrol pumps, factory & printing presses not using motive power in the manufacturing process, private educational and cultural institutions (excluding institutions covered under the LT V General Purpose Supply), lodging and boarding houses.

	Energy Charge	Fixed Charge
For all consumption	Rs. 9.19/kWh	Rs. 150/kW/month

LT Category V: LT General Purpose Supply:

Applicability

a. This tariff shall be applicable for supply of power to consumers having Connected Load up to 30 kW to all Non-commercial and Non-domestic users of electric power like Government offices, Government Educational and cultural institutions, Government hospitals, dispensaries, Charitable institutions and Trusts (public or private formed solely for charitable or religious purposes), Dharamshala, Non-commercial boarding and lodging houses and other Non-commercial institutions, Private Educational Institutions affiliated to Secondary Education Board of Assam (SEBA) / Assam Higher Secondary Education Council (AHSEC) / Central Board of Secondary Education (CBSE) / Council for the Indian School Certificate Examination (CISCE) and Universities approved by Government of Assam

	Energy Charge	Fixed Charge
For all consumption	Rs. 8.24/kWh	Rs. 165/kW/month

b. Government Primary and Secondary / Higher Secondary Schools/Charitable organizations involved in eradicating hunger specially for children

	Energy Charge	Fixed Charge
For all consumption.	Rs. 8.14/kWh	Rs. 90/kW/month

LT Category VI-Public Lighting

Applicability

This tariff is applicable to supply of power for street lighting systems in Municipalities, Town Committees and Panchayat, etc., Signal systems in roads and park lighting, in areas of Municipality/Town Committee/Panchayat, etc.

	Energy Charge	Fixed Charge
For all consumption	Rs. 8.19/kWh	Rs. 140/kW/month

N.B. In case any unmetered supply is provided in exigency, the energy shall be assessed considering 12 hours per day burning hours for the energy charge. For example, if the total

connected load of the street light service is 1 kW, energy shall be assessed as 12 units per day.

LT Category VII: Agriculture

Applicability

This tariff shall be applicable for supply of power for agriculture / irrigation purpose in the agricultural sector having Connected Load up to 30 kW.

	Energy Charge	Fixed Charge
For all consumption.	Rs. 6.34/kWh	Rs. 65/kW/month

LT Category VIII: Small Industries

Applicability

This tariff is applicable for supply of power for industrial purposes having licence from designated authority of appropriate Government and not covered under any other category, for consumers having Contract Demand/Connected Load up to 30 kW.

Category	Energy Charge	Fixed Charge
Rural Industries – for all consumption	Rs. 6.84/kWh	Rs. 70/kW/month
Urban Industries - for all consumption	Rs. 7.09/kWh	Rs. 80/kW/month

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for LT-VIII Small Industries shall be optionally applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

LT Category IX: Temporary Supply

Applicability

This Tariff will be applicable for electric supply of power at LT, which is temporary in nature for a period not exceeding one month.

Category	Charges
Domestic	Rs. 105/kW/day or Rs. 11.18/kWh whichever is higher
Non-Domestic Non- Agricultural	Rs.155/kW/day or Rs. 13.28/kWh whichever is higher
Agricultural	Rs. 65/kW/day or Rs. 6.44/kWh whichever is higher.

LT Category X- Electric Vehicles Charging Station

Applicability

This tariff is applicable to consumers who use electricity exclusively for Electric Vehicle Charging installations at LT level.

	Energy Charge	Fixed Charge
For all consumption	Rs. 9.55/kWh	-

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for LT-X Electric Vehicle Charging Stations shall be applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

Note: Consumers can charge their own Electric Vehicles at their respective premises, paying the charge applicable to the consumer category.

HT GROUP

Tariff for this group is applicable for those consumers availing power supply at 11 kV or above. Calculations shall be deemed to be in kVA for consumers under this part of the tariff schedule. However, consumers above 30 kW (or 35 kVA) Connected Load and drawing power at LT are also covered under this Group. During the period of conversion from LT supply to HT supply,

the consumer shall have to pay the necessary compensatory charges (10% and 3% of total energy consumption for LT line & DTR, respectively).

Common Terms & Conditions for HT Group

- a. For supply at voltages higher than as applicable to the consumers, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage, and a surcharge of 3% shall be applicable if consumer draws power at lower than the applicable voltage level.
- b. In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing, an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

c. Voltage Rebate

- A rebate of 3% in the Energy Charges shall be applicable for all consumers taking supply at 132 kV.
- ii. ii) A rebate of 1.5% in the Energy Charges shall be applicable for all consumers taking supply at 33 kV.
- d. **Contract Demand**: The Contract Demand shall be as per the Agreement executed between the consumer and APDCL. In case declaration/option is not made by the consumer, 100% of the Connected Load converted to kVA shall be the contracted demand.
- e. **Billable Demand**: Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 6.3.4 of AERC (Electricity Supply Code) Regulations, 2017, as amended from time to time.
- f. Overdrawal Penalty: If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.

HT Category I: HT Domestic

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load above

30 kW (or 35 kVA) to residential premises, exclusively for domestic purposes only. This shall also include supply of power to occupants of flats in multi storied buildings/ residential colony, receiving bulk power at single point with single metering for domestic purposes.

	Energy Charge	Fixed Charge
For all consumption	Rs 8.89/kWh#	Rs 70/kVA/month

The GoA has committed to continue providing the same amount of subsidy as targeted subsidy, after merger of the FPPPA with the energy charges. The consumers of this category will continue to pay the same tariff as that presently applicable, and there is no increase in tariff, after merging the prevalent FPPPA.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial, etc., the entire consumption shall be treated under that category and the respective tariff shall be applied for the entire consumption.

HT Category-II: HT Commercial

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load above 30 kW (or 35 kVA) to all establishments and institutions of commercial nature and connected with trading activities, including commercial offices, Government and public sector commercial installations, commercial houses, optical houses, shops, shopping malls, restaurants, hotels, bars, refreshment stalls, showcases of advertisements, theatres, cinema halls, guest houses, laundries, dry-cleaners, Railway stations, public and private bus-stands not covered under any other category of consumers, copy works, X-ray installations, private nursing homes/clinical laboratories, photographic studios, battery charging units, workshops, petrol pumps, factory & printing presses not using motive power in the manufacturing process, private educational and cultural institutions (excluding institutions covered under the HT IV (i) Bulk Supply – Educational Institutions), lodging and boarding houses.

	Energy Charge	Fixed Charge
For all consumption	Rs. 9.29/kWh	Rs. 210/kVA/month

HT Category - III: Public Water Works

Applicability

This tariff is applicable for public water supply maintained by Government or Government Corporations, Municipalities, Town Committees and Panchayats.

	Energy Charge	Fixed Charge
For all consumption.	Rs. 8.04/kWh	Rs. 155/kVA/month

HT Category - IV: Bulk Supply

Applicability

This tariff is applicable to Bulk consumers with a Connected Load above 30 kW (or 35 kVA) provided that the consumers not covered by any other category such as any domestic connection, industries, tea, etc., and who make their own internal distribution arrangement at their own cost and receive power at the point of supply at high or extra high voltage. This is further classified as under:

(i) Educational institution-

- **a.** Government Educational Institutions/Charitable organizations involved in eradicating hunger specially for children
- b. Private Educational Institutions affiliated to Secondary Education Board of Assam (SEBA) / Assam Higher Secondary Education Council (AHSEC) / Central Board of Secondary Education (CBSE) / Council for the Indian School Certificate Examination (CISCE) and Universities approved by Government of Assam
- (ii) Others categories not included in any of the above categories, including Government offices, Railways, Military Engineering Services, etc.

(i) Educational Institutions

	Energy Charge	Fixed Charge
For all consumption	Rs. 8.44/kWh	Rs. 150/kVA/month
(!!)		

(ii) Others

	Energy Charge	Fixed Charge
For all consumption	Rs. 9.39/kWh	Rs.210/kVA/month

HT Category V (A): HT Small Industries

Applicability

This tariff is applicable for supply of power for industrial purposes having licence from designated authority of appropriate Government and not covered under any other category, for consumers with Connected Load above 30 kW (or 35 kVA) and up to 50 kVA, irrespective of location of the industry in rural area or urban area.

	Energy Charge	Fixed Charge
For all consumption.	Rs. 7.54/kWh	Rs. 90/kVA/month

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-V (A) Industries shall be optionally applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

HT Category V (B)-HT-I Industries

Applicability

This tariff is applicable for supply of power to industrial consumers having licence from designated authority of appropriate Government and not covered under any other category, at a single point for industrial purposes with Contract Demand/Connected Load above 50 kVA and up to 150 kVA.

	Energy Charge (Base Tariff)	Fixed Charge
For all consumption	Rs. 7.94/kWh	Rs. 200/kVA/month

TOD tariff

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-I industries shall be applicable:

Time Slot	Energy charge (Rs. /kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

HT Category V (C): HT-II Industries

Applicability

This tariff is applicable for supply of power at a single point for industrial purposes having licence from designated authority of appropriate Government and not covered under any other category, for Contract Demand/Connected Load above 150 kVA.

(a) Tariff

A consumer may opt for any one of the following Options depending on his requirements by prior intimation to concerned billing unit of Discom. A consumer may change his Option only after six months of availing that particular Option.

Option -1

	Energy Cha (Base Tariff)	arge	Fixed Charge
For all consumption	Rs. 8.34/kWh		Rs. 280/kVA/month

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-II Industries shall be applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

Option -2

	Energy Charge	Fixed Charge
For all consumption	Rs. 7.94/kWh	Rs. 360/kVA/month

No TOD Tariff will be applicable for consumers who opt for Option-2.

Note: 20% rebate on total energy charges shall be applicable for Oxygen manufacturing plants under both Option-1 and Option-2.

HT Category VI-Tea, Coffee and Rubber

Applicability

This tariff is applicable for tea, coffee and rubber plantation/production by utilisation of

electrical power in factory, irrigation, lighting, etc., in the Estate.

	Energy Charge (Base Tariff)	Fixed Charge
For all consumption.	Rs. 8.29/kWh	Rs. 310/kVA/month

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-VI Tea, Coffee & Rubber shall be applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

HT Category VII: Oil and Coal

Applicability

This tariff shall be applicable for supply of power to consumers at a single point for installations of Oil and Coal Sector.

	Energy Charge (Base Tariff)	Fixed Charge
For all consumption	Rs 9.34/kWh	Rs. 320/kVA/month

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-VII Oil and Coal shall be applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

HT Category VIII: HT Irrigation

Applicability

This tariff shall be applicable for electricity supply for agriculture / irrigation purpose in the agricultural sector for pump set above 30 kW (or 35 kVA) and for whom power has been

supplied at 11 kV or above.

	Energy Charge	Fixed Charge
For all consumption.	Rs. 7.84/kWh	Rs. 85/kVA/month

HT Category IX: Temporary Supply

Applicability

This Tariff will be applicable for electric supply of power at HT which is temporary in nature for a period not exceeding one month.

Charges				
Rs. 190/kVA/day or	Rs.	10.94/kWh,	whichever	is
higher				

HT Category - X: Electric Crematorium

Applicability

This tariff is applicable for electricity used in Electric Crematoriums for all purposes, including lighting.

	Energy Charge	Fixed Charge
For all consumption	Rs. 6.14/kWh	Rs. 190/kVA/month

HT Category – XI: Railway Traction

Applicability

This tariff is applicable to the Railways for traction loads.

	Energy Charge	Fixed Charge
For all consumption	Rs. 8.04/kWh	Rs. 320/kVA/month

HT Category - XII: Electric Vehicles Charging Stations

Applicability

This tariff is applicable to consumers who use electricity exclusively for Electric Vehicle Charging installations at HT level.

	Energy Charge	Fixed Charge
For all consumption.	Rs. 8.60/kWh	-

In addition to the above Base Tariff, the following Time of Day (TOD) tariff for HT-XII Electric Vehicle Charging Stations shall be applicable:

Time Slot	Energy charge (Rs./kWh)
0600 hrs to 1700 hrs (normal)	0.00
1700-2200 hrs (peak)	(+) 2.00
2200-0600 hrs (night off-peak)	(-) 2.00

Note: Consumers can charge their own Electric Vehicles at their respective premises, paying the charge applicable to the consumer category.

Green Energy Tariff

For LT and HT consumers availing additional Green Energy from Distribution Licensee:

Green Energy Tariff: Rs. 1.83/kWh

The Green Energy Tariff shall be over and above the existing fixed and energy charges applicable for different categories of consumers.

General Conditions

- a) This Tariff Order shall continue to be applicable until it is replaced/modified by a subsequent Order of the Commission.
- b) This Tariff Order is signed by the Assam Electricity Regulatory Commission on June 27, 2024.
- c) These Tariffs take effect from July 1, 2024.

Sd/-	Sd/-	Sd/-
(A. Bhattacharyya)	(S.N. Kalita)	(K.S. Krishna)
Member, AERC	Member, AERC	Chairperson, AERC

11 Annexure-1

Minutes of the 33rd Meeting of the State Advisory Committee

Venue: AERC Conference Hall

Day/Dated: Wednesday, 10th January 2024

List of members/special invitees: At Annexure-1 (Enclosed)

The 33rd Meeting of the State Advisory Committee (SAC) was chaired by the Hon'ble Chairperson, AERC, Kumar Sanjay Krishna, IAS, (Retd.).

At the onset, Hon'ble Chairperson, AERC welcomed all members and invitees. In the welcome address, the Hon'ble Chairperson, AERC highlighted that the fuel and power purchase cost accounts for more than 90% of the Aggregate Revenue Requirement (ARR) of APDCL. Therefore, this cost needs to be contained in order to bring down the power tariff. More than 70% of the installed generating capacity of APGCL is natural gas based. In the tariff Order for this ongoing year i.e. FY 2023-24, the gas price was fixed as US \$ 2.90 /MMBTU keeping in mind the declining trend of international gas prices during January-March, 2023. However, gas price was fixed at US \$6.5 / MMBTU since 8th April, 2023 even for the gas produced from ONGC/OIL fields. With increase in gas price, the generation cost of APGCL and the power purchase cost of APDCL has increased. Although, most of the factors affecting power purchase cost is uncontrollable, still the Company must focus on reducing the cost to the extent possible.

Hon'ble Chairperson, AERC also emphasized on the matter that in the recent tariff petitions, APDCL merged the ongoing FPPPA and have requested the Commission not to increase the tariff any further. However, the Company has shown a deficit of over Rs 1400 Crore in the true up which they have requested the Commission to allow along with carrying cost which amounts to Rs 1766 Crore. Shri Krishna informed that APDCL has requested that this amount may be allowed to be recovered through a suitable mechanism without creating any regulatory asset.

Concluding his address, the Hon'ble Chairperson called upon the SAC members to actively participate and to offer their suggestions on the adjustment of the true -up gap of Rs. 1766 Crore.

The important points raised by the members during the discussions that followed are briefly recorded below.

Brief presentation on Action Taken Report of AEGCL, APGCL and APDCL

A brief presentation by Mr. Jayjeet Bezbaruah, Deputy Director (GEN PPA, P&P) on action taken report of APDCL and APGCL which was noted by the members.

Agenda Item No 2 & 3: Brief presentation by APDCL on the Power position of the State by MD, APDCL and Discussions

Shri Rakesh Kumar, MD, APDCL appraised the SAC on the power scenario of the state. MD, APDCL informed that since reform the peak demand has reached 2540 MW, maximum demand met is 2413 (in the month of September, 2023) and average daily consumption is 36.95 MU. MD, APDCL also informed the SAC on the Power Purchase Planning of APDCL which includes Long Term Planning through Power Purchase Agreements, Day Ahead Planning, and Real Time Balancing through Power Exchange. Shri Kumar further informed the SAC of the present steps taken by APDCL to meet the demand, which include several short, medium and long duration contracts in MoP's DEEP Portal as well as in IEX. The members were also informed regarding future tie ups with upcoming generators such as PTC (Nikacchu, Bhutan), NLC (Ghatampur, UP), APGCL (Lower Kopili), NHPC(Suwansiri), SECI, NTPC (Talcher) and APDCL (Solar). In matter of RPO Compliance, MD, APDCL stated that there has been a deficit in RPO compliance especially in terms of Wind RPO due to non-availability of wind power in the region.

SAC Members mentioned that a disparity has been observed in terms of Energy sales and purchase from approved (as seen from the True-up of 2022-23).

Further, among various sources for power purchase, the variation in %age price hike is diverse with significant hikes for APGCL, AGBPP, etc. whereas reduction for OTPC. Further, even among various Coal-based or Hydel sources, the semblance is not found in the %age price hikes. Hence, SAC members recommended that the break up and analysis of Energy cost may be done by APDCL. Further, it is seen that optimum utilization of the available generation capacity has not been done for which AI based technological solutions may be adopted. SAC Members further observed that power has been purchased from the exchange at high cost during peak, which has been exported at lower cost, resulting in losses. Thus, SAC members recommended that proper Power Purchase Planning and practical Power

procurement should be done, which necessitates the monitoring with all the 3 companies, viz., APDCL, AEGCL, and APGCL.

Further, no semblance between unit prices of fuel and price hikes has also not been observed for the generating plants under APGCL, which may be due to the impact of heat rate in the normative calculation. Hence, for maximum clarity, the SAC members recommended that the actual values should also be incorporated in the petition along with normative values so that a comparative statement can be obtained for the actual values achieved by the utility against the values approved by the Commission. SAC Members also recommended that the same may be incorporated in the petitions of all the utilities. The deviations in achieving targets may be analyzed using advanced technological tools such as AI, specialized software available.

SAC Members also recommended that since a major portion of power procurement is from natural gas-based generators, to reduce the impact of yearly hikes in gas prices, diversion of portfolio for natural gas may be explored. Also, APDCL may carry out a comparative study of their AT&C losses against other distribution companies that have minimal losses. MD, APDCL clarified that a direct comparison of APDCL with other utilities like TATA Power, Adani Power, etc. cannot be drawn as the commercial and industrial load is much lower in Assam resulting in a low HT: LT consumer mix ratio. Hence, the AT&C losses are much higher. Shri S. Sharma, SAC Member mentioned that increasing the LT connection upper limit from 25kVA to 30kVA has further added to the ratio being even higher and APDCL may take it up with the Hon'ble Commission. SAC members also recommended that a long-term (preferably five years) loss reduction plan be chalked out and presented to the SAC.

SAC Members further mentioned that the wind RPO trajectory is quite high which is not practical for Assam and requested AERC to consider the possibility of compensating the wind RPO with other RE sources. The Hon'ble Member (Technical), AERC clarified the RPO is in line with the MoP Rules.

Agenda Item No 4 & 5: Presentations on the Tariff Petitions by the utilities & Discussions

Presentation by APDCL

MD, APDCL informed that in True Up for FY 2022-23, the net revenue gap is Rs. 1904.17 Cr which has been brought about due to an exorbitant hike in Natural Gas Price (Effective price of \$7.34/MMBTU against earlier approved price of \$2.90/MMBTU) and the consistently

high price of power in the market resulting in a significant increase in power purchase cost for APDCL. MD, APDCL mentioned that 24% of the total power procured by APDCL is from gas-based stations, which explains the impact of the rise in gas prices on the power purchase cost for APDCL. The distribution loss is 16.22% against the approved 15%. Also, APDCL received a government subsidy of around Rs 346.40 Cr.

MD, APDCL further informed that in APR for FY 2023-24, the distribution loss of 15.80% against the approved loss of 14.75%. There is also a massive increase in Power cost of Rs 2520.31 Cr mainly due to persistently high natural gas prices and high market prices. MD, APDCL also mentioned that the compliance of RPO obligations also adds up to the increase in power purchase cost. MD, APDCL informed that the net gap in APR is around Rs 1170.19 Cr.

MD, APDCL also informed that in ARR the cumulative revenue requirement for FY 2023-24 is Rs 13,191.66 Cr and the ACoS to recover the entire cumulative amount shall be Rs. 12.35 per kWh for FY 2024-25. MD, APDCL submitted that the effective ABR prevailing at present over the approved level of ACoS is Rs. 9.31 per unit (without Government subsidy) and recovery of the entire amount will lead to increase of existing retail tariff by 33% on the prevailing rate on average. Hence, MD, APDCL proposed to continue the prevailing tariff structure (with applicable FPPPA) and requested the commission to allow a suitable mechanism to recover the dues pertaining to true up petition with carrying cost without creating any regulatory assets.

SAC Members mentioned that for reduction of losses voltage level should be ideally above 33kV. The members enquired whether any study has been carried out in co-ordination with AEGCL for reducing technical shortcomings and optimized use of Substations and recommended that advanced technological tools may be used for the purpose.

SAC Members also mentioned that a huge impact has been observed in the tariff in terms of RoE, where the percentage claimed is 14% in case of APDCL and 15.5% in case of APGCL and AEGCL which is much higher than the GoI benchmark of 10%. SAC Members requested the Commission to look into the matter. Also, a significant impact in terms of RoE has been observed due to conversion of grants to equity for APDCL. Same has been observed in case of AEGCL and APGCL as well. SAC Members noted that the burden of this conversion is being passed on to the consumers which defies the very purpose why funds were earlier given as grants to reduce cost and provide benefit to the consumers by way of lower tariff. Hence, SAC members suggested that the matter may be taken up with the State

Government. The Hon'ble Chairperson assured that the matter shall be taken up with the Government and requested the Additional Secretary, DoP, GoA to make a note of the same.

SAC Members further enquired whether there is a shortage of manpower in APDCL at present, especially lineman, meter readers, etc. and the same may be taken up with the GoA. MD, APDCL clarified that APDCL is currently operational at optimum manpower level including outsourced manpower. New recruitments are being done for the new substations coming up under various schemes. SAC Members recommended that pragmatic manpower assessment may be done and training programs, etc. should be implemented right from the circle level. The Hon'ble Member (Technical), AERC stated that the implementation of ERP has resulted in a gradual reduction in manpower cost, which is in line with the directive of the Commission, and the same was confirmed by MD, APDCL.

SAC Members enquired about the parameter "Revenue with Approved tariff including targeted subsidy" in the petition of APDCL. APDCL clarified that this revenue is including the levy of FPPPA which is a major component. SAC Members also enquired about the parameter "Other Income" in the petition of APDCL. MD, APDCL clarified that it pertains to the past bills/receivables by APDCL, which are gradually being collected through the Smart Prepaid Meters and also on account of seasonal export at improved market rates. SAC Members also enquired whether the Smart Prepaid Meters can be used for Rooftop Solar Plants to which MD, APDCL confirmed in the affirmative.

SAC Members also requested not to increase FPPPA significantly so as to provide reasonable tariff in order to encourage more industrial establishments in Assam and improve the HT/LT ratio.

SAC Members enquired about the proposed timeline from the upcoming Neyvelli generating plant which is supposed to supply power at around Rs. 4.52/unit. MD, APDCL informed that the 1st unit is expected around March, 2024 and the 2nd unit is expected after 6 months. SAC Members further enquired if any steps had been taken for requesting CERC/Gol for reduction in the cost of power from BTPS as compared to other coal-based plants. APDCL informed that proposal was placed under NLCPR funding, but the same was not approved by Ministry of Finance, Gol. However, alternate arrangement with switchover of coal block, spread out of depreciation, etc. has resulted in reduction of cost of power from the station.

SAC Members further recommended APDCL to prepare and present the roadmap of the next 5 years and analysis of consumer service rating, billing efficiency, consumer

satisfaction, performance-based assessment of APDCL manpower etc. in the next SAC meeting. The Electricity Ombudsman enquired about the reasons for huge numbers of billing arrears. MD, APDCL clarified that the issues of billing arrears are being taken care of with smart meters and proper monitoring. MD, APDCL informed that APDCL ranks 4th on DISCOM performance and as per consumer service rating APDCL has improved its rating from category C last year to category B+ this year. With the installation of smart meters, AT&C losses have reduced in such areas to a minimum of ~7%, billing efficiency is almost 92% and collection efficiency is 100%. MD, APDCL further informed that a detailed analysis shall be presented in the next SAC meeting.

Presentation by AEGCL

A PowerPoint presentation was made by Shri Debajyoti Das, MD, AEGCL on the salient features of Tariff petition submitted by AEGCL and SLDC. Important points of the discussion are noted below

In True-up for FY 2022-23, AEGCL has shown ARR of Rs.604.59 Crore and a gap of Rs. 144.14 Crore. For SLDC, in True-Up, ARR of Rs. 7.84 Crore and gap of Rs. 1.34 Crore is shown.

In APR for FY 2023-24, AEGCL has shown ARR of Rs.662.91 Crore and a marginal gap of Rs. 4.03 Crore. For SLDC, in APR for FY 2023-24, ARR of Rs. 10.39 Crore and gap of Rs. 0.29 Crore is shown.

In ARR for FY 2024-25, AEGCL has shown ARR of Rs.719.11 Crore and a gap of Rs 190.94 Crore. SLDC has shown ARR of Rs. 15.25 Crore with a gap of Rs. 7.90 Crore. SLDC has also requested for a separate revenue item for Back-up SLDC of Rs. 3.00 Crore.

AEGCL has submitted a transmission loss of 3.31% for True-up against the approved loss of 3.27%. AEGCL has projected a loss of 3.28% in ARR for FY 2024-25. AEGCL has a projected transmission charge of Rs.0.71 Rs./kwh and SLDC charge of Rs. 174.27/MW/Day for FY 2024-25.

SAC Members observed that as stated in earlier meetings, a load centre was proposed in Rangia by installing 200 MVA transformers at Rangia GSS, AEGCL. SAC members enquired whether a proper load flow study has been done in the matter, what is the current status of action taken by AEGCL and whether any co-ordination meeting has been conducted with APDCL for planning evacuation of power. MD, AEGCL informed the SAC that the LOA has already been issued for procurement of one no. of 200 MVA transformer at Rangia GSS and

the same is expected to arrive at site around April, 2024. Shri Das also stated the load flow study has already been carried out. MD, AEGCL further stated that though several discussions have taken place at field level with APDCL officials, a co-ordination meeting for the evacuation plan has not yet been done. SAC Members suggested that regular co-ordination meetings may be convened between AEGCL, APDCL and APGCL for better functioning of all the three utilities.

MD, AEGCL also informed with the load flow study software PSSE is currently in use in AEGCL which enables carrying out the load flow studies. The SAC members enquired whether study has been carried out for the new proposed 400kV Substation coming up in Rangia. Hon'ble Member (Technical), AERC clarified that proper load flow studies for all upcoming projects have been carried out which have been vetted by CEA as well as Gol, only after which approval as well as funding for the projects have been received. Hon'ble Member also directed AEGCL to develop a strong commercial team for proper studies and adequate planning. Hon'ble Member also raised concern regarding the PGCIL feeder of 500m evacuating supply from NTPC, Bongaigaon to AEGCL, for which huge amount of transmission charges are being incurred. The matter has come to light in several earlier instances and recommended early action on part of AEGCL to address the issue.

SAC Members further highlighted that the Transmission Loss is still on the higher side and efforts should be made with proper analysis to bring down the loss and resolve lower voltage issues with measures such as parallel operation of transformers, operationalization of Capacitor Banks, etc. SAC Members suggested that the action plan for addressing loss minimization and resolution of lower voltage issues at 33kV level may be presented by AEGCL. SAC Members also recommended to carry out analysis of actual against the approved in addition to the normative, as stated earlier. SAC Members also pointed out that ERS (Emergency Restoration System) should be established, however, the same was not procured by AEGCL in the year 2022-23 even after approval of the Commission. It was suggested that efficient manpower planning needs to be carried out for AEGCL also.

Further, SAC Members enquired whether the BST (Bulk Supply Tariff) is sufficient to pay the pensioners. AEGCL clarified that there remains a deficit which is provisioned by the GoA in the annual budget for AEGCL. SAC Members further recommended that AEGCL should show proper utilization of the pension corpus fund (if created), its utilization and how it plans to mitigate deficits in the next SAC meeting.

Presentation by APGCL

A Power Point Presentation by Shri. Bibhu Bhuyan, MD, APGCL on approval of True up for FY 2022-23, Revised Capex Plan for FY 2023-24 to FY 2024-25, Petition for Annual Performance Review for FY 2023-24 and Revised ARR for FY 2024-25.

MD, APGCL brought to notice of SAC that APGCL has been rated in A++ category against the earlier A rating. Shri Bhuyan reiterated that the generating plants of APGCL are mostly gas based and due to the exorbitant hike in natural gas prices the cost of power in each generating station of APGCL increased significantly and this has an impact in consumer retail Tariff. MD, APGCL also appraised the Committee regarding a proposal for a Pump Storage Hydro Plant. He further stated that the initial study has been taken up and 3 nos. of sites have been identified in Karbi Anglong, of which one site shall be finalized after completion of the studies and in-principle approval has been obtained from the State Government. Shri Bhuyan also mentioned that GT unit 3 (15MW) of NTPS is proposed to be operated for the purpose of Merchant Sale of Power in FY 2024-25.

In the True Up for the FY 2022-23, APDCL has shown a Net Revenue of Rs. 1385.55 Cr and actual revenue gap of Rs. 176.94 Cr. The Gross generation is 2156.79 MU. The presentation also depicted the rising trend in gas price which has increased almost 380% from September, 2021 to September, 2023.

During the presentation, SAC Members expressed concern that in the case of Auxiliary consumption in the True Up especially for LTPS a significant rise has been observed against the approved figure. SAC Members requested APGCL to carry out an analysis in this matter. MD, APGCL clarified that analysis has been carried out and it has been observed that the scope of reduction of the auxiliary consumption is low as the gas pressure itself is very low. The supply from AGCL has not improved even after implanting gas booster facility. SAC Members requested the Commission to look into the matter.

SAC Members further expressed concern that a disparity in fuel price hikes has been observed throughout the various generating plants of APGCL in several parameters. To this, the MD, APGCL clarified that this is observed mainly due to the different sources of fuel supply. SAC Members further stated that the petition depicts only the normative values against the approved values for the True Up. However, the SAC members reiterated that the actual values should also be incorporated in the petition along with the normative values.

Further, the matter for conversion of grant to equity which has resulted in increase in equity in several plants of APGCL, should be taken up with the State Government.

SAC Members also recommended that in the context of high gas price, the state government may be approached for considering a reduction in the VAT to 5%, which is currently being charged at 14.5%. The reduction in 9.5%, if approved, will result in significant reduction in the gas price and hence on the overall tariff. The Hon'ble Chairperson, AERC recommended that the Additional Secretary, DoP, Assam may take up the matter with the State Government.

SAC Members also enquired about the proposed timeline for the revival of LTPS. MD, APGCL informed the SAC that work is in progress and the plant is likely to start generating power from the mid of 2025.

The Hon'ble Chairperson thanked the members for their participation and insights in the meeting and directed the utilities, APDCL, AEGCL and APGCL to make presentations in the next SAC meeting on the points requested by the members during the course of the discussions. Hon'ble Chairperson once again requested the SAC members to offer their ideas & suggestions for adjustment of the gap of Rs 1766 Cr as per APDCL petitions, even at a later date.

Sd/-

Secretary,

Assam Electricity Regulatory Commission

Annexure-I

List of members, special invitees, and officers present in the meeting of the 33rd SAC

Members

- 1. Kumar Sanjay Krishna, IAS (Retd), Chairperson, AERC
- 2. Shri Satyendra Nath Kalita, Member (Technical), AERC
- 3. Shri Alokeswar Bhattacharyya, Member (Law), AERC
- 4. Shri Narsing Pawar, Secretary (Finance)
- 5. Shri S. M. Z. Chistie, Additional Secretary Power (E)
- 6. Shri Nikunja Borthakur, Sr. CGM NRL
- 7. Shri Subodh Sharma, Consumer Activist
- 8. Shri Arin Bordoloi, Ex GM NTPC
- 9. Shri Abhijit Barooah, Ex-Chairman, CII Assam Branch
- 10. Shri Sanjay Bagchi, ABITA
- 11. Shri Deepakananda Bharali, Ex. GM IOC
- 12. Dr. Jaideep Baruah, Director, AEDA
- 13. Shri Kumud Medhi, Secretary, NESSIA
- 14. Shri Dilip. Kr. Sarma, Ex. Executive Director, PGCIL
- 15. Shri Sauresh Agarwala, Power Committee, FINER

SPECIAL INVITEES

- 1. Shri Maninder Singh, IAS(Retd.), Chairman, AEGCL
- 2. Shri Rakesh Kumar, IAS, Managing Director, APDCL
- 3. Shri Bibhu Bhuyan, Managing Director, APGCL
- 4. Shri Debajyoti Das, Managing Director, AEGCL
- 5. Shri J. N. Baruah, AASSIA
- 6. Shri Badan D. Barman, G.S. AASSIA

OFFICERS FROM APDCL, AEGCL & APGCL

- 1. Shri B. Basumatary, CGM, AEGCL
- 2. Shri Deepanjal Das, GM (PP&EM), APDCL
- 3. Shri Chinmoy kr. Bordoloi, GM, (TRC), APDCL
- 4. Shri F Hashmi DGM, AEGCL
- 5. Shri Pinkey Deb, DGM (AUDIT), APGCL

- 6. Shri Aklantika Saikia, DGM APGCL
- 7. Shri Debasish Paul, AGM (F&A), AEGCL
- 8. Shri Dipmoni Nath, AM, AEGCL
- 9. Shri T.G. Basumatary, Special Executive Officer, APGCL
- 10. Shri Bidyut Das, Consultant

OFFICERS FROM AERC

- 1. Shri Manoj Kumar Deka, IAS (Retd). Secretary
- 2. Smt. Panchamrita Sharma, Joint Director (Tariff & RA)
- 3. Shri Nipen Deka, Joint Director (Engg)
- 4. Shri Jayjeet Bezbaruah, Deputy Director (GEN PPA, P&P)
- 5. Smt. Jharna Devi, Deputy Director (Engg)
- 6. Shri Kishore Rajkumar, Assistant Director (IT& RIM)
- 7. Smt. Punam Rabha, Assistant Director (Tariff)
- 8. Shri A.N Dev Choudhury, Consultant (Tariff)