## MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5<sup>th</sup> Floor, Metro Plaza, Bittan Market, Bhopal - 462 016



# **Determination of True-up of Aggregate Revenue Requirement (ARR) for FY 2014-15 to FY 2017-18**

Petition Nos. 55/2018, 30/2019, 37/2019, and 41/2019

#### PRESENT:

Mukul Dhariwal, Member Shashi Bhushan Pathak, Member

#### IN THE MATTER OF:

Determination of True-up of Aggregate Revenue Requirement (ARR) for FY 2014-15 to FY 2017-18 based on the True-up Petitions filed by the Distribution Licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (East DISCOM), Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (West DISCOM), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central DISCOM), and M.P. Power Management Company Limited (MPPMCL).

# **Table of Contents**

<b>A1:</b>	ORDER	13
A2:	TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2014-15	28
Analys	sis of Expenses during the period from April 2014 to March 2015:28	}
	energy28	
	Purchase Quantum and Cost	
Opera	tion and Maintenance (O&M) Expenses47	1
	st on Project Loans51	
Interes	st on Working capital54	ļ.
Interes	st on Consumer Security Deposits56	)
Return	on Equity57	′
Depre	ciation 59	)
Other	items of ARR61	_
Bad ar	nd doubtful debts61	_
Any of	ther expense	,
Reven	ue from Sale of Power64	ļ
Sale of	<sup>2</sup> Power 64	ļ
Non-T	ariff Income65	;
Subsid	ly from State Government65	;
	Income 66	
Reven	ue Surplus / (Deficit) admitted68	;
A3:	TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2015-16	
	sis of Expenses during the period from April 2015 to March 201670	
	Purchase Quantum and Cost	
	tion and Maintenance (O&M) Expenses89 st on Project Loans93	
	st on Working capital96	
	st on Consumer Security Deposits99	
	on Equity	
_	ciation	
	nd doubtful debtsPetitioners' Submission: 103	
•	ther expense	
	ue from Sale of Power	
	Power	
	ariff Income	
	ly from State Government	
	Income	
Keven	ue Surplus / (Deficit) admitted110	)

A4: TRUE UP OF AGGREGATE REVENUE REQUIRE	MENT OF FY 2016-17112
Analysis of Expenses during the period from April 2016 to M	March 2017 112
Sale of energy	
Power Purchase Quantum and Cost	115
Operation and Maintenance (O&M) Expenses	131
Interest on Project Loans	
Interest on Working capital	
Interest on Consumer Security Deposits	
Return on Equity	
Depreciation	
Other items of ARR	
Bad and doubtful debts	
Any other expense	
Revenue from Sale of Power	
Non-tariff income	
Subsidy from State Government	
Other Income	
Saving from Operational Efficiency Measures	
Revenue Surplus / (Deficit) admitted	
Analysis of Expenses during from the period April 2017 to M	March 2018 155
Sale of energy	
Power Purchase Quantum and Cost	
Operation and Maintenance (O&M) Expenses	
Interest on Project Loans	
Interest on Working capital	
Interest on Consumer Security Deposits	
Return on Equity	
Depreciation	
Other items of ARR	190
Bad and doubtful debts	190
Any other expense	
Revenue from Sale of Power	
Non-tariff income	
Subsidy from State Government	
Other Income	
Revenue Surplus / (Deficit) admitted	
A6: PUBLIC OBJECTIONS AND COMMENTS ON LIC	ENSEES' PETITION FOR FY
2014-15 TO 2017-18	
ZVI IV IV ZVI/ IV	170
ANNEXURE-1	216

# **List of Tables**

Table 1: List of Newspapers- Public Notice	.14
Table 2 : Summary of the True-up Petition of DISCOMs for the period from April 2014 to	
March 2015 – as submitted by the Petitioners (Rs. Crore)	.15
Table 3: Summary of the True-up Petition of DISCOMs for the period from April 2015 to	
March 2016 – as submitted by the Petitioners (Rs. Crore)	.16
Table 4: Summary of the True-up Petition of DISCOMs for the period from April 2016 to	
March 2017 – as submitted by the Petitioners (Rs. Crore)	.16
Table 5: Summary of the True-up Petition of DISCOMs for the period from April 2017 to	
March 2018 – as submitted by the Petitioners (Rs. Crore)	.17
Table 6: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2014-15 (Rs. Crore)	
Table 7: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2015-16 (Rs. Crore)	
Table 8: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2016-17 (Rs. Crore)	
Table 9: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2017-18 (Rs. Crore)	
Table 10: Cumulative Revenue Gap / (Surplus) admitted by the Commission for FY 2014-15 to	
FY 2017-18 (Rs. Crore)	
Table 11: Debt take over by GoMP as per UDAY MoU (Rs. Crore)*	.23
Table 12: Present status of Debt taken over by GoMP * (Rs. Crore)	
Table 13: Loss to be taken over by GoMP*	
Table 14: Present Status of Loss take over by GoMP* (Rs Crore)	
Table 15: Revenue Gap admitted by the Commission for period prior to signing of UDAY MoU	J
Table 16: Net Revenue Gap admitted on True up of FY 2014-15 to FY 2017-18 (Rs. Crore)	.25
Table 17: Sales admitted in Tariff Order dated 24th May, 2014 (MU)	
Table 18: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition f	
FY 2014-15 (MU)	
	.20
Table 20: Summary of sale to the unmetered domestic category booked in excess of the specific	
benchmark (MU):	ea .29
Table 21: Summary of sale to the unmetered agriculture category booked in excess of the specified benchmark (MU):	.30
Table 22: Energy sale as per Tariff Order for FY 2014-15, as per filing of the DISCOMs and	as
admitted by the Commission (MU)	
Table 23: Claimed Power Purchase Cost for FY 2014-15 (Rs. Crore)	.33
Table 24: Power purchase quantum and cost admitted in Tariff Order and as per the Audited	
Accounts	
Table 25: Energy Balance as filed by DISCOMs for FY 2014-15	.34
Table 26: Distribution loss trajectory for FY 2014-15 (%)	.35
Table 27: Analysis of Power purchase quantum (MU)	.36
Table 28: Comparision of power purchase cost as submitted by the Petitioners (Rs. Crore)	
Table 29: Reconcilation of power purchase cost as per DISCOMs audited account and	
MPPMCL accounts submitted by the Petitioners (Rs. Crore)	.37
Table 30: Details of Other Cost submitted by the Petitioner for FY 2014-15 (Rs. Crore)	.38
Table 31: Other expenses in Power Purchase Cost not considered by the Commission for FY	
2014-15 (Rs. Crore)	.39

Table 32: MPPMCL Cost admitted for FY 2014-15 (Rs. Crore)	40
Table 33: Other income of MPPMCL admitted for FY 2014-15	41
Table 34: UI / DSM and Reactive Energy Charges Admitted for FY 2014-15	42
Table 35: Fixed Cost admitted by the Commission for FY 2014-15 (Rs. Crore)	44
Table 36: Determination of Power Purchase Cost (Rs. Crore)	
Table 37: Transmission Charges including SLDC charges for FY 2014-15 (Rs. Crore)	
Table 38: Transmission Charges admitted by the Commission for FY 2014-15 (Rs. Crore)	
Table 39: O&M Expenses admitted in Tariff Order of FY 2014-15 (Rs. Crore)	
Table 40: O&M Expenses claimed by Petitioners for FY 2014-15 (Rs. Crore)	
Table 41: Normative and actual Employee Expenses computed for FY 2014-15 (Rs. Crore)	
Table 42: Normative and Actual A&G Expenses computed for FY 2014-15 (Rs. Crore)	
Table 43: Normative and Actual R&M Expenses computed for FY 2014-15 (Rs. Crore)	
Table 44: O&M expenses admitted for DISCOM for FY 2014-15 (Rs. Crore.)	
Table 45: Interest on Project Loans admitted by the Commission for FY 2014-15 (Rs. Crore).	
Table 46: Interest on Working Capital admitted by the Commission for FY 2014-15 (in Rs.	
Crore)	55
Table 47: Interest on Consumer Security Deposit admitted for FY 2014-15 (Rs. Crore)	57
Table 48: Return on Equity admitted for FY 2014-15 (Amount in Rs. Crore)	
Table 49: Depreciation admitted by the Commission for FY 2014-15 (Rs. Crore)	
Table 50: Bad Debts claimed by DISCOMs (Rs. Crore)	61
Table 51: Bad Debts admitted by the Commission for FY 2014-15 (Rs. Crore)	62
Table 52: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit)	
admitted by the Commission (Rs. Crore)	63
Table 53: Revenue from sale of power excluding subsidy and other income as per Audited	
Accounts (Rs. Crore)	
Table 54: Break up of Non-Tariff Income (Rs. Crore)	
Table 55: Subsidy considered as per Audited Accounts (Rs. Crore)	
Table 56: Other Income as submitted by the Petitioners (Rs. Crore)	
Table 57: Other Income as admitted by Commission (Rs. Crore)	
Table 58: Total Revenue, Non-Tariff Income and Subsidy admitted (Rs. Crore)	
Table 59: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2014-15 (Rs. Crore)	
Table 60 : Sales admitted in Tariff Order dated 17th April, 2015 (MU)	
Table 61: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition 3	for
FY 2015-16 (MU)	70
Table 62: Basis of billing to un-metered consumers	
Table 63: Summary of sale to the unmetered domestic category booked in excess of the specifi	
benchmark (MU):	71
Table 64: Summary of sale to the unmetered agriculture category booked in excess of the	
specified benchmark (MU)	
Table 65: Energy sale as per Tariff Order for FY 2015-16, as per filing of the DISCOMs and	
admitted by the Commission (MU)	
Table 66: Claimed Power Purchase Cost for FY 2015-16 (Rs. Crore)	
Table 67: Power purchase quantum and cost admitted in Tariff Order and as per the Audited	
Accounts	
Table 68: Energy Balance as filed by DISCOMs for FY 2015-16	
Table 69: Distribution loss trajectory for FY 2015-16 (%)	
Table 70: Analysis of Power purchase quantum	78

Table 71: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore)	78
Table 72: Reconciliation of Power purchase cost as per DISCOMs audited account and	
MPPMCL accounts submitted by the Petitioners (Rs. Crore)	78
Table 73: Details of Other Cost submitted by the Petitioner for FY 2015-16 (Rs. Crore)	80
Table 74: Other expenses in Power Purchase Cost not considered by the Commission for FY	
2015-16 (Rs. Crore)	81
Table 75: MPPMCL Cost admitted for FY 2015-16 (Rs. Crore)	
Table 76: Other income of MPPMCL admitted for FY 2015-16	
Table 77: UI/DSM Charges admitted for FY 2015-16	
Table 78: Analysis of Supplementary Power Purchase Cost (Rs. Crore)	
Table 79: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)	
Table 80: Fixed Cost Admitted by the Commission (Rs. Crore)	
Table 81: Admitted Power Purchase Cost	
Table 82: Transmission Charges including SLDC charges for FY 2015-16 (Rs. Crore)	
Table 83: Transmission Charges admitted by the Commission for FY 2015-16 (Rs. Crore)	
Table 84: O&M Expenses admitted in Tariff Order of FY 2015-16 (Rs. Crore)	
Table 85: O&M Expenses claimed by Petitioners for FY 2015-16 (Rs. Crore)	
Table 86: Normative and actual Employee Expenses computed for FY 2015-16 (Rs. Crore)	
Table 87: Normative and Actual A&G Expenses computed for FY 2015-16 (Rs. Crore)	
Table 88: Normative and Actuals R&M Expenses computed for FY 2015-16 (Rs. Crore)	
Table 89: O&M expenses of DISCOM admitted for FY 2015-16 (Rs. Crore.)	
Table 90: Interest on Project Loans admitted by the Commission for FY 2015-16(Rs. Crore.	
Table 91: Interest on Working Capital admitted by the Commission for FY 2015-16 (in Rs.	
<i>Crore</i> )	98
Table 92: Interest on Consumer Security Deposit admitted for FY 2015-16 (Rs. Crore)	.100
Table 93: Return on Equity admitted for FY 2015-16 (Rs. Crore)	.100
Table 94: Depreciation admitted by the Commission for FY 2015-16 (Rs. Crore)	.103
Table 95: Bad Debts claimed by DISCOMs (Rs. Crore)	
Table 96: Bad Debt admitted by the Commission for FY 2015-16 (Rs. Crore)	.105
Table 97: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit	
admitted by the Commission (Rs. Crore)	.106
Table 98: Revenue from sale of power excluding subsidy and other income as per Audited	
Accounts (Rs. Crore)	.107
Table 99: Break up of Non-Tariff Income (Rs. Crore)	.107
Table 100: Subsidy considered as per Audited Accounts (Rs. Crore)	.108
Table 101: Other Income as submitted by the Petitioners (Rs. Crore)	
Table 102: Other Income as admitted by Commission (Rs. Crore)	.109
Table 103: Total Revenue, Non-Tariff Income and Subsidy admitted (Rs. Crore)	.110
Table 104: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2015-16 (Rs. Crore	?)
	.111
Table 105: Sales admitted in Tariff Order dated 05th April, 2016 (MU)	.112
Table 106: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petitic	
for FY 2016-17 (MU)	
Table 107: Basis of billing to un-metered consumers	
Table 108: Summary of sale to the unmetered domestic category booked in excess of the	
specified benchmark (MU):	.113

Table 109: Summary of sale to the unmetered agriculture category booked in excess of the	
specified benchmark (MU)	
Table 110: Energy sale as per Tariff Order for FY 2016-17, as per filing of the DISCOMs ar	
as admitted by the Commission (MU)	
Table 111: Claimed Power Purchase Cost for FY 2016-17 (Rs. Crore)	.116
Table 112: Power purchase quantum and cost admitted in Tariff Order and as per the Audite	d
Accounts	
Table 113: Energy Balance as filed by DISCOMs for FY 2016-17	.118
Table 114: Distribution loss trajectory for FY 2016-17(%)	.119
Table 115: Analysis of Power purchase quantum (MU)	.120
Table 116: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore).	.120
Table 117: Reconciliation of power purchase cost as per DISCOMs account and MPPMCL	
account as submitted by the Petitioners (Rs. Crore)	
Table 118: Details of Other Cost submitted by the Petitioner for FY 2016-17 (Rs. Crore)	.122
Table 119: Other expenses in Power Purchase Cost not considered by the Commission for F	
2016-17 (Rs. Crore)	
Table 120: MPPMCL Cost admitted for FY 2016-17 (Rs. Crore)	.123
Table 121: Other income of MPPMCL admitted for FY 2016-17	
Table 122: UI/DSM and Reactive Energy Charges admitted for FY 2016-17	
Table 123: Analysis of Supplementary Power Purchase Cost (Rs. Crore)	
Table 124: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)	
Table 125: Fixed Cost Admitted by the Commission (Rs. Crore)	
Table 126: Admitted Power Purchase Cost (Rs. Crore)	
Table 127: Transmission Charges including SLDC charges for FY 2016-17 (Rs. Crore)	
Table 128: Transmission Charges admitted by the Commission for FY 2016-17 (Rs. Crore).	
Table 129: O&M Expenses admitted in Tariff Order of FY 2016-17 (Rs. Crore)	
Table 130: O&M Expenses claimed by Petitioners for FY 2016-17 (Rs. Crore)	
Table 131: Normative and Actuals Employee Expenses computed for FY 2016-17 (Rs. Crore)	
Table 132: Normative and Actual A&G Expenses computed for FY 2016-17 (Rs. Crore)	
Table 133: Normatitive and Actuals R&M Expenses computed for FY 2016-17 (Rs. Crore)	
Table 134: O&M expenses admitted for DISCOMs for FY 2016-17 (Rs. Crore)	
Table 135: Interest on Project Loans admitted by the Commission for FY 2016-17 (Rs. Crore	
Table 136: Interest on Working Capital admitted by the Commission for FY 2016-17 (in Rs.	
	.140
Crore)	FY
2016-17 (Rs. Crore)	
Table 138: Interest on Consumer Security Deposit admitted for FY 2016-17 (Rs. Crore)	
Table 139: Return on Equity admitted for FY 2016-17 (Rs. Crore)	
Table 140: Depreciation admitted by the Commission (Rs. Crore)	
Table 141: Bad Debts claimed by DISCOMs (Rs. Crore)	
Table 142: Bad Debts admitted by the Commission for FY 2016-17 (Rs. Crore)	
Table 143: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credi	
Extra Ordinary Items claimed by DISCOMs (Rs. Crore)	
Table 144: Revenue from sale of power excluding subsidy and other income as per Audited	
Accounts (Rs. Crore)	.149
Table 145 : Break up of Non-Tariff Income (Rs. Crore)	.149

Table 146: Subsidy considered Audited Accounts (Rs. Crore)	.150
Table 147: Other Income as submitted by the Petitioner (Rs. Crore)	.150
Table 148: Other Income as Admitted by Commission (Rs. Crore)	
Table 149: Total revenue, non-tariff income and subsidy admitted (Rs. Crore)	
Table 150: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2016-17 (Rs. Crore	
Table 151: Sales admitted in Tariff Order dated 31st March, 2017 (MU)	
Table 152: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petitio	
for FY 2017-18 (MU)	
Table 153: Basis of billing to un-metered consumers	
Table 154: Summary of sale to the unmetered category booked in excess of the specified	
benchmark (MU):	.156
Table 155: Energy sale as per Tariff Order for FY 2017-18, as per filing of the DISCOMs and	
as admitted by the Commission (MU)	
Table 156: Claimed Power Purchase Cost for FY 2017-18 (Rs. Crore)	
Table 157: Power purchase quantum and cost admitted in Tariff Order and as per the Audite	
Accounts	
Table 158: Energy Balance as filed by DISCOMs for FY 2017-18	.161
Table 159: Distribution loss trajectory for FY 2017-18 (%)	
Table 160: Analysis of Power purchase quantum (MU)(MU)	
Table 161: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore)	
Table 162: Reconcilation of power purchase cost as per DISCOMs audited account and	
MPPMCL accounts submitted by the Petitioners (Rs. Crore)	.163
Table 163: Details of Other Cost submitted by the Petitioner for FY 2017-18 (Rs. Crore)	.165
Table 164: Other expenses in Power Purchase Cost not considered by the Commission for F	
2017-18 (Rs. Crore)	.166
Table 165: MPPMCL Cost admitted for FY 2017-18 (Rs. Crore)	.167
Table 166: Other income of MPPMCL admitted for FY 2017-18	.167
Table 167: UI/DSM and Reactive Energy Charge Admitted for FY 2017-18	.168
Table 168: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)	.169
Table 169: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)	.170
Table 170: Fixed Cost Admitted by the Commission (Rs. Crore)	.171
Table 171: Admitted Power Purchase Cost (Rs. Crore)	
Table 172: Transmission Charges including SLDC charges for FY 2017-18 (Rs. Crore)	
Table 173: Transmission Charges admitted by the Commission for FY 2017-18 (Rs. Crore)	
Table 174: O&M Expenses admitted in Tariff Order of FY 2017-18 (Rs. Crore)	
Table 175: O&M Expenses claimed by Petitioners for FY 2017-18 (Rs. Crore)	
Table 176: Normative and Actuals Employee Expenses computed for FY 2017-18 (Rs. Crore)	
Table 177: Normatitive and Actuals A&G Expenses computed for FY 2017-18 (Rs. Crore)	
Table 178: Normative and Actuals R&M Expenses computed for FY 2017-18	
Table 179: O&M expenses of DISCOMs admitted for FY 2017-18 (Rs. Crore.)	
Table 180: Provision for Terminal Benefit Trust Fund admitted by the Commission in FY 201	
18 (Rs. Crore)	.178
Table 181: Interest on Project Loans admitted by the Commission for FY 2017-18 (Rs. Crore	
	.182
Table 182: Interest on Working Capital admitted by the Commission for FY 2017-18 (Rs. Cr.	
	. 184

Table 183 : Interest on Security Deposit worked out by the Commission as per Regulation f	or FY
2017-18 (in Rs. Crore)	186
Table 184 : Interest on Consumer Security Deposit admitted for FY 2017-18 (Rs. Crore)	186
Table 185 : Return on Equity admitted for FY 2017-18 (Rs. Crore)	187
Table 186 : Depreciation admitted by the Commission (Rs. Crore)	189
Table 187 : Bad Debts claimed by DISCOMs (Rs. Crore)	190
Table 188: Bad Debts admitted by the Commission for FY 2017-18 (Rs. Crore)	191
Table 189 : Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Cre	dit)/
Extra Ordinary Items claimed by DISCOMs (Rs. Crore)	191
Table 190 : Revenue from sale of power excluding subsidy and other income as per Auditea	!
Accounts	193
Table 191 : Break up of Non-Tariff Income (Rs. Crore)	193
Table 192 : Subsidy considered as per Audited Accounts (Rs. Crore)	194
Table 193 : Other Income as submitted by the Petitioners (Rs. Crore)	194
Table 194 : Other Income as Admitted by Commission (Rs. Crore)	195
Table 195 : Total Revenue, Non-Tariff Income and subsidy admitted (Rs. Crore)	196
Table 196: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2017-18 (Rs. Cro	re)
	197

# **List of Abbreviations**

AB Aerial Bunched APTEL Appellate Tribunal for Electricity ARR Aggregate Revenue Requirement AS Additional Surcharge AT&C Aggregate Technical and Commercial ATPS Amarkantak Thermal Power Station BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Grovernment of India	A&G	Administrative and General Expenses				
APTEL Appellate Tribunal for Electricity  ARR Aggregate Revenue Requirement  AS Additional Surcharge  AT&C Aggregate Technical and Commercial  ATPS Amarkantak Thermal Power Station  BPSA Bulk Power Supply Agreement  CAGR Compounded Annual Growth Rate  CEA Central Electricity Regulatory Commission  CFA Cash Financial Assistance  CGS Central Generating Station  CHPS Chambal Hydro Power Scheme  COD Commercial Date of Operation  CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
ARR Aggregate Revenue Requirement AS Additional Surcharge AT&C Aggregate Technical and Commercial ATPS Amarkantak Thermal Power Station BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
AS Additional Surcharge AT&C Aggregate Technical and Commercial ATPS Amarkantak Thermal Power Station BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
AT&C Aggregate Technical and Commercial ATPS Amarkantak Thermal Power Station BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
ATPS Amarkantak Thermal Power Station BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset		_				
BPSA Bulk Power Supply Agreement CAGR Compounded Annual Growth Rate CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
CAGR Compounded Annual Growth Rate  CEA Central Electrical Authority  CERC Central Electricity Regulatory Commission  CFA Cash Financial Assistance  CGS Central Generating Station  CHPS Chambal Hydro Power Scheme  COD Commercial Date of Operation  CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
CEA Central Electrical Authority CERC Central Electricity Regulatory Commission CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
CERC Central Electricity Regulatory Commission  CFA Cash Financial Assistance  CGS Central Generating Station  CHPS Chambal Hydro Power Scheme  COD Commercial Date of Operation  CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
CFA Cash Financial Assistance CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
CGS Central Generating Station CHPS Chambal Hydro Power Scheme COD Commercial Date of Operation CPP Captive Power Plants CSD Consumer Security Deposit CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
CHPS Chambal Hydro Power Scheme  COD Commercial Date of Operation  CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
COD Commercial Date of Operation  CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
CPP Captive Power Plants  CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
CSD Consumer Security Deposit  CSS Cross Subsidy Surcharge  CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset		-				
CSS Cross Subsidy Surcharge CTPS Chandrapur Thermal Power Station CWIP Capital Works in Progress  DA Dearness Allowance DISCOM Distribution Company DPS Delayed Payment Surcharge DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset		•				
CTPS Chandrapur Thermal Power Station  CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset		• 1				
CWIP Capital Works in Progress  DA Dearness Allowance  DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset						
DA Dearness Allowance DISCOM Distribution Company  DPS Delayed Payment Surcharge  DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset		*				
DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset						
DPS Delayed Payment Surcharge DSM Demand Side Management DTPS Durgapur Thermal Power Station DTR Distribution Transformer DVC Damodar Valley Corporation EA 2003 Electricity Act, 2003 EHT Extra High Tension ER Eastern Region FCA Fuel Cost Adjustment FI Financial Institution FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset	DISCOM	Distribution Company				
DSM Demand Side Management  DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	DPS					
DTPS Durgapur Thermal Power Station  DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	DSM					
DTR Distribution Transformer  DVC Damodar Valley Corporation  EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	DTPS	=				
EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	DTR					
EA 2003 Electricity Act, 2003  EHT Extra High Tension  ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	DVC	Damodar Valley Corporation				
ER Eastern Region  FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	EA 2003					
FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	EHT					
FCA Fuel Cost Adjustment  FI Financial Institution  FY Financial Year  GAAP Generally Accepted Accounting Principles  GC Group Captive  GFA Gross Fixed Asset	ER					
FY Financial Year GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset	FCA					
GAAP Generally Accepted Accounting Principles GC Group Captive GFA Gross Fixed Asset	FI					
GC Group Captive GFA Gross Fixed Asset	FY					
GC Group Captive GFA Gross Fixed Asset	GAAP					
GFA Gross Fixed Asset	GC	Group Captive				
GoI Government of India	GFA					
	GoI	Government of India				

GPP Gas Power Plant GST Goods and Service Tax GTIS Group Term Insurance Scheme HP Horse Power HPS Hydro Power Station HT High Tension IDC Interest During Construction IEX Indian Energy Exchange IND-AS Indian Accounting Standards ISPS Indira Sagar Power Station	GoMP	Government of Madhya Pradesh				
GST Goods and Service Tax GTIS Group Term Insurance Scheme HP Horse Power HPS Hydro Power Station HT High Tension IDC Interest During Construction IEX Indian Energy Exchange IND-AS Indian Accounting Standards		·				
GTIS Group Term Insurance Scheme  HP Horse Power  HPS Hydro Power Station  HT High Tension  IDC Interest During Construction  IEX Indian Energy Exchange  IND-AS Indian Accounting Standards						
HP Horse Power HPS Hydro Power Station HT High Tension IDC Interest During Construction IEX Indian Energy Exchange IND-AS Indian Accounting Standards						
HPS Hydro Power Station HT High Tension IDC Interest During Construction IEX Indian Energy Exchange IND-AS Indian Accounting Standards		•				
HT High Tension  IDC Interest During Construction  IEX Indian Energy Exchange  IND-AS Indian Accounting Standards						
IDC Interest During Construction  IEX Indian Energy Exchange  IND-AS Indian Accounting Standards						
IEX     Indian Energy Exchange       IND-AS     Indian Accounting Standards						
IND-AS Indian Accounting Standards						
		-				
IPDS Integrated Power Development Scheme						
IPP Independent Power Producer						
KAPS Kakrapar Atomic Power Station	KAPS					
kV kilo Volt	kV					
kVA kilo Volt Ampere						
kVAh kilo Volt Ampere hour		1				
kW kilo Watt	kW	1				
kWh kilo Watt hour	kWh					
	LED	Light Emitting Diode				
LT Low Tension	LT					
MD Maximum Demand	MD	Maximum Demand				
MOD Merit Order Despatch	MOD					
MoP Ministry of Power	MoP	•				
MP Madhya Pradesh	MP					
MPERC Madhya Pradesh Electricity Regulatory Commission	MPERC					
MP Genco or MPPGCL Madhya Pradesh Power Generating Company Limited		Madhya Pradesh Power Generating Company Limited				
MPPMCL MP Power Management Company Limited	MPPMCL	MP Power Management Company Limited				
MPPTCL Madhya Pradesh Power Transmission Company Limited	MPPTCL	Madhya Pradesh Power Transmission Company Limited				
MPSEB Madhya Pradesh State Electricity Board	MPSEB	* *				
MTPS Mejia Thermal Power Plant	MTPS					
MU Million Unit	MU	•				
MVA Mega Volt Ampere	MVA	Mega Volt Ampere				
MW Mega Watt	MW					
MYT Multi-Year Tariff	MYT					
NHDC Narmada Hydroelectric Development Corporation	NHDC	Narmada Hydroelectric Development Corporation				
NPS New Pension Scheme	NPS					
NTPC NTPC Limited	NTPC	NTPC Limited				
O&M Operation & Maintenance	O&M	Operation & Maintenance				

OA	Open Access				
OHP	Omkareshwar Hydro Project				
PAF	Plant Availability Factor				
PF	Provident Fund				
PGCIL	Power Grid Corporation of India Ltd.				
PLF	Plant Load Factor				
PoC	Point of Connection				
PPA	Power Purchase Agreement				
PPCA	Power Purchase Cost Adjustment				
PTR	Power Transformer				
PWW	Public Water Works				
PXIL	Power Exchange India Limited				
R&M	Repair & Maintenance				
RBI	Reserve Bank of India				
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana				
RoE	Return on Equity				
RPO	Renewable Purchase Obligation				
SAC	State Advisory Committee				
SBI	State Bank of India				
SEZ	Special Economic Zone				
SGTPS	Sanjay Gandhi Thermal Power Station				
SLDC	State Load Dispatch Centre				
SSP	Sardar Sarovar Project				
STPS	Super Thermal Power Station				
TP	Tariff Policy				
TAPS	Tarapur Atomic Power Station				
TBT	Terminal Benefit Trust				
ToD	Time of Day				
TPS	Thermal Power Station				
UDAY	Ujwal DISCOM Assurance Yojana				
UMPP	Ultra Mega Power Plant				
VAT	Value Added Tax				
WR	Western Region				
WRPC	Western Regional Power Committee				

# A1: ORDER

# (Passed on this 24th Day of May, 2021)

- 1.1 This order relates to Petition Nos. 55/2018, 30/2019, 37/2019, and 41/2019 filed by Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd., Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd., Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd. and M.P. Power Management Company Ltd., Jabalpur, respectively (hereinafter referred to as East DISCOM, West DISCOM, Central DISCOM and MPPMCL, respectively and collectively as Petitioners or Distribution Licensees or distribution companies or DISCOMs) before Madhya Pradesh Electricity Regulatory Commission (hereinafter referred to as MPERC or the Commission). The Petitions were filed by the Distribution Licensees seeking the True-up of Aggregate Revenue Requirement (ARR) determined by the Commission in its Retail Supply Tariff Orders for FY 2014-15, FY 2015-16, FY 2016-17, and FY 2017-18 (hereinafter referred to as Tariff Orders).
- 1.2 The Commission has reviewed the operational and financial performance parameters of the DISCOMs for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. The Commission has finalized this Order based on the review and analysis of the audited accounts, past records, submissions, information / clarifications submitted by the Petitioners and views expressed by the Stakeholders.

## **Procedural history**

- 1.3 The Commission had issued the Retail Supply Tariff Order for FY 2014-15 on 24<sup>th</sup> day of May, 2014 and for FY 2015-16 on 17<sup>th</sup> day of April, 2015 in accordance with MPERC (Terms and conditions for determination of tariff for supply and wheeling of Electricity and methods and principles for fixation of charges) Regulations, 2012 (hereinafter referred to as the MYT Regulations, 2012). Similarly, the Commission issued Retail Supply Tariff Order for FY 2016-17 on 5<sup>th</sup> day of April, 2016 and for FY 2017-18 on 31<sup>st</sup> day of March, 2017 in accordance with MPERC (Terms and conditions for determination of tariff for supply and wheeling of Electricity and methods and principles for fixation of charges) Regulations, 2015 (hereinafter referred to as the MYT Regulations, 2015).
- As per the MYT Regulations, DISCOMs were required to file their respective Petitions for True-up of ARR for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18 by 31<sup>st</sup> October, 2015, 31<sup>st</sup> October, 2016, 31<sup>st</sup> October, 2017 and 31<sup>st</sup> October, 2018 respectively. Further, as per directives of Hon'ble APTEL in the Judgment of 11<sup>th</sup> November, 2011 in the matter of O.P. No.1 of 2011, the DISCOMs are required to file their True-up Petitions for respective years regularly.

- 1.5 However, DISCOMs have not filed their True-up Petitions for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18 within the stipulated time. After, rigorous pursuance, the Petitioners filed the True-up Petitions for above financial years. The motion hearing on the jointly filed Petition Nos. 55/2018, 30/2019, 37/2019, and 41/2019 was held on 13<sup>th</sup> November, 2019. The Commission admitted the Petitions on 13<sup>th</sup> November, 2019.
- 1.6 The Petitions were further examined and found deficient on many grounds with regards to computation of Aggregate Revenue Requirement (ARR), Power Purchase Costs and Sales. Therefore, vide letters dated 4<sup>th</sup> December, 2019, deficiencies / additional data requirement and information needed were communicated to the Petitioners, which were required to be submitted by 21<sup>st</sup> December, 2019. In response, MPPMCL vide letter dated 20<sup>th</sup> December, 2019 requested for time extension till 23<sup>rd</sup> December, 2019 for submission of the requisite information. Subsequently, MPPMCL vide letter dated 23<sup>rd</sup> December, 2019 submitted the requisite information. Accordingly, the Commission has taken the submission made by the Petitioners on record.

## Notification of true-up proposals for public information

1.7 The public notices were published on 23<sup>rd</sup> November, 2019 by the Petitioners in Hindi and English newspapers for inviting comments/objections from various stakeholders. The details of the publications are as below:

Table 1: List of Newspapers- Public Notice

DISCOM	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
	(Petition No.	(Petition No.	(Petition No.	(Petition No.
	55/2018)	30/2019)	37/2019)	41/2019)
	Daily Hitavada	Daily Hitavada	Daily Hitavada	Daily Hitavada
East	Haribhumi	Nai Dunia	Patrika	Dainik Bhaskar
DISCOM	Dainik Aacharan	Dainik Bhaskar	Dainik Aacharan	Dainik Jagran
	M.P. Jansandesh	Star Samachar	M.P. Jansandesh	-
	Pioneer	Pradesh Today	Times of India	Free Press
Central	Central Chronical	Patrika	Deshbandhu	Raj Express
DISCOM	Dainik Jagran	-	Nai Dunia	Swadesh
	Dainik Bhaskar	-	-	-
West	Free Press	Free Press	Times of India	Times of India
DISCOM	People Samachar	Dabang Dunia	Nav Bharat	Nav Bharat
DISCOM	Dainik Bhaskar	Pradesh Today	Avantika	Avantika

1.8 The last date for filing the comments / suggestions / objections by the stakeholders was 11<sup>th</sup> December, 2019. During the public hearing some of the stakeholders requested the Commission to extend the timeline for filing of comments/ suggestion/ objections. Therefore, considering the plea of the stakeholders, the Commission decided to extend the last date for filing comments/ suggestion/ objections till 31<sup>st</sup> December, 2019.

# **Hearings**

1.9 In order to provide opportunity to the stakeholders to present their views before the Commission, the public hearing was held on 11<sup>th</sup> December, 2019 in the Court Room of the Commission's office at Bhopal. A list of stakeholders who have submitted their suggestions/ comments / observations on the Petitions before the Commission in person or through written submissions is annexed to this Order as **Annexure-1**.

# **Summary of Petitions**

1.10 The summary of the True-up Petitions for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18 as submitted by the Petitioners is given below:

Table 2: Summary of the True-up Petition of DISCOMs for the period from April 2014 to March 2015 – as submitted by the Petitioners (Rs. Crore)

FY 2014-15 **East DISCOM** West DISCOM **Central DISCOM Total for State Particulars Tariff Tariff** Tariff Tariff Claimed Claimed Claimed Claimed Order Order Order Order Power Purchase Cost 4,516.51 5,829.80 7,165.13 6,187.48 15,589.19 19,182.41 5,717.76 5,354.92 **PGCIL Charges** Transmission charges including 754.88 807.89 520.06 671.40 545.70 557.95 1,737.16 2,120.72 SLDC charges O&M Expenses (Net of 1.008.37 950.87 926.46 873.68 892.43 850.64 2,827.26 2,675.19 Capitalisation) Depreciation 104.23 359.13 98.73 191.05 113.93 196.33 316.89 746.51 Interest & Finance Charges 192.87 224.04 220.23 129.76 272.79 244.77 685.89 598.57 On Project Loans 154.53 132.24 140.63 76.27 171.29 191.11 466.45 399.62 On Working Capital Loans (4.78)37.92 0.00 (7.85)35.64 -2.05 30.86 28.02 On Consumer Security Deposit 38.34 53.88 79.60 61.34 65.86 55.71 183.80 170.93 Return on Equity 194.89 208.91 166.84 167.39 212.41 234.94 574.14 611.24 Bad & Doubtful Debts 9.27 2.00 79.99 2.00 2.00 218.68 6.00 307.94 Any other expense 0.00 (112.10)13.55 (202.21)0.00 (300.76)**Total Expenses** 6,538.93 8,224.79 7,803.42 9,436.29 7,394.18 8,290.62 21,736.53 25,951.70 Other income 157.36 366.00 289.03 200.13 244.52 240.17 690.91 806.30 **Net total Expenses** 6,381.56 7,858.79 7,514.40 9,236.16 7,149.66 8,050.45 21,045.64 25,145.40 Add: Impact of True-ups of 373.65 608.90 480.04 995.91 273.01 13.36 (93.83)659.21 DISCOMS ARR FY 2008-09 **Gross Total expenses** 7,956.62 6,755.22 8,131.80 8,123.29 9,716.20 7,163.02 22,041.54 25,804.62 Revenue 6,755.22 6,620.36 8,123.29 7,944.22 7,163.04 6,083.15 22,041.57 20,647.73 **Revenue Gap** 0.001,511.43 0.00 1,771.98 0.00 1,873.47 0.005,156.88

Table 3: Summary of the True-up Petition of DISCOMs for the period from April 2015 to March 2016 – as submitted by the Petitioners (Rs. Crore)

1,200	2010		nittea by t		015-16			
Particulars	East D	ISCOM	West D	ISCOM	Central	DISCOM	Total f	or State
	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed
Power Purchase Cost	5 140 07	6 610 22	7.592.26	0 121 104	6440.67	7.210	10 174 70	21.060.22
PGCIL Charges	5,149.87	6,619.22	7,582.26	8,131.10#	6442.67	7,219	19,174.78	21,969.23
Transmission charges including SLDC charges	538.79	816.71	691.25	937.59	573.91	805.70	1,803.95	2,560.10
O&M Expenses (Net of Capitalisation)	1,091.05	1,025.90	993.84	919.00	976.05	896.51	3,060.94	2,841.41
Depreciation	125.76	261.10	107.63	213.16	137.60	240.85	370.99	715.11
Interest & Finance Charges	270.54	211.03	198.90	134.55	355.34	268.59	824.78	614.17
On Project Loans	183.93	119.26	106.20	69.34	262.22	215.29	552.35	403.89
On Working Capital Loans	24.93	34.93	3.48	2.93	31.90	(4.47)	60.31	33.39
On Consumer Security Deposit	61.68	56.84	89.22	62.28	61.22	57.77	212.12	176.89
Return on Equity	237.26	192.04	182.03	164.55	258.98	249.97	678.27	606.56
Bad & Doubtful Debts	2.00	0.00	2.00	261.25	2.00	25.69	6.00	286.94
Any other expense	0.00	(238.49)		13.17		168.94	0.00	(56.38)
Total Expenses	7,415.27	8,887.50	9,757.91	10,774.28	8,746.55	9,879.82	25,919.73	29,541.60
Other income	202.24	294.12	341.25	265.95	551.11	212.43	1,094.60	772.50
Net total Expenses	7,213.03	8,593.38	9,416.65	10,508.33	8,195.43	9,667.39	24,825.11	28,769.11
Add: Impact of True-ups of DISCOMs ARR FY 2009-10, FY 2010-11, FY 2011-12	1,076.00	1,062.00	17.00	(1.00)	637.00	683.00	1,730.00	1,744.00
<b>Gross Total expenses</b>	8,289.03	9,655.38	9,433.65	10,507.33	8,832.43	10,350.39	26,555.11	30,513.11
Revenue	8,289.00	7,069.02	9,434.00	9,195.73	8,832.00	7,090.41	26,555.00	23,355.16
Revenue Gap	0.00	2,586.36	0.00	1,311.60	0.00	3,259.99	0.00	7,157.95

#As per Revised submission in reply to data gap

Table 4: Summary of the True-up Petition of DISCOMs for the period from April 2016 to March 2017 – as submitted by the Petitioners (Rs. Crore)

				FY 20	16-17	,		
Particulars	East D	OISCOM	West D	ISCOM	Central	DISCOM	<b>Total for State</b>	
	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed
Power Purchase Cost	6,463.00	7.083.24	7,212.22	8,525.58	6.244.83	7.095.18	19920.05	22703.99
PGCIL Charges	0,403.00	7,065.24	7,212.22	0,323.36	0,244.63	7,093.18	19920.03	22103.99
Transmission charges including SLDC charges	673.16	789.14	870.56	1,149.60	708.64	944.37	2252.36	2883.11
O&M Expenses (Net of Capitalisation)	1,247.07	1,200.74	1,200.37	1,027.89	1,113.96	1,135.46	3561.40	3364.09
Depreciation	134.91	303.80	106.91	237.30	161.46	272.54	403.28	813.63

				FY 20	16-17			
Particulars	East D	OISCOM	West D	ISCOM	Central	DISCOM	Total fo	or State
- 11 11 11 11 11	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed
Interest & Finance Charges	340.52	276.82	174.97	163.64	378.03	325.02	893.52	765.48
On Project Loans	225.28	168.96	84.86	75.47	284.20	148.62	594.34	393.05
On Working Capital Loans	74.92	57.29	0.00	25.18	31.96	121.53	106.88	204.00
On Consumer Security Deposit	40.32	50.57	90.11	62.99	61.87	54.87	192.30	168.43
Return on Equity	255.26	293.25	180.81	168.05	305.92	311.18	741.98	772.48
Bad & Doubtful Debts	2.00	100.89	2.00	158.51	2.00	277.46	6.00	536.86
Any other expense	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.87
Expense Capitalised	0.00	(103.64)	0.00	0.00	0.00	0.00	0.00	(103.64)
Total Expenses	9,115.91	9,944.23	9,747.84	11,431.42	8,914.85	10,361.21	27,778.61	31,736.87
Other income	251.93	269.96	206.26	133.00	212.25	212.28	670.44	615.24
Savings from Operational Efficiency	231.93	0.00	88.24	0.00	279.83	0.00	600.00	0.00
Net total Expenses	8,631.99	9,674.27	9,453.35	11,298.43	8,422.77	10,148.93	26,508.11	31,121.63
Add: Impact of True-up Impact of True-ups of DISCOMS ARR FY 2005-06, FY 2012-13	373.29	408.57	797.35	835.49	649.16	680.98	1,819.80	1,925.04
Gross Total expenses	9,005.28	10,082.84	10,250.70	12,133.92	9,071.93	10,829.91	28,327.91	33,046.67
Revenue	9,005.28	7,418.77	10,250.70	10,368.24	9,071.93	8,012.11	28327.91	25,799.12
Revenue Gap	0.00	2,664.07	0.00	1,765.67	0.00	2,817.80	0.00	7,247.55

Table 5: Summary of the True-up Petition of DISCOMs for the period from April 2017 to March 2018 – as submitted by the Petitioners (Rs. Crore)

				FY 2	017-18			
Particulars	East D	ISCOM	West D	ISCOM	Central l	DISCOM	Total for State	
	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed
Power Purchase Cost	6.181.06	7,148.21	8,292.75	8,936.36	6,842.26	7,709.74	21316.07	23794.31
PGCIL Charges	0,161.00	7,140.21	0,292.73	6,930.30	0,642.20	7,709.74	21310.07	23794.31
Transmission charges including SLDC charges	756.67	853.65	969.65	1,033.83	806.05	860.31	2532.37	2,747.79
O&M Expenses (Net of Capitalisation)	1,368.18	1,210.22	1,341.09	1,020.29	1,284.61	1,406.98	3993.89	3,637.49
Depreciation	116.50	335.28	105.02	244.33	159.54	300.71	381.10	880.32
Interest & Finance Charges	224.35	278.48	186.02	145.83	340.64	94.95	751.00	519.26
On Project Loans	106.69	150.08	67.53	44.51	238.10	6.37	412.32	200.96
On Working Capital Loans	85.97	72.61	63.99	37.73	46.38	35.69	196.34	146.03
On Consumer Security Deposit	31.69	55.79	54.50	63.59	56.16	52.89	142.34	172.27
Return on Equity	219.05	307.16	177.63	174.41	302.14	318.61	698.82	800.17
Bad & Doubtful Debts	2.00	14.75	2.00	237.00	2.00	23.28	6.00	275.03

				FY 2	017-18			
Particulars	East D	ISCOM	West DISCOM		Central DISCOM		Total for State	
	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed	Tariff Order	Claimed
Any other expense	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.52
Expense Capitalised	0.00	(122.92)	0.00	0.00	0.00	(27.75)	0.00	(150.67)
Total Expenses	8,867.82	10,024.83	11,074.19	11,792.57	9,737.25	10,686.83	29,679.25	32,504.23
Other income	243.40	316.77	349.37	144.32	268.57	342.26	861.34	803.35
Net total Expenses	8,624.42	9,708.06	10,724.82	11,648.26	9,468.68	10,344.57	28,817.91	31,700.89
Add: Impact of True-up of DISCOMs ARR for FY 2006- 07 and APTEL Order for FY 2007-08 to FY 2011-12	795.03	840.40	638.98	687.98	810.09	864.09	2,244.10	2,392.47
Gross Total expenses	9,419.45	10,548.46	11,363.80	12,336.24	10,278.76	11,208.66	31,062.01	34,093.36
Revenue	9,419.45	8,332.88	11,363.80	11,837.85	10,278.76	8,595.08	31,062.01	28,765.81
Revenue Gap	0.00	2,215.58	0.00	498.38	0.00	2,613.58	0.00	5,327.53

- 1.11 The Commission analysed the Petitions for Truing-up of ARR for FY 2014-15, FY 2015-16, FY 2016-17, and FY 2017-18. On the basis of the information furnished by the Petitoners and considering the comments of the stakeholders, the Commission prudently considered the submissions of DISCOMs for true-up for FY 2014-15, FY 2015-16, FY 2016-17, and FY 2017-18. After giving due consideration to the norms, methodology, process of determination of expenditures and revenues as elaborated in the MYT Regulations, 2012 and MYT Regulations, 2015, the Commission has determined the allowable revenue deficit / surplus, as detailed in the subsequent Sections of this Order.
- 1.12 Summary of the True-up of ARR admitted for FY 2014-15, FY 2015-16, FY 2016-17, and FY 2017-18 is given below:

Table 6: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2014-15 (Rs. Crore)

Particulars		ISCOM		ISCOM		DISCOM	· ·	or State
Paruculars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME								
Tariff Income	5,750.14	5,760.97	6,563.83	6,563.83	4,929.51	4,933.60	17,243.48	17,258.41
Non-tariff income		50.77		121.38		77.48		249.62
Net other income (excluding Delayed Payment Surcharge)	366.00	79.57	200.13	83.75	240.17	80.86	806.30	244.18
Subsidy	870.22	870.22	1,380.39	1,380.39	1,153.64	1,153.64	3,404.25	3,404.25
Total Income (A)	6,986.36	6,761.53	8,144.35	8,149.35	6,323.32	6,245.58	21,454.03	21,156.46
EXPENSES								
Power Purchase								
Power Purchase Cost	5,829.80	5,215.84	7,165.13	6,523.22	6,187.48	5,345.03	19,182.41	17,084.09
MP Transco Charges	754.88	754.88	807.89	807.89	557.95	557.95	2,120.72	2,120.72
Total Power Purchase (Incl. Transmission) (B)	6,584.68	5,970.71	7,973.02	7,331.11	6,745.43	5,902.98	21,303.13	19,204.80
O&M Expenses (Net of Capitalisation)								
Employee Expenses	354.00	335.06	334.00	334.00	313.00	333.87	1,001.00	1,002.94
DA	301.89	301.89	278.58	278.58	280.69	280.69	861.16	861.16
Terminal Benefits	13.10	25.77	14.13	23.23	9.32	35.04	36.55	84.04
Arrears	34.00	29.78	30.00	30.00	29.52	20.60	93.52	80.38

Dough and and	East D	ISCOM	West D	ISCOM	Central	DISCOM	Total fo	or State
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
A&G Expenses	121.73	143.73	100.07	100.07	91.89	88.99	313.69	332.79
R&M Expenses	122.85	70.78	99.24	99.24	124.31	33.59	346.40	203.61
Other expenses (including Taxes & MPERC Fees)	3.30	3.30	17.66	14.54	1.91	1.91	22.87	19.75
O&M Expense Capitalised	0.00	(21.97)	0.00	(39.58)	0.00	(44.19)	0.00	(105.74)
Total O&M Expenses (C)	950.87	888.36	873.68	840.08	850.64	750.49	2,675.19	2,478.93
Other Expenses								
Depreciation	359.13	108.31	191.05	92.59	196.33	116.68	746.51	317.58
Interest & Financing Charges on								
Project Loans (Net of	132.24	121.19	76.27	50.24	191.11	155.48	399.62	326.91
Capitalisation)								
Interest on working capital loans	37.92	10.60	(7.85)	3.54	(2.05)	7.02	28.02	21.16
Interest on Consumer Security Deposit	53.88	53.88	61.34	61.34	55.71	55.71	170.93	170.93
Return on Equity	208.91	200.26	167.39	156.34	234.94	200.63	611.24	557.24
Bad & Doubtful Debts	9.27	9.27	79.99	65.64	218.68	-	307.94	74.90
Any Other Expense	(112.10)	(1.09)	13.55	6.62	(202.21)	(15.74)	(300.76)	(10.21)
Total Other Expenses (D)	689.25	502.42	581.74	436.31	692.51	519.78	1,963.50	1,458.51
Total Expenses $E = (B + C + D)$	8,224.80	7,361.49	9,436.29	8,607.50	8,290.62	7,173.24	25,951.71	23,142.23
Revenue Gap $F = (E-A)$	1,238.44	599.96	1,291.94	458.15	1,967.30	927.66	4,497.68	1,985.77
Add: Impact of True-up of DISCOMs ARR FY 2008-09 (G)	273.01	273.01	480.04	480.04	(93.83)	(93.83)	659.22	659.22
Gross Expenses $H = (E + G)$	8,497.81	7,634.50	9,916.33	9,087.54	8,196.79	7,079.41	26,610.93	23,801.45
Total Revenue Gap I = (H - A)	1,511.43	872.97	1,771.98	938.19	1,873.47	833.83	5,156.88	2,644.99

Table 7: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2015-16 (Rs. Crore)

Particulars		ISCOM		DISCOM		DISCOM		or State
Paruculars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME								
Tariff Income	6,115.35	6,121.03	6,195.36	6,195.35	5,626.60	5,520.87	17,937.30	17,837.25
Non-tariff income		85.20		137.91		105.73		328.84
Net other income (excluding	294.12	118.15	265.95	132.64	212.43	121.40	772.50	372.19
Delayed Payment Surcharge)		116.13		132.04		121.40		372.19
Subsidy	953.67	953.67	3,000.37	3,000.37	1,463.81	1,463.81	5,417.86	5,417.86
Total Income (A)	7,363.14	7,278.05	9,461.68	9,466.28	7,302.84	7,211.80	24,127.66	23,956.13
EXPENSES								
Power Purchase								
Power Purchase Cost	6,619.22	5,757.80	8,131.01	7,394.76	7,219.00	6,109.70	21,969.23	19,262.27
MP Transco Charges	816.71	816.71	937.59	937.59	805.80	805.80	2,560.10	2,560.09
<b>Total Power Purchase (Incl.</b>	7,435.93	6,574.51	9,068.60	8,332.35	8,024.80	6,915.50	24,529.33	21,822.36
Transmission) (B)	1,433.93	0,374.31	9,000.00	0,332.33	0,024.00	0,913.30	24,329.33	21,022.30
O&M Expenses (Net of								
Capitalisation)								
Employee Expenses	365.00	331.23	344.00	344.00	322.00	360.29	1,031.00	1,035.52
DA	324.23	323.33	298.51	298.51	296.84	296.84	919.57	918.68
Terminal Benefits	50.19	51.95	19.05	19.86	12.83	53.89	82.07	125.70
Arrears	14.17	0.22	15.10	10.00	12.30	7.28	41.57	17.50
A&G Expenses	131.38	156.70	108.00	108.00	99.18	87.48	338.56	352.18
R&M Expenses	138.79	77.13	112.26	112.26	151.54	65.38	402.59	254.78
Other expenses (including Taxes & MPERC Fees)	2.14	2.16	22.07	12.48	1.82	1.83	26.04	16.47
O&M Expenses Capitalised	0.00	(35.43)	0.00	(41.25)	0.00	(30.26)	0.00	(106.94)
Total O&M Expenses (C)	1,025.90	907.30	919.00	863.86	896.51	842.73	2,841.41	2,613.89
Other Expenses								
Depreciation	261.10	112.49	213.16	97.05	240.85	131.44	715.11	340.97
Interest & Financing Charges on Project Loans (Net of Capitalisation)	119.26	103.32	69.34	52.36	215.29	207.09	403.89	362.78

Doutionland	East D	ISCOM	West D	ISCOM	Central l	DISCOM	Total fo	or State
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Interest on working capital loans	34.93	12.79	2.93	15.07	(4.49)	9.72	33.37	37.58
Interest on Consumer Security Deposit	56.84	56.84	62.28	62.28	57.77	57.77	176.89	176.89
Return on Equity	192.04	205.80	164.55	163.96	249.97	207.17	606.56	576.93
Bad & Doubtful Debts	0.00	0.00	261.25	61.95	25.69	0.00	286.94	61.95
Any Other Expense	(238.49)	0.00	13.17	0.00	168.94	(16.98)	(56.38)	(16.98)
Total Other Expenses (D)	425.68	491.24	786.68	452.67	954.02	596.21	2,166.38	1,540.12
Total Expenses $E = (B + C + D)$	8,887.51	7,973.05	10,774.2 8	9,648.89	9,879.82	8,354.44	29,541.61	25,976.38
Revenue Gap F = (E-A)	1,524.37	695.00	1,312.60	182.61	2,576.98	1,142.64	5,413.95	2,020.24
Add: Impact of True-up of DISCOMs ARR FY 2009-10, FY 2010-11, FY 2011-12( <b>G</b> )	1,062.00	1,062.00	(1.00)	(1.00)	683.00	683.00	1,744.00	1,744.00
Gross Expenses $H = (E + G)$	9,949.51	9,035.05	10,773.2 8	9,647.89	10,562.82	9,037.44	31,285.61	27,720.38
<b>Total Revenue Gap I = (H - A)</b>	2,586.36	1,757.00	1,311.60	181.61	3,259.99	1,825.64	7,157.95	3,764.24

Table 8: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2016-17 (Rs. Crore)

Tuble 8. Revenue (Su	<u> </u>	SCOM		ISCOM		DISCOM	Total for State	
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME	Clamica	Aumitteu	Clamica	Admitted	Clamica	Aumitted	Clamica	Admitted
Tariff Income	6,316.21	6,347.73	6,643.66	6,651.73	6,103.15	5,536.69	19,063.02	18,536.16
Non-tariff income	ĺ	108.39		145.58		91.49	,	345.46
Net other income (excluding Delayed Payment Surcharge)	269.96	154.34	133.00	56.27	212.28	180.52	615.24	391.13
Subsidy	1,102.56	1,102.56	3,724.58	3,724.58	1,908.96	1,908.96	6,736.10	6,736.10
Savings from Operational Efficiency	-	231.93	-	88.24	-	279.83	-	600.00
Total Income (A)	7,688.73	7,944.95	10,501.24	10,666.41	8,224.39	7,997.50	26,414.36	26,608.85
EXPENSES			,				,	,
Power Purchase								
Power Purchase Cost	7,083.24	6,546.43	8,525.58	8,207.40	7,095.18	6,657.48	22,703.99	21,411.31
MP Transco Charges	789.14	789.14	1,149.60	1,149.59	944.37	944.37	2,883.11	2,883.10
Total Power Purchase (Incl. Transmission) (B)	7,872.38	7,335.57	9,675.18	9,356.99	8,039.55	7,601.85	25,587.10	24,294.41
O&M Expenses (Net of								
Capitalisation)								
Employee Expenses	435.62	314.47	403.00	403.00	398.59	377.34	1,237.21	1,094.81
DA	320.63	320.63	304.25	304.25	286.80	286.80	911.68	911.67
Terminal Benefits	58.03	49.64	53.64	53.49	250.63	74.72	362.30	177.85
Arrears	-	3.92	0.14	0.14	-	-	0.14	4.06
A&G Expenses	212.30	182.11	143.38	129.00	98.49	97.94	454.17	409.05
R&M Expenses	174.16	174.16	123.48	126.74	130.51	78.94	428.15	379.84
Other expenses (including Taxes & MPERC Fees)	-	3.44	-	2.88	-	1.39	-	7.71
O&M Expenses Capitalised	(58.19)	(58.19)	-	(38.31)	(29.55)	(26.13)	(87.74)	(122.62)
Total O&M (C)	1,142.55	990.17	1,027.89	981.19	1,135.47	890.99	3,305.91	2,862.36
Other Expenses							-	-
Depreciation	303.80	117.10	237.30	97.11	272.54	148.37	813.63	362.59
Interest & Financing Charges on Project Loans (Net of	123.51	182.74	75.47	36.12	148.62	192.53	347.60	411.40
Capitalisation)								
Interest on working capital loans	57.29	34.37	25.18	38.20	121.53	5.21	204.00	77.78
Interest on Consumer Security Deposit	50.57	50.57	62.99	62.99	54.87	54.87	168.43	168.43
Return on Equity	293.25	212.52	168.05	164.07	311.18	223.55	772.48	600.14

Particulars	East DI	SCOM	West D	ISCOM	Central 1	DISCOM	Total f	or State
Farticulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Bad & Doubtful Debts	100.89	-	158.51	55.00	277.46	-	536.86	55.00
Any Other Expense	-	-	0.87	-	-	-	0.87	-
Total Other Expenses (D)	929.30	597.31	728.36	453.50	1,186.20	624.53	2,843.87	1,675.34
Total Expenses $E = (B + C + D)$	9,944.23	8,923.05	11,431.42	10,791.68	10,361.22	9,117.37	31,736.87	28,832.10
Revenue Gap F = (E-A)	2,255.50	978.10	930.18	125.27	2,136.83	1,119.88	5,322.51	2,223.25
Add: Impact of True-ups of DISCOMs ARR FY 2005-06, FY 2012-13 ( <b>G</b> )	408.57	408.57	835.49	835.49	680.98	680.98	1,925.04	1,925.04
Gross Expenses $H = (E + G)$	10,352.80	9,331.62	12,266.91	11,627.17	11,042.20	9,798.35	33,661.91	30,757.14
<b>Total Revenue Gap I = (H - A)</b>	2,664.07	1,386.67	1,765.67	960.76	2,817.81	1,800.86	7,247.55	4,148.29

Table 9: Revenue (Surplus)/Deficit admitted in True-up of ARR for FY 2017-18 (Rs. Crore)

Tuble 3. Revenue (Su		ISCOM		ISCOM		DISCOM	Total for State		
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	
INCOME	Ciumica	Hamittea	Clamica	ramittea	Claimea	Hamittea	Clamica	7 I Gillitte G	
Tariff Income	7,060.16	7,066.44	7,519.88	7,519.88	6,336.15	6,336.15	20,916.19	20,922.47	
Non-tariff income	7,000.10	135.58	7,317.00	148.18	0,330.13	114.62	20,710.17	398.38	
Net other income (excluding	316.77		144.32		342.26		803.35		
Delayed Payment Surcharge)		181.19		53.81		226.88		461.88	
Subsidy	1,272.72	1,272.72	4,317.97	4,317.97	2,258.93	2,258.93	7,849.62	7,849.62	
Total Income (A)	8,649.65	8,655.93	11,982.17	12,039.84	8,937.34	8,936.58	29,569.16	29,632.35	
EXPENSES									
Power Purchase									
Power Purchase Cost	7,148.21	6,825.88	8,936.36	8,678.71	7,709.74	7,020.89	23,794.31	22,525.48	
MP Transco Charges	853.65	853.65	1,033.83	1,033.83	860.31	860.31	2,747.79	2,747.79	
Total Power Purchase (Incl.	8,001.86	7,679.53	9,970.19	9,712.54	8,570.05	7,881.20	26,542.10	25 273 27	
Transmission) (B)	8,001.80	7,079.55	9,970.19	9,/12.54	8,570.05	7,001.20	20,542.10	25,273.27	
O&M Expenses (Net of									
Capitalisation)									
Employee Expenses	449.66	341.36	415.00	415.00	618.72	370.00	1,483.38	1,126.36	
DA	284.04	284.04	238.16	238.16	230.77	230.77	752.97	752.97	
Terminal Benefits	88.78	50.17	65.86	67.79	278.36	67.30	433.00	185.26	
Arrears	-	136.42	12.21	12.21	-	12.10	12.21	160.73	
A&G Expenses	218.40	206.58	138.00	138.00	129.15	103.00	485.55	447.58	
R&M Expenses	168.84	168.84	136.32	136.32	145.58	199.37	450.74	504.53	
Other expenses (including Taxes &	0.50	2.28	14.73	2.34	4.40	3.76	19.63	8.38	
MPERC Fees)	0.50		14.73		4.40		17.03		
O&M Expenses Capitalised		(38.96)	-	(32.11)	-	(27.75)	-	(98.82)	
Provision for Terminal Benefit	-	40.00	-	40.00	-	40.00	-	120.00	
Total O&M (C)	1,210.22	1,190.73	1,020.28	1,017.71	1,406.98	998.54	3,637.48	3,206.98	
Other Expenses									
Depreciation	335.28	127.56	244.33	97.96	300.71	166.59	880.32	392.10	
Interest & Financing Charges on	150.08	37.76	44.51	18.74	6.37	185.02	200.96	241.51	
Project Loans	130.00	37.70	44.51	10.74	0.57	103.02	200.70	241.31	
Interest and Finance Charges on	72.61	33.64	37.73	50.94	35.69	17.17	146.03	101.76	
working capital loans	72.01	33.01	37.73	30.51	33.07	17.17	110.03	101.70	
Interest on Consumer Security	55.79	55.79	63.59	63.59	52.89	52.89	172.27	172.27	
Deposit									
Return on Equity	307.16	219.77	174.41	165.52	318.61	247.77	800.18	633.05	
Bad & Doubtful Debts	14.75	-	237.00	75.20	23.28	-	275.03	75.20	
Any Other Expense	(122.92)	-	0.52	-	(27.75)	-	(150.15)	-	
Total Other Expenses (D)	812.75	474.51	802.09	471.95	709.80	669.43	2,324.64	1,615.89	
Total Expenses $E = (B + C + D)$	10,024.83	9,344.78	11,792.56	11,202.19	10,686.83	9,549.17	32,504.22	30,096.15	
Revenue Gap F = (E-A)	1,375.18	688.85	(189.61)	(837.65)	1,749.49	612.59	2,935.06	463.80	
Add: Impact of True-up of	840.40	840.40	687.98	687.98	864.09	864.09	2,392.47	2,392.47	
DISCOMs ARR for FY 2006-07							,	,	

Particulars	East DISCOM		West DISCOM		Central DISCOM		Total for State	
Farticulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
and APTEL Order for FY 2007-08								
to FY 2011-12 ( <b>G</b> )								
Gross Expenses $H = (E + G)$	10,865.23	10,185.18	12,480.54	11,890.17	11,550.92	10,413.26	34,896.69	32,488.62
Total Revenue Gap I = (H - A)	2,215.58	1,529.25	498.38	(149.67)	2,613.58	1,476.68	5,327.54	2,856.27

## Cumulative Revenue Gap admitted for FY 2014-15 to FY 2017-18

1.13 The Commission has carried out the exercise of truing up of FY 2014-15 to FY 2017-18 in this order and accordingly admitted the Revenue Gap as follows:

Table 10: Cumulative Revenue Gap / (Surplus) admitted by the Commission for FY 2014-15 to FY 2017-18 (Rs. Crore)

11 2017 10 (1251 670.0)								
Voor	East DISCOM West DISCOM Cen		Central	Central DISCOM		Total for State		
Year	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
FY 2014-15	1,511.43	872.97	1,771.98	938.19	1,873.47	833.83	5,156.88	2,644.99
FY 2015-16	2,586.36	1,757.00	1,311.60	181.61	3,259.99	1,825.64	7,157.95	3,764.24
FY 2016-17	2,664.07	1,386.67	1,765.67	960.76	2,817.80	1,800.86	7,247.55	4,148.29
FY 2017-18	2,215.58	1,529.25	498.38	-149.67	2,613.58	1,476.68	5,327.54	2,856.27
Grand Total	8,977.44	5,545.89	5,347.63	1,930.90	10,564.84	5,937.00	24,889.92	13,413.79

- 1.14 The Commission has observed that the power purchase booked in the audited accounts of FY 2014-15 to FY 2017-18 also includes an amount of Rs. 644.39 Crore as "supplementary bills raised by the generators for the period prior to 2014-15". The scrutiny of the supplementary bill details furnished to the Commission in support of aforesaid claim of Rs. 644.39 Crore has revealed that the claim pertains to payments for the power purchase for the period from FY 2005-06 to FY 2013-14.
- 1.15 The Commission is inclined to consider it; however, the Petitioners are required to reconcile the same with respective year's power purchase cost as the true ups of those years have already been finalised. It is a matter of concern that the Petitioner has been raising claim on account of supplementary Power Purchase cost for the period from FY 2005-06 to FY 2013-14 in almost all truing up exercises, thereby increasing the power purchase cost exorbitantly. In this regard, the Commission vide deficiency note directed the Petitioner to submit the details of all the supplementary power purchase claimed till date in true up Petitions for FY 2015-16 to FY 2017-18 identifying the reasons for the claims along with the justification for not claiming the amount in the said years. The Petitioner has provided some of the details in reply, which requires further clarification. Accordingly, the Commission has not considered the Petitioners' claim towards the supplementary power purchase cost prior to FY 2014-15 in this Petition. However, the Commission allows Petitioner to approach this Commission to claim the said amount separately on furnishing of the adequate details.

#### Treatment of Revenue Gap admitted for FY 2014-15 to FY 2017-18

- 1.16 MP State DISCOMs were reeling under severe financial stress. The accumulated loss level had reached to the level of Rs. 30,282 Crore at the end of FY 2014-15. The outstanding debt level of MP DISCOMs was Rs. 34,739 Crore at the end of September 2015. The Government of India, the Government of Madhya Pradesh and the MP State DISCOMs entered into a tripartite MoU, under Ujwal DISCOM Assurance Yojana (UDAY) on 10.08.2016 in order to improve the efficiency of the MP DISCOMs to enable the operational and financial turnaround of the DISCOMs. Under UDAY, several obligations/ commitments were decided for the Parties, i.e., GoI/ GoMP/MP DISCOMs.
- 1.17 One of the main obligations/commitments of GoMP, which is to be facilitated by GoI under the UDAY scheme, is to take over debt of Rs. 26,055 Crore (75% of the debt as on September 2015, i.e., Rs. 34,739 Crore). The debt taken over by the GoMP shall be transferred to the DISCOMs as a mix of grant, and equity as described in the following table:

Table 11: Debt take over by GoMP as per UDAY MoU (Rs. Crore)\*

Year	Amount	Debt taken over in the form of
FY 2016-17	Rs. 7,568	Equity
FY 2017-18	Rs. 4,622	Grant
FY 2018-19	Rs. 4,622	Grant
FY 2019-20	Rs. 4,622	Grant
FY 2020-21	Rs. 4,621	Grant
<b>Grand Total</b>	Rs. 26,055	

\*Source: - UDAY MoU signed between MoP, GoMP and MPPMCL for and behalf of MPPKVVCL, MPMKVVCL and MPPoKVVCL

- Further, apart from above, MP State DISCOMs were mandated to fully / partially issue State Guaranteed bonds for the remaining 25% loan or get them converted into loans or bonds at rate not more than Bank Rate plus 0.1%.
- 1.19 In order to understand the nature of the debt taken over by the State Government under UDAY scheme, the Commission had conducted several meetings with the nodal officers of the Petitioners. The Commission also directed the Petitioners to submit the details of all the loan taken over under the scheme and the actual year wise grant / equity received from the State Government in accordance to UDAY MoU in FY 2016-17 to FY 2018-19. On the analysis of the information submitted by the Petitioners, it was observed that the loans taken over by the State Government included loans taken for Capital Works, Loans to fund working capital requirements, perpetual loan of the State Governments. In reply the Petitioners submitted that Rs. 12,690 Crore of debt of MP State DISCOMs have been

taken over by the State Government upto FY 2018-19, out of which Rs. 7568 Crore is in the form of equity and Rs. 5122 Crore is in the form of Grant. Breakup of the same is as follows:

Table 12: Present status of Debt taken over by GoMP \* (Rs. Crore)

	As per UDAY MoU		-	As per Actuals			
Year	Amount	Debt taken over in the form of	Grant	Equity	Total		
FY 2016-17	7,568	Equity	4,011	3,557	7,568		
FY 2017-18	4,622	Grant	611	4,011	4,622		
FY 2018-19	4,622	Grant	500	-	500		
FY 2019-20	4,622	Grant	-	-	-		
FY 2020-21	4,621	Grant	-	-	-		
<b>Grand Total</b>	26,055		5,122	7,568	12,690		

<sup>\*</sup>Source: - As per UDAY MoU and actuals as submitted by the DISCOMs in reply to data gap.

1.20 Further, in accordance with Clause 1.1 (h) of UDAY, the GoMP shall take over the future losses of the DISCOMs in a graded manner and shall fund the losses as follows:

Table 13: Loss to be taken over by GoMP\*

Year	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Previous Year's	0% of the	0% of the	5% of the	10% of the	25% of the
DISCOM loss to be	loss of FY				
taken over by State	2015-16	2016-17	2017-18	2018-19	2019-20

<sup>\*</sup>Source: - As per UDAY MoU.

1.21 In accordance with above, the State Government has taken over losses for FY 2017-18, FY 2018-19 and FY 2019-20 in FY 2018-19, FY 2019-20 and FY 2020-21 respectively which is as follows:

Table 14: Present Status of Loss take over by GoMP\* (Rs Crore)

	<u> </u>	(210 010	. • /
Year	FY 2018-19	FY 2019-20	Total
Previous Year's DISCOM loss take over by State	253.21	729.95	983.16

<sup>\*</sup>Source: - As per audited accounts of DISCOMs.

1.22 The Commission carries out the tariff determination exercise based on the norms specified in its respective Tariff Regulations. Accordingly, any expenditure, which the Commission finds imprudent is not allowed to be recovered by way of tariff. Accordingly, the gap between actual revenue recovery realised by the Petitioners on the basis of tariff determined by the Commission and actual expenses incurred by them during the said year are booked as losses for the year and reflected in the books of accounts. In order to fund these losses, the Distribution Licensees are forced to take short / medium term loans, which again increased their interest burden and is reflected in the subsequent years.

- 1.23 As per UDAY MoU, the total debt outstanding as on September 2015 was Rs. 34,739 Crore. The debt burden is on account of capex loans, bonds and short terms loans of banks, FIs and GoMP of the DISCOMs. Apparently, the debt burden is also to meet their losses accumulated on account of revenue deficits in previous years. The Commission has observed that one of the major reasons for accumulation of these losses is high actual distribution losses of the Petitioners which are much higher than the distribution losses specified in the Regulations. The Petitioners are also paying for power purchase to cater these increased distribution losses and paying the bills of the generators for procurement of power for meeting out the consumption over and above the normative losses. However, the Petitioners are not able to convert the input energy into desired level of sale and the same is reflecting as revenue loss in their book of accounts and to fund these losses, the Petitioners resort to short and medium term fundings.
- 1.24 As explained above, the liabilities to be taken over under UDAY scheme are the total liabilities of the DISCOMs, which would comprise the following types of loans:
  - i. Loans to fund capital projects (Allowed by the Commission to be recovered through tariff);
  - ii. Loans to fund Working Capital requirements (**Partly allowed by the** Commission **on normative basis to be recovered through tariff**);
  - iii. Loans to service losses, which are not admitted by the Commission; and
  - iv. Loans to service legitimate revenue gap for the year for which truing up is pending (To be allowed by the Commission at the time of true up).
- 1.25 However, as per UDAY MoU, the debt taken over by the GoMP may include loans for any of the purposes listed above. Therefore, any loan taken against the Revenue Gap and/or Capital Loans which the Commission has already approved as part of ARR or allowed its recovery during the Tariff determination and / or truing up exercise, should be adjusted against UDAY grant. Else, the same would lead to double recovery from the Government and the consumers, as the Commission will also be allowing its recovery from consumers as increase in tariff for subsequent years. For instance, the following table shows the Revenue Gap allowed by the Commission for years prior to September 2015 in the tariff for FY 2015-16 and onwards:

Table 15: Revenue Gap admitted by the Commission for period prior to signing of UDAY MoU

True up Year	Revenue Gap Allowed (Rs. Crore)	Recovery allowed in Tariff Order
FY 2009-10	494	
FY 2010-11	318	FY 2015 -16
FY 2011-12	932	

True up Year	Revenue Gap Allowed (Rs. Crore)	Recovery allowed in Tariff Order
FY 2012-13	1,559	FY 2016-17
FY 2005-06	366	11 2010-17
FY 2006-07	423	
Impact of APTEL complied order for FY 2007-08 to FY 2011-12	1,969	FY 2017-18
Supplementary bills adjustments for FY 2012-13	985	FY 2018-19
FY 2013-14	3,919.48	FY 2019-20
FY 2014-15	2,644.99	recovery to be allowed
Total	13,610.47	

\*Source: As per MPERC Tariff Orders

Accordingly, the Distribution Licensees would have already taken loan to fund this gap 1.26 in the respective years due to pendency of true up and would have reflected in its books of account as on September 2015. Therefore, UDAY shall also cover this loan for conversion into Grant / Equity. It is to be noted that the Commission has already allowed Distribution Licensees to recover the amount of true-up gap upto FY 2013-14 by way of tariff hike in the subsequent year/s. Therefore, the Commission by way of tariff hike has already allowed to recover these losses, whereas as per the UDAY MoU State Government has also taken over these losses and if the Commission does not offset these true up amounts against the grant / equity made available by the State Government, then there would be double recovery of the same amount to the Petitioners. Therefore, the Commission considers it appropriate to offset the amount of grant/equity received under UDAY with the cumulative Revenue Gap admitted by the Commission. It is to be noted that the equity which has been received under the UDAY scheme is not against any capital investment scheme for development of any asset. Therefore, the same is also liable to be considered as grant. Accordingly, based on the above, the net revenue gap to be allowed by the Commission for tariff hike in subsequent order shall be as follows:

Table 16: Net Revenue Gap admitted on True up of FY 2014-15 to FY 2017-18 (Rs. Crore)

Particulars	Amount
Total Revenue Gap claimed by the DISCOMs in True up of FY 2014-15 to FY 2017-18	24,889.92
Total Revenue Gap admitted in true up of FY 2014-15 to FY 2017-18 admitted	13,413.79
Less: Total Grant / Equity received by DISCOMs under UDAY in FY 2016-17 to FY 2017-18	12,190.00
Net Remaining Revenue Gap	1,223.79

- 1.27 Accordingly, the Commission has admitted the net Revenue Gap of Rs. 1,223.79 Crore on the true up of FY 2014-15 to FY 2017-18 for passing on the gap amount in retail supply tariff to be determined by the Commission in ensuing years. Further, the Grant / Equity received by the DISCOMs from FY 2018-19 onwards shall be considered by the Commission in the respective year's true ups.
- 1.28 Ordered as above, read with detailed reasons, grounds and conditions annexed herewith.

(Shashi Bhushan Pathak) Member (Mukul Dhariwal) Member

Dated: 24 th May, 2021

Place: Bhopal

# A2: TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2014-15

Analysis of Expenses during the period from April 2014 to March 2015:

#### Sale of energy

2.1 In the retail supply tariff order issued on 24<sup>th</sup> May, 2014 for FY 2014-15, the Commission admitted the sale of energy for FY 2014-15 as shown in the table below:

Table 17: Sales admitted in Tariff Order dated 24th May, 2014 (MU)

DISCOM	East DISCOM	West DISCOM	Central DISCOM	Total for State
LT Sale	10,044.42	12,975.45	10,716.91	33,736.78
HT Sale	3,826.04	4,061.83	3,876.54	11,764.41
Total Sale	13,870.46	17,037.28	14,593.45	45,501.19

A comparison of Sales as admitted in Tariff Order, as per the R-15 statements and as claimed in the True-up Petition is given in the table below:

Table 18: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition for FY 2014-15 (MU)

Particulars	5	East DISCOM	West DISCOM	Central DISCOM	Total for State
A a a dunitta d in the	LT Sale	10,044.42	12,975.45	10,716.91	33,736.78
As admitted in the Tariff Order	HT Sale	3,826.04	4,061.83	3,876.54	11,764.41
Tariii Oruer	Total Sale	13,870.46	17,037.28	14,593.45	45,501.19
Ag non monthly D 15	LT Sale	8,653.69	11,662.08	9,814.31	30,130.08
As per monthly R-15	HT Sale	3,959.40	3,957.99	3,535.30	11,452.69
report	Total Sale	12,613.09	15,620.07	13,349.61	41,582.77
As filed in Two up	LT Sale	8,653.69	11,662.08	9,814.31	30,130.08
As filed in True-up Petition	HT Sale	3,959.40	3,957.99	3,535.30	11,452.69
reution	Total Sale	12,613.09	15,620.07	13,349.61	41,582.77

- 2.3 The Commission has observed that the Sales as filed in the True-up Petition by DISCOM's is same as recorded in their monthly/Annual R-15 statements.
- 2.4 The Commission had approved assessment of sale to the unmetered category of domestic and agriculture consumers in the tariff order as shown in the table below:

**Assessed units for un-metered** Assessed units for un-Assessed units for unmetered domestic metered agricultural agricultural connections (units connections (units per connections (units per HP per HP per month) connection per month) per month) Urban Rural Rural Category Urban Category Rural Urban Three Phase **Single Phase April to March April to September April to September** Permanent 80 Permanent 90 90 90 195 **Temporary** 220 **Temporary** 205 230 October to March October to March 100 75 Permanent 170 Permanent 180 170 180 **Temporary** 195 220 **Temporary** 205 230

Table 19: Basis of billing to un-metered consumers

2.5 On scrutiny of the sales for the unmetered domestic consumers recorded in monthly R-15 statement (basic sale/billing data statement) for FY 2014-15, it has been observed that the actual monthly unmetered sales to domestic consumers for West and Central DISCOM is within the monthly benchmarks approved by the Commission, whereas for East DISCOM it is higher in few months. Therefore, the Commission has admitted the actual sales to domestic unmetered consumers as reported in the monthly R-15 statement for West and Central DISCOMs. For East DISCOM, the Commission has disallowed the sales of 15.02 MU booked in excess on monthly norms as per R15. A summary of the the unmetered sale as per monthly R-15 statement, and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 20: Summary of sale to the unmetered domestic category booked in excess of the specified benchmark (MU):

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for unmetered domestic connections
East	352.24	15.02
West	111.74	0.00
Central	155.09	0.00
State	619.07	15.02

2.6 Further, on scrutiny of the monthly sales to unmetered agricultural consumers recorded in monthly R-15 statement for FY 2014-15, it is observed that the sale to un-metered category of agriculture consumers has been booked in excess of the prescribed monthly benchmarks, when compared with the number of consumers and their load. Accordingly,

the Commission has accepted the metered sales as per R-15 statement, whereas the sales to un-metered agricultural consumers has been admitted as per the monthly benchmarks prescribed in tariff order for FY 2014-15. A summary of the unmetered sale as per monthly R-15 statement, and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 21: Summary of sale to the unmetered agriculture category booked in excess of the specified benchmark (MU):

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for unmetered agricultural connections
East	4,022.98	166.43
West	6,527.74	0.04
Central	5,142.21	1,470.90
State	15,692.92	1,637.37

2.7 The details of energy sale as per Tariff Order for FY 2014-15, as per true up Petition of the DISCOMs and as admitted by the Commission for the purpose of the True-up are given in the following table:-

Table 22: Energy sale as per Tariff Order for FY 2014-15, as per filing of the DISCOMs and as admitted by the Commission (MU)

	East DISCOM		West DISCOM			Central DISCOM			Total for the State			
Category	As per tariff order FY 2014- 15	As per true up Petitio n FY 2014- 15	As admitte d in true up order FY 2014-15	As per tariff order FY 2014- 15	As per true up Petitio n FY 2014- 15	As admitte d in true up order FY 2014-	As per tariff order FY 2014-15	As per true up Petition FY 2014-15	As admitte d in true up order FY 2014-15	As per tariff order FY 2014-15	As per true up Petition FY 2014-15	As admitted in true up order FY 2014- 15
LOW TENSION												
LV 1: Domestic Consumers	4610.29	3094.50	3079.48	3997.00	3457.11	3457.11	4358.79	3191.96	3191.96	12966.08	9743.57	9728.55
LV 2: Non – Domestic	795.98	674.86	674.86	827.83	818.32	818.32	883.08	704.04	704.04	2506.89	2197.22	2197.22
LV 3: Public Water Works and Streetlights	473.52	456.41	456.41	349.07	336.99	336.99	432.50	299.13	299.13	1255.09	1092.53	1092.53
LV 4: Industry	312.91	283.94	283.94	579.58	519.18	519.18	359.19	232.93	232.93	1251.68	1036.05	1036.05
LV 5: Agricultural Consumers	3851.72	4143.99	3977.56	7221.97	6530.48	6530.44	4683.35	5386.25	3915.35	15757.04	16060.72	14423.35
LT Sale (MU)	10044.42	8653.69	8472.24	12975.45	11662.08	11662.04	10716.91	9814.31	8343.42	33736.78	30130.09	28477.70
HIGH TENSION												

	F	East DISCOM		West DISCOM		Central DISCOM			Total for the State			
Category	As per tariff order FY 2014- 15	As per true up Petitio n FY 2014- 15	As admitte d in true up order FY 2014-15	As per tariff order FY 2014- 15	As per true up Petitio n FY 2014- 15	As admitte d in true up order FY 2014-15	As per tariff order FY 2014-15	As per true up Petition FY 2014-15	As admitte d in true up order FY 2014-15	As per tariff order FY 2014-15	As per true up Petition FY 2014-15	As admitted in true up order FY 2014- 15
HV 1: Railway Traction	637.32	560.62	560.62	592.71	433.81	433.81	978.45	893.11	893.11	2208.48	1887.54	1887.54
HV 2: Coal Mines	496.08	467.19	467.19	0.00	0.00	0.00	34.73	34.84	34.84	530.81	502.02	502.02
HV-3: Industrial and Non- Industrial	2133.93	2543.02	2543.02	3161.95	3094.50	3094.50	2477.95	2301.24	2301.24	7773.83	7938.76	7938.76
HV-4: Seasonal	7.80	8.92	8.92	7.44	4.83	4.83	2.05	1.83	1.83	17.29	15.58	15.58
HV-5: HT Irrigation and Water Works	96.08	89.57	89.57	292.15	393.31	393.31	192.99	153.55	153.55	581.22	636.43	636.43
HV-6: Bulk residential users	454.83	289.73	289.73	7.58	30.81	30.81	190.37	150.74	150.74	652.78	471.28	471.28
HV-7: Bulk Supply to Exemptees	0.00	0.35	0.35	0.00	0.73	0.73	0.00	0.00	0.00	0.00	1.08	1.08
HT Sale (MU)	3826.04	3959.40	3959.40	4061.83	3957.99	3957.99	3876.54	3535.30	3535.30	11764.41	11452.69	11452.68
GRAND TOTAL HT + LT (MU)	13870.46	12613.09	12431.64	17037.28	15620.07	5620.03	14593.45	13349.61	11878.72	45501.19	41582.77	39930.38

## **Power Purchase Quantum and Cost**

#### **Petitioners' Submission**

- 2.8 The Petitioners have submitted that the energy requirement (MU) admitted in the Tariff Order by the Commission was based on the normative loss trajectory as per MYT Regulations, 2012, which differs from the actual loss levels for FY 2014-15.
- 2.9 The Petitioners have submitted that the Commission while projecting the power purchase requirement does not consider the quantum of energy sale to other DISCOM's and UI energy at DISCOM's periphery. Also, the losses outside their periphery, i.e., losses of MPPTCL and PGCIL is beyond their control and therefore, the Petitioners have requested to determine the average per unit rate based on the actual net energy input at DISCOM periphery for sale to retail consumers only. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States.
- 2.10 The Petitioner further submitted that to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States. Also, the calculation of average per unit rate should not be based on purchase at ex-bus, which

may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried out. This results in erroneous calculation of energy balance and the UI quantum of each DISCOM is left unattended.

- 2.11 The State Energy Account (SEA) and State UI gets revised regularly and as a result the quantum and cost as considered during the audited accounts/ energy audit finalization gets revised. The Petitioners have considered actual net drawl and schedule energy during the period as per latest DSM reports and considered amount as per audited accounts.
- 2.12 The Petitioners have considered the MPPTCL losses of 2.82% in accordance with the Annual Report on Regulatory Compliance for FY 2014-15. With regard to Inter-State losses, the Petitioners have submitted the Month-wise and Region-wise breakup of losses for FY 2014-15.
- 2.13 Further, with regard to cost of power purchase, the Petitioners have submitted that the primary reason for increase in power purchase cost is on account of following reasons:
  - Payment of Fuel Cost adjustment on actuals;
  - Payment of Supplementary bills based on actuals of previous years;
  - Payment of actual Inter-State and Intra-State transmission charges.
- 2.14 The Petitioners have submitted that they do not have any material control on the losses outside their periphery i.e. M.P. Transco and PGCIL losses as they are external to their periphery and involve complex interconnected grid. Therefore, it will be appropriate to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM including UI within the State and also banking of power to other States. It is to be noted that calculation of average per unit losses should not be based on calculated at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried.
- 2.15 The Petitioners have requested the Commission to determine the cost of power purchase to be adjusted (disallowed) in the revenue requirement of the Petitioners' for the quantum of power purchase of disallowed power by applying the basic principle that all such costs and expenses on average basis, would have avoided by the Petitioner if the quantum of power whose purchase was disallowed by the Commission has not been purchased.
- 2.16 Based on above, the Petitioners have claimed the power purchase cost as follows:

Table 23: Claimed Power Purchase Cost for FY 2014-15 (Rs. Crore)

Sr.		East DISCOM		West DISCOM			DISCOM	Total for State	
No.	Particulars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
1	Distribution Loss Level (%)	21.69%	20%	21.68%	18%	24.62%	21%	24.22%	19.59%
2	Fixed Cost for FY 2014-15	2,153.42	2,153.42	2,745.79	2,745.79	2,224.90	2,224.90	7,124.11	7,124.11
3	Fixed Cost for Supplementary Bills of Previous FYs	45.43	45.43	57.42	57.42	35.86	35.86	138.71	138.71
4	Variable Cost for FY 2014-15 after adjusting the sale of additional power and other income	2,969.32	2,919.20	3,426.74	3,320.77	3,202.60	3,086.51	9,598.66	9,326.48
5	Other Charges (ED, Cess, Heavy Water Charges, Water Charges, MOPA, Insurance, Others, etc.)	134.32	132.05	155.47	150.66	133.71	128.86	423.50	411.57
6	Inter State Transmission Charges	439.96	439.96	523.46	523.46	456.06	456.06	1,419.48	1,419.48
7	Intra State Transmission Charges for FY 2014-15 including SLDC	754.88	754.88	807.89	807.89	557.95	557.95	2,120.72	2,120.72
8	Variable Cost for Supplementary Bills of Previous FYs after adjusting other charges	146.54	144.07	159.12	154.2	162.45	156.56	468.11	454.83
9	Other Cost of MPPMCL, which cannot be apportioned	62.57	62.57	70.89	70.89	64.74	64.74	198.20	198.20
10	Power Purchased Directly by DISCOM's	3.08	3.03	-	-	0.7	0.67	3.78	3.70
11	DSM/UI at Intra State Boundary	(33.52)	(32.96)	34.14	33.09	159.05	153.29	159.67	153.42
12	Reactive Energy Charges	(3.57)	(3.5)	(0.26)	(0.25)	4.18	4.03	0.35	0.28
13	Other Adjustment based on Reconciliation with MPPPMCL	(34.04)	(33.47)	112.59	109.1	(128.66)	(124)	(50.11)	(48.37)
14	Total	6,638.39	6,584.68	8,093.24	7,973.02	6,873.54	6,745.43	21,605.17	21,303.13

# Commission's Analysis of Power Purchase Requirement and Cost

# **Power Purchase Requirement**

2.17 Details of power purchase including inter-State transmission charges and losses as admitted in the Retail Supply Tariff Order for FY 2014-15 and as per the audited accounts of DISCOMs are given in the table below:

Table 24: Power purchase quantum and cost admitted in Tariff Order and as per the Audited Accounts

DISCOM	Particulars	Admitted in the tariff order	Actual as per audited accounts
East DISCOM	Power Purchase Quantum (MU)	18,113.55	16,911.93*
East DISCOM	Power Purchase Cost (Rs. Crore)	5,036.57	6,638.39#
West DISCOM	Power Purchase Quantum (MU)	21,681.10	20,743.56*
West Discom	Power Purchase Cost (Rs. Crore)	6,389.16	8,093.24#
Central	Power Purchase Quantum (MU)	19,263.77	18,538.48*
DISCOM	Power Purchase Cost (Rs. Crore)	5,900.62	6,873.54#
Total for the	Power Purchase Quantum (MU)	59,058.43	56,193.97
State	Power Purchase Cost (Rs. Crore)	17,325.88	21,605.17

<sup>\*</sup>As Power Purchase quantum is not reflected in Audited Accounts, considered equal to as Petitioned. #It includes supplementary power purchase cost of period prior to FY 2014-15.

2.18 Further, on analysis of the data submitted by the Petitioner, it has been observed that the Petitioners have not submitted the complete details of energy balance in format "Schedule 4a" which requires that the Inter State and Intra State losses be separately shown, whereas the Petitioners have submitted figures combining both these losses. Energy balance details as submitted by DISCOMs are shown in the Table below:

Table 25: Energy Balance as filed by DISCOMs for FY 2014-15

-									
S	Particulars	East	West	Central	Total for				
No.	1 at uculais	DISCOM	DISCOM	DISCOM	State				
1	Total Energy Sale (MU)	12,613.10	15,620.07	13,349.61	41,582.78				
2	A. Distribution losses (%)	21.69%	21.09%	24.62%	22.25%				
2	B. Distribution losses (MU)	3,493.07	4,175.28	4,361.29	12,029.64				
3	At T-D interface (MU)	16,087.04	20,097.35	17,870.33	54,054.72				
	A. Transmission loss of MPPTCL (%)								
4	B. Transmission losses of MPPTCL								
	(MU)		NT .	1 2 1					
5	At MP periphery	Not submitted							
6	A. External losses (%)								
6	B. External losses (MU)								
7	Total energy requirement (MU)	16,911.93	20,743.56	18,538.48	56,193.97				

2.19 However, for admitting the power purchase cost, the Commission in line with the approach adopted in truing up of previous years has computed the normative power purchase requirement by following the principle of grossing up sales with normative loss levels, which is narrated below:

- i. The admitted actual sales (say X) made by the DISCOMs have been grossed up by the normative Distribution Loss levels (say Y) to arrive at the power required at DISCOM periphery, i.e., T-D boundary (say Z=X/(1-Y)).
- ii. The quantum (Z) thus arrived at has further been grossed up by the STU losses (MP Transco) (A) to arrive at the quantum of power required at the State boundary (Say B= Z/(1-A)).
- iii. Finally, the quantum (B) is grossed up by the actual external losses (say C) to arrive at the total energy requirement, i.e., D=B/(1-C) for power procured from external sources.
- 2.20 In order to compute the energy balance for DISCOMs, it is necessary to know the loss levels at each stage. Therefore, inter-State transmission, intra-State transmission and distribution losses need to be identified correctly. The intra-State transmission loss has been submitted as 2.82% by MPPTCL in their annual report of regulatory compliance for FY 2014-15. Accordingly, the same loss level has been considered as the Intra-State transmission losses for the present True-up exercise. The Commission had approved the distribution loss levels for working out power purchase requirement in the Retail Supply Tariff Order for FY 2014-15 as specified in the MYT Regulations, 2012, as shown in the table below:

Table 26: Distribution loss trajectory for FY 2014-15 (%)

Voor	East	West	Central
Year	DISCOM	DISCOM	DISCOM
FY 2014-15	20%	18%	21%

- 2.21 The Commission observed that the Petitioners have submitted the monthly actual external transmission losses (computed based on the weekly losses issued by RLDCs) of Inter-State Transmission System for FY 2014-15. Accordingly, the average losses for FY 2014-15 applicable for Western Region and Eastern Region have been worked out as 3.80% and 2.27%, respectively. The external losses (MU) thus arrived by multiplying the applicable losses (%) with the power purchase (MU) from the respective regions has been apportioned based on the total power purchase by each DISCOM.
- 2.22 Based on above, the power purchase requirement admitted by the Commission for FY 2014-15 is shown in the table below:

West **Total for** East Central S. No. **Particulars DISCOM** DISCOM **DISCOM** State Total Energy Sale (MU) 39,930.39 12,431.64 15,620.03 11.878.72 A. Distribution Losses (%) 20.00% 18.00% 21.00% 19.54% 2 B. Distribution Losses (MU) 3,107.91 3,428.79 3,157.63 9,694.33 At T-D interface (MU) 3 15,539.55 19,048.81 15,036.35 49,624.72 A. Transmission loss of MPPTCL (%) 2.82% 2.82% 2.82% 2.82% 4 B. Transmission losses of MPPTCL (MU) 450.93 552.76 436.33 1,440.03 15,990.48 5 At MP periphery 19,601.58 15,472.68 51,064.74 6 External losses (MU) 282.27 292.25 245.74 820.26 Net energy requirement (MU) 16,272.76 19,893.83 15,718.42 51,885.00

Table 27: Analysis of Power purchase quantum (MU)

#### **Power Purchase Cost**

2.23 On analysis of the power purchase cost submitted by the Petitioner variation was observed between the power purchase cost booked as per audited accounts of the DISCOMs and MPPMCL account. A comparison of power purvchase cost as per the Petition, as per audited accounts of DISCOMs and MPPMCL is shown in the table below:

Table 28: Comparision of power purchase cost as submitted by the Petitioners (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for the State
As filed in Petition	6,584.68	7,973.02	6,745.43	21,303.13
As per DISCOMs audited accounts	6,638.39	8,093.24	6,873.54	21,605.16
As per MPPMCL audited account	52,923.99	7254.12	6,346.52	19,524.62

2.24 The Commission through data gap directed the Petitioners to submit the reconciliation of the power purchase cost as per audited account of DISCOMs and MPPMCL. In reply Petitioner submitted the reconciliation statement, which shows that the major variation is due to additional expenses booked in the audited accounts of DISCOMs pertaining to Intra State transmission charges, SLDC charges, UI charges and some expenses which has been booked in the audited accounts of MPPMCL of previous year. The reconciliation statement submitted by the Petitioners is shown below:

Table 29: Reconcilation of power purchase cost as per DISCOMs audited account and MPPMCL accounts submitted by the Petitioners (Rs. Crore)

Sr.	Particulars	East	West	Central	Total for
No	Particulars	DISCOM	DISCOM	DISCOM	State
Ι	Total Cost as per MPPMCL Power Statement	5,951.56	6,280.31	7,138.88	19,370.75
1	Fixed Charges	2,701.38	2,781.55	3,397.56	8,880.49
2	Energy Charges	3,115.86	3,365.05	3,585.85	10,066.76
3	ED, Cess, Heavy Water Charge, Water Charges	128.12	127.58	150.60	406.30
4	MOPA, Insurance Charges	0.15	0.12	0.18	0.45
5	Other Charges	6.05	6.01	4.70	16.76
II	Additional Power Purchase Cost considered by MPPMCL	(27.57)	66.20	115.24	153.87
1	MPPGCL Power purchase expenses to be passed on to the DISCOMs booked in FY 2014-15	34.81	46.55	42.58	123.94
2	Power Purchase from Wind Generators passed twice in Sept 2014 monthly DISCOM Bill	8.87	9.90	11.18	29.94
3	Sales of Power not passed in FY 2014-15 through monthly bills	-	-	-	-
4	State Energy Account Revision for FY 2014-15	(71.24)	9.75	61.49	-
A	Power Purchase Cost for DISCOMs as per MPPMCL Accounts	5,923.99	6,346.52	7.254.12	19,524.62
III	Cost included by DISCOMs in FY 2014-15 but booked by PMC in previous FY	(6.47)	(194.86)	(2.66)	(203.99)
1	Credit towards Inter DISCOM Power Purchase Sales Charge for the year 2012-13 considered by PMC in the FY 2012-13, However bill of the same issued to the DISCOM in the FY 2014-15, Accordingly same is accounted for by the DISCOM in the FY 14-15	(6.49)	-	(2.60)	(9.08)
2	Supplementary bill consequent to account finalization for the FY 2013-14 issued by PMC to DISCOM dated 12/08/2014. Accordingly, same is accounted for by the DISCOM in the FY 2014-15. However, the said bill is booked by PMC in the FY 2013-14	(0.05)	-	(0.06)	(0.10)
3	Being Credit post finalization of accounts of MPPMCL	0.06	(0.06)	-	-
4	Adjustment done under prior period charges under accounts note 33 out of Rs. 365.35 Crore related to supplementary bills	-	(194.80)	-	(194.80)
IV	Other Cost forming part of power purchase cost	720.87	721.88	841.77	2,284.52
1	Reactive Energy Charges	(3.57)	4.18	(0.26)	0.35
2	UI Chargres	(33.52)	159.05	34.14	159.68
3	Intra-State Transmission & SLDC Charges	754.88	557.95	807.89	2,120.72
4	Inter State Purchase	-	-	-	-
5	Power Purchase by East & Central DISCOMs directly (CSPDCL, border village, bhimgarh for East & Morand MHP, Satpura MHP for Central)	3.08	0.70	-	3.78
V	Total Power Purchase Cost as per above Calculation	6,638.39	6,873.54	8,093.24	21,605.16

Sr. No	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
VI	Power Purchase Cost as per DISCOM Accounts	6,638.39	6,873.54	8,093.24	21,605.16
VII	Difference	0.00	0.00	0.00	0.00

- 2.25 Accordingly, the Commission in line with the approach adopted in previous true up orders and considering that the DISCOMs have made some payments directly to other entities like transmission charges, UI charges etc., has considered power purchase cost as per audited accounts of DISCOMs for further scrutiny as per following section.
- 2.26 While scrutinising the power purchase costs as indicated in the audited accounts of the DISCOMs, the Commission has observed that in support of their claim, the Petitioners have furnished a statement indicating month-wise, station-wise details of power purchase quantum and costs (fixed cost, variable charges, other charges/costs) with DISCOM-wise apportionment for corroborating the figures in audited accounts for FY 2014-15. The total fixed cost for the stations as indicated in this statement is Rs. 7124.10 Crore, Variable and other charges (net of revenue from sales of surplus power) of Rs. 10,136.19 Crore, inter-State transmission cost (PGCIL/POSOCO Charges, etc.) of Rs. 1419.47 Crore, Supplementary Power Purchase Cost of Rs. 606.81 Crore, MPPMCL Cost of Rs. 198.21 Crore and UI charge of Rs. 160.03 Crore. The Commission has analysed the component wise power purchase claimed by the Petitioner in the following Section.

#### MPPMCL Cost of Rs. 198.21 Crore

2.27 With regards to the Other Cost of Rs. 198.21 Crore (Rs. 62.57 Crore, Rs. 64.74 Crore and Rs. 70.89 Crore for East, Central and West DISCOM, respectively) included in Power Purchase Cost, which was not apportioned station-wise by the Petitioner, the Commission vide letter dated 21<sup>st</sup> January, 2019, sought details in this regard from the Petitioner. In response, MPPMCL vide letter dated 7<sup>th</sup> December, 2019, submitted the requisite details. The breakup of the Other Cost as submitted by MPPMCL is as follows:

Table 30: Details of Other Cost submitted by the Petitioner for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	Amount	Details			
1	Power Purchase Cost	(17.04)	Energy bills, which have not been passed to the DISCOMs in their monthly energy bills. Also includes O&M charges paid to MP Genco.			
2	Exchange of Power (Trading Margin)	3.09	Trading Margin paid on power purchase through Exchange			
3	Bank Charges	2.86	Charges paid to Bank for LC facility			
5	Open Access Charge for Purchase of Power	0.31	Open Access Charges paid on short term power purchase			

Sr. No.	Particulars	Amount	Details				
6	Open Access Charge for Banking of Power	40.53	Open Access Charges paid for banking of power				
7	Banking of Energy	(39.10)	Liability towards Banking of Energy				
8	Employee benefit Expense (including salary)	57.81	Employee Benefit Expenses o MPPMCL				
9	Finance Cost	84.85	Interest paid on working capital loans				
10	Administration and General Expense	92.03	A&G related expenses of MPPMCL				
11	Depreciation	2.83	Depreciation expenses on MPPMCL assets				
12	Power Purchase from Wind generators passed twice in Sept 2014 monthly DISCOM Bill	(29.94)					
13	Total	198.21					

2.28 On the analysis of the component-wise details of the Other Cost, it was observed that certain cost/(Revenue) pertains to provisioning for banking of power, surcharge on delayed payment, rebate on sale of power and free electricity to its employees, which cannot be passed on to the State DISCOMs, therefore, the Commission has disallowed such expenses. Details of Other Expenses, which have not been admitted by the Commission are as follows:

Table 31: Other expenses in Power Purchase Cost not considered by the Commission for FY 2014-15 (Rs. Crore)

Sl. No.	Particulars	Amount	Reason for Disallowance			
1	Banking of Energy	(39.10)	The amount pertains to provision made for payment of Banking of Energy and hence, no actual payment has been received.			
2	Rebate on Sale of Power	1.06	The amount pertains to rebate provided to MPIDC (MPAKVN) on sale of Power, the burden of which cannot be passed as cost to State DISCOMs.			
3	Surcharge on Delayed Payment	55.49	The Commission does not consider any surcharge earned or paid on account of delayed payment.			
4	Supply of Free Electricity to Employees	0.72	The amount pertains to free electricity provided by MPPMCL to its employees. As the Commission in Retail Supply Tariff Order for FY 2014-15 had not allowed any supply of free			

Sl. No.	Particulars	Amount	Reason for Disallowance
			electricity to its Employees. Hence, the expense of the same cannot be passed on to the consumers of the State DISCOMs.
5	Finance Cost	84.85	These Loans have been taken by MPPMCL for working capital requirement and do not pertain to funding of the Capital Projects of the DISCOMs. Since the Commission has already allowed the DISCOMs normative Interest on Working Capital, it would not be appropriate to allow finance cost to MPPMCL, separately.
	Total	103.02	

2.29 Based on above, the admitted MPPMCL cost for FY 2014-15 for each DISCOM which has been apportioned based on the actual claimed MPPMCL cost is shown in the following table:

Table 32: MPPMCL Cost admitted for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Actual MPPMCL cost as per accounts	62.57	70.89	64.74	198.21
2	MPPMCL Cost disallowed	32.52	36.85	33.65	103.02
3	MPPMCL cost admitted	30.05	34.05	31.09	95.19

# Other income of MPPMCL of Rs. 279.39 Crore

2.30 The power purchase cost also includes an amount of Rs. 279.39 Crore towards Other income / rebate received by MPPMCL. Since, the Commission has allowed to pass on the expenses of MPPMCL towards its operation and maintenance to the Petitioners, any income earned by it should also be passed onto them. However, it is observed that majority of other income is towards rebate of prompt payment to generators and since the Commission has admitted the power purchase cost towards normative energy energy requirement only. Therefore, the Commission has admitted other income in proportion to the admitted energy requirement, which is shown in the table below:

Table 33: Other income of MPPMCL admitted for FY 2014-15

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	16,911.93	20,743.56	18,538.48	56,193.97
2	Actual Other Income (Rs. Crore)	В	86.11	103.71	89.57	279.39
3	Quantum of Power Purchase Admitted (MUs)	С	16,272.76	19,893.83	15,718.42	51,885.00
4	Other Income of MPPMCL admitted (Rs. Crore)	D=B*C/A	82.85	99.46	75.95	258.27

# Supplementary Power Purchase Cost of Rs. 606.71 Crore

- 2.31 The power purchase booked in the audited accounts also includes an amount of Rs. 606.71 Crore (Rs. 191.87 Crore of East DISCOM, Rs. 216.53 Crore of West DISCOM and Rs. 198.31 Crore of Central DISCOM) as "supplementary bills raised by the generators for the period prior to 2014-15". However, the scrutiny of the supplementary bill details furnished to the Commission in support of aforesaid claim of Rs. 606.71 Crore has revealed that the claim pertains to the period from FY 2005-06 to FY 2013-14.
- 2.32 The amount of Rs. 606.71 Crore has been included in the audited accounts for FY 2014-15 and the Commission is inclined to consider it, however, the Petitioners are required to reconcile the same with respective year's power purchase cost. Therefore, the Commission had directed the Petitioners to submit the details of Supplementary Bills prior to FY 2014-15 vide letter dated 21<sup>st</sup> January, 2019. The Petitioners submitted their reply on 7<sup>th</sup> December, 2019. Accordingly, the Petitioners have revised their claim for supplementary Power Purchase Cost to Rs. 566.60 Crore after reducing the claim on account of supplementary bills allowed in the true up of FY 2013-14.
- 2.33 The Commission's True-up Orders of past years have already attained finality and the amount of Rs. 606.71 Crore has been accounted for in the audited accounts for FY 2014-15, therefore, it would be appropriate to consider these supplementary bills of the past years in the true up for FY 2014-15. However, it is a matter of concern that the Petitioner has been raising claim on account of supplementary Power Purchase cost for the period from FY 2005-06 to FY 2013-14 in almost all truing up exercises, thereby increasing the power purchase cost exorbitantly. In this regard, the Commission vide deficiency note directed the Petitioner to submit the details of all the supplementary power purchase claimed till date in true up Petitions for FY 2015-16 to FY 2017-18 identifying the reason for the claim along with the justification for not claiming the amount in the said years. The Petitioner has provided some of the details in reply, which requires further clarification. Accordingly, the Commission has not considered the Petitioners' claim

towards the supplementary power purchase cost in this Petition. However, the Commission allows Petitioner to approach the Commission to claim the said amount separately on furnishing of the adequate details.

# **Inter-State Transmission Charges**

2.34 The Commission in Retail supply tariff order for FY 2014-15 had admitted the inter state transmission charges of Rs. 1,098.84 Core based on the actual charges for FY 2012-13. However, the actual inter State transmission charges paid by the DISCOMs in FY 2014-15 is Rs. 1,419.47 Crore. As inter-State transmission charges are uncontrollable for DISCOMs, the Commission has admitted the actual inter State transmission charges of Rs. 1,419.47 Crore as per actuals in true up of FY 2014-15.

# Unscheduled Interchange (UI) / Deviation Settlement Mechanism (DSM) and Reactive Energy Charges

- 2.35 It is observed that the Petitioners have claimed UI / DSM of Rs. 159.67 Crore for FY 2014-15 based on the actual payment towards these charges. Per unit rate of UI / DSM charges paid by the DISCOMs is on higher side signifying indiscipline in power drawl by the DISCOMs. The UI / DSM is not meant for trading of electricity and is mainly an instrument for grid discipline and settling the unintended deviations during the normal course of operations and when the frequency is in normal operating range according to the Grid Code. Further, additional UI / DSM charges are required to be paid when the DISCOMs draws more power than their scheduled drawl when the grid frequency is low. Accordingly, the Distribution utilities are required to project their demand precisely. Presently, the Commission in this order has admitted pro-rated actual UI / DSM charges to the admitted normative energy requirement for FY 2014-15. However, the Petitioners are directed to reduce their payment towards UI / DSM charges by adopting efficient management, proper scheduling of power etc.
- 2.36 Similarly, the Commission has admitted the pro-rated reactive energy charges towards admitted normative energy requirement for FY 2014-15 as shown in table below:

Table 34: UI / DSM and Reactive Energy Charges Admitted for FY 2014-15

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	16,911.93	20,743.56	18,538.48	56,193.97
2	UI / DSM Charge (Rs. Crore)	В	(33.52)	34.14	159.05	159.67
3	Quantum of Power Purchase Admitted (MUs)	С	16,272.76	19,893.83	15,718.42	51,885.00

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
4	UI / DSM Charge Admitted (Rs. Crore)	D=B/A*C	(32.25)	32.74	134.86	135.34
5	Reactive Energy Charges (Rs. Crore)	Е	(3.57)	(0.26)	4.18	0.35
6	Reactive Energy Charges Admitted (Rs. Crore)	F=E/A*C	(3.44)	(0.25)	3.54	(0.14)

# Fixed and Variable Cost of generating stations

- 2.37 The Commission has noted that DISCOMs have procured power in excess of admitted energy requirement based on norms specified in the MYT Regulations, 2012 and previous orders. Similar situation had arisen during the True-up exercise of previous years. Hence, the Commission has decided to adopt the same approach as followed for the True-up of previous years by taking cognisance of the Judgment of the Hon'ble APTEL dated 15<sup>th</sup> September, 2015 in Appeal Nos. 234, 270, 271 and 276 of 2014, in the matter of True-up Orders of previous years issued by the Commission. Accordingly, the power purchase cost has been determined by considering:
  - i. Full fixed cost for the generating stations meeting the power purchase requirement of the DISCOMs and
  - ii. The cost for short-term power and variable cost of long-term power together for deriving the average rate to be applied on the admitted quantum of power purchase requirement.
- 2.38 Accordingly, the Commission has admitted the actual fixed cost as claimed by the Petitioners in line with the methodology priscribed by the Hon'ble APTEL except for the fixed charges for Torrent Power Station. With regard to power purchase from Torrent Power station, some of the stakeholders have raised the issue with regard that it is against the principles of Merit Order Dispatch (MOD) on the basis of variable cost of generating station. Therefore, in line with the view taken by the Commission in true up for FY 2013-14, the Commission has considered it appropriate to keep in abeyance the quantum of power purchase from Torrent Power stations and its cost. Accordingly, the Commission has allowed the actual fixed cost excluding the fixed cost towards torrent power station.
- 2.39 The summary of fixed charges as considered by the Commission is shown in table below:

	•	U		'
Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Fixed Cost Admitted in Tariff Order for FY 2014-15	1,629.24	2,291.82	2,005.63	5,926.44
Fixed Cost Claimed in True-up Petition for FY 2014-15	2,153.42	2,745.79	2,224.90	7,124.10
Fixed Cost Admitted in True-up Order for FY 2014-15	2,127.16	2,715.89	2,197.55	7,040.60

Table 35: Fixed Cost admitted by the Commission for FY 2014-15 (Rs. Crore)

- 2.40 It is observed that the main reasons for increase in fixed cost admitted in true up of FY 2014-15 as compared to fixed charges admitted in retail supply tariff order for FY 2014-15 are due to following reasons:
  - The Commission had not considered the fixed charge towards undispatached energy from the generating stations as per the projected MoD in retail supply tariff order for FY 2014-15, whereas, in true up order, the Commission has admitted the total actual fixed cost except fixed cost for Torrent Power Station considering the Judgment of the Hon'ble APTEL dated 15<sup>th</sup> September, 2015 in Appeal Nos. 234, 270, 271 and 276 of 2014.
  - The Commission in retail supply tariff order had considered the fixed charges for the generating stations as per the Fixed Charges approved for FY 2013-14, as the tariff order for these generating stations was yet to be issued by MPERC and CERC. As the tariff for these stations was issued subsequently, the fixed charges increased for the stations.
  - During FY 2014-15, Badarpur TPS, Tehri HPP, Koteshwar HPP, Chamera-III HPP, Parbati-III HPP allocated to MP which also led to increase in fixed cost by Rs. 43.24 Crore.
- 2.41 Further, in regard to the Petitioners request for disallowance of power purchase cost for the quantum of power purchase attributable to excess loss in distribution system, the Commission observe no merit. The losses in Intra-State and Inter-State transmission system are beyond the control of the Petitioners, however, these losses would have been very low, if the Petitioners would have achieved the distribution losses as per the target specified by the Commission and restricted its unmetered sale for agriculture and domestic consumers within the norms specified by the Commission. Similarly, computation of pool energy rate (Rs./kWh) based on the actual power purchase cost as per audited accounts and total energy procured by the Petitioner as per DSM/UI account would lead to higher per unit rate due to inclusion of cost of power of costlier plants, which could have been avoided by the Petitioners, if they would have achieved the target loss levels and restricted their sales to unmetered agriculture and domestic consumers

within the norms specified by the Commission. Therefore, considering that the Petitioners have not achieved the norms specified by the Commission, the inefficiency of the Petitioners should not be passed on to the consumers of the State. Accordingly, the Commission has recomputed the energy charges of the Petitioners as per the following approach:

- Monthly Energy Requirement computed considering the monthly energy sales admitted by the Commission grossed up with admitted loss levels of Distribution system, Intra-State and Inter-State transmission network;
- To meet this monthly energy requirement, scheduled energy of each generating stations has been considered as per monthly State Energy Account. Scheduling of the generating stations has been considered as per the monthly MOD issued by MPSLDC;
- Shortfall if any in meeting the energy requirement has been considered to be met through purchase of power from open market at rate equal to energy charge of the last generating station in the MOD;
- Energy charge worked out for each generating station considering the actuals energy and other charges as per the MPPMCL statement on annual basis provided by the Petitioners.
- 2.42 Based on the above approach, the Commission has computed the energy charges of Rs. 8,651.89 Crore at per unit energy charges of Rs 1.67/kWh.
- Accordingly, the total power purchase cost determined by the Commission for FY 2014-15 is given in the table below:

Table 36: Determination of Power Purchase Cost (Rs. Crore)

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Fixed Cost of Power Purchase for FY 2014-15 (in Rs. Crore)	A	2,127.16	2,715.89	2,197.55	7,040.60
2	Inter-State Transmission Charges (Rs Crore)	В	439.96	523.46	456.06	1,419.47
3	MPPMCL Cost Admitted (Other cost which can't be apportioned) (Rs Crore)	С	30.05	34.05	31.09	95.19
4	UI / DSM Charge Admitted (Rs Crore)	D	(32.25)	32.74	134.86	135.34

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
5	Reactive Energy Charges Admitted (Rs Crore)	E	(3.44)	(0.25)	3.54	(0.14)
6	Other Income of MPPMCL	F	82.85	99.46	75.95	258.27
7	Sub-total	G= A+B+C+D+E-F	2,478.63	3,206.43	2,747.15	8,432.20
8	Pooled variable rate (Rs. / kWh)	Н	1.68	1.67	1.65	1.67
9	Quantum of Power Purchase Admitted (MUs)	Ι	16,272.76	19,893.83	15,718.42	51,885.00
10	Total Variable Cost admitted (in Rs. Crore)	J=H*I/10	2,737.21	3,316.80	2,597.88	8,651.89
11	Total Power Purchase Cost Admitted for FY 2014-15 (in Rs. Crore)	K=G+J	5,215.84	6,523.22	5,345.03	17,084.09

- 2.44 It is observed that the total power purchase cost excluding MPPTCL and SLDC charges as admitted in the retail tariff order for FY 2014-15 was Rs. 15,588.72 Crore, whereas in this order the Commission has admitted power purchase cost of Rs. 17,342.35 Crore. The major reason for this increase is as follows:
  - Increase in Fixed Cost due to allowance of full fixed cost (excluding torrent power) as per Hon'ble APTEL Judgment dated 15<sup>th</sup> September, 2015 in Appeal Nos. 234, 270, 271 and 276 of 2014;
  - Increase in variable charges due to upward revision in energy charges of the generating stations;
  - Increase in actual Inter State transmission charges.

# **Intra-State Transmission Charges**

2.45 Transmission charges admitted in the Retail Tariff Order, Audited Accounts and as filed for FY 2014-15 by East, West and Central DISCOMs including SLDC charges are given in the table below:

Table 37: Transmission Charges including SLDC charges for FY 2014-15 (Rs. Crore)

		Transmission	Transmission	Transmission
Sl. No.	DISCOM	charges as per	charges as per	charges as
		tariff order	audited accounts	filed
1	East	520.66	754.88	754.88
2	West	671.40	807.89	807.89
3	Central	545.70	557.95	557.95
4	Total	1737.16	2120.72	2120.72

2.46 It has been observed from the above table that East, West and Central DISCOMs have claimed transmission charges as per the Audited Accounts of FY 2014-15. Accordingly, the Commission has admitted the actual transmission charges (including SLDC charges) as per the Audited Accounts of FY 2014-15, which is as shown in the Table below:

Table 38: Transmission Charges admitted by the Commission for FY 2014-15 (Rs. Crore)

Sl. No.	DISCOMs	Transmission charges (including SLDC charges)
1	East	754.88
2	West	807.89
3	Central	557.95
	Total	2,120.72

# Operation and Maintenance (O&M) Expenses

## **Petitioners' Submission**

2.47 The Commission had admitted the total O&M Expenses as Rs. 2827.27 Crore in the Tariff Order for FY 2014-15. DISCOM-wise break-up of the O&M expenses admitted in the Tariff Order is given in the table below:

Table 39: O&M Expenses admitted in Tariff Order of FY 2014-15 (Rs. Crore)

Particulars	East	West	Central	Total
	DISCOM	DISCOM	DISCOM	for State
O&M Expenses	1008.37	926.46	892.43	2827.26

- 2.48 The Petitioners have claimed the O&M Expenses in accordance with the MYT Regulations, 2012. The Petitioners have submitted that the claimed Employee Expenses are much lower as compared to the amount approved by the Commission in Tariff Order for FY 2014-15 on account of actual lower Dearness Allowances (DA) paid to the employees. Further, the Petitioner have also submitted that in accordance with the MYT Regulations, 2012, they have claimed actual terminal benefits including leave encashment but excluding the pension and gratuity, which is being allowed as part of ARR of MP Transco.
- 2.49 With regards to A&G Expenses, the Petitioners have submitted that the claimed A&G expense has increased on account of actual taxes paid to the government in FY 2014-15.
- 2.50 Accordingly, O&M expenses claimed by the Petitioners are shown in the table below:

Table 40: O&M Expenses claimed by Petitioners for FY 2014-15 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
O&M Expenses	937.90	861.34	841.32	2640.56
Terminal Benefits	12.97	12.34	9.32	34.63
Total O&M Expenses claimed	950.87	873.68	850.64	2675.19

# **Commission's Analysis on O&M Expenses:**

- 2.51 The Commission had specified norms for O&M expenses in the MYT Regulations, 2012. These norms were fixed on the basis of past audited figures of the Distribution Licensees. The rationale behind fixing these norms was to promote competition, adoption of commercial principles, efficient working of the Distribution Licensees and protection of Consumers' interest. However, it is observed that the Petitioners have been not able to keep its operational efficiency in line with the targets specified by the Commission in the Regulations. Accordingly, the Commission in accordance to Regulation 46 of MPERC MYT Regulations, 2012, has decided not to pass the burden of their inefficiencies onto the consumers of the States, by considering the norms specified in these Regulation as the ceiling norms and thereby allowing O&M expenses on actuals, if the same is lesser as compared to norms specified in the Regulations.
- 2.52 Further, in accordance with the MYT Regulations,2012 dearness allowance, pension and terminal benefits, taxes to be paid to the Government or Local Authorities and fees to be paid to MPERC is allowable on actual basis. Therefore, the same has been allowed by the Commission on actual basis. Also, the Commission has considered the actual Operation and Maintenance expenses capitalized during the year as per the audited account of FY 2014-15 and has reduced the same from the admitted Operation and Maintenance expenses.
- 2.53 Further, the Commission observed that some DISCOMs are booking expenses towards contractual employees under employee expenses, whereas some are booking it under the A&G Expenses. Therefore, the Commission has considered the lesser of the actual O&M expenses as per the audited accounts vis-a-vis normative O&M expenses in totality.
- 2.54 Accordingly, based on the above, the component-wise analysis of each expense is shown in the following paragraphs:

## **Employee Expenses, Terminal Benefits & Arrears**

2.55 The Commission has carried out detailed scrutiny of the actual employee expenses excluding DA, arrears, pension and terminal benefit as per the provision of the MYT Regulations, 2012and has compared the same with the norms specified in the Regulations.

- 2.56 Further, while determining the norms, an element for payment of prior period arrears up to 31.8.2008, on account of revision of pay scales of the employees in accordance with Sixth Pay Commission recommendations as implemented by the Distribution Licensees of the State, was included. These arrears are subject to true up based on actual payments by the Petitioners. Accordingly, the Commission has considered the actual arrears paid by the DISCOMs for FY 2014-15.
- 2.57 Further, in accordance with the MYT Regulations, 2012, the DISCOMs are eligible to claim DA, terminal benefits, incentives paid to Employees on actuals. Accordingly, the Commission has considered the DA on actuals for FY 2014-15. As regards the issue of expenses against terminal benefits for MPSEB/successor entities as well as pension payments to pensioners, the Commission has considered the terminal benefits and pension expenses on "Pay as you go" principle under the transmission charges. Therefore, the Commission has not considered any provisioning made under the head "Terminal Benefits to Employees" in the True-up for FY 2014-15 and allowed only the actual payment made to employees including leave encashment but excluding pension and gratuity. Further, the Commission has observed that the Petitioner has claimed audit charges under the head of Terminal Benefits, which has not been considered by the Commission under Employee Expenses as the same needs to be managed under the allowed A&G expenses for FY 2014-15. Therefore, the Commission has considered the audited charges under actual A&G expense.
- 2.58 Based on the above, the Employee Expenses as per actuals and as per the provision of Regulations for FY 2014-15 is shown in the following table:

Table 41: Normative and actual Employee Expenses computed for FY 2014-15 (Rs. Crore)

Sr.	Particulars	East DISC	East DISCOM		WEST DISCOM		DISCOM
No.	Particulars	Normative*	Actual	Normative*	Actual	Normative*	Actual
1	Employee Expenses	354.00	335.06	334.00	354.07	313.00	333.87
2	DA	301.89	301.89	278.58	278.58	280.69	280.69
3	Terminal Benefits	25.77	25.77	23.23	23.23	35.04	35.04
4	Arrears	34.00	29.78	30.00	30.00	20.60	20.60
5	Total	715.67	692.51	665.81	685.88	649.33	670.20

<sup>\*</sup> As per the provision of the Regulations

# **A&G Expenses**

2.59 The Commission has analysed the actual A&G expenses and compared the same with the norms specified in the Regulation. Further, with regards to the actual taxes paid to the government, the Commission has considered the actual taxes paid by the DISCOMs

- except for the entry tax, as the same has been already been considered as part of norms approved for A&G Expense by the Commission.
- 2.60 The Commission has considered the actual audit charges booked under the head of Terminal Benefits under actual A&G expenses. Further, the Commission has observed that the MPERC Fees claimed by the Petitioner is in line with actual fees paid to the Commission. Therefore, the Commission has considered the same. Accordingly, based on the above, A&G Expense as per actual and as per the provision of Regulations for FY 2014-15 is shown in the following table:

Sr.	Particulars	East DIS	СОМ	WEST DI	SCOM	CENTRAL DISCOM	
No.	Particulars	Normative*	Actual	Normative*	Actual	Normative*	Actual
1	A&G Expenses	121.73	143.73	100.07	124.36	91.89	88.99
2	Taxes	2.78	2.78	13.91	13.91	1.36	1.36
3	MPERC Fees	0.52	0.52	0.63	0.63	0.55	0.55
4	Total	125.03	147.03	114.61	138.90	93.80	90.89

<sup>\*</sup> As per the provision of the Regulations

# **R&M Expenses**

2.61 The provision for R&M expenses in the MYT Regulations, 2012 is @ 2.3% on the opening GFA of the financial year for all DISCOMs. The Commission has also analysed the actual R&M expenses as per the audited accounts for FY 2014-15. Accordingly, based on the above, R&M Expense as per actual and as per the provision of Regulations for FY 2014-15 is shown in the following table:

Table 43: Normative and Actual R&M Expenses computed for FY 2014-15 (Rs. Crore)

DISCOMs	CEA	GFA % as Normative		Actual R&M	
DISCOMS	GFA	per norms	R&M Expenses	Expenses	
East	5,341.45	2.3%	122.85	70.78	
West	4,314.87	2.3%	99.24	99.24	
Central	5,404.75	2.3%	124.31	33.59	
Total	15,061.07	2.3%	346.40	203.61	

2.62 Accordingly, based on the above analysis, the Commission compared the O&M Expenses computed as per the provision of the Regulations and actual O&M Expense as per audited account of FY 2014-15. Based on the approach detailed above, the Commission has admitted the lower of the O&M computed as per Regulations and as per audited accounts.

In view of the above, the admitted O&M expenses for FY 2014-15 are as shown in the following table:

Table 44: O&M expenses admitted for DISCOM for FY 2014-15 (Rs. Crore.)

Particulars	Actual	Normative	Admitted
East DISCOM	888.36	941.58	888.36
West DISCOM	884.44	840.08	840.08
Central DISCOM	750.49	823.25	750.49
Total O&M expenses	2,523.29	2,604.91	2,478.93

# **Interest on Project Loans**

## **Petitioners' Submission:**

2.63 The Petitioners have submitted that they have not taken impact of the true up order for FY 2013-14, as the same was awaited at the time filing of the Petition for truing up of FY 2014-15. Accordingly, the Petitioners have claimed interest on project loans (inclusive of finance charges) for East, West and Central DISCOM of Rs. 132.24 Crore, Rs. 191.11 Crore and Rs. 76.27 Crore, respectively, based on the methodology adopted by the Commission in previous orders.

# **Commission's Analysis on Interest on Project Loans:**

- 2.64 The Commission has examined the claims of DISCOMs from their filings and Audited Accounts. As per Regulations 31.1 to 31.9 of the MYT Regulations, 2012, for allowing interest and finance charges, all loans shall be identified for the assets capitalised till the relevant year. In the absence of information related to loan mapping with particular assets, it cannot be ascertained as to how much loan is related to completed fixed assets and how much is related to capital work in progress.
- 2.65 Further Regulation 21.1 of the MYT Regulations, 2012, specifies that debt-equity ratio shall be 70:30 for calculation of interest on loan and for return on equity. Accordingly, the Commission has adopted the following principles for computing interest on project loans.

# Principles adopted for calculation of interest on project loans

2.66 In the True-up Order for FY 2013-14, the interest on project loans was admitted on the fixed asset created till 31st March, 2014 on the basis of Audited Accounts for FY 2013-14. The Commission has adopted the same methodology for allocating the Gross Fixed Assets (GFA) addition during the year into debt and equity as explained below:

- a. Allocation of fixed assets into debt and equity as on 31st March, 2014 has been considered as per the True-up Order of FY 2013-14.
- b. Net addition to GFA during FY 2014-15 has been worked out after subtracting the amount received towards consumer contribution and grants during the year from total addition to GFA as available in the audited accounts of DISCOMs:
  - i. The Commission has considered closing GFA admitted in the True-up Order for FY 2013-14 as the opening GFA for FY 2014-15.
  - ii. Further, the Commission has considered the closing consumer contribution and grants for FY 2013-14 as the opening consumer contribution & grants for FY 2014-15.
- c. Equity in excess of 30% of the net GFA added during FY 2014-15, has been considered as normative loan. However, if the actual equity deployed is less than 30% of the net GFA, then actual equity has been considered for computation of RoE. Further, only such equity capital is to be considered, which has been actually utilized for creation of asset. The equity so derived has been added to the equity considered at the end of FY 2013-14 and balance net addition to GFA has been considered as funded through debt.
- d. Balance of net addition to GFA, has been considered as having been funded through debt and added to the total debt considered at the end of FY 2013-14. In absence of the actual dates of capitalization of individual assets, interest on project loans has been computed based on the average of the opening and closing loans for the financial year.
- In accordance with the Regulation 31.3 of the MYT Regulations, 2012, debt repayment is equal to the depreciation admitted for that year. As regards the weighted average rate of interest for the computation of interest on loans, the Commission has verified the weighted average interest rate filed by East, West and Central DISCOMs as 7.29%, 7.31% and 8.42%, respectively and it was observed that East and Central DISCOMs have considered working capital loan taken from REC in their computation of weighted average interest on Project Loans. The Petitioners were asked to explain the purpose of undertaking these loans. However, the Petitioners were unable to justify that these loans were taken for funding project specific works. Therefore, the Commission while approving the weighted average rate of interest has not considered these Loans. Accordingly, the Commission has computed the revised weighted average rate of interest for projects specific loans for each DISCOM and admitted the weighted average rate of interest of 7.62%, 7.31% and 8.66% for East, West and Central DISCOMs, respectively.

- 2.68 Other Finance Charges claimed by East, West and Central DISCOMs are Rs. 16.14 Crore, Rs. 13.45 Crore and Rs. 23.02 Crore, respectively. The Commission after scrutinizing DISCOMs submission with audited accounts, has considered only cost of raising funds, bank charges, commitment charges and guarantee/LC charges. Accordingly, the Commission admitted Other Finance Charges as Rs. 16.14 Crore, Rs. 12.41 Crore and Rs. 22.15 Crore for East, West and Central DISCOMs, respectively. The Commission has not considered the Petitioners' claim towards the penal interest paid by Central DISCOM of Rs. 0.76 crore claimed under the head of finance charges. Further, the Commission has also not considered the rebate on bills provided for timely payment as expense towards finance charges of Rs. 0.11 Crore and Rs. 1.04 Crore claimed by Central and West DISCOMs, respectively, as this rebate encourages consumers to pay bills timely which improves cash flow of the Petitioners. Therefore, passing of this rebate as expenses in the ARR will defeat the whole purpose of introducing the rebate. Further, the Commission has considered the actual interest and finance charges capitalized as per audited account of FY 2014-15 and has reduced the same from the admitted interest and finance charges.
- 2.69 Details of interest on project loans along with other finance charges admitted in true-up of FY 2014-15 for DISCOMs are given in the table below:

Table 45: Interest on Project Loans admitted by the Commission for FY 2014-15 (Rs. Crore)

Particulars	Legend	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening Debt associated with GFA					
(Closing Debt as Per FY 2013-14 True-up	A	1,629.70	763.07	1,669.50	4,062.27
Order)					
GFA Addition during the year	В	692.89	566.19	1,164.71	2,423.79
Consumer Deposit and Grants utilized during the year	С	350.92	248.81	292.15	891.88
Net GFA Addition during the year	E=B-C	341.97	317.38	872.56	1,531.91
Net GFA considered as funded through debt	F	272.77	222.17	825.58	1320.52
Debt repayment during the year (equal to Depreciation)	G	108.31	92.59	116.68	317.58
Closing debt associated with GFA	H=A+F-G	1,794.15	892.65	2,378.40	5,065.21
Average debt associated with Loan	I=Average (A, H)	1,711.92	827.86	2,023.95	4,563.74
Weighted average rate of interest (%) on all loans as per Petitioner	J	7.62%	7.31%	8.66%	8.02%
Interest on Project Loans	K=I*J	130.45	60.52	175.27	366.24
Interest Capitalised	L	(25.40)	(22.69)	(41.94)	(90.03)
Other Finance cost	M	16.14	12.41	22.15	50.70

Particulars	Legend	East DISCOM	West DISCOM	Central DISCOM	Total for State
Interest cost admitted on project loans in True-Up	N=K+L+M	121.19	50.24	155.48	326.91

# **Interest on Working capital**

#### **Petitioners' Submission:**

- 2.70 The Petitioners have submitted that as per the MYT Regulations, 2012, Interest on Working Capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan with respect to normative figures and the same is allowed based on segregation between wheeling and retail supply business.
- 2.71 The Petitioners have computed the Interest on Working Capital according to the methodology adopted by the Commission in Tariff Order dated 24<sup>th</sup> May, 2014 and norms specified under the MYT Regulations, 2012. The Petitioners have considered the interest rate on working capital of 13.50%, i.e., SBI Base Rate of 10% as on 1<sup>st</sup> April, 2014 plus 350 basis points.

# Commission's Analysis on Interest on working capital:

2.72 Regulation 22 of the MYT Regulations, 2012 specifies the methodology for the computation of working capital requirement for the Distribution Licensees as follows:

# "22. Working capital

- 22.1. Working capital for supply activity of the licensee shall consist of:
  - (i) Receivables of two months of average billing reduced by power purchase cost of one month and any consumer security deposit,
  - (ii) O&M expenses for one month, and
  - (iii) Inventory (meters, metering equipment, testing equipment are particularly relevant in case of supply activity) for 2 months based on annual requirement for previous year.
- 22.2. Working capital for wheeling activity of the licensee shall consist of
  - (i) O&M expenses for one month, and

- (iii) Inventory (excluding meters, etc. considered part of supply activity) for 2 months based on annual requirement considered at 1% of the gross fixed assets for previous year.
- 22.3. The norms described above shall be applicable for each year of the tariff period."
- 2.73 Accordingly, in line with the approach adopted by the Commission in previous order and in line with the provisions of the Regulations, the Commission has considered Gross Fixed Assets at the start of FY 2014-15 as Rs 5,341.45 Crore, Rs. 4,314.87 Crore and Rs. 5,405.75 Crore for East, West and Central DISCOM, respectively. One percent of this GFA has been pro-rated to two months to work out the inventory for retail and wheeling activity as Rs. 8.90 Crore, Rs. 7.19 Crore, and Rs. 9.01 Crore for East, West and Central DISCOM, respectively. This has been further divided into wheeling and retail inventory in the ratio of 80:20 in line with the approach adopted in the last true up Order. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements of working capital have been considered based on the expenses admitted by the Commission in the relevant sections of this order. Further, as noted in previous true up orders also, as both the activities are undertaken simultaneously by the DISCOMs, the available resources are common for both. Therefore, the Commission has taken working capital requirement together for wheeling and retail activities. Accordingly, the Commission has only considered one Month O&M Expense towards the wheeling activity only.
- 2.74 Further, Regulation 36 of the MYT Regulations, 2012, specifies as follows for the computation of interest on working capital:

# "36. Interest charges on working capital

- 36.1. Working capital shall be computed as provided in these Regulations and Rate of interest on working capital shall be equal to the State Bank of India Base Rate as on April 1 of the relevant Year plus 3.50%. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has borrowed in excess of the working capital loan computed on normative basis."
- 2.75 Accordingly, for the purpose of interest rate on working capital, State Bank of India Base Rate as on 1<sup>st</sup> April 2014, i.e., 10% plus 3.50% has been taken. The admitted interest on working capital is shown in the table below:

# Table 46: Interest on Working Capital admitted by the Commission for FY 2014-15 (in Rs. Crore)

Sl.	Particulars	Months	East	West	Central	Total for	
No.	1 articulars	Months	DISCOM	DISCOM	DISCOM	State	
For wh	eeling activity						
A)	1/6 <sup>th</sup> of annual requirement of	2	7.12	5.75	7.21	20.08	
	inventory for previous year						
B)	1/12 <sup>th</sup> of total O&M expenses	1	74.03	70.01	62.54	206.58	
C)	Total Working capital (A+B)		81.15	75.76	69.75	226.66	
D)	Rate of Interest		13.50%	13.50%	13.50%	13.50%	
E)	Interest on Working capital		10.96	10.23	9.42	30.60	
For Re	tail Sale activity	•					
A)	1/6 <sup>th</sup> of annual requirement of	2	1.78	1.44	1.80	5.02	
A)	inventory for previous year	2	1.76	1.++	1.00	3.02	
B)	Receivables equivalent to 2 months	2	1,105.20	1,324.04	1,014.54	3,443.78	
<i>D</i> )	average billing					·	
C)	1/12 <sup>th</sup> of power purchase expenses	1	434.65	543.60	445.42	1,423.67	
D	Consumers Security Deposit		674.98	831.41	588.68	2,095.07	
E)	Total Working capital (A+B-C-D)		(2.65)	(49.54)	(17.76)	(69.95)	
F)	Rate of Interest		13.50%	13.50%	13.50%	13.50%	
<b>G</b> )	Interest on Working capital		(0.36)	(6.69)	(2.40)	(9.44)	
	Summary						
	For wheeling activity		10.96	10.23	9.42	30.60	
	For Retail Sale activity		(0.36)	(6.69)	(2.40)	(9.44)	
	Total Interest on working Capital		10.60	3.54	7.02	21.16	
	Total Interest on working Capital admitted		10.60	3.54	7.02	21.16	

# **Interest on Consumer Security Deposits**

## **Petitioners' Submission:**

2.76 Petitioners have claimed interest on consumer security deposit as per their Audited Accounts for FY 2014-15. East, West and Central DISCOMs have claimed Rs. 53.88 Crore, Rs. 61.34 Crore and Rs. 55.71 Crore, respectively, as against Rs. 38.34 Crore, Rs. 79.60 Crore and Rs. 61.34 Crore, respectively, admitted by the Commission in the Tariff Order for FY 2014-15.

# **Commission's Analysis on Consumer Security Deposit:**

2.77 As per the Regulation 31.9 of the MYT Regulations, 2012 interest on consumer security deposit shall be considered at the rate specified by the Commission. In the Tariff Order

for FY 2014-15, the Commission admitted the interest on consumer security deposit in view of the following:

- "3.151The Commission has observed from Audited Statement of Accounts of the DISCOMs that the total outgo of annual interest on the Consumer Security Deposit is not in tune with the quantum of security deposits held and the interest costs allowed in past. DISCOMs have been paying less interest than admitted, which may be due to the reason that amount of security deposit held is neither adjusted pursuant to permanent disconnection or default of payments nor is the interest paid in such cases. Therefore, the Commission has decided to admit the interest on Consumer Security Deposit based on the DISCOMs' proposal for FY 2014-15."
- 2.78 Therefore, the Commission in line with the view taken by the Commission in Retail Tariff Order for FY 2014-15 has decided to admit the interest amount on consumer security deposit as per the Audited Accounts of the DISCOMs. Summary of interest on consumer security deposit admitted in the Tariff Order, claimed in the True-up Petitions and admitted in this True up Order for FY 2014-15 is shown in table below:

**East** West Central **Total for Particulars DISCOM DISCOM DISCOM** State Admitted in tariff order for FY 2014-15 38.34 79.60 183.80 65.86 Claimed in true up Petition for FY 2014-15 53.88 61.34 55.71 170.93 As per Audited Accounts for FY 2014-15 53.88 61.34 55.71 170.93 Admitted in this true-up order 53.88 61.34 55.71 170.93

Table 47: Interest on Consumer Security Deposit admitted for FY 2014-15 (Rs. Crore)

# **Return on Equity**

#### **Petitioners' Submission:**

2.79 Petitioners have claimed return on equity @ 16%. East, Central and West DISCOMs have claimed return on equity as Rs. 208.91 Crore, Rs 234.94 Crore, Rs 167.39 Crore, respectively, as against Rs. 194.89 Crore, Rs. 212.41 Crore, Rs. 166.84 Crore, respectively, admitted by the Commission in the Tariff Order for FY 2014-15.

# **Commission's Analysis on Return on Equity:**

As explained in section of Interest on Project Loans, the equity contribution has been considered as 30% on the net GFA addition during FY 2014-15, if the actual equity deployed is more than 30% of the net GFA. Further, only that equity capital is required

to be considered, which has been utilized for funding of the project. Accordingly, the Commission directed the Petitioners to submit the actual funding of the GFA addition for FY 2014-15. In reply, the East and Central DISCOMs submitted the information, whereas the West DISCOM submitted that the funding details for FY 2014-15 is not available. Accordingly, in absence of information of actual equity being capitalised for creation of asset for West DISCOM, actual paid up share capital addition during the financial year has been considered as the actual equity deployed subject to equity addition being within 30% of the net GFA. Any equity in excess of the 30% of the net GFA has been considered as normative loan. For East and Central DISCOMs, as the actual equity deployed is less than 30% of net GFA addition during FY 2014-15, actual equity has been considered for allowance of Return on Equity.

2.81 Closing equity of FY 2013-14 as admitted by the Commission in True-up Order of FY 2013-14 has been considered as opening value of equity for FY 2014-15. Further, the rate of return on equity has been considered as per the MYT Regulations @16%. The computation of return on equity as admitted is shown in the table below:

Table 48: Return on Equity admitted for FY 2014-15 (Amount in Rs. Crore)

S. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Opening Equity identified with GFA (Closing GFA as per True-up Order of FY 2013-14)	1217.05	929.53	1230.47	3,377.04
2	GFA Addition during the year	692.89	566.19	1164.71	2,423.79
3	Consumer Deposit and Grants utilized during the year	350.92	248.81	292.15	891.88
4	Net GFA Addition during the year	341.97	317.38	872.56	1,531.91
5	Actual Equity Addition	69.20	119.42	46.98	235.60
6	30% of the Net GFA addition	102.59	95.21	261.77	459.57
7	Net GFA considered as funded through equity (Min (5,6))	69.20	95.21	46.98	211.39
8	Closing Equity Considered for FY 2014-15	1286.25	1024.74	1277.45	3588.43
9	Average Equity identified with GFA and considered for FY 2014-15	1251.65	977.13	1253.96	3482.74
10	RoE @16% admitted in True-up of FY 2014- 15	200.26	156.34	200.63	557.24

# **Depreciation**

## **Petitioners' Submission:**

- 2.82 The Petitioners have submitted that the depreciation has been computed as per the methodology specified in the MYT Regulations, 2012 on the basis of the opening GFA as on 1<sup>st</sup> of April 2014 as per audited balance sheet and actual addition to GFA during FY 2014-15. The Petitioners have further submitted that as per the Second Amendment to MPERC (Recovery of expenses and other charges for providing Electric Line or Plant used for the purpose of giving Supply) (Revisions-I) Regulations, 2009 (RG-31(I) of 2009), the manner of the recognition of asset created through consumer contribution as well as depreciation thereon has been elaborated. Further, Accounting Standard 12, provides guidance on the asset created through government grant. Accordingly, as per provisions of the Regulation, DISCOM can charge depreciation on the full amount of asset and amortize the corresponding amount from grant to the P&L account. Therefore, treatment given by the DISCOM in the accounts is in line with the Regulation (RG-31) and prevailing Accounting Standards.
- 2.83 Further, the Petitioners have claimed Depreciation as charged in the books of the Petitioners for the Assets capitalized during the year and at the beginning of the year consistent with the rates of depreciation specified in MYT Regulations, 2012 (except West DISCOM). Further, the West DISCOM adopted the rate of depreciation notified by the Commission in Regulations from FY 2010-11 as per the clarification issued by the Ministry of Corporate Affairs vide general circular No 31/2011 dated 31st May 2011. Since, DISCOMs adopted depreciation rates specified in the Regulations only from FY 2010-11, a separate depreciation model was used to consider depreciation as per Regulations since FY 2006-07. Accordingly, the Petitioner (West DISCOM) has considered the Depreciation for FY 2014-15.
- Accordingly, the Petitioners have claimed net depreciation of Rs. 359.13 Crore, Rs. 191.05 Crore and Rs. 196.33 Crore for East, West and Central DISCOMs, respectively, as against Rs. 104.23 Crore, Rs. 98.73 Crore and Rs. 113.93 Crore, respectively, approved by the Commission in Tariff Order for FY 2014-15. The Petitioner has submitted that the major reason for increase in claimed depreciation is on account of depreciation claimed on the asset created under the RGGVY scheme.

# Commission's analysis on depreciation:

2.85 The Commission in Regulation 32 of the MYT Regulations, 2012 has specified the following methodology for computation of depreciation:

•

- a. The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission
- b. The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.
- c. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
- d. Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- e. Depreciation shall be calculated annually based on 'straight line method' and at rates specified in Annexure II to these Regulations for the assets of the Distribution System declared in commercial operation after 31/03/2013.
  - Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets."
- 2.86 The Commission in its True-up Order for FY 2005-06 dated January 16, 2008 clarified that irrespective of the accounting practice followed by the utilities, the Commission will allow depreciation as per the depreciation rates specified in the Regulations.
- 2.87 The Commission has observed that claims against depreciation by the DISCOMs have not been duly substantiated by the detailed Fixed Asset Registers in the format prescribed by the Commission to ensure that claims made are only against those assets, which have not been fully depreciated. DISCOMs in the past also did not submit these details despite repetitive directions of the Commission. Accordingly, in order to reprimand the Petitioners, the Commission in truing up for FY 2014-15 has allowed the same depreciation rate as approved in Tariff Order for FY 2014-15 i.e., 2.44%, 2.81%, and 2.44% for East, West and Central DISCOMs, respectively. Accordingly, considering GFA addition (net of consumer contribution and grants) as discussed in "Interest & Finance Charges" Section of this Order, the admitted depreciation for FY 2014-15 is as shown in the table below:

Table 49: Depreciation admitted by the Commission for FY 2014-15 (Rs. Crore)

Particulars	East	West	Central	Total for
1 at ticulars	DISCOM	DISCOM	DISCOM	State
Opening GFA on 1 April, 2014 (Closing GFA net of				
consumer contribution & grants as per True-up Order	4,268.10	3,136.31	4,345.59	11,750.00
of FY 2013-14)				
Add: GFA Added during the year	692.89	580.61	1,164.71	2,438.21
Less: Deductions during the year	0.00	14.42	0.00	14.42
Less: Consumer Contribution and grants during the	350.92	248.81	292.15	891.88
year	330.92	240.01	292.13	071.00
Net GFA addition during the year	341.97	317.38	872.56	1,531.91
Closing GFA on 31 March, 2015	4,610.07	3,453.69	5,218.15	13,281.91
Average GFA	4,439.08	3,295.00	4,781.87	12,515.96
Rate of Depreciation	2.44%	2.81%	2.44%	2.54%
Depreciation admitted by the Commission	108.31	92.59	116.68	317.58

## Other items of ARR

2.88 Apart from the above discussed components, there are certain other items, which form part of the ARR. These include bad debts, other miscellaneous expenditure, any prior period expenses / credits, income tax and fringe benefit tax. These components are analysed in the following section:

## **Bad and doubtful debts**

#### **Petitioners' Submission:**

2.89 DISCOMs have claimed the bad and doubtful debts as shown in the table below:

Table 50: Bad Debts claimed by DISCOMs (Rs. Crore)

DISCOM	Bad Debts as per tariff order	Bad Debts claimed
East	2.00	9.27
West	2.00	77.99
Central	2.00	218.68
Total	6.00	305.94

# Commission's Analysis on Bad and Doubtful debts:

- 2.90 The MYT Regulations, 2012 provide for admission of bad debts as amount actually written-off subject to the maximum of 1% of the revenue from sale of power. Vide letter dated 21<sup>st</sup> January, 2019, the Commission directed the DISCOMs to submit the details of bad debt claimed. In reply to the queries, DISCOMs have submitted as below:
  - (a) East DISCOM submitted that amount written off against dues of Water Resource Department is Rs 9.27 Crore.
  - (b) West DISCOM submitted that the amount of Rs. 79.99 Crore has been written off against dues of various societies and consumers with approval of BoD.
  - (c) Central DISCOM submitted that amount written off against various schemes is Rs. 60.49 Crore against which it received receivables from the State Government of Rs. 39.78 Crore and against LT demand withdrawal of Rs 197.97 Crore.
- 2.91 From above it can be observed that majority of the debt has been written off against a scheme or withdrawal / false demand, whereas some write off is against dues and delayed payment surcharge. The Commission has already taken the view in True-up Order for previous years that the principal amount written off under any scheme or withdrawn / false demand shall not be considered under bad debts, as the same has been waived off at the Petitioners' own behest.
- 2.92 With regards to write off against dues, it is observed that none of the DISCOMs have provided any details about the efforts made for the recovery of the dues, however, the DISCOMs have submitted the approval taken from the Board of Directors. Accordingly, the Commission has only admitted Bad Debts against these dues. The admitted bad debts for FY 2014-15 are shown as follows:

Table 51: Bad Debts admitted by the Commission for FY 2014-15 (Rs. Crore)

Particulars	East	West	Central	Total for
raruculars	DISCOM	DISCOM	DISCOM	State
Debt written off against scheme	-	0.29	20.71	21.00
Demand Withdrawn / false demand	-	-	197.97	197.97
Surcharge written Off	-	-	-	-
Written off against dues	9.27	80.40	-	89.67
Total	9.27	80.69	218.68	308.64
Debt written off under consideration	9.27	80.40	0.00	89.67
1% of sales revenue	57.61	65.64	49.34	172.58
Admitted	9.27	65.64	0.00	74.90

Any other expense

Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit)

#### **Petitioners' Submission:**

- 2.93 The Petitioners submitted that Other Expense/(Income) consists of miscellaneous losses and write offs, prior period charges/ (credit), sundry expenses, extraordinary items and other charges, etc. The Petitioners in their ARR filing for FY 2014-15 had not claimed any expenses as other expenses, however, as per audited accounts of FY 2014-15, other expenses for East, West and Central DISCOM stand at Rs. (300.77) Crore, Rs. 13.55 Crore and Rs. (112.10) Crore, respectively.
- 2.94 Further, the Central DISCOM submitted that while finalizing the audited accounts for FY 2014-15, it had considered supplementary bills to be accounted in power purchase amounting to Rs. 194.80 Crore under other expenses- net prior period credit charges. The same has been reduced from other expenses/ (income) and duly accounted under power purchase reconciliation with audited accounts for FY 2014-15.
- 2.95 The Commission directed DISCOMs to submit the details of other expenses, miscellaneous losses & write-offs / sundry expenses / net prior period charges/(credits) claimed in the Petitions. The DISCOMs submitted their responses.

# **Commission's Analysis**

- 2.96 Considering the submissions of DISCOMs, the Commission has undertaken detailed head wise analysis of Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges /(Credit) as claimed in the Petition and provided in the Audited Accounts of the DISCOMs.
- As regards other expenses claimed by DISCOMs, the Commission has observed that employee related credits/ interest/ prior period depreciation expense, etc., under the head of prior period adjustments are claimed. As the Commission has already undertaken truing up of previous years based on the prudence check of the audited accounts in light of norms provided in Regulations, the Commission has not considered these expenses.
- 2.98 Accordingly, the Commission after verifying expenses from the audited accounts of the DISCOMs has admitted the miscellaneous losses & write-offs / sundry expenses / net prior period charges/(credits) as shown in the table below:
  - Table 52: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) admitted by the Commission (Rs. Crore)

Douti ou lous	East D	East DISCOM		West DISCOM		DISCOM
Particulars	Claimed	Allowed	Claimed	Allowed	Claimed	Allowed
Excess provisions for Interest & Finance / Depreciation Charges of Prior Periods	(23.89)	0.00	6.79	0.00	(33.51)	0.00
Other Excess Provisions of Prior Periods	(90.30)	0.00	-	1	0.00	0.00
Operating expenses of previous years	2.24	0.00	-	1	(2.29)	0.00
Prior Period Power Purchase Expense / (Income)	(7.64)	(7.64)	-	ı	0.05*	(0.05)
Supplementary Bills to be accounted in Power Purchase	-	-	-	-	194.80	0.00
Extraordinary items			-	-	(17.71)	(17.71)
Sundry Expenses/Miscellaneous Losses	(120.75)	0.00	-	-	-	-
Other Charges	0.93	0.00	0.14	0.00	-	-
Other Charges/ Interest on deposits recevied from REC under RGGVY Scheme	6.55	6.55	6.62	6.62	(2.02)	2.02
Total	(232.85)	(1.09)	13.55	6.62	(202.22)*	(15.74)

<sup>\*</sup>Central DISCOM has erred in computation and has shown income as expense and vice-a-versa

## **Revenue from Sale of Power**

#### Sale of Power

2.99 The Commission had admitted the projection of Sales as 12,613.09 MU, 15,620.07 MU and 13,349.61 MU at revenue of Rs. 6,755.24 Crore, Rs. 8,123.29 Crore and Rs. 7163.04 Crore for East, West and Central DISCOMs, respectively, in the Retail Supply Tariff order for FY 2014-15 dated 24<sup>th</sup> May, 2014. As against the same, the Sales filed are 12,613.09 MU, 15,620.07 MU and 13,349.61 MU at revenue of Rs 6,620.36 Crore, Rs 7,944.22 Crore and Rs 6,083.15 Crore by East, West and Central DISCOMs, respectively.

## **Commission's Analysis**

- 2.100 The Petitioners in their Audited Accounts have booked the revenue from sale of power excluding subsidy and other income to the tune of Rs. 5,750.15 Crore, Rs. 6,563.83 Crore and Rs. 4,929.51 Crore for East, West and Central DISCOMs, respectively.
- 2.101 The Commission understands that the Petitioners had implemented retail tariffs as per the tariff order issued by the Commission on 24<sup>th</sup> May, 2014 and based on the same the following revenue has been booked in the audited accounts excluding subsidy and other income. Further, the Commission has also considered recoveries from theft/ malpractices

of Rs.10.82 Crore and Rs. 4.10 Crore for East and Central DISCOMs as per audited account, respectively, as part of revenue from sale of power.

Table 53: Revenue from sale of power excluding subsidy and other income as per Audited Accounts (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total
Revenue from sale of power	5,760.97	6,563.83	4,933.60	17,258.41

- 2.102 Further, the Commission also recognizes that the Petitioners have received tariff subsidy from State Government other than the revenue from sale of power as reported in the audited balance sheets. DISCOMs have also received other income and non-tariff income during FY 2014-15 as booked in the Audited Accounts. Thus, in addition to the revenue from sale of power, the Commission has also considered the following revenue, as reported in audited accounts, for this true-up exercise and as discussed subsequently:
  - Non-Tariff Income
  - Subsidy received from State Govt.
  - Other income

## **Non-Tariff Income**

2.103 In addition to the above revenue from sale of power, the Non-Tariff Income has been considered separately as stated below for all the three DISCOMs as per their respective Audited Accounts:

Table 54: Break up of Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Misc. charges from consumers (Including Supervision Charges)	13.53	70.52	31.39	115.44
2	Income from wheeling charges	0.20	1.93	11.03	13.16
3	Meter rent	37.04	48.92	35.06	121.02
	Total non-tariff income	50.77	121.38	77.48	249.62

## **Subsidy from State Government**

2.104 The Petitioners Audited Accounts for FY 2014-15 reveal that tariff subsidy to the tune of Rs. 870.22 Crore, Rs.1,380.39 Crore and Rs. 1,153.64 Crore has been received from the Government of Madhya Pradesh by East, West and Central DISCOMs, respectively. Accordingly, the Commission has considered this amount as the income of the

Petitioners, as it is a part of the revenue from sale of power to the subsidized consumers, which is shown as follows:

Table 55: Subsidy considered as per Audited Accounts (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Subsidy received from GoMP	870.22	1,380.39	1,153.64	3,404.25

# **Other Income**

# **Petitioners' Submission:**

2.105 The Other Income claimed by the Petitioners is mentioned in the table below.

Table 56: Other Income as submitted by the Petitioners (Rs. Crore)

	Tuble 30. Other Income as submanea by the Tellubrers (Rs. Crore)					
Sr.	Particulars	East	West	Central		
No.		DISCOM	DISCOM	DISCOM		
	Income from Investment, Fixed & Call					
A	Deposits					
	Interest on Staff loans & advances	0.00	0.37	0.15		
	Interest on FDRs/Investment	9.11	30.45	21.57		
A	Sub-Total (A)	9.11	30.83	21.73		
В	Other Non-Tariff Income					
	Delayed Payment Surcharge	112.63	132.57	213.12		
	Interest & penal interest on advance to	5.40	1.07	0.57		
	suppliers	5.49	1.97	8.56		
	Interest from banks	0.00	0.00	0.36		
	Utility charges	0.00	0.00	3.51		
	Scrap sales	0.00	24.80	0.00		
	Lease rent	0.00	0.00	0.21		
	Income from staff recoveries	0.04	0.00	0.56		
	Income from Staff Welfare activities	0.00	0.01	0.00		
	Deferred income (consumer contribution)	224.84	0.00	0.00		
	RGGVY	0.00	0.00	74.16		
	Misc services/receipts	37.02	19.16	43.31		
	Profit on sale of stores	0.00	0.00	2.35		
	Sale of Tender Form	0.00	0.00	0.27		
	Income from trading (other than electricity)	27.92	6.99	3.58		
В	Sub-total (B)	407.93	185.49	349.99		

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
C	Total other income (A+B)	417.04	216.31	371.72
D	Total other income (excluding DPS)	304.41	83.75	158.59

# **Commission's Analysis:**

- 2.106 The Commission has not considered the Delayed Payment Surcharge as part of income of DISCOMs as per the Regulations as any additional interest on working capital for the delayed payment is also not considered by the Commission.
- 2.107 The Commission has computed depreciation on the net asset addition after reducing grants and consumer contribution from the actual gross asset addition during the year. Therefore, the Commission has not considered the deferred income and income from RGGVY depreciation.
- 2.108 Accordingly, the other income as admitted by Commission is shown as follows:

Table 57: Other Income as admitted by Commission (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.37	0.15
	Interest on FDRs/Investment	9.11	30.45	21.57
A	Sub-Total (A)	9.11	30.83	21.73
В	Delayed payment surcharge	112.63	132.57	213.12
C	Other Non-tariff Income			
	Interest & penal interest on advance to suppliers	5.49	1.97	8.56
	Interest from banks	0.00	0.00	0.36
	Income from staff recoveries	0.04	0.00	0.56
	Income from Staff Welfare activities	0.00	0.01	0.00
	Misc services/receipts/any other income	64.94	50.95	47.30
	Profit on sale of stores	0.00	0.00	2.35
С	Sub-total (C)	70.46	52.92	59.13
D	Total Other Income (A+B+C)	192.21	216.31	293.98
E	Total Other Income (D-B)	79.57	83.75	80.86

- 2.109 Accordingly, the Commission admits the actual other income of Rs. 79.57 Crore, Rs. 83.75 Crore, and Rs 80.86 Crore for East, West and Central DISCOMs, respectively, as per audited accounts excluding the components as discussed above.
- 2.110 Based on above discussion, the total revenue admitted by the Commission for FY 2014-15 is mentioned in the table below:

Table 58: Total Revenue, Non-Tariff Income and Subsidy admitted (Rs. Crore)

DISCOM	Revenue from sale of power	Non-tariff income	Revenue subsidies from GoMP	Other income (excluding DPS)	Total revenue income admitted for true-up
East	5,760.97	50.77	870.22	79.57	6,761.53
West	6,563.83	121.38	1,380.39	83.75	8,149.35
Central	4,933.60	77.48	1,153.64	80.86	6,245.58
Total	17,258.41	249.62	3,404.25	244.18	21,156.46

# Revenue Surplus / (Deficit) admitted

2.111 Based on the scrutiny of various cost components regarding revenue income and expenditures of DISCOMs, the Commission has determinted the following Surplus / (Deficit) for the period April 2014 to March 2015 for recovery by the Licensee through retail tariffs in future years:

Table 59: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2014-15 (Rs. Crore)

Particulars	East D	ISCOM	West DISCOM		Central DISCOM		Total for State	
r ai ucuiai s	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME								
Tariff Income	5,750.14	5,760.97	6,563.83	6,563.83	4,929.51	4,933.60	17,243.48	17,258.41
Non-tariff income		50.77		121.38		77.48		249.62
Net other income (excluding	366.00	79.57	200.13	83.75	240.17	80.86	806.30	244.18
Delayed Payment Surcharge)		19.31		63.73		80.80		244.16
Subsidy	870.22	870.22	1,380.39	1,380.39	1,153.64	1,153.64	3,404.25	3,404.25
Total Income (A)	6,986.36	6,761.53	8,144.35	8,149.35	6,323.32	6,245.58	21,454.03	21,156.46
EXPENSES								
Power Purchase								
Power Purchase Cost	5,829.80	5,215.84	7,165.13	6,523.22	6,187.48	5,345.03	19,182.41	17,084.09
MP Transco Charges	754.88	754.88	807.89	807.89	557.95	557.95	2,120.72	2,120.72
<b>Total Power Purchase (Incl.</b>	6,584.68	5,970.71	7,973.02	7,331.11	6,745.43	5,902.98	21,303.13	19,204.80
Transmission) (B)	0,304.00	3,970.71	1,913.02	7,331.11	0,743.43	3,902.90	21,303.13	17,204.00
O&M Expenses (Net of								
Capitalisation)								
Employee Expenses	354.00	335.06	334.00	334.00	313.00	333.87	1,001.00	1,002.94
DA	301.89	301.89	278.58	278.58	280.69	280.69	861.16	861.16
Terminal Benefits	13.10	25.77	14.13	23.23	9.32	35.04	36.55	84.04
Arrears	34.00	29.78	30.00	30.00	29.52	20.60	93.52	80.38
A&G Expenses	121.73	143.73	100.07	100.07	91.89	88.99	313.69	332.79
R&M Expenses	122.85	70.78	99.24	99.24	124.31	33.59	346.40	203.61

Dough and any	East D	ISCOM	West I	DISCOM	Central DISCOM		Total for State	
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Other expenses (including Taxes & MPERC Fees)	3.30	3.30	17.66	14.54	1.91	1.91	22.87	19.75
O&M Expense Capitalised	0.00	(21.97)	0.00	(39.58)	0.00	(44.19)	0.00	(105.74)
Total O&M Expenses (C)	950.87	888.36	873.68	840.08	850.64	750.49	2,675.19	2,478.93
Other Expenses								
Depreciation	359.13	108.31	191.05	92.59	196.33	116.68	746.51	317.58
Interest & Financing Charges on Project Loans (Net of Capitalisation)	132.24	121.19	76.27	50.24	191.11	155.48	399.62	326.91
Interest on working capital loans	37.92	10.60	(7.85)	3.54	(2.05)	7.02	28.02	21.16
Interest on Consumer Security Deposit	53.88	53.88	61.34	61.34	55.71	55.71	170.93	170.93
Return on Equity	208.91	200.26	167.39	156.34	234.94	200.63	611.24	557.24
Bad & Doubtful Debts	9.27	9.27	79.99	65.64	218.68	-	307.94	74.90
Any Other Expense	(112.10)	(1.09)	13.55	6.62	(202.21)	(15.74)	(300.76)	(10.21)
Total Other Expenses (D)	689.25	502.42	581.74	436.31	692.51	519.78	1,963.50	1,458.51
Total Expenses $E = (B + C + D)$	8,224.80	7,361.49	9,436.29	8,607.50	8,290.62	7,173.24	25,951.71	23,142.23
Revenue Gap $F = (E-A)$	1,238.44	599.96	1,291.94	458.15	1,967.30	927.66	4,497.68	1,985.77
Add: Impact of True-up of DISCOMs ARR FY 2008-09 (G)	273.01	273.01	480.04	480.04	(93.83)	(93.83)	659.22	659.22
Gross Expenses $H = (E + G)$	8,497.81	7,634.50	9,916.33	9,087.54	8,196.79	7,079.41	26,610.93	23,801.45
Total Revenue Gap I = (H - A)	1,511.43	872.97	1,771.98	938.19	1,873.47	833.83	5,156.88	2,644.99

# A3: TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2015-16

Analysis of Expenses during the period from April 2015 to March 2016

# Sale of energy

3.1 In the retail supply tariff order issued on 17<sup>th</sup> April, 2015 for FY 2015-16, the Commission admitted the sale of energy for FY 2015-16 as shown in the table below:

Table 60: Sales admitted in Tariff Order dated 17th April, 2015 (MU)

DISCOM	East	West	Central	Total
LT Sale	11,813.80	13,769.80	12,613.80	38,197.60
HT Sale	4,083.20	4,035.20	3,921.20	12,039.60
Total Sale	15,897.00	17,805.00	16,535.00	50,237.00

3.2 A comparison of Sales as admitted in Tariff Order, as per the R-15 statements and as claimed in the True-up Petition is given in the table below:

Table 61: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition for FY 2015-16 (MU)

Particulars		East DISCOM	West DISCOM	Central DISCOM	Total for State
	LT Sale	11,813.80	13,769.80	12,613.80	38,197.60
As admitted in the Tariff Order	HT Sale	4,083.20	4,035.20	3,921.20	12,039.60
	Total Sale	15,897.00	17,805.00	16,535.00	50,237.00
A 41 D 45	LT Sale	10,069.40	12,761.72	10,936.50	33,767.62
As per monthly R-15 report	HT Sale	3,821.83	4,146.41	3,775.64	11,743.88
Тероге	Total Sale	13,891.23	16,908.13	14,712.15	45,511.50
A 603 1 4 75	LT Sale	10,069.40	12,761.73	10,936.46	33,767.60
As filed in True-up Petition	HT Sale	3,821.83	4,146.39	3,775.64	11,743.86
1 Cation	<b>Total Sale</b>	13,891.23	16,908.13	14,712.10	45,511.46

- 3.3 The Commission has observed that the Sales as filed in the True-up Petitions by DISCOMs is same as recorded in their monthly/Annual R-15 statements, except for Central DISCOM. Accordingly, the Commission has considered the sales as per R15 for further assessment.
- 3.4 The Commission had approved assessment of sale to the unmetered category of domestic and agriculture consumers in the tariff order as shown in the table below:

Assessed un metered connections connection	` -	Assessed metered connection per month	agi ns (units	for un- ricultural per HP	Assessed units for un-metered agricultural connections (units per HP per month)			
Urban	Rural	Category Rural Urban			Category	Rural	Urban	
		Th	ree Phase		Sin	gle Phase		
April to	March	April	to Septem	ber	April to September			
					1	0.0	00	
		Permanent	80	90	Permanent	90	90	
		Permanent Temporary	80 195	220	Permanent Temporary	205	230	
100	75	Temporary		220	Temporary		230	
100	75	Temporary	195	220	Temporary	205	230	

Table 62: Basis of billing to un-metered consumers

3.5 On scrutiny of the sales for the unmetered domestic consumers recorded in monthly R-15 statement (basic sale/billing data statement) for FY 2015-16, it has been observed that the actual monthly unmetered sales to domestic consumers for Central DISCOM is within the benchmark approved by the Commission, whereas for East and West DISCOMs, it is higher in few months. Therefore, the Commission has admitted the actual sales to domestic unmetered consumers as reported in the monthly R-15 statement for Central DISCOM. For East and West DISCOMs, the Commission has disallowed the sales of 12.31 MU and 0.11 MU, respectively, booked in excess on monthly norms as per R15. A summary of the the unmetered sale as per monthly R-15 statement, and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 63: Summary of sale to the unmetered domestic category booked in excess of the specified benchmark (MU):

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for unmetered agricultural connections
East	315.09	12.31
West	49.27	0.11
Central	117.18	0.00
State	481.54	12.42

3.6 Further on scrutiny of the sales to unmetered agricultural consumers recorded in monthly R-15 statement for FY 2015-16, it is observed that the sale to un-metered category of agriculture consumers had been booked in excess of the prescribed monthly benchmarks, when compared with the number of consumers and their load. Accordingly, the

Commission has accepted the metered sales as per R-15 statement, whereas the sales to unmetered agricultural consumers has been admitted as per the monthly benchmarks prescribed in tariff order for FY 2015-16. A summary of the unmetered sale as per monthly R-15 statement, and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 64: Summary of sale to the unmetered agriculture category booked in excess of the specified benchmark (MU)

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess over the prescribed benchmark for unmetered agricultural connections
East	5,216.57	790.52
West	7,355.66	0.22
Central	6,019.99	2,004.90
State	18,592.22	2,795.64

3.7 The details of energy sale as per Tariff Order for FY 2015-16, as per true up Petition of the DISCOMs and as admitted by the Commission for the purpose of the True-up are given in the following table:-

Table 65: Energy sale as per Tariff Order for FY 2015-16, as per filing of the DISCOMs and as admitted by the Commission (MU)

	I	East DISCOM	[	1	West DISCOM			Central DISCOM			Total for the State		
Category	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	
LOW TENSION													
LV 1: Domestic Consumers	4,559.00	3,422.58	3,410.27	4,696.00	3,582.37	3,582.26	4,963.00	3,453.53	3,453.53	14,218.00	10,458.48	10,446.06	
LV 2: Non – Domestic	1,001.00	827.18	827.18	897.00	893.40	893.40	901.00	766.57	766.57	2,799.00	2,487.15	2,487.15	
LV 3: Public Water Works and Streetlights	744.00	290.29	290.29	374.00	379.69	379.69	363.00	305.44	305.44	1,481.00	975.42	975.42	
LV 4: Industry	345.00	294.28	294.28	549.00	546.97	546.97	285.00	238.79	238.79	1,179.00	1,080.04	1,080.04	
LV 5: Agricultural Consumers	5,164.00	5,235.07	4,444.55	7,253.00	7,359.31	7,359.09	6,101.00	6,172.14	4,167.27	18,518.00	18,766.52	15,970.91	
LT Sale (MU)	11,813.00	10,069.40	9,266.57	13,769.00	12,761.74	12,761.42	12,613.00	10,936.46	8,931.60	38,195.00	33,767.61	30,959.58	
HIGH TENSION													
HV 1: Railway Traction	612.00	442.60	442.60	562.00	366.02	366.02	1,019.00	732.46	732.46	2,193.00	1,541.08	1,541.08	
HV 2: Coal Mines	474.00	468.77	468.77	-	-	-	39.00	34.51	34.51	513.00	503.28	503.28	
HV-3: Industrial and	2,512.00	2,519.46	2,519.46	3,090.00	3,280.37	3,280.37	2,554.00	2,671.43	2,671.43	8,156.00	8,471.26	8,471.26	

	I	East DISCOM		7	Vest DISCOM	1	Ce	entral DISCO	M	To	tal for the Sta	ite
Category	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16	As per tariff order FY 2015-16	As per true up Petition FY 2015- 16	As admitted in true up order FY 2015- 16
Non- Industrial												
HV-4: Seasonal	15.00	7.92	7.92	5.00	11.44	11.44	2.00	1.72	1.72	22.00	21.08	21.08
HV-5: HT Irrigation and Water Works	107.00	99.45	99.45	349.00	457.56	457.56	156.00	173.49	173.49	612.00	730.50	730.50
HV-6: Bulk residential users	363.00	283.49	283.49	21.00	30.63	30.63	151.00	161.57	161.57	535.00	475.69	475.69
HV-7: Bulk Supply to Exemptees	-	0.14	0.14	8.00	0.38	0.38	-	0.45	0.45	8.00	0.97	0.97
HT Sale (MU)	4,083.00	3,821.83	3,821.83	4,035.00	4,146.40	4,146.40	3,921.00	3,775.63	3,775.63	12,039.00	11,743.86	11,743.86
GRAND TOTAL HT + LT (MU)	15,897.00	13,891.23	13,088.40	17,805.00	16,908.13	16,907.82	16,535.00	14,712.10	12,707.23	50,237.00	45,511.47	42,703.44

## **Power Purchase Quantum and Cost**

#### **Petitioners' Submission**

- 3.8 The Petitioner have submitted that the energy requirement (MU) admitted in the Tariff Order by the Commission was based on the normative loss trajectory as per MYT Regulations, which differs from the actual loss levels for FY 2015-16.
- 3.9 The Petitioners have submitted that the Commission while projecting the power purchase requirement does not consider the quantum of energy sale to other DISCOM's and UI energy at DISCOM's periphery. Also, the losses outside their periphery i.e. losses of MPPTCL and PGCIL is beyond their control and therefore the Petitioners have requested to determine the average per unit rate based on the actual net energy input at DISCOM periphery for sale to retail consumers only. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States.
- 3.10 The Petitioner further submitted that to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States. Also, the calculation of average per unit rate should not be based on purchase at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried out. This results in erroneous calculation of energy balance and the UI quantum of each DISCOM is left

unattended.

- 3.11 The Petitioners have submitted that they have considered the MPPTCL losses of 2.88% in accordance to the Annual Report on Regulatory Compliance for FY 2015-16. With regard to Inter-State losses, the Petitioners have submitted the Month wise and Region wise break up of losses for FY 2015-16.
- 3.12 Further, with regard to cost of power purchase, the Petitioners have submitted that the primary reason for increase in power purchase cost is on account of following reasons:
  - Payment of Fuel Cost adjustment on actuals;
  - Payment of Supplementary bills based on actuals of previous years;
  - Payment of actual Inter-State and Intra-State transmission charges
- 3.13 The Petitioners have submitted that they do not have any material control on the losses outside their periphery i.e. M.P. Transco and PGCIL losses as they are external to their periphery and involve complex interconnected grid. Therefore, it will be appropriate to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM including UI within the State and also banking of power to other States. It is to be noted that calculation of average per unit losses should not be based on calculated at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried.
- 3.14 The Petitioners have requested the Commission to determine the cost of power purchase to be adjusted (disallowed) in the revenue requirement of the Petitioners' for the quantum of power purchase of disallowed power by applying the basic principle that all such costs and expenses on average basis, would have avoided by the Petitioner if the quantum of power whose purchase was disallowed by the Commission has not been purchased.
- 3.15 Based on above, the Petitioners have claimed the power purchase cost as follows:

Table 66: Claimed Power Purchase Cost for FY 2015-16 (Rs. Crore)

Sr.	Particulars	East D	ISCOM	West D	ISCOM	Central	DISCOM	Total fo	or State
No.	Faruculars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
1	Distribution Loss Level (%)	22.65%	18.00%	23.10%	16.00%	25.13%	19.00%	23.63%	17.64%
2	Fixed Cost for FY 2015-16	2,674.41	2,674.41	3,396.70	3,396.70	2,770.48	2,770.48	8,841.59	8,841.59

Sr.	Doution long	East D	ISCOM	West D	ISCOM	Central DISCOM		Total fo	or State
No.	Particulars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
3	Cost for Supplementary Bills of Previous FYs	230.59	227.17	264.53	261.6	291.9	288.61	787.02	777.38
4	Variable Cost for FY 2015-16 after adjusting the sale of additional power and other income	3,241.24	3,090.43	3,823.86	3,552.31	3,473.11	3,260.36	10,538.21	9,903.10
5	Other Charges (ED, Cess, Heavy Water Charges, Water Charges, MOPA, Insurance, Others etc.)	275.11	262.31	327.82	304.54	281.67	264.42	884.60	831.27
6	Inter State Transmission Charges	816.71	816.71	937.59	937.59	805.8	805.8	2,560.10	2,560.10
7	Intra State Transmission Charges for FY 2015-16 including SLDC	438.42	438.42	519.34	519.34	453.46	453.46	1,411.22	1,411.22
8	Other Cost of MPPMCL which cannot be apportioned	38.39	38.39	45.61	45.61	40.31	40.31	124.31	124.31
9	Power Purchased Directly by DISCOM's	2.52	2.52	0	0	3.81	3.81	6.33	6.33
10	DSM/UI at Intra State Boundary	(132.83)	(132.83)	23.55	23.55	158.64	158.64	49.36	49.36
11	Reactive Energy Charges	(6.47)	(6.47)	(1.21)	(1.21)	5.59	5.59	(2.09)	(2.09)
12	Other Adjustment based on Reconciliation with MPPPMCL	26.08	24.87	29.67	27.56	(28.41)	(26.67)	27.34	25.76
13	Total	7,604.18	7,435.92	9,367.45	9,067.59	8,253.46	8,024.80	25,225.09	24,528.31

# Commission's Analysis of Power Purchase Requirement and Cost

# **Power Purchase Requirement**

3.16 Details of power purchase including inter-State transmission charges and losses as admitted in the Retail Supply Tariff Order for FY 2015-16 and as per the audited accounts of DISCOMs are given in the table below:

Table 67: Power purchase quantum and cost admitted in Tariff Order and as per the Audited Accounts.

DISCOM	Particulars	Admitted in the tariff order (B)	Actual as per audited accounts (A)
East DISCOM	Power Purchase Quantum (MU)	20,462	19,542.79*
Last Discovi	Power Purchase Cost (Rs. Crore)	5,689	7,604.18#
West DISCOM	Power Purchase Quantum (MU)	22,298	23,417.74*
West Discom	Power Purchase Cost (Rs. Crore)	8,274	9,367.45#
Central	Power Purchase Quantum (MU)	21,502	20,869.59*
DISCOM	Power Purchase Cost (Rs. Crore)	7,017	8,256.36#
Total for the	Power Purchase Quantum (MU)	64,261	63,542.79*
State	Power Purchase Cost (Rs. Crore)	20,979	25,227.98#

<sup>\*</sup>As Power Purchase quantum is not reflected in Audited Accounts, it has been considered equal to as per Petition. #It includes supplementary power purchase cost of period prior to FY 2015-16.

3.17 Further, on analysis of the data submitted by the Petitioner, it has been observed that the Petitioners have not submitted the complete details of energy balance in format "Schedule 4a" which requires that the Inter State and Intra State losses be separately shown, whereas the Petitioners have submitted figures combining both these losses. Energy balance details as submitted by DISCOMs are shown in the Table below:

Table 68: Energy Balance as filed by DISCOMs for FY 2015-16

S No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State		
1	Total Energy Sale (MU)	13,891.23	16,908.13	14,712.10	45,511.46		
2	A. Distribution losses (%)	22.65%	23.10%	25.13%	23.48%		
2	B. Distribution losses (MU)	4,068.39	5,079.42	4,936.96	14,084.77		
3	At T-D interface (MU)	18,012.80	22,255.18	19,707.52	59,975.50		
	A. Transmission loss of MPPTCL (%) *						
4	B. Transmission losses of MPPTCL (MU)						
5	At MP periphery		Not Su	bmitted			
6	A. External losses (%) *						
0	B. External losses (MU)						
7	Total energy requirement (MU)	19,255.46	23,417.74	20,869.59	63,542.79		

3.18 However, for admitting the power purchase cost, the Commission in line with the approach adopted in truing up of previous years has computed the normative power purchase requirement by following the principle of grossing up sales with normative loss levels, which is narrated below:

- i. The admitted actual sales (say X) made by the DISCOMs have been grossed up by the normative Distribution Loss levels (say Y) to arrive at the power required at DISCOM periphery i.e. T-D boundary (say Z=X/(1-Y)).
- ii. The quantum (Z) thus arrived at has further been grossed up by the STU losses (MP Transco) (A) to arrive at the quantum of power required at the State boundary (Say B= Z/(1-A)).
- iii. Finally, the quantum (B) is grossed up by the actual external losses (say C) to arrive at the total energy requirement i.e. D=B/(1-C).
- 3.19 In order to compute the energy balance for DISCOMs, it is necessary to know the loss levels at each stage. Therefore, inter-State transmission, intra-State transmission and distribution losses need to be identified correctly. The intra-state transmission loss has been submitted as 2.88% by MPPTCL in their annual report of regulatory compliance for FY 2015-16. Accordingly, the same loss level has been considered as the Intra-State transmission losses for the present True-up exercise. The Commission had approved the distribution loss levels for working out power purchase requirement in the Retail Supply Tariff Order for FY 2015-16 as specified in the MYT Regulations,2012 as shown in the table below:

Table 69: Distribution loss trajectory for FY 2015-16 (%)

Voor	East	West	Central
Year	DISCOM	DISCOM	DISCOM
FY 2015-16	18%	16%	19%

- 3.20 The Commission observed that the Petitioner has submitted the monthly actual external transmission losses (computed based on the weekly losses issued by RLDCs) of Inter State Transmission System system for FY 2015-16. Accordingly, the average losses for FY 2015-16 applicable for Western Region and Eastern Region have been worked out as 3.66% and 2.34%, respectively. The external losses (MU) thus arrived by multiplying the applicable losses (%) with the power purchase (MU) from the respective regions has been apportioned based on the total power purchase by each DISCOM.
- 3.21 Based on above, the power purchase requirement admitted by the Commission for FY 2015-16 is shown in the table below:

East West **Total for** S. Central **Particulars** No. **DISCOM** DISCOM **DISCOM** State Total Energy Sale (MU) 12,707.24 42,703.44 1 13.088.40 16,907.80 A. Distribution Losses (%) 18.00% 16.00% 19.00% 17.53% 2 B. Distribution Losses (MU) 2,873.06 3,220.53 2,980.71 9,074.31 3 At T-D interface (MU) 15,961.46 20,128.34 15,687.95 51,777.75 2.88% A. Transmission loss of MPPTCL (%) 2.88% 2.88% 2.88% 4 B. Transmission losses of MPPTCL (MU) 473.32 596.89 465.21 1,535.42 At MP periphery 16,434.78 20,725.22 16,153.16 53,313.17 5 6 External losses (MU) 265.92 229.71 277.06 772.69 Net energy requirement (MU) 7 16,700.70 20,954.94 16,430.23 54,085.86

Table 70: Analysis of Power purchase quantum

## **Power Purchase Cost**

3.22 On analysis of the power purchase cost submitted by the Petitioner it was observed that there was variation between the power purchase cost booked as per audited accounts of the DISCOMs and MPPMCL account. A comparison of power purvchase cost as per the Petition, as per audited accounts of DISCOMs and MPPMCL is shown in the table below:

Table 71: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore)

		0.0.0)		
Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for the State
As filed in Petition	7,435.92	9,067.59	8,024.80	24,528.32
As per the audited accounts of DISCOMs	7,604.18	9,367.45	8,256.36	25,227.98
As per MPPMCL audited account	6,924.24	8,407.52	7,282.52	22,614.28

3.23 The Petitioner has submitted reconciliation statement for the power purchase cost in the Petition, which is shown below.

Table 72: Reconciliation of Power purchase cost as per DISCOMs audited account and MPPMCL accounts submitted by the Petitioners (Rs. Crore)

Sr. no	Particulars	East	Central	West
Ι	Total Cost as per MPPMCL Power Statement	6,898.16	7,310.93	8,377.85
1	Fixed Charges	3,275.78	3,439.63	4,095.89
2	Energy Charges	3,347.28	3,589.62	3,954.14
3	ED, Cess, Heavy Water Charge, Water Charges	181.91	185.09	216.15
4	MOPA, Insurance Charges	0.02	0.02	0.03
5	Other Charges	93.17	96.56	111.64
II	Additional Power Purchase Cost considered by MPPMCL	26.08	-28.41	29.67

Sr. no	Particulars	East	Central	West
1	Power Purchase bills passed twice and not passed in monthly DISCOM bills	7.7	10.69	8.95
2	State Energy Account Revision for FY 2013-14	32.43	(22.09)	-10.34
3	DISCOM-wise difference due to bills of Rs 219 Crores not passed in original base sheet	(14.05)	(17.01)	31.06
A	<b>Power Purchase Cost as per MPPMCL Accounts</b>	6,924.24	7,282.52	8,407.52
III	Cost included by DISCOM in FY 2015-16 but booked by PMC in previous FYs			
1	Credit towards Inter DISCOM Power Purchase Sale charges for the Year 2013-14 considered by PMC in the FY 2013-14, However bill of the same issued to the DISCOM in the FY 2015-16. Accordingly same is accounted for by the DISCOM in the FY 15-16.	-	-	-
2	Supplementary bill consequent to account finalisation for the FY 2014-15 issued by PMC to DISCOM. Accordingly same is accounted for by the DISCOM in the FY 2014-15. However, the said bill is booked by PMC in the FY 2013-14.	-	-	-
3	Being Credit post finalization of accounts of MPPMCL	-	-	-
4	Adjustment done under prior period charges under accounts note 33 out of Rs 365.35 Crores related to supplementary bills	-	-	-
IV	Other Cost forming part of power purchase cost	679.93	973.83	959.93
1	Reactive Energy Charges	(6.47)	5.59	(1.21)
2	UI Charges	(132.83)	158.64	23.55
3	Intra State Transmission & SLDC Charges	816.71	805.8	937.59
4	Inter State Purchase			
5	Power Purchase by East & Central DISCOMs Directly (CSPDCL Border Village, Bhimgarh for East & Morand MHP, Satpura MHP for Central)	2.52	3.81	-
В	Total Power Purchase Cost as per above Calculation (B=A+III+IV)	7,604.11	8,253.46	9,367.45
C	Power Purchase Cost as per DISCOM Accounts	7,604.11	8,253.46	9,367.45
D	Difference (D=B-C)	0.00	0.00	0.00

- 3.24 Accordingly, the Commission in line with the approach adopted in previous true up orders and considering that the DISCOMs have made some payments directly to other entities also like transmission charges, UI charges etc., has considered power purchase cost as per audited accounts of DISCOMs for further scrutiny as per following section.
- 3.25 While scrutinising the power purchase costs as indicated in the audited accounts of the DISCOMs, the Commission has observed that in support of their claim the Petitioners have furnished a statement indicating month wise, station wise details of power purchase quantum and costs (fixed cost, variable charges, other charges / costs) with DISCOM wise apportionment for corroborating the figures in audited accounts for FY 2015-16. The total fixed cost for the stations as indicated in this statement is Rs. 8,841.58 Crore, Variable and

other charges (net of revenue from sales of surplus power) of Rs. 11,503.76 Crore, inter-State transmission cost (PGCIL / POSOCO Charges etc.) of Rs. 1,411.22 Crore, Supplementary Power Purchase Cost of Rs. 787.02 Crore, MPPMCL Cost of Rs. 124.31 Crore, Unscheduled Interchange charge and Reactive Energy Charges of Rs. 47.27 Crore, The Commission has analysed the component wise power purchase claimed by the Petitioner in the following Section.

## MPPMCL Cost of Rs. 124.31 Crore

3.26 With regards to the Other Cost of Rs. 124.31 Crore (Rs. 38.39 Crore, Rs. 40.31 Crore and Rs. 45.61 Crore for East, Central and West DISCOM, respectively) included in Power Purchase Cost, which was not apportioned station wise by the Petitioners, the Commission vide letter dated 21<sup>st</sup> January, 2019, sought details from the Petitioners. In response, MPPMCL vide letter dated 7<sup>th</sup> December, 2019 submitted the requisite details. The breakup of the Other Cost as submitted by MPPMCL is as follows:

Table 73: Details of Other Cost submitted by the Petitioner for FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	Amount	Details
1	Power Purchase Cost	15.80	Energy bills which have not been passed to the DISCOMs in their monthly energy bills. Also includes O&M charges paid to MP Genco.
2	Exchange of Power (Trading Margin)	1.74	Trading Margin paid on power purchase through Exchange
3	Bank Charges	2.12	Charges paid to Bank for LC facility
5	Open Access Charge for Purchase of Power	0.38	Open Access Charges paid on short and Medium term power purchase
6	Open Access Charge for Banking of Power	44.68	Open Access Charges paid for banking of power
7	Banking of Energy	(71.28)	Liability towards Banking of Energy
8	Congestion Charges	1.43	
9	Employee benefit Expense (including salary)	55.75	Employee Benefit Expenses of MPPMCL
10	Finance Cost	56.78	Interest paid on working capital loans
11	Other Expenses	41.02	
12	Depreciation	3.21	Depreciation expenses on MPPMCL assets

Sr. No.	Particulars	Amount	Details
13	Adjustment towards Power Purchase bills passed twice in monthly bills	(27.34)	
14	Total	124.31	

3.27 On the analysis of the component wise details of the Other Cost it was observed that certain cost / (Revenue) pertains to provisioning for banking of power, surcharge on delayed payment, rebate on sale of power and free electricity to employees, which cannot be passed onto the State DISCOMs, therefore, the Commission has disallowed such expenses. Details of Other Expenses which have not been admitted by the Commission are as follows:

Table 74: Other expenses in Power Purchase Cost not considered by the Commission for FY 2015-16 (Rs. Crore)

Joi 11 2013-10 (Rs. Crore)					
Sl. No.	Particulars	Amount	Reason for Disallowance		
1	Banking of Energy	(71.28)	The amount pertains to provision made for payment of Banking of Energy and hence no actual payment has been received.		
2	Rebate on Sale of Power	2.09	The amount pertains to rebate provided to MPIDC (MPAKVN) on sale of Power, the burden of which cannot be passed as cost to State DISCOMs.		
3	Surcharge on Delayed Payment	19.44	The Commission does not consider any surcharge earned or paid on account of delayed payment.		
4	Supply of Free Electricity to Employee	1.73	The amount pertains to free electricity provided by MPPMCL to its employees. As the Commission in Retail Supply Tariff Order for FY 2014-15 had not allowed any supply of free electricity to its Employees. Hence the expense of the same cannot be passed onto the consumers of the State DISCOMs.		
5	Finance Cost	56.78	These Loans have been taken by MPPMCL for working capital requirement and do not pertain to funding of the Capital Projects of the DISCOMs. Since the Commission has already allowed the DISCOMs normative Interest on Working Capital, it would not be appropriate to allow finance cost to MPPMCL, separately.		

Sl. No.	Particulars	Amount	Reason for Disallowance
	Total	8.21	

3.28 Based on above, the admitted MPPMCL cost for FY 2015-16 for each DISCOM which has been apportioned based on the actual claimed MPPMCL cost is shown in the following table:

Table 75: MPPMCL Cost admitted for FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Actual MPPMCL cost as per accounts	38.39	45.61	40.31	124.31
2	MPPMCL Cost disallowed	2.54	3.01	2.66	8.21
3	MPPMCL cost admitted	35.85	42.60	37.65	116.10

## Other income of MPPMCL of Rs.532.62

3.29 The power purchase cost also includes an amount of Rs. 532.62 Crore towards Other income / rebate received by MPPMCL. Since, the Commission has allowed to pass on the expenses of MPPMCL towards its operation and maintenance to the Petitioners, any income earned by it should also be passed onto them. However, it is observed that majority of other income is towards rebate of prompt payment to generators and since the Commission has admitted the power purchase cost towards normative energy energy requirement only. Therefore, the Commission has admitted other income in proportion to the admitted energy requirement, which is shown in the table below:

Table 76: Other income of MPPMCL admitted for FY 2015-16

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	19,255.46	23,417.74	20,869.59	63,542.79
2	Actual Other Income (Rs. Crore)	В	164.26	196.96	171.40	532.62
3	Quantum of Power Purchase Admitted (MUs)	C	16,700.70	20,954.94	16,430.23	54,085.86
4	Other Income of MPPMCL admitted (Rs. Crore)	D=B*C/A	142.47	176.25	134.94	453.65

# Unscheduled Interchange (UI) / Deviation Settlement Mechanism (DSM) and Reactive Energy Charges

- 3.30 It is observed that the Petitioner has claimed UI / DSM of Rs. 49.36 Crore for FY 2015-16 based on the actual payment towards these charges. Per unit rate of UI / DSM charges paid by the DISCOMs is on higher side signifying indiscipline in power drawl by the DISCOMs. The UI / DSM is not meant for trading of electricity and is mainly an instrument for grid discipline and settling the unintended deviations during the normal course of operations and when the frequency is in normal operating range according to the Grid Code. Further, additional UI / DSM charges are required to be paid when the DISCOMs draws more power than their scheduled drawl when the grid frequency is low. Accordingly, the Distribution utilities are required to project their demand precisely. Presently, the Commission in this order has admitted pro-rated actual UI / DSM charges to the admitted normative energy requirement for FY 2015-16. However, the Petitioners are directed to reduce their payment towards UI / DSM charges by adopting efficient management, proper scheduling of power etc.
- 3.31 Similarly, the Commission has admitted the pro-rated reactive energy charges towards admitted normative energy requirement for FY 2015-16 as shown in table below:

Table 77: UI/DSM Charges admitted for FY 2015-16

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	19,255.46	23,417.74	20,869.59	63,542.79
2	UI / DSM Charge (Rs. Crore)	В	(132.83)	23.55	158.64	49.36
3	Quantum of Power Purchase Admitted (MUs)	С	16,700.70	20,954.94	16,430.23	54,085.86
4	UI / DSM Charge Admitted (Rs. Crore)	D=B/A*C	(115.21)	21.08	124.89	30.76
5	Reactive Energy Charges (Rs. Crore)	E	(6.47)	(1.21)	5.59	(2.09)
6	Reactive Energy Charges Admitted (Rs. Crore)	F=E/A*C	(5.61)	(1.08)	4.40	(2.29)

# **Supplementray Power Purchase Cost of Rs. 787.02 Crore**

3.32 The power purchase booked in the audited account also includes an amount of Rs. 787.02 Crore (Rs. 230.59 Crore of East DISCOM, Rs. 264.53 Crore of West DISCOM and Rs. 291.90 Crore of Central DISCOM) as "supplementary bills raised by the generators for the period prior to 2015-16". However, the scrutiny of the supplementary bill details furnished to the Commission in support of aforesaid claim of Rs. 787.02 Crore has revealed that

- amount of Rs. 189.19 Crore pertains to period prior to FY 2014-15, whereas, Rs. 597.83 Crore pertains to FY 2014-15.
- 3.33 The amount of Rs. 787.02 Crore has been accounted for in the audited accounts for FY 2015-16, therefore, it would be appropriate to consider these supplementary bills of the past years in the true up for FY 2015-16. Since in the past years' true up orders, the power purchase cost of a year was admitted on the basis of the actual metered sale, normative unmetered sale and normative losses of that year; the year wise claims of the power purchase cost have been worked out accordingly. However, it is a matter of concern that the Petitioner has been raising claim on account of supplementary Power Purchase cost for the period from FY 2005-06 onwards in almost all truing up exercise, thereby increasing the power purchase cost exorbitantly. In this regard, the Commission vide deficiency note directed the Petitioner to submit the details of all the supplementary power purchase claimed till date in true up Petitions for FY 2015-16 to FY 2017-18 identifying the reason for the claim along with the justification for not claiming the amount in the said years. The Petitioner has provided some of the details in the reply, which requires further clarification. Accordingly, the Commission has not considered the Petitioner's claim towards the supplementary power purchase cost for the period for which true up has already attained finality i.e. upto FY 2013-14 in this Petition. However, the Commission allows Petitioner to approach the Commission to claim the said amount separately on furnishing of the adequate details. Further, since the Commission has approved true up of FY 2014-15 in this order, the amount of supplementary power purchase pertaining to FY 2014-15 of Rs. 597.83 Crore has been considered for approval in this order. The Commission has reworked this amount based on the the actual metered sale, normative un-metered sale and normative losses admitted in true up of FY 2014-15. Approach adopted by the Commission in approval of power purchase cost towards supplementary bills of FY 2014-15 is as follows:
  - Full Fixed Cost allowed except for the fixed cost towards torrent power generating station as per the approach adopted in true up of FY 2014-15.
  - Variable and other cost admitted only for those plants which has been considered as scheduled for meeting the normative energy requirement of FY 2014-15 as per true up of FY 2014-15.
  - Variable and other cost of torrent power generating station as per the approach adopted in true up of FY 2014-15.
- 3.34 The working of supplementary power purchase cost is shown as follows:-

**East** West Central **Total for** Sr. No. **Particulars** Reference **DISCOM DISCOM DISCOM** State Fixed Cost as per actual 1 Α 83.10 105.69 290.18 101.38 supplementary bills Fixed Cost disallowed towards 2 В 1.99 2.09 2.03 6.11 supplementary bills Total Fixed Cost allowed 3 C=A-B81.12 99.29 103.66 284.07 towards supplementary bills Variable and Other Cost as per 4 D 91.09 110.71 104.64 306.44 actual supplementary bills Cost disallowed Variable 5 E -1.43 -1.43 -1.56 -4.41 towards supplementary bills Total Variable Cost allowed 6 F=D-E 92.51 112.14 106.20 310.85 towards supplementary bills **Total Power Purchase Cost** 173.63 209.86 594.92 7 allowed towards G=C+F211.43 supplementary bills

Table 78: Analysis of Supplementary Power Purchase Cost (Rs. Crore)

3.35 The admitted supplementary power purchase cost is shown as follows:

Table 79: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)

	Petitioners Claimed			Admitted				
Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State	East DISCOM	West DISCOM	Central DISCOM	Total for State
Supplementary Bills for FY 2014-15	174.44	212.58	210.81	597.83	173.63	211.43	209.86	594.92

## **Inter-State Transmission Charges**

3.36 The Commission in Retail supply tariff order for FY 2015-16 had admitted the inter state transmission charges of Rs. 1,414 Crore based on the actual charges for FY 2013-14, estimated for FY 2014-15 as per actual charges upto November, 2014 and considered the 10% increase over the estimated amount of FY 2014-15 for working out inter-state charges for FY 2015-16. However, the actual inter State transmission charges paid by the DISCOMs in FY 2015-16 is Rs. 1,411.22 Crore. As inter-State transmission charges are uncontrollable for DISCOMs, the Commission has admitted the actual inter State transmission charges of Rs. 1,411.22 Crore as per actuals in true up of FY 2015-16.

## Fixed and Variable Cost of generating station

- 3.37 The Commission has noted that DISCOMs had procured power in excess of admitted energy requirement computed based on norms specified in the MYT Regulations and methodology adopted in previous orders. Similar situation had arisen during the True-up exercise of previous years. Hence, the Commission has decided to adopt the same approach as followed for the True-up of previous years by taking cognisance of the Judgment of the Hon'ble APTEL dated 15th September, 2015 in Appeal nos. 234, 270, 271 and 276 of 2014, in the matter of True-up Orders of previous years issued by the Commission. Accordingly, the power purchase cost has been determined by considering:
  - i. Full fixed cost for the generating stations meeting the power purchase requirement of the DISCOMs and
  - ii. The cost for short term power and variable cost of long term power together for deriving the average rate to be applied on the admitted quantum of power purchase requirement.
- 3.38 Accordingly, the Commission has admitted the actual fixed cost as claimed by the Petitioners in line with the methodology priscribed by the Hon'ble APTEL except for the fixed charges for Torrent Power Station. With regard to power purchase from Torrent Power station, some of the stakeholders have raised the issue with regard that it is against the principles of Merit Order Dispatch (MOD) on the basis of variable cost of generating station. Therefore, in line with the view taken by the Commission in true up for FY 2013-14, the Commission has considered it appropriate to keep in abeyance the quantum of power purchase from Torrent Power stations and its cost. Accordingly, the Commission has allowed the actual fixed cost excluding the fixed cost towards torrent power station.
- 3.39 The summary of fixed charges as considered by the Commission is shown in table below:

Table 80: Fixed Cost Admitted by the Commission (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for the State
Fixed Cost Admitted in Tariff Order for FY 2015-16	3,052.00	3,663.00	3,192.00	9,906.00
Fixed Cost Claimed in True-up Petition for FY 2015-16	2,674.41	3,396.70	2,770.48	8,841.58
Fixed Cost Admitted in True-up Order for FY 2015-16	2,646.34	3,363.35	2,741.94	8,751.62

3.40 Further, in regard to the Petitioners request for disallowance of power purchase cost for the quantum of power purchase attributable to excess loss in distribution system, the Commission observe no merit. The losses in Intra-State and Inter-State transmission system are beyond the control of the Petitioners, however, these losses would have been very low, if the Petitioners would have achieved the distribution losses as per the target

specified by the Commission and restricted its unmetered sale for agriculture and domestic consumers within the norms specified by the Commission. Similarly, computation of pool energy rate (Rs./kWh) based on the actual power purchase cost as per audited accounts and total energy procured by the Petitioner as per DSM/UI account would lead to higher per unit rate due to inclusion of cost of power of costlier plants, which could have been avoided by the Petitioners, if they would have achieved the target loss levels and restricted their sales to unmetered agriculture and domestic consumers within the norms specified by the Commission. Therefore, considering that the Petitioners have not achieved the norms specified by the Commission, the inefficiency of the Petitioners should not be passed on to the consumers of the State. Accordingly, the Commission has recomputed the energy charges of the Petitioners as per the following approach:

- Monthly Energy Requirement computed considering the monthly energy sales admitted by the Commission grossed up with admitted loss levels of Distribution system, Intra-State and Inter-State transmission network;
- To meet this monthly energy requirement, scheduled energy of each generating stations has been considered as per monthly State Energy Account. Scheduling of the generating stations has been considered as per the monthly MOD issued by MPSLDC;
- Shortfall if any in meeting the energy requirement has been considered to be met through purchase of power from open market at rate equal to energy charge of the last generating station in the MOD;
- Energy charge worked out for each generating station considering the actuals energy and other charges as per the MPPMCL statement on annual basis provided by the Petitioners.
- 3.41 Based on the above approach, the Commission has computed the energy charges of Rs. 8,813.59 Crore at per unit energy charges of Rs 1.63/kWh.
- 3.42 Accordingly, the total power purchase cost determined by the Commission for FY 2015-16 is given in the table below:

Table 81: Admitted Power Purchase Cost

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Fixed Cost of Power Purchase for FY 2015-16 (Rs. Crore)	A	2,646.34	3,363.35	2,741.94	8,751.62

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
2	Inter-State Transmission Charges (Rs Crore)	В	438.42	519.34	453.46	1,411.22
3	MPPMCL Cost Admitted (Other cost which can't be apportioned)	С	35.85	42.60	37.65	116.10
4	UI / DSM Charge Admitted (Rs. Crore)	D	(115.21)	21.08	124.89	30.76
5	Reactive Energy Charges Admitted (Rs. Crore)	E	(5.61)	(1.08)	4.40	(2.29)
6	Other Income of MPPMCL	F	142.47	176.25	134.94	453.65
7	Sub-total	G= A+B+C+D+E-F	2,857.33	3,769.03	3,227.40	9,853.76
8	Pooled variable rate (Rs. / kWh)	Н	1.63	1.63	1.63	1.63
9	Quantum of Power Purchase Admitted (MUs)	I	16,700.70	20,954.94	16,430.23	54,085.86
10	Total Variable Cost admitted (in Rs. Crore)	J=H*I/10	2,726.85	3,414.30	2,672.44	8,813.59
11	Total Power Purchase Cost Admitted for FY 2015-16 (in Rs. Crore)	K=G+J	5,584.17	7,183.34	5,899.84	18,667.35
12	Supplementary Power Purchase Cost for FY 2014-15	L	173.63	211.43	209.86	594.92
13	Power Purchase Cost admitted including supplementary bills	M=K+L	5,757.80	7,394.76	6,109.70	19,262.27

- 3.43 It is observed that the total power purchase cost excluding MPPTCL and SLDC charges as admitted in the retail tariff order for FY 2015-16 was Rs. 19,174 Crore, whereas in this order the Commission has admitted power purchase cost of Rs. 19,715.92 Crore. The major reason for this increase is as follows:
  - Increase in variable charges due to upward revision in energy charges of the generating stations;
  - Inclusion of supplementary Power Purchase Cost of Rs. 594.92 Crore, which pertains to the FY 2014-15.

# **Intra-State Transmission Charges**

3.44 Transmission charges admitted in the Retail Tariff Order, Audited Accounts and as filed for FY 2015-16 by East, West and Central DISCOMs including SLDC charges are given in the table below:

Table 82: Transmission Charges including SLDC charges for FY 2015-16 (Rs. Crore)

Sl. No.	DISCOM	Transmission charges as per tariff order	Transmission charges as per audited accounts	Transmission charges as filed
1	East	538.79	816.71	816.71
2	West	691.25	937.59	937.59
3	Central	573.91	805.80	805.80
4	Total	1,803.95	2,560.09	2,560.09

3.45 It has been observed from the above table that East, West and Central DISCOMs have claimed as per Audited Accounts. Accordingly, the Commission has admitted the actual transmission charges (including SLDC charges) as per the Audited Accounts of FY 2015-16, which is as shown in the Table below:

Table 83: Transmission Charges admitted by the Commission for FY 2015-16 (Rs. Crore)

Sl. No.	DISCOMs	Transmission charges (including SLDC charges)
1	East	816.71
2	West	937.59
3	Central	805.80
4	Total	2,560.09

## Operation and Maintenance (O&M) Expenses

## **Petitioners' Submission:**

3.46 The Commission had admitted the total O&M Expenses as Rs. 3,060.93 Crore in the Tariff Order for FY 2015-16. DISCOM-wise break-up of the O&M expenses admitted in the Tariff Order is given in the table below:

Table 84: O&M Expenses admitted in Tariff Order of FY 2015-16 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
O&M Expenses	1,091.05	993.84	976.05	3,060.93

3.47 The Petitioners have submitted that they have claimed the O&M Expenses in accordance with the MYT Regulations, 2012. The Petitioners have submitted that the claimed Employee Expenses are much lower as compared to the amount approved by the Commission in Tariff Order for FY 2015-16 on account of actual lower Dearness Allowance (DA) paid to the employees. Further, the Petitioners have also submitted that in accordance with the MYT Regulations, 2012, they have claimed actual terminal benefits

- including leave encashment but excluding the pension and gratuity, which is being allowed as part of ARR of MP Transco.
- 3.48 With regards to A&G Expenses, the Petitioners have submitted that the claimed A&G expense has increased on account of actual taxes paid to the government in FY 2015-16.
- 3.49 Accordingly, O&M expenses claimed by the Petitioners are shown in the table below:

Tuble 03. Octil Expenses entitled by I entitle 15 for 1 1 2013 10 (Rs. Cross						
Particulars	East	West	Central	Total for		
raruculars	DISCOM	DISCOM	DISCOM	State		
O&M Expenses	976	899.96	883.68	2,759.64		
Terminal Benefit	49.90	19.04	12.83	81.77		
Total O&M Expenses claimed	1,025.90	919.00	896.51	2,841.41		

Table 85: O&M Expenses claimed by Petitioners for FY 2015-16 (Rs. Crore)

## **Commission's Analysis on O&M Expenses:**

- 3.50 The Commission had specified norms for O&M expenses in the MYT Regulations, 2012. These norms were fixed on the basis of past audited figures of the Distribution Licensees. The rationale behind fixing these norms was to promote competition, adoption of commercial principles, efficient working of the Distribution Licensees and protection of Consumers interest. However, it is observed that the Petitioners' have been not able to keep its operational efficiency in line with the targets specified by the Commission in the Regulations. Accordingly, the Commission in accordance to Regulation 46 of MPERC MYT Regulations, 2012, has decided not to pass the burden of their inefficiencies on the consumers of the States, by considering the norms specified in these Regulation as ceiling norms and thereby allowing O&M expenses on actuals, if the same is lesser as compared to norms specified in the Regulations.
- 3.51 Further, in accordance with the MYT Regulations,2012 dearness allowance, pension and terminal benefits, taxes to be paid to the Government or Local Authorities and fees to be paid to MPERC is allowable on the actual basis. Therefore, the same has been allowed by the Commission on actual basis. Also, the Commission has considered the actual Operation and Maintenance expenses capitalized during the year as per the audited account of FY 2015-16 and has reduced the same from the admitted Operation and Maintenance expenses.
- 3.52 Further, the Commission observed that some DISCOMs are booking expenses towards contractual employees under employee expenses, whereas some are booking it under the A&G Expenses. Therefore, the Commission has considered the lesser of the actual O&M expenses as per the audited accounts vis-a-vis normative O&M expenses in totality.

3.53 Accordingly, based on the above, the expense wise analysis of each component is shown in the following paragraphs.

## **Employee Expenses, Terminal Benefits & Arrears**

- 3.54 The Commission has carried out detailed scrutiny of the actual employee expenses excluding DA, arrears, pension and terminal benefit as per the provision of the MYT Regulations, 2012 and has compared the same with the norms specified in the Regulations.
- 3.55 Further, while determining the norms an element for payment of prior period arrears up to 31.8.2009, on account of revision of pay scales of the employees in accordance with Sixth Pay Commission recommendations as implemented by the Distribution Licensees of the State, was included. These arrears are subject to true up based on actuals payment by the Petitioners. Accordingly, the Commission has considered the actual arrears paid by the DISCOMs for FY 2015-16.
- 3.56 Further, in accordance with the MYT Regulations, 2012, the DISCOMs are eligible to claim DA, terminal benefits, incentives paid to Employees on actuals. Accordingly, the Commission has considered the DA on actuals for FY 2015-16. As regards the issue of expenses against terminal benefits for MPSEB/successor entities as well as pension payments to pensioners, the Commission has onsidered the terminal benefits and pension expenses on "Pay as you go" principle under the transmission charges. Therefore, the Commission has not considered any provisioning made under the head "Terminal Benefits to Employees" in the True-up for FY 2015-16 and allowed only the actual payment made to employees including leave encashment but excluding pension and gratuity. Further, the Commission has observed that the Petitioner has claimed audit charges under the head of Terminal Benefits, which has not been considered by the Commission under Employee Expenses as the same needs to be managed under the allowed A&G expenses for FY 2015-16. Therefore, the Commission has considered the audited charges under actual A&G expense.
- 3.57 Based on the above, the Employee Expenses as per actuals and as per the provision of Regulations for FY 2015-16 is shown in the following table:

Table 86:Normative and actual Employee Expenses computed for FY 2015-16 (Rs. Crore)

Particulars	EAST DIS	COM	WEST DISCOM		CENTRAL DISCOM	
Faruculars	Normative*	Actual	Normative*	Actual	Normative*	Actual
Employee Expenses	365.00	331.23	344.00	355.98	322.00	360.29
DA	323.33	323.33	298.51	298.51	296.84	296.84
Terminal Benefits	51.95	51.95	19.86	19.86	53.89	53.89

Doutionland	EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
Particulars	Normative*	Actual	Normative*	Actual	Normative*	Actual
including incentives						
Arrears	14.17	0.22	10.00	15.10	12.30	7.28
Total	754.45	706.73	672.38	689.46	685.02	718.29

<sup>\*</sup> As per the provision of the Regulations

# **A&G Expenses**

- 3.58 The Commission has analysed the actual A&G expenses and compared the same with the norms specified in the Regulation, Further, with regards to the actual taxes paid to the government, the Commission has considered the actual taxes paid by the DISCOMs except for the entry tax, as the same has been already been considered as part of norms approved for A&G Expense by the Commission.
- 3.59 The Commission has considered the actual audit charges booked under the head of Terminal Benefits under actual A&G expenses. Further, the Commission has observed that the MPERC Fees claimed by the Petitioner is in line with actual fees paid to the Commission. Therefore, the Commission has considered the same. Accordingly, based on the above, A&G Expense as per actual and as per the provision of Regulations for FY 2015-16 is shown in the following table:

Table 87: Normative and Actual A&G Expenses computed for FY 2015-16 (Rs. Crore)

Sr.	Particulars	EAST DIS	EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
No.	Farticulars	Normative*	Actual	Normative*	Actual	Normative*	Actual	
1	A&G Expenses	131.38	156.70	108.00	125.67	99.18	87.48	
2	Taxes	1.56	1.56	11.80	11.80	1.21	1.21	
3	MPERC Fees	0.60	0.60	0.67	0.67	0.62	0.62	
4	Total	133.54	158.87	120.48	138.15	101.01	89.31	

<sup>\*</sup> As per the provision of the Regulations

## **R&M Expenses**

3.60 The provision for R&M expenses in the MYT Regulations,2012 is @ 2.3% on the opening GFA of the financial year for all DISCOMs. The Commission has also analysed the actual R&M expenses as per the audited accounts for FY 2015-16. Accordingly, based on the above, R&M Expense as per actual and as per the provision of Regulations for FY 2015-16 is shown in the following table:

Actual GFA % as Normative **DISCOMs GFA** R&M **R&M Expenses** per norms **Expenses** East DISCOM 6,034.35 2.3% 138.79 77.13 West DISCOM 4,881.06 2.3% 112.26 115.86 Central DISCOM 6,569.46 2.3% 151.10 65.38 2.3% 402.15 **Total** 17,484.87 258.38

Table 88: Normative and Actuals R&M Expenses computed for FY 2015-16 (Rs. Crore)

3.61 Accordingly, based on the above analysis, the Commission compared the O&M Expenses computed as per the provision of the Regulations and actual O&M Expense as per audited account of FY 2015-16. Based on the approach detailed above, the Commission has admitted the lower of the O&M computed as per Regulations and as per audited accounts. In view of the above, the admitted O&M expenses for FY 2015-16 are as shown in the following table:

Table 89: O&M expenses of DISCOM admitted for FY 2015-16 (Rs. Crore.)

Particulars	Actual	Normative	Admitted
East DISCOM	907.30	991.35	907.30
West DISCOM	902.21	863.86	863.86
Central DISCOM	842.73	906.88	842.73
Total O&M expenses	2,652.24	2,762.09	2,613.89

# **Interest on Project Loans**

## **Petitioners' Submission:**

3.62 The Petitioners have submitted that they have not taken impact of the true up order for FY 2015-16, as the same awaited at the time filing of the Petition for truing up of FY 2015-16. Accordingly, the Petitioners have claimed interest on project loans (inclusive of finance charges) for East, West and Central DISCOMs is Rs. 119.26 Crore, Rs. 69.34 Crore and Rs. 215.29 Crore respectively based on the methodology adopted by the Commission in previous orders.

## **Commission's Analysis on Interest on Project Loans:**

3.63 The Commission has examined the claims of DISCOMs from their filings and Audited Accounts. As per Regulations 31.1 to 31.9 of the MYT Regulations 2012, for allowing interest and finance charges all loans shall be identified for the assets capitalised till the relevant year. In the absence of information related to loan mapping with particular assets,

- it cannot be ascertained as to how much loan is related to completed fixed assets and how much is related to capital work in progress.
- 3.64 Further Regulation 21.1 of the MYT Regulations, 2012, specifies that debt-equity ratio shall be 70:30 for calculation of interest on loan and for return on equity. Accordingly, the Commission has adopted the following principles for computing interest on project loans.

# Principles adopted for calculation of interest on project loans

- 3.65 In the True-up Order for FY 2014-15, the interest on project loans has been admitted on the fixed asset created till 31st March, 2015, on the basis of Audited Accounts for FY 2014-15. The Commission has adopted the same methodology for allocating the Gross Fixed Assets (GFA) addition during the year into debt and equity as explained below:
  - a. Allocation of fixed assets into debt and equity as on 31<sup>st</sup> March, 2015 has been considered as per the True-up Order of FY 2014-15.
  - b. Net addition to GFA during FY 2015-16 has been worked out after subtracting the amount received towards consumer contribution and grants during the year from total addition to GFA as available in the audited accounts of DISCOMs.
    - i. The Commission has considered closing GFA admitted in the True-up Order for FY 2014-15 as the opening GFA for FY 2015-16.
    - ii. Further, the Commission considered the closing consumer contribution and grants for FY 2014-15 as the opening consumer contribution & grants for FY 2015-16.
  - c. Equity in excess of 30% of the net GFA added during FY 2015-16, has been considered as normative loan. However, if the actual equity deployed is less than 30% of the net GFA, then actual equity has been considered for computation of RoE. Further, only such equity capital is to be considered which has been actually utilized for creation of asset. The equity so derived has been added to the equity considered at the end of FY 2014-15 and balance net addition to GFA has been considered as funded through debt.
  - d. Balance of net addition to GFA has been considered as having been funded through debt and added to the total debt considered at the end of FY 2014-15. In absence of the actual dates of capitalization of individual assets, interest on project loans has been computed based on the average of the opening and closing loans for the financial year.

- 3.66 In accordance with the Regulation 31.3 of the MYT Regulations, 2012, debt repayment is equal to the depreciation admitted for that year. As regards the weighted average rate of interest for the computation of interest on loans, the Commission has verified the weighted average interest rate filed by East, West and Central DISCOMs as 8.80%, 8.51% and 9.55%, respectively and observed that the East and Central DISCOMs have considered working capital loan taken from REC, PP/SLR Bonds in its computation of weighted average of Project Loans. The Petitioners were asked to explain the purpose of loans which had been taken from REC, PP Bonds. However, the Petitioners were unable to justify that these loans were taken for funding project specific works. Therefore, the Commission while approving the weighted average rate of Interest has not considered these loans. Accordingly, the Commission has computed the revised weighted average rate of interest for projects specific loans for each DISCOM and admitted the weighted average rate of interest of 7.83%, 8.51% and 8.82% for East, West and Central DISCOMs, respectively.
- 3.67 Other Finance Charges claimed by East, West and Central DISCOMs are Rs. 13.73 Crore, Rs. 10.11 Crore and Rs. 16.46 Crore, respectively. The Commission after scrutinizing DISCOMs submission with audited accounts has considered only cost of raising funds, bank charges, commitment charges and guarantee/ LC charges. Accordingly, the Commission admitted Other Finance Charges as Rs. 11.95 Crore, Rs. 8.95 Crore and Rs. 16.26 Crore for East, West and Central DISCOMs, respectively. The Commission has not considered the Petitioners' claimed towards the penal charges of delayed payment or rebate to consumer on timely payment by East DISCOM, West DISCOM and Central DISCOM of Rs. 1.78 Crore, Rs. 1.16 Crore and Rs. 0.20 Crore respectively claim under the head of finance charges. Further, the Commission did not consider the rebate to consumers for timely payment of bills as expense towards finance charges as this rebate encourages consumers to pay bills timely which improves cash flow of the Petitioners. Therefore, passing of this rebate as expenses in the ARR will defeat the whole purpose of introducing the rebate.. Further, the Commission has considered the actual interest and finance charges capitalized as per audited account of FY 2015-16 and has reduced the same from the admitted interest and finance charges.
- 3.68 Details of interest on project loans along with other finance charges admitted in true-up of FY 2015-16 for DISCOMs are given in the table below:

Table 90: Interest on Project Loans admitted by the Commission for FY 2015-16(Rs. Crore.)

Particulars	Legend	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening Debt associated with GFA (Closing Debt as Per FY 2014-15 True-up )	A	1,794.15	892.65	2,378.40	5,065.21
GFA Addition during the year	В	134.63	487.79	897.06	1,519.48

Particulars	Legend	East DISCOM	West DISCOM	Central DISCOM	Total for State
Consumer Deposit and Grants utilized during the year	С	134.63	487.79	559.68	1,182.10
Net GFA Addition during the year	E=B-C	0.00	0.00	337.38	337.38
70% of addition to net GFA considered as funded through debt	F=70%*E	0.00	0.00	302.65	302.65
Debt repayment during the year (equal to Depreciation)	G	112.49	97.05	131.44	340.97
Closing debt associated with GFA	H=A+F-G	1,681.67	795.60	2,549.61	5026.88
Average debt associated with Loan	I=Average(A,H)	1,737.91	844.13	2464.01	5046.04
Weighted average rate of interest (%) on all loans as per Petitioner	J	7.83%	8.51%	8.82%	8.43%
Interest on Project Loans	K=I*J	136.08	71.84	217.33	425.24
Interest capitalised	L	(44.70)	(28.42)	(26.49)	(99.61)
Other Finance cost	M	11.95	8.95	16.26	37.15
Interest cost admitted on project loans in True-Up	N=K+L+M	103.32	52.36	207.09	362.78

# **Interest on Working capital**

#### **Petitioners' Submission:**

- 3.69 The Petitioners have submitted that as per the MYT Regulations, 2012, Interest on Working Capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan with respect to normative figures and the same is allowed based on segregation between wheeling and retail supply business.
- 3.70 The Petitioners have computed the Interest on Working Capital according to the methodology adopted by the Commission in Tariff Order dated 17<sup>th</sup> April 2015 and norms specified under the MYT Regulations, 2012. The Petitioners have considered the interest rate on working capital of 13.50% i.e. SBI Base Rate of 10% as on 1<sup>st</sup> April 2015 plus 350 basis points.

# Commission's Analysis on Interest on working capital:

3.71 Regulation 22 of the MYT Regulations, 2012 specifies the methodology for the computation of working capital requirement for the Distribution Licensees as follows:

# "22. Working capital

- 22.1. Working capital for supply activity of the licensee shall consist of:
  - (i) Receivables of two months of average billing reduced by power purchase cost of one month and any consumer security deposit,
  - (ii) O&M expenses for one month, and
  - (iii) Inventory (meters, metering equipment, testing equipment are particularly relevant in case of supply activity) for 2 months based on annual requirement for previous year.
- 22.2. Working capital for wheeling activity of the licensee shall consist of
  - (i) O&M expenses for one month, and
  - (iii) Inventory (excluding meters, etc. considered part of supply activity) for 2 months based on annual requirement considered at 1% of the gross fixed assets for previous year.
- 22.3. The norms described above shall be applicable for each year of the tariff period."
- 3.72 Accordingly, in line with the approach adopted by the Commission in previous order and in line with the provisions of the Regulations, the Commission has considered Gross Fixed Assets at the start of FY 2015-16 as Rs. 6,034.35 Crore, Rs. 4,881.06 Crore and Rs. 6,569.46 Crore for East, West and Central DISCOM, respectively. One percent of this GFA has been pro-rated to two months to work out the inventory for retail and wheeling activity as Rs. 8.05 Crore, Rs. 6.51 Crore, and Rs. 8.76 Crore for East, West and Central DISCOM, respectively. This has been further divided into wheeling and retail inventory in the ratio of 80:20 in line with the approach adopted in the last tariff order. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements of working capital have been considered based on the expenses admitted by the Commission in the relevant sections of this order. Further as noted in previous true up orders also as both the activities are undertaken simultaneously by the DISCOMs, the available resources are common for both. Therefore, the Commission has taken working capital requirement together for wheeling and retail activities. Accordingly, the Commission has considered one Month O&M Expense towards the wheeling activity only.

3.73 Further, Regulation 36 of the MYT Regulations, 2012 specifies as follows for the computation of interest on working capital:

# "36. Interest charges on working capital

- 36.1. Working capital shall be computed as provided in these Regulations and Rate of interest on working capital shall be equal to the State Bank of India Base Rate as on April 1 of the relevant Year plus 3.50%. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has borrowed in excess of the working capital loan computed on normative basis."
- 3.74 Accordingly, for the purpose of interest rate on working capital, State Bank of India Base Rate as on 1st April 2015 i.e. 10% plus 3.50% has been taken. The admitted interest on working capital is shown in the table below:

Table 91: Interest on Working Capital admitted by the Commission for FY 2015-16 (in Rs. Crore)

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State
	 neeling activity		DISCOM	DISCOM	DISCON	Suite
A)	1/6th of annual requirement of inventory for previous year	2	8.05	6.51	8.76	23.31
B)	1/12th of total O&M expenses	1	75.61	71.99	70.23	217.82
C)	Total Working capital (A+B)		83.65	78.50	78.99	241.14
D)	Rate of Interest		13.50%	13.50%	13.50%	13.50%
E)	Interest on Working capital		11.29	10.60	10.66	32.55
For Re	tail Sale activity	•				
A)	1/6th of annual requirement of inventory for previous year	2	2.01	1.63	2.19	5.83
B)	Receivables equivalent to 2 months average billing	2	1,179.12	1,532.62	1,164.11	3,875.85
C)	1/12th of power purchase expenses	1	479.82	616.23	509.14	1,605.19
D)	Consumers Security Deposit		690.21	884.86	664.18	2,239.24
E)	Total Working capital (A+B-C-D)		11.11	33.16	(7.02)	37.25
F)	Rate of Interest		13.50%	13.50%	13.50%	13.50%
G)	Interest on Working capital		1.50	4.48	(0.95)	5.03
	Summary					
	For wheeling activity		11.29	10.60	10.66	32.55

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State
	For Retail Sale activity		1.50	4.48	(0.95)	5.03
	Total Interest on working Capital		12.79	15.07	9.72	37.58
	Total Interest on working Capital admitted		12.79	15.07	9.72	37.58

## **Interest on Consumer Security Deposits**

## **Petitioners' Submission:**

3.75 Petitioners have claimed interest on consumer security deposit as per their Audited Accounts for FY 2015-16. East, West and Central DISCOMs have claimed Rs. 56.84 Crore, Rs. 62.28 Crore and Rs. 57.77 Crore respectively as against Rs. 62 Crore, Rs. 89 Crore and Rs. 61 Crore respectively admitted by the Commission in the Tariff Order for FY 2015-16.

# **Commission's Analysis on Consumer Security Deposit:**

- 3.76 As per the Regulation 31.9 of the MYT Regulations, 2012, interest on consumer security deposit shall be considered at the rate specified by the Commission. In the Tariff Order for FY 2015-16, the Commission admitted the interest on consumer security deposit in view of the following:
  - "3.151 The Commission has observed from Audited Statement of Accounts of the DISCOMs that the total outgo of annual interest on the Consumer Security Deposit is not in tune with the quantum of security deposits held and the interest costs allowed in past. DISCOMs have been paying less interest than admitted, which may be due to the reason that amount of security deposit held is neither adjusted pursuant to permanent disconnection or default of payments nor is the interest paid in such cases. Therefore, the Commission has decided to admit the interest on Consumer Security Deposit based on the DISCOMs' proposal for FY 2015-16."
- 3.77 Accordingly, the Commission has admitted the actual interest on security deposit paid by the Petitioners as per the audited accounts of FY 2015-16, which is shown in the following table:

**East** West Central **Particulars Total DISCOM DISCOM DISCOM** Admitted in tariff order for FY 2015-16 62.00 89.00 61.00 212.00 Claimed in true up Petition for FY 2015-16 56.84 62.28 57.77 176.89 As per Audited Accounts for FY 2015-16 56.84 62.28 57.77 176.89 Admitted in this true-up order 56.84 62.28 57.77 176.89

Table 92: Interest on Consumer Security Deposit admitted for FY 2015-16 (Rs. Crore)

## **Return on Equity**

#### **Petitioners' Submission:**

3.78 Petitioners have claimed return on equity @ 16%. East, West and Central DISCOMs have claimed return on equity as Rs. 192.04 Crore, Rs 164.55 Crore, Rs 249.97 Crore respectively as against Rs. 237.26 Crore, Rs. 182.03 Crore, Rs. 258.98 Crore, respectively admitted by the Commission in the Tariff Order for FY 2015-16.

# **Commission's Analysis on Return on Equity:**

- 3.79 As explained in section of Interest on Project Loans the equity contribution has been considered as 30% on the net GFA addition during FY 2015-16, if the actual equity deployed is more than 30% of the net GFA. Further, only that equity capital is required to be considered, which has been utilized for funding of the project. Accordingly, the Commission directed the Petitioners to submit the actual funding of the GFA addition for FY 2015-16. In reply, all the DISCOMs submitted the funding details for FY 2015-16. Accordingly, the actual equity deployed has been considered subject to equity addition being within 30% of the net GFA. Any equity in excess of the 30% of the net GFA has been considered as normative loan. For East and West DISCOMs, as the 30% of net GFA addition during FY 2015-16 is less than zero, therefore equity addition for FY 2015-16 has been considered as zero. For Central DISCOM, as the actual equity addition for FY 2015-16 has been considered for approval of Return on Equity.
- 3.80 Closing equity of FY 2014-15 as admitted by the Commission in True-up Order of FY 2014-15 has been considered as opening value of equity for FY 2015-16. Further, the rate of return on equity has been considered as per the MYT Regulations @16%. The computation of return on equity as admitted is shown in the table below:

Table 93: Return on Equity admitted for FY 2015-16 (Rs. Crore)

S.	Particulars	East	West	Central	Total for
No.		DISCOM	DISCOM	DISCOM	State
1	Opening Equity identified with GFA (Closing GFA as per True-up of FY 2014-15)	1,286.25	1,024.74	1277.45	3588.43
2	GFA Addition during the year	134.63	487.79	897.06	1,519.48
3	Consumer Deposit and Grants utilized during the year	134.63	487.79	559.68	1,182.10
4	Net GFA Addition during the year	0.00	0.00	337.38	337.38
5	Actual Equity addition	24.07	56.59	34.73	115.39
6	30% of addition to net GFA considered as funded through equity	0.00	0.00	101.21	101.21
7	Net GFA considered as funded through equity (Min (5,6))	0.00	0.00	34.73	34.73
6	Closing Equity Considered for FY 2015-16	1,286.25	1,024.74	1312.18	3,623.16
7	Average Equity identified with GFA and considered for FY 2015-16	1,286.25	1,024.74	1294.81	3,605.80
8	RoE @16% admitted in True-up of FY 2015-16	205.80	163.96	207.17	576.93

# **Depreciation**

## **Petitioner's' Submission:**

3.81 The Petitioners have submitted that the depreciation has been computed as per the methodology specified in the MYT Tariff Regulations, 2012, on the basis of the opening GFA as on 1st of April 2015 as per audited balance sheet and actual addition to GFA during FY 2015-16. The Petitioner have further submitted that as per the Second Amendment to MPERC (Recovery of expenses and other charges for providing Electric Line or Plant used for the purpose of giving Supply) (Revisions-I) Regulations, 2009 (RG-31(I) of 2009), the manner of the recognition of asset created through consumer contribution as well as depreciation thereon has been elaborated. Further Accounting Standard 12, provides guidance on the asset created through government grant. Accordingly, as per provision of the Regulation, DISCOM can charge depreciation on the full amount of asset and amortize the corresponding amount from grant to the P&L account. Therefore, treatment given by the DISCOM in the accounts is in line with the Regulation (RG-31) and prevailing Accounting Standards.

- 3.82 Further, the Petitioners have claimed Depreciation as charged in the books of the Petitioners for the Assets capitalized during the year and as the beginning of the year consistent with the rates of depreciation specified in MYT Regulations, 2012 (except West DISCOM). Further, the West DISCOM adopted the rate of depreciation notified by the Commission in Regulation from the FY 2010-11 as per the clarification issued by the Ministry of Corporate Affairs vide general circular No 31/2011 dated 31st May 2011. Since, DISCOMs adopted Depreciation rates specified in the Regulations only from FY 2010-11, a separate depreciation model was used to consider depreciation as per Regulation since FY 2006-07. Accordingly, the Petitioner's (West DISCOM) has considered the Depreciation for FY 2015-16.
- 3.83 Accordingly, the Petitioners have claimed net depreciation of Rs. 261.10 Crore, Rs. 213.16 Crore and Rs. 240.85 Crore for East, West and Central DISCOMs, respectively as against Rs. 125.76 Crore, Rs. 107.63 Crore and Rs. 137.60 Crore respectively approved by the Commission in Tariff Order for FY 2015-16.

# Commission's analysis on Depreciation

- 3.84 The Commission in Regulation 32 of the MYT Regulations,2012 has specified the following methodology for computation of depreciation:
  - a. The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission
  - b. The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.
  - c. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
  - d. Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
  - e. Depreciation shall be calculated annually based on 'straight line method' and at rates specified in Annexure II to these Regulations for the assets of the Distribution System declared in commercial operation after 31/03/2013.

Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets.

- 3.85 The Commission in its True-up Order for FY 2005-06 dated January 16, 2008 clarified that irrespective of the accounting practice followed by the utilities, the Commission will allow depreciation as per the depreciation rates specified in the Regulations.
- 3.86 The Commission has observed that claims against depreciation by the DISCOMs have not been duly substantiated by the detailed Fixed Asset Registers in the format prescribed by the Commission to ensure that claims made are only against those assets which have not been fully depreciated. DISCOMs in the past also did not submit these details despite repetitive directions of the Commission. Accordingly, in order to reprimand the Petitioners, the Commission in truing up for FY 2015-16 has allowed the same depreciation rate as approved in Tariff Order for FY 2015-16 i.e., 2.44%, 2.81%, and 2.44% for East, West and Central DISCOMs respectively. Accordingly, considering GFA addition (net of consumer contribution and grants) as discussed in "Interest & Finance Charges" Section of this Order, the admitted depreciation for FY 2015-16 is as shown in the table below:

Table 94: Depreciation admitted by the Commission for FY 2015-16 (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Opening GFA on 1 April, 2015 (Closing GFA				
net of consumer contribution & grants as per	4,610.07	3,453.69	5,218.15	13,281.91
True-up of FY 2014-15)				
Add: GFA Added during the year	134.63	499.64	897.06	1,531.33
Less: Deductions during the year	0.00	11.85	0.00	11.85
Less: Consumer Contribution and grants	124.62	487.79	559.68	1 192 10
during the year	134.63	487.79	339.08	1,182.10
Net GFA addition during the year	0.00	0.00	337.38	337.38
Closing GFA on 31 March, 2016	4,610.07	3,453.69	5,555.53	13,619.29
Average GFA	4,610.07	3,453.69	5,386.84	13,450.60
Rate of Depreciation	2.44%	2.81%	2.44%	2.54%
<b>Depreciation admitted by the Commission</b>	112.49	97.05	131.44	340.97

#### Other items of ARR

3.87 Apart from the above discussed components, there are certain other items which form part of the ARR. These include bad debts, other miscellaneous expenditure, any prior period

expenses / credits, income tax and fringe benefit tax. These components are analyzed in the following section:

## Bad and doubtful debtsPetitioners' Submission:

3.88 DISCOMs have claimed the bad and doubtful debts as shown in the table below:

Table 95: Bad Debts claimed by DISCOMs (Rs. Crore)

DISCOM	Bad Debts as per tariff order	Bad Debts claimed
East	2.00	0.00
West	2.00	261.25
Central	2.00	25.69
Total	6.00	286.94

## Commission's Analysis on Bad and Doubtful debts:

- 3.89 The MYT Regulations, 2012, provide for admission of bad debts as amount actually written-off subject to the maximum of 1% of the revenue from sale of power. Vide letter dated 1st September, 2016, the Commission directed the DISCOMs to submit the details of bad debt claimed. In reply to the queries DISCOMs have submitted as below:
  - (a) West DISCOM submitted that the amount of Rs. 70.73 Crore has been written off against Domestic Samadhaan Yojna and Deenbandhu Samadhaan Yojna schemes and Rs. 190.52 Crore against dues of various societies and consumers.
  - (b) Central DISCOM submitted that amount written off against Kisan Samriddhi Yojana, Samadhan Yojana and Deenbandhu Samadhaan Yojana schemes is Rs. 39.26 Crore against which it received receivables from the State Government of Rs. 13.57 Crore.
- 3.90 From above it can be observed that majority of the debt has been written off against a scheme or withdrawal / false demand, whereas some write off is against dues and delayed payment surcharge. The Commission has already taken the view in True-up Order for previous years that the principal amount written off under any scheme or withdrawn / false demand shall not be considered under bad debts, as the same has been waived off at the Petitioners own behest.
- 3.91 With regards to write off against dues, it is observed that none of the DISCOMs have provided any details about the efforts made for the recovery of the dues, however, the DISCOMs have submitted the approval taken from the Board of Directors. Accordingly,

the Commission has only admitted Bad Debts against these dues. The admitted bad debts for FY 2015-16 are shown as follows:

Table 96: Bad Debt admitted by the Commission for FY 2015-16 (Rs. Crore)

Particulars	East	West	Central	Total for State
Debt written off against scheme	0.00	70.73	25.69	96.42
Demand Withdrawn / false demand	0.00	0.00	277.99	277.99
Written off against dues	0.00	190.52	0.00	190.52
Total	0.00	261.25	303.68	564.93
Debt written off under consideration	0.00	190.52	0.00	190.52
1% of sales revenue	61.21	61.95	55.21	178.37
Admitted	0.00	61.95	0.00	61.95

## Any other expense

Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit)

#### **Petitioner's Submission:**

3.92 The Petitioners submitted that Other Expense/ (Income) consists of miscellaneous losses and write offs, prior period charges/ (credit), sundry expenses, extraordinary items and other charges etc. The Petitioners in their ARR filing for FY 2015-16 had not claimed any expenses as other expenses, however as per audited accounts of FY 2015-16, other expenses for East, West and Central DISCOM stands at Rs. (158.36) Crore, Rs. (13.17) Crore and Rs.168.94 Crore respectively.

# **Commission's Analysis:**

- 3.93 Considering the submissions of DISCOMs, the Commission has undertaken detailed head wise analysis of Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) as claimed in the petitions and provided in the Audited Accounts of the DISCOMs.
- 3.94 As regards other expenses claimed by DISCOMs, the Commission has observed that employee related credits/ interest/ prior period depreciation expense etc., under the head of prior period adjustments are claimed. As the Commission has already undertaken truing up of previous years based on the prudence check of the audited accounts in light of norms provided in Regulations, the Commission has not considered these expenses.

3.95 Accordingly, the Commission after verifying expenses from the audited accounts of the DISCOMs has admitted the miscellaneous losses & write-offs / sundry expenses / net prior period charges – (credits) as shown in the table below:

Table 97: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) admitted by the Commission (Rs. Crore)

Doutionland	East DISCOM		West DISCOM		Central DISCOM	
Particulars	Claimed	Allowed	Claimed	Allowed	Claimed	Allowed
Excess provisions for Interest & Finance / Depreciation Charges of Prior Periods	(1.30)	0.00		0.00		0.00
Other Excess Provisions of Prior Periods	0.00	0.00		0.00		0.00
Other Income relating to Prior Periods	(87.60)	0.00	12.62#	0.00		(16.98)
Operating expenses of previous years	(1.18)	0.00		0.00		0.00
Prior Period Power Purchase Expense / (Income)	0.00	0.00		0.00	168.94	0.00
Supplementary Bills to be accounted in Power Purchase	0.00	0.00	0.00	0.00		0.00
Extraordinary items	0.00	0.00	0.00	0.00		0.00
Sundry Expenses/Miscellaneous Losses	0.43	0.00	0.54	0.00		0.00
Other Charges	0.00	0.00	0.00	0.00		0.00
Total	(158.36)	0.00	13.17	0.00	168.94*	(16.98)

<sup>\*</sup>Note: From the audited account it is observed that the Net Prior Period Income is Rs. 168.94 Crore, whereas the Petitioner has claimed it as expenses.

#### **Revenue from Sale of Power**

## Sale of Power

3.96 The Commission had admitted the projection of Sales as 15,897 MU, 17,805 MU and 16,535 MU at revenue of Rs. 8,289.35 Crore, Rs. 8,832.21 Crore and Rs. 9,433.44 Crore for East, West and Central DISCOMs, respectively in the Retail Supply Tariff order for FY 2015-16 dated 17th April, 2015. As against the same, the Sales filed are 13,891.23 MU, 16,908.13 MU and 14,712.10 MU at revenue of Rs 7,069.02 Crore, Rs 9,195.73 Crore and Rs 7,090.41 Crore by East, West and Central DISCOMs, respectively.

## **Commission's Analysis**

<sup>#</sup> Pertains to Depreciation and other items.

- 3.97 The Petitioners in their Audited Accounts have booked the revenue from sale of power excluding subsidy and other income to the tune of Rs. 6,115.34 Crore, Rs. 6,195.35 Crore and Rs. 5,517.82 Crore for East, West and Central DISCOMs, respectively.
- 3.98 The Commission understands that the Petitioners had implemented retail tariffs as per the tariff order issued by the Commission on 17th April, 2015 and based on the same the following revenue has been booked in the audited accounts excluding subsidy and other income. Further, the Commission has also considered recoveries from theft/ malpractices of Rs.5.69 Crore and Rs. 3.05 Crore for East and Central DISCOMs, as per audited account, respectively, as part of revenue from sale of power.

Table 98: Revenue from sale of power excluding subsidy and other income as per Audited Accounts (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Revenue from sale of power	6,121.03	6,195.35	5,520.87	17,837.25

- 3.99 Further, the Commission also recognizes that the Petitioners have received tariff subsidy from State Government other than the revenue from sale of power as reported in the audited balance sheets. DISCOMs have also received other income and non-tariff income during FY 2015-16 as booked in the Audited Accounts. Thus, in addition to the revenue from sale of power, the Commission has also considered the following revenue, as reported in audited accounts, for this true-up exercise and as discussed subsequently:
  - Non-Tariff Income
  - Subsidy received from State Govt.
  - Other income

## **Non-Tariff Income**

3.100 In addition to the above revenue from sale of power, the Non-Tariff income has been considered separately as stated below for all the three DISCOMs as per their respective Audited Accounts:

Table 99: Break up of Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Misc. charges from consumers (Including Supervision Charges)	48.20	77.74	22.65	148.59
2	Income from wheeling charges	0.30	3.02	45.11	48.43
3	Meter rent	36.70	57.14	37.97	131.81

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
	Total non-tariff income	85.20	137.91	105.73	328.84

# **Subsidy from State Government**

3.101 The Petitioners Audited Accounts for FY 2015-16 reveal that tariff subsidy to the tune of Rs. 953.67 Crore, Rs.3,000.37 Crore and Rs. 1,463.81 Crore has been received from the Government of Madhya Pradesh by East, West and Central DISCOMs, respectively. Accordingly, the Commission has considered this amount as the income of the Petitioners, as it is a part of the revenue from sale of power to the subsidized consumers, which is shown as follows:

Table 100: Subsidy considered as per Audited Accounts (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Subsidy received from GoMP	953.67	3,000.37	1,463.81	5,417.86

# **Other Income**

## **Petitioners' Submission:**

3.102 The other income claimed by the Petitioners is mentioned in the table below.

Table 101: Other Income as submitted by the Petitioners (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.31	0.10
	Interest on FDRs/Investment	0.26	40.07	49.14
A	Sub-Total (A)	0.26	40.39	49.24
В	Other Non-Tariff Income			
	Delayed Payment Surcharge	147.65	136.54	347.84
	Interest & penal interest on advance to suppliers	11.57	33.62	8.62
	Interest from banks	0.00	0.00	0.36
	Utility charges	0.00	0.00	9.06
	Scrap sales	0.00	9.15	0.00
	Lease rent	0.00	0.00	0.12

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	
	Income from staff recoveries	0.29	0.00	0.82	
	Deferred income (consumer contribution)	85.08	0.00	89.47	
	Misc services/receipts	32.20	42.30	50.59	
	Profit on sale of stores	0.00	0.00	2.27	
	Sale of Tender Form	0.00	0.00	0.32	
	Income from trading (other than electricity)	73.83	7.17	0.00	
В	Sub-total (B)	350.62	228.79	509.46	
C	Total Other Income (A+B)	350.88	269.18	558.71	
D	Total other income (excluding DPS)	203.23	132.64	210.87	

## **Commission Analysis:**

- 3.103 The Commission has not considered the Delayed Payment Surcharge as part of income of DISCOMs as per the Regulations as any additional interest on working capital for the delayed payment is also not considered by the Commission.
- 3.104 The Commission has computed depreciation on the net asset addition after reducing grants and consumer contribution from the actual gross asset addition during the year. Therefore, the Commission has not considered the deferred income and income from RGGVY depreciation.
- 3.105 Accordingly, the other income as admitted by Commission is shown as follows:

Table 102: Other Income as admitted by Commission (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.31	0.10
	Interest on FDRs/Investment	0.26	40.07	49.14
A	Sub-Total (A)	0.26	40.39	49.24
В	Delayed Payment Surcharge	147.65	136.54	347.84
C	Other Non-Tariff Income			

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	
	Interest & penal interest on advance to suppliers	11.57	33.62	8.62	
	Interest from banks	0.00	0.00	0.36	
	Income from staff recoveries	0.29	0.00	0.82	
	Misc services/receipts/ any other income	106.03	58.63	60.08	
	Profit on sale of stores	0.00	0.00	2.27	
С	Sub-total (C)	117.89	92.25	72.15	
D	Total Other Income (A+B+C)	265.80	269.18	469.24	
E	Total Other Income (D-B)	118.15	132.64	121.40	

- 3.106 Accordingly, the Commission admits the actual other income of Rs. 118.15 Crore, Rs. 132.64 Crore, and Rs 121.40 Crore for East, West and Central DISCOMs, respectively, as per audited balance sheet excluding the components as discussed above.
- 3.107 Based on above discussion, the total revenue admitted by the Commission for the period April, 2015 to March, 2016 is mentioned in the table below:

Table 103: Total Revenue, Non-Tariff Income and Subsidy admitted (Rs. Crore)

DISCOM	Revenue from sale of power	Non-tariff income	Revenue subsidies from GoMP	Other income (excluding DPS)	Total revenue income admitted for true-up
East	6,121.03	85.20	953.67	118.15	7,278.05
West	6,195.35	137.91	3,000.37	132.64	9,466.28
Central	5,520.87	105.73	1,463.81	121.40	7,211.80
Total	17,837.25	328.84	5,417.86	372.19	23,956.13

# Revenue Surplus / (Deficit) admitted

3.108 Based on the scrutiny of various cost components regarding revenue income and expenditures of DISCOMs, the Commission has determinted the following Surplus / (Deficit) for the period April 2014 to March 2015 for recovery by the Licensee through retail tariffs in future years:

Table 104: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2015-16 (Rs. Crore)

Table 104. Revenue		ISCOM	West D	SCOM   Central DISCOM   Total for Sta				
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Ciamieu	Admitted
Tariff Income	6,115.35	6,121.03	6,195.36	6,195.35	5,626.60	5,520.87	17,937.30	17,837.25
Non-tariff income	0,113.33	85.20	0,193.30	137.91	3,020.00	105.73	17,937.30	328.84
Net other income (excluding	294.12		265.95		212.43	103.73	772.50	
Delayed Payment Surcharge)	294.12	118.15	203.93	132.64	212.43	121.40	112.30	372.19
Subsidy	953.67	953.67	3,000.37	3,000.37	1,463.81	1,463.81	5,417.86	5,417.86
Total Income (A)	<b>7,363.14</b>	7,278.05	9,461.68	9,466.28	7,302.84	7,211.80	24,127.66	23,956.13
EXPENSES	7,303.14	1,278.05	9,401.08	9,400.28	7,302.84	7,211.80	24,127.00	23,950.13
Power Purchase								
	6 610 22	5.757.00	0.121.01	7.204.76	7.210.00	c 100.70	21.060.22	10.262.27
Power Purchase Cost	6,619.22	5,757.80	8,131.01	7,394.76	7,219.00	6,109.70	21,969.23	19,262.27
MP Transco Charges	816.71	816.71	937.59	937.59	805.80	805.80	2,560.10	2,560.09
Total Power Purchase (Incl. Transmission) (B)	7,435.93	6,574.51	9,068.60	8,332.35	8,024.80	6,915.50	24,529.33	21,822.36
O&M Expenses (Net of								
Capitalisation)								
Employee Expenses	365.00	331.23	344.00	344.00	322.00	360.29	1,031.00	1,035.52
DA	324.23	323.33	298.51	298.51	296.84	296.84	919.57	918.68
Terminal Benefits	50.19	51.95	19.05	19.86	12.83	53.89	82.07	125.70
Arrears	14.17	0.22	15.10	10.00	12.30	7.28	41.57	17.50
A&G Expenses	131.38	156.70	108.00	108.00	99.18	87.48	338.56	352.18
R&M Expenses	138.79	77.13	112.26	112.26	151.54	65.38	402.59	254.78
Other expenses (including Taxes & MPERC Fees)	2.14	2.16	22.07	12.48	1.82	1.83	26.04	16.47
O&M Expenses Capitalised	0.00	(35.43)	0.00	(41.25)	0.00	(30.26)	0.00	(106.94)
Total O&M Expenses (C)	1,025.90	907.30	919.00	863.86	896.51	842.73	2,841.41	2,613.89
Other Expenses	,						, , ,	,
Depreciation	261.10	112.49	213.16	97.05	240.85	131.44	715.11	340.97
Interest & Financing Charges on		222.17		,,,,,,			, , , , , , , , , , , , , , , , , , , ,	0.1017
Project Loans (Net of	119.26	103.32	69.34	52.36	215.29	207.09	403.89	362.78
Capitalisation)								
Interest on working capital loans	34.93	12.79	2.93	15.07	(4.49)	9.72	33.37	37.58
Interest on Consumer Security	56.04	56.04	(2.20	(2.29	57.77	52.22	176.00	176.00
Deposit	56.84	56.84	62.28	62.28	57.77	57.77	176.89	176.89
Return on Equity	192.04	205.80	164.55	163.96	249.97	207.17	606.56	576.93
Bad & Doubtful Debts	0.00	0.00	261.25	61.95	25.69	0.00	286.94	61.95
Any Other Expense	(238.49)	0.00	13.17	0.00	168.94	(16.98)	(56.38)	(16.98)
Total Other Expenses (D)	425.68	491.24	786.68	452.67	954.02	596.21	2,166.38	1,540.12
Total Expenses $E = (B + C + D)$	8,887.51	7,973.05	10,774.28	9,648.89	9,879.82	8,354.44	29,541.61	25,976.38
Revenue Gap F = (E-A)	1,524.37	695.00	1,312.60	182.61	2,576.98	1,142.64	5,413.95	2,020.24
Add: Impact of True-ups of DISCOMS ARR FY 2009-10, FY 2010-11, FY 2011-12 ( <b>G</b> )	1,062.00	1,062.00	(1.00)	(1.00)	683.00	683.00	1,744.00	1,744.00
Gross Expenses $\mathbf{H} = (\mathbf{E} + \mathbf{G})$	9,949.51	9,035.05	10,773.28	9,647.89	10,562.82	9,037.44	31,285.61	27,720.38
Total Revenue Gap I = (H - A)	2,586.36	1,757.00	1,311.60	181.61	3,259.99	1,825.64	7,157.95	3,764.24
Total Nevenue Gap I – (II • A)	4,500.50	1,737.00	1,311.00	101.01	ン・ムンブ・ブブ	1,043.04	1,131.33	3,104.44

# A4: TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2016-17

## Analysis of Expenses during the period from April 2016 to March 2017

## Sale of energy

4.1 In the retail supply tariff order issued on 05<sup>th</sup> April, 2016 for FY 2016-17, the Commission admitted the sale of energy for FY 2016-17 as shown in the table below:

Table 105: Sales admitted in Tariff Order dated 05th April, 2016 (MU)

DISCOM	East DISCOM	West DISCOM	Central DISCOM	Total
LT Sale	10,993	13,835	10,623	35,451
HT Sale	4,736	3,959	4,406	13,101
Total Sale	15,730	17,793	15,029	48,552

4.2 A comparison of Sales as admitted in Tariff Order, as per the R-15 statements and as claimed in the True-up Petition is given in the table below:

Table 106: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition for FY 2016-17 (MU)

1 emion yor 11 2010 1, (112)										
Particulars		East DISCOM	West DISCOM	Central DISCOM	Total					
As admitted in the Tariff	LT Sale	10,993	13,835	10,623	35,451					
As admitted in the Tarini Order	HT Sale	4,736	3,959	4,406	13,101					
Order	Total Sale	15,730	17,793	15,029	48,552					
	LT Sale	10463.19	13,644.75	9,257.95	33,365.89					
As per monthly R-15 report	HT Sale	2946.28	3,920.44	3,051.19	9,917.92					
	Total Sale	13,409.47	17,565.19	12,309.15	43,283.81					
	LT Sale	10,463.19	13,644.73	9,257.95	33,365.87					
As filed in True-up Petition	HT Sale	2,946.28	3,920.44	3,051.19	9,917.92					
	Total Sale	13,409.47	17,565.17	12,309.14	43,283.78					

- 4.3 The Commission has observed that the Sales as filed in the True-up Petitions by DISCOMs is same as recorded in their monthly/Annual R-15 statements.
- 4.4 The Commission had approved the assessment of sale to the unmetered category of domestic and agriculture consumers in the tariff order as shown in the table below:

**Assessed units for un-metered** Assessed units for un-Assessed units for un-metered metered domestic agricultural connections agricultural connections (units (units per HP per month) connections (units per per HP per month) connection per month) Rural Category Urban Rural Category Urban Rural Urban Three Phase **Single Phase April to March April to September April to September** Permanent 80 90 Permanent 90 90 195 205 **Temporary** 220 **Temporary** 230 100 October to March October to March 75 Permanent 170 170 Permanent 180 180 **Temporary** 195 220 **Temporary** 205 230

Table 107: Basis of billing to un-metered consumers

4.5 On scrutiny of the sales for the unmetered domestic consumers recorded in monthly R-15 statement (basic sale/billing data statement) for FY 2016-17, it has been observed that the actual monthly unmetered sales to domestic consumers for East, West and Central DISCOMs is higher in few months with respect to monthly norms approved by the Commission. Therefore, the Commission has disallowed the sales of 3.51 MU, 0.06 MU and 0.76 MU, for East, West and Central DISCOMs, respectively, booked in excess on monthly norms as per R15. A summary of the the unmetered sale as per monthly R-15 statement, and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 108: Summary of sale to the unmetered domestic category booked in excess of the specified benchmark (MU):

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for unmetered agricultural connections
East	287.06	3.15
West	0.46	0.06
Central	81.00	0.76
State	481.54	3.96

4.6 Further, on scrutiny of the sales to unmetered agricultural consumers recorded in monthly R-15 statement for FY 2016-17, it is observed that the sale to un-metered category of agriculture consumers had been booked in excess of the prescribed monthly benchmarks, when compared with the number of consumers and their load. Accordingly, the Commission has accepted the metered sales as per monthly R-15 statement, whereas the sales to un-metered agricultural consumers has been admitted as per the monthly

benchmarks prescribed in tariff order for FY 2016-17 has been disallowed. A summary of the the unmetered sale as per monthly R-15 statement and Sales in excess of the prescribed monthly benchmarks as observed from the monthly R-15 statement is shown in the table below:

Table 109: Summary of sale to the unmetered agriculture category booked in excess of the specified benchmark (MU)

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for un-metered agricultural connections
East DISCOM	4,824.75	64.75
West DISCOM	7,987.84	0.04
Central DISCOM	4,305.59	77.21
State	17,118.18	141.96

4.7 The details of energy sale as per Tariff Order for FY 2016-17, as per true up Petition of the DISCOMs and as admitted by the Commission for the purpose of the True-up are given in the following table:-

Table 110: Energy sale as per Tariff Order for FY 2016-17, as per filing of the DISCOMs and as admitted by the Commission (MU)

	I	East DISCOM	1	V	Vest DISCOM	1	Ce	entral DISCO	M	Total for Sta		9
Category	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17
LOW TENSION												
LV 1: Domestic Consumers	4,569.00	3,766.11	3,762.96	4,458.00	3,690.36	3,690.30	4,639.00	3,503.39	3,502.63	13,666.00	10,959.85	10,955.90
LV 2: Non – Domestic	848.00	1,043.15	1,043.15	911.00	962.66	962.66	901.00	825.78	825.78	2,660.00	2,831.58	2,831.59
LV 3: Public Water Works and Streetlights	596.00	423.52	423.52	401.00	432.76	432.76	407.00	325.89	325.89	1,404.00	1,182.17	1,182.17
LV 4: Industry	363.00	392.55	392.55	584.00	561.67	561.67	301.00	252.88	252.88	1,248.00	1,207.10	1,207.10
LV 5: Agricultural Consumers	4,617.00	4,837.86	4,773.11	7,481.00	7,997.28	7,997.24	4,375.00	4,350.02	4,272.81	16,473.00	17,184.59	17,043.16
LT Sale (MU)	10,993.00	10,462.62	10,395.29	13,835.00	13,644.73	13,644.64	10,623.00	9,257.96	9,179.99	35,451.00	33,365.29	33,219.92
HIGH TENSION												
HV 1: Railway Traction	672.00	-	-	434.00	-	-	1,195.00	-	-	2,301.00	-	-
HV 2: Coal Mines	504.00	460.02	460.02	-	-	-	35.00	30.95	30.95	539.00	490.97	490.97
HV-3: Industrial and Non- Industrial	3,149.00	2,098.88	2,098.88	3,095.00	3,374.00	3,374.00	2,826.00	2,666.91	2,666.91	9,070.00	8,139.79	8,139.79

	East DISCOM			West DISCOM			Ce	entral DISCO	M	Total for State		
Category	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17	As per tariff order FY 2016-17	As per true up Petition FY 2016- 17	As admitted in true up order FY 2016- 17
HV-4: Seasonal	11.00	7.41	7.41	5.00	11.37	11.37	2.00	1.65	1.65	18.00	20.43	20.43
HV-5: HT Irrigation and Water Works	108.00	99.61	99.61	393.00	498.73	498.73	170.00	190.83	190.83	671.00	789.17	789.17
HV-6: Bulk residential users	292.00	280.20	280.20	31.00	36.34	36.34	177.00	150.68	150.68	500.00	467.22	467.22
HV-7: Bulk Supply to Exemptees	-	0.16	0.16	1.00	-	-	-	10.17	10.17	1.00	10.33	10.33
HT Sale (MU)	4,736.00	2,946.28	2,946.28	3,959.00	3,920.44	3,920.44	4,406.00	3,051.19	3,051.19	13,101.00	9,917.91	9,917.91
GRAND TOTAL HT + LT (MU)	15,730.00	13,409.47	13,341.57	17,793.00	17,565.17	17,565.08	15,029.00	12,309.14	12,231.18	48,552.00	43,283.78	43,137.84

#### **Power Purchase Quantum and Cost**

#### **Petitioners' Submission**

- 4.8 The Petitioner have submitted that the energy requirement (MU) admitted in the Tariff Order by the Commission was based on the normative loss trajectory as per MYT Regulations, which differs from the actual loss levels for FY 2016-17.
- 4.9 The Petitioners have submitted that the Commission while projecting the power purchase requirement does not consider the quantum of energy sale to other DISCOM's and UI energy at DISCOM's periphery. Also, the losses outside their periphery i.e. losses of MPPTCL and PGCIL is beyond their control and therefore the Petitioners have requested to determine the average per unit rate based on the actual net energy input at DISCOM periphery for sale to retail consumers only. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States.
- 4.10 The Petitioner further submitted that to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States. Also, the calculation of average per unit rate should not be based on purchase at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried out. This results in erroneous calculation of energy balance and the UI quantum of each DISCOM is left unattended.

- 4.11 The Petitioners submitted that they have considered the MPPTCL losses of 2.71% in accordance with the Annual Report on Regulatory Compliance for FY 2016-17. With regard to Inter-State losses, the Petitioners have submitted the Month wise and Region wise break-up of losses for FY 2016-17.
- 4.12 Further, with regard to cost of power purchase, the Petitioners have submitted that the primary reason for increase in power purchase cost is on account of the following reasons:
  - Payment of Fuel Cost adjustment on actuals;
  - Payment of RE purchase cost;
  - Payment of actual Inter-State and Intra-State transmission charges;
  - Payment of UI/ DSM charges and MPPMCL charges.
- 4.13 The Petitioners have submitted that they do not have any material control on the losses outside their periphery i.e. M.P. Transco and PGCIL losses as they are external to their periphery and involve complex interconnected grid. Therefore, it will be appropriate to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM including UI within the State and also banking of power to other States. It is to be noted that calculation of average per unit losses should not be based on claulated at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried out.
- 4.14 The Petitioners have requested the Commission to determine the cost of power purchase to be adjusted (disallowed) in the revenue requirement of the Petitioners' for the quantum of power purchase of disallowed power by applying the basic principle that all such costs and expenses on average basis, would have avoided by the Petitioner if the quantum of power whose purchase was disallowed by the Commission has not been purchased.
- 4.15 Based on above, the Petitioners have claimed the power purchase cost as follows:

Table 111: Claimed Power Purchase Cost for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	East DISCOM		West DISCOM		Central DISCOM		Total for State	
		Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
1	Distribution Loss Level (%)	22.61%	18.00%	17.87%	16.00%	36.15%	19.00%	25.36%	17.49%
2	Fixed Cost for FY 2016-17	2,938.39	2,938.39	3,553.95	3,553.95	3,089.28	3,089.28	9,581.62	9,581.62
3	Supplementary Bills of Previous FYs	368.4	364.62	491.87	488.2	358.09	355.12	1,218.36	1,207.94

Sr.	Particulars	East D	ISCOM	West D	ISCOM	Central 1	DISCOM	Total fo	or State
No.	Paruculars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
4	Variable Cost for FY 2016-17 after adjusting the sale of additional power and other income	3,181.76	3,035.08	3,662.77	3,594.10	3,405.32	2,821.29	10,249.85	9,450.47
5	Other Charges (ED, Cess, Heavy Water Charges, Water Charges, MOPA, Insurance, Others etc.)	323.41	308.5	361.59	354.81	337.77	279.84	1,022.77	943.15
6	Inter State Transmission Charges for FY 2016-17 including SLDC	437.08	437.08	509.49	509.49	459.61	459.61	1,406.18	1,406.18
7	Other Cost of MPPMCL which cannot be apportioned	66.03	66.03	74.51	74.51	71.51	71.51	212.05	212.05
8	Other Adjustment based on Reconciliation with MPPPMCL	48.23	46	(91.55)	-89.84	13.38	11.09	(29.94)	(32.75)
9	MPPMCL Cost	7,363.30	7,195.71	8,562.63	8,485.23	7,734.95	7,087.73	23,660.88	22,768.67
10	Sup. Bill Due to revision of SEA for the FY 14-15	(1.73)	(1.73)		-	(74.99)	(74.99)	(76.72)	(76.72)
11	Intra State Transmission Charges for FY 2016-17	789.14	789.14	1,149.60	1,149.60	944.37	944.37	2,883.11	2,883.11
12	Power Purchased Directly by DISCOMs	4.96	4.96				-	4.96	4.96
13	DSM/UI at Intra State Boundary	(109.57)	(109.57)	41.48	41.48	79.55	79.55	11.46	11.46
14	Reactive Energy Charges	(6.13)	(6.13)	(1.13)	(1.13)	2.89	2.89	(4.37)	(4.37)
15	Total	8,039.97	7,872.38	9,752.58	9,675.18	8,686.77	8,039.55	26,479.32	25,587.11

## Commission's Analysis of Power Purchase Requirement and Cost

## **Power Purchase Requirement**

4.16 Details of power purchase including inter-State transmission charges and losses as admitted the Retail Supply Tariff Order for FY 2016-17 and as per the audited accounts of DISCOMs are given in the table below:

Table 112: Power purchase quantum and cost admitted in Tariff Order and as per the Audited Accounts.

DISCOM	Particulars	Admitted in the tariff order	Actual as per audited accounts
East DISCOM	Power Purchase Quantum (MU)	20,246.00	18,358.73*
East Discon	Power Purchase Cost (Rs. Crore)	7,136.16	8,039.97#
West DISCOM	Power Purchase Quantum (MU)	22,357.00	22,496.87*
West Discoli	Power Purchase Cost (Rs. Crore)	8,082.78	9,752.57#
Central DISCOM	Power Purchase Quantum (MU)	19,584.00	20,370.21*
Central Discolvi	Power Purchase Cost (Rs. Crore)	6,953.47	8,686.77#
Total for the State	Power Purchase Quantum (MU)	62,186.00	61,225.81
Total for the State	Power Purchase Cost (Rs. Crore)	22,172.41	26,479.31

<sup>\*</sup>As Power Purchase quantum is not reflected in Audited Accounts, considered equal to as Petitioned. #It includes supplementary power purchase cost of period prior to FY 2016-17.

4.17 Further, on analysis of the data submitted by the Petitioner, it has been observed that the Petitioners have not submitted the complete details of energy balance in format "Schedule 4a" which requires that the Inter State and Intra State losses be separately shown, whereas the Petitioners have submitted figures combining both these losses. Energy balance details as submitted by DISCOMs are shown in the Table below:

Table 113: Energy Balance as filed by DISCOMs for FY 2016-17

S	Particulars	East	West	Central	Total for		
No.	1 at ticulars	DISCOM	DISCOM	DISCOM	State		
1	Total Energy Sale (MU)	13,409.47	17,565.17	12,309.14	43,283.78		
2	A. Distribution losses (%)	22.61%	17.87%	36.15%	25.12%		
2	B. Distribution losses (MU)	3,917.50	3,823.14	6,969.23	14,709.87		
3	At T-D interface (MU)	17,358.71	21,745.13	19,447.42	58,551.26		
4	A. Transmission loss of MPPTCL (%)						
4	B. Transmission losses of MPPTCL (MU)						
5	At MP periphery		Not Su	bmitted			
(	A. External losses (%)						
6	B. External losses (MU)	1					
7	Total energy requirement (MU)	18,358.73	22,496.87	20,370.21	61,225.81		

- 4.18 However, for admitting the power purchase cost, the Commission in line with the approach adopted in truing up of previous years has computed the normative power purchase requirement by following the principle of grossing up sales with normative loss levels for which is narrated below:
  - i. The admitted actual sales (say X) made by the DISCOMs have been grossed up by the normative Distribution Loss levels (say Y) to arrive at the power required at DISCOM periphery i.e. T-D boundary (say Z=X/(1-Y)).
  - ii. The quantum (Z) thus arrived at has further been grossed up by the STU losses (MP Transco) (A) to arrive at the quantum of power required at the State boundary (Say B= Z/(1-A)).
  - iii. Finally, the quantum (B) is grossed up by the actual external losses (say C) to arrive at the total energy requirement i.e. D=B/(1-C).
- 4.19 In order to compute the energy balance for DISCOMs, it is necessary to know the loss levels at each stage. Therefore, inter-State transmission, intra-State transmission and distribution losses need to be identified correctly. The intra-state transmission loss has been submitted as 2.71% by MPPTCL in their annual report of regulatory compliance report for FY 2016-17. Accordingly, the same loss level has been considered as the Intra-State transmission losses for the present True-up exercise. The Commission had approved the distribution loss levels for working out power purchase requirement in the Retail Supply Tariff Order for FY 2016-17 as specified in the MYT Regulations, 2015, is as shown in the table below:

Table 114: Distribution loss trajectory for FY 2016-17(%)

Voor	East	West	Central
Year	DISCOM	DISCOM	DISCOM
FY 2016-17	18%	16%	19%

- 4.20 The Commission observed that the Petitioner has submitted the monthly actual external transmission losses (computedbased on the weekly losses issued by RLDCs) of Inter State Transmissionsystem for FY 2016-17. Accordingly, the average transmission losses for FY 2016-17 applicable for Western Region and Eastern Region have been worked out as 3.66% and 2.27%, respectively. The external losses (MU) thus arrived by multiplying the applicable losses (%) with the power purchase (MU) from the respective regions has been apportioned based on the total power purchase by each DISCOMs.
- 4.21 Based on above, the power purchase requirement admitted by the Commission for FY2016-17 is shown in the table below:

S. **East** West **Central Total for Particulars** State No. DISCOM **DISCOM DISCOM** Total Energy Sale (MU) 12,231.17 1 13.341.57 17,565.09 43,137.84 A. Distribution Losses (%) 18.00% 16.00% 19.00% 17.49% 2 B. Distribution Losses (MU) 2,928.64 3,345.73 9,143.41 2,869.04 15,100.22 3 At T-D interface (MU) 16,270.21 20,910.83 52,281.25 A. Transmission loss of MPPTCL (%) 2.71% 2.71% 2.71% 2.71% 4 453.20 B. Transmission losses of MPPTCL (MU) 582.47 420.61 1,456.29 16,723.42 15,520.83 5 At MP periphery 21,493.29 53,737.54 6 External losses (MU) 373.50 383.28 352.86 1,109.65 7 Net energy requirement (MU) 17,096.92 21,876.58 15,873.69 54,847.19

Table 115: Analysis of Power purchase quantum (MU)

#### **Power Purchase Cost**

4.22 On analysis of the power purchase cost submitted by the Petitioner it was observed that there was variation between the power purchase cost booked as per audited accounts of the DISCOMs and MPPMCL account. A comparison of power purvchase cost as per the Petition, as per audited accounts of DISCOMs and MPPMCL is shown in the table below:

Table 116: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for the State
As filed in Petition	7,872.38	9,675.18	8,039.55	25,587.11
As per the audited accounts of DISCOMs	8,039.97	9,752.57	8,686.77	26,479.31
As per MPPMCL audited account	7363.3	8562.63	7734.95	23660.88

4.23 The Commission through data gap directed the Petitioners to submit the reconciliation of the power purchase cost as per audited account of DISCOMs and MPPMCL. In reply Petitioner submitted the reconciliation statement, which shows that the major variation is due to additional expenses booked in the audited accounts of DISCOMs pertaining to Intra State transmission charges, SLDC charges, UI charges and some expenses which has been booked in the audited accounts of MPPMCL of previous year. The reconciliation statement submitted by the Petitioners is shown below:

Table 117: Reconciliation of power purchase cost as per DISCOMs account and MPPMCL account as submitted by the Petitioners (Rs. Crore)

Sr.	Particulars	East	Central	West	MP State
1	Fixed Cost	2,938.39	3,089.28	3,553.95	9,581.63
2	Supplementary Bills of Previous FYs	368.4	358.09	491.87	1,218.36
3	Variable Cost	3,559.85	3,817.22	4,125.57	11,502.63

Sr.	Particulars	East	Central	West	MP State
	Less: Sale of additional power	155.69	165.73	180.8	502.22
	Less: Other income	222.4	246.17	282	750.57
4	Variable Cost after adjusting the sale of additional power and other income	3,181.76	3,405.32	3,662.77	10,249.85
5	Other Charges (ED, CESS, Heavy Water Charges, Water Charges, MOPA, Insurance, Others etc.)	323.41	337.77	361.59	1,022.77
6	Inter State Transmission Charges including SLDC	437.08	459.61	509.49	1,406.17
8	Other Cost of MPPMCL which cannot be apportioned	66.03	71.51	74.51	212.05
9	Other Adjustment based on Reconciliation with MPPPMCL	48.23	13.38	-91.55	-29.94
	Power Purchase Cost as per MPPMCL Statement/Accounts	7,363.30	7,734.95	8,562.63	23,660.88
A	Sup. Bill Due to revision of State Energy Account for the FY 2014-15	(1.73)	(75.94)		
В	Intra State Transmission Charges	789.14	944.37	1,149.60	2,883.11
С	Power Purchased Directly by DISCOM's	4.96	-		4.96
D	DSM/UI at Intra State Boundary	(109.57)	79.55	41.48	11.46
Е	Reactive Energy Charges	(6.13)	2.89	(1.13)	(4.37)
	Power Purchase Cost as per DISCOM Audited Accounts	8,039.97	8,685.82	9,752.58	26,478.36

- 4.24 Accordingly, the Commission in line with the approach adopted in previous true up orders and considering that the DISCOMs have made some payments directly to other entities also like transmission charges, UI charges etc., has considered power purchase cost as per audited accounts of DISCOMs for further scrutiny as per following section.
- 4.25 While scrutinising the power purchase costs as indicated in the audited accounts of the DISCOMs, the Commission has observed that in support of their claim the Petitioners have furnished a statement indicating month wise, station wise details of power purchase quantum and costs (fixed cost, variable charges, other charges / costs) with DISCOM wise apportionment for corroborating the figures in audited accounts for FY 2016-17. The total fixed cost for the stations as indicated in this statement is Rs. 9,581.63 Crore, Variable and other charges (net of revenue from sales of surplus power) of Rs. 11,178 Crore, inter State transmission cost (PGCIL/POSOCO Charges etc) of Rs.1,406.17 Crore, Supplementary Power Purchase Cost of Rs. 1,218.36 Crore, MPPMCL Cost of Rs. 212.05 Crore, DSM charge of Rs. (30.02) and Reacttive Energy Charges of Rs. 37.10 Crore, The Commission has analysed the component wise power purchase claimed by the Petitioner in the following Section.

## MPPMCL Cost of Rs. 212.05 Crore

4.26 With regards to the Other Cost of Rs. 212.05 Crore (Rs. 66.03 Crore, Rs. 71.51 Crore and Rs. 74.51 Crore for East, Central and West DISCOM, respectively) included in Power Purchase Cost, which was not apportioned station wise by the Petitioner, the Commission vide letter dated 04<sup>th</sup> December, 2019, sought details in this regard from the Petitioner. In response, MPPMCL vide letter dated 23<sup>rd</sup> December, 2019 submitted the requisite details. The breakup of the Other Cost as submitted by MPPMCL is as follows:

Table 118: Details of Other Cost submitted by the Petitioner for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Amount	Details
1	Power Purchase Cost	(1.52)	Energy bills which have not been passed to the DISCOMs in their monthly energy bills. Less: Purchase Bills passed through revised base sheet
2	Exchange of Power (Trading Margin)	0.04	Trading Margin paid on power purchase through Exchange
3	Bank Charges	3.46	Charges paid to Bank for LC facility
4	Open Access Charge for Banking of Power	26.73	Open Access Charges paid for banking of power
5	Banking of Energy	(8.52)	Liability towards Banking of Energy
6	Employee benefit Expense (including salary)	60.05	Employee Benefit Expenses of MPPMCL
7	Finance Cost	61.67	Interest paid on working capital loans
8	Other Expenses	36.62	Other A&G related expenses of MPPMCL
9	Depreciation	3.58	Depreciation expenses on MPPMCL assets
10	Credit for Wind energy bills passed in monthly bill of September, 2016 for Wind energy bill of the same amount passed twice in the monthly DISCOM bill of September, 2014.	29.94	
11	Total	212.05	

4.27 On the analysis of the component wise details of the Other Cost it was observed that certaincost / (Revenue) pertains to provisioning for banking of power, surcharge on delayed payment rebate on sale of power and free electricity to employees, which cannot be passed onto the State DISCOMs, therefore, the Commission has disallowed such expenses. Details of Other Expenses which have not been admitted by the Commission are as follows:

Table 119: Other expenses in Power Purchase Cost not considered by the Commission for FY 2016-17 (Rs. Crore)

	Jor F1 2010-17 (RS. Crore)					
Sl. No.	Particulars	Amount	Reason for Disallowance			
1	Banking of Energy	(8.52)	The amount pertains to provision made for payment of Banking of Energy and hence no actual payment has been received.			
2	Rebate on Sale of Power	1.20	The amount pertains to rebate provided to MPIDC (MPAKVN) on sale of Power. The burden of which cannot be passed as cost to State DISCOMs.			
3	Surcharge on Delayed Payment	15.81	The Commission does not consider any surcharge earned or paid on account of delayed payment.			
4	Supply of Free Electricity to Employee	0.46	The amount pertains to free electricity provided by MPPMCL to its employees. As the Commission in Retail Supply Tariff Order for FY 2014-15 had not allowed any supply of free electricity to its Employees. Hence the expense of the same cannot be passed onto the consumers of the State DISCOMs.			
5	Finance Cost	61.67	These Loans have been taken by MPPMCL for working capital requirement and do not pertain to funding of the Capital Projects of the DISCOMs. Since, the Commission has already allowed the DISCOMs normative Interest on Working Capital it would not be appropriate to allow finance cost to MPPMCL, separately.			
	Total	70.62				

4.28 Based on above, the admitted MPPMCL cost for FY 2016-17 for each DISCOM which has been apportioned based on the actual claimed MPPMCL cost is shown in the following table:

Table 120: MPPMCL Cost admitted for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Actual MPPMCL cost as per accounts	66.03	74.51	71.51	212.05
2	MPPMCL Cost disallowed	21.99	24.81	23.81	70.62
3	MPPMCL cost admitted	44.04	49.70	47.69	141.44

#### Other income of MPPMCL of Rs.502.22

4.29 The power purchase cost also includes an amount of Rs.502.22 Crore towards Other income / rebate received by MPPMCL. Since, the Commission has allowed to pass on the expenses of MPPMCL towards its operation and maintenance to the Petitioners, any income earned by it should also be passed onto them. However, it is observed that majority of other income is towards rebate of prompt payment to generators and since the Commission has admitted the power purchase cost towards normative energy energy requirement only. Therefore, the Commission has admitted other income in proportion to the admitted energy requirement, which is shown in the table below:

Table 121: Other income of MPPMCL admitted for FY 2016-17

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	18,358.73	22,496.87	20,370.21	61,225.81
2	Actual Other Income (Rs. Crore)	В	155.69	180.80	165.73	502.22
3	Quantum of Power Purchase Admitted (MUs)	С	17,096.92	21,876.58	15,873.69	54,847.19
4	Other Income of MPPMCL admitted (Rs. Crore)	D=B*C/A	144.99	175.81	129.15	449.95

# Unscheduled Interchange (UI) / Deviation Settlement Mechanism (DSM) and Reactive Energy Charges

- 4.30 It is observed that the Petitioner has claimed UI / DSM of Rs. (30.02) Crore for FY 2016-17 based on the actual payment towards these charges. High per unit rate of UI / DSM charges paid by the DISCOMs signifies indiscipline in power drawl by the DISCOMs. The UI / DSM is not meant for trading of electricity and is mainly an instrument for grid discipline and settling the unintended deviations during the normal course of operations and when the frequency is in normal operating range according to the Electricity Grid Code. Further, additional UI / DSM charges are required to be paid when the DISCOMs draws more power than their scheduled drawl when the grid frequency is low. Accordingly, the Distribution utilities are required to project their demand precisely. Presently, the Commission in this order has admitted pro-rated actual UI / DSM charges to the admitted normative energy requirement for FY 2016-17. However, the Petitioners are directed to reduce their payment towards UI / DSM charges by adopting efficient management, proper scheduling of power etc.
- 4.31 Similarly, the Commission has admitted the pro-rated reactive energy charges towards admitted normative energy requirement for FY 2016-17 as shown in table below:

Table 122: UI/DSM and Reactive Energy Charges admitted for FY 2016-17

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	18,358.73	22,496.87	20,370.21	61,225.81
2	UI / DSM Charge (Rs. Crore)	В	(109.57)	0.00	79.55	(30.02)
3	Quantum of Power Purchase Admitted (MUs)	С	17,096.92	21,876.58	15,873.69	54,847.19
4	UI / DSM Charge Admitted (Rs. Crore)	D=B/A*C	(102.04)	0.00	61.99	(40.05)
5	Reactive Energy Charges (Rs. Crore)	E	(6.13)	40.35	2.89	37.10
6	Reactive Energy Charges Admitted (Rs. Crore)	F=E/A*C	(5.71)	39.23	2.25	35.77

## Supplementary Power Purchase Cost of Rs. 1,218.36 Crore

- 4.32 The power purchase booked in the audited account also includes an amount of Rs. 1,218.36 Crore (Rs. 368.40 Crore of East DISCOM, Rs. 491.87 Crore of West DISCOM and Rs. 358.09 Crore of Central DISCOM) as "supplementary bills raised by the generators for the period prior to 2016-17". However, the scrutiny of the supplementary bill details furnished to the Commission in support of aforesaid claim of Rs. 1,218.36 Crore has revealed that amount of Rs. 272.96 Crore pertains to period prior to FY 2014-15, whereas, Rs. 279.56 Crore and Rs. 665.84 Crore pertains to FY 2014-15 and FY 2015-16, respectively.
- 3.109 The amount of Rs. 1,218.36 Crore has been accounted for in the audited accounts for FY 2016-17, therefore, it would be appropriate to consider these supplementary bills of the past years in the true up for FY 2016-17. Since in the past years' true up orders, the power purchase cost of a year was admitted on the basis of the actual metered sale, normative unmetered sale and normative losses of that year; the year wise claims of the power purchase cost have been worked out accordingly. However, it is a matter of concern that the Petitioner has been raising claim on account of supplementary Power Purchase cost for the period from FY 2005-06 onwards in almost all truing up exercise, thereby increasing the power purchase cost exorbitantly. In this regard, the Commission vide deficiency note directed the Petitioner to submit the details of all the supplementary power purchase claimed till date in true up Petitions for FY 2015-16 to FY 2017-18 identifying the reason for the claim along with the justification for not claiming the amount in the said years. The Petitioner has provided some of the details in the reply, which requires further clarification. Accordingly, the Commission has not considered the Petitioner's claim towards the supplementary power purchase cost for the period for which true up has already attained finality i.e. upto FY 2013-14 in this Petition. However, the Commission allows Petitioner

to approach the Commission to claim the said amount separately on furnishing of the adequate details. Further, since the Commission has approved true up of FY 2014-15 and FY 2015-16 in this order, the amount of supplementary power purchase pertaining to FY 2014-15 (i.e. Rs. 279.56 Crore) and FY 2015-16 (i.e. Rs. 665.84 Crore) has been considered for approval in this order. The Commission has reworked this amount as Rs. 268.35 Crore and Rs. 611.13 Crore towards supplementary power purchase cost pertaining to FY 2014-15 and FY 2015-16, respectively, considering the actual metered sales, normative un-metered sales and normative losses of FY 2014-15 and FY 2015-16 admitted in true up of FY 2014-15 and FY 2015-16. Approach adopted by the Commission in approval of power purchase cost towards supplementary bills of FY 2016-17 is as follows:

- Full Fixed Cost allowed except for the fixed cost towards torrent power generating station as per the approach adopted in true up of FY 2014-15 and FY 2015-16.
- Variable and other cost admitted only for those plants which has been considered as scheduled for meeting the normative energy requirement of FY 2014-15 and FY 2015-16 as per their respective true ups.
- Variable and other cost of torrent power generating station as per the approach adopted in true up of FY 2014-15 and FY 2015-16.
- 4.33 The working of supplementary power purchase cost is shown as follows:-

Table 123: Analysis of Supplementary Power Purchase Cost (Rs. Crore)

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Fixed Cost as per actual supplementary bills	A	121.54	157.46	123.22	402.21
2	Fixed Cost disallowed towards supplementary bills	В	0.00	0.00	0.00	0.00
3	Total Fixed Cost allowed towards supplementary bills	С=А-В	121.54	157.46	123.22	402.21
4	Variable and Other Cost as per actual supplementary bills	D	163.99	212.78	166.42	543.19
5	Variable Cost disallowed towards supplementary bills	E	0.68	0.52	0.74	1.93
6	Total Variable Cost allowed towards supplementary bills	F=D-E	163.31	212.26	165.68	541.25
7	Total Power Purchase Cost allowed towards supplementary bills	G=C+F	284.85	369.72	288.90	943.46

4.34 The admitted supplementary power purchase cost is shown as follows.

Table 124: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)

Particulars	Claimed				Admitted			
	East DISCOM	West DISCOM	Central DISCOM	Total for State	East DISCOM	West DISCOM	Central DISCOM	Total for State
Supplementary Bills for FY 2014-15 to FY 2015-16	285.52	370.23	289.64	945.40	284.85	369.72	288.90	943.46

## **Inter-State Transmission Charges**

4.35 The Commission in Retail supply tariff order for FY 2016-17 had admitted the inter state transmission charges of Rs. 1,477 Crore based on the actual charges for FY 2014-15. However, the actual inter State transmission charges paid by the DISCOMs in FY 2015-16 is Rs. 1,406.17 Crore. As inter-State transmission charges are uncontrollable for DISCOMs, the Commission has admitted the actual inter State transmission charges of Rs. 1,406.17 Crore as per actuals in true up of FY 2016-17.

# Fixed and Variable Cost of generating station

- 4.36 The Commission has noted that DISCOMs has procured power in excess of admitted energy requirement computed based on norms specified in the MYT Regulations,2015 and methodology adopted in previous orders. Similar situation had arisen during the True-up exercise of previous years. Hence, the Commission has decided to adopt the same approach as followed for the True-up of previous years by taking cognisance of the Judgment of the Hon'ble APTEL dated 15<sup>th</sup> September, 2015 in Appeal Nos. 234, 270, 271 and 276 of 2014, in the matter of True-up Orders of previous years issued by the Commission. Accordingly, the power purchase cost has been determined by considering:
  - i. Full fixed cost for the generating stations meeting the power purchase requirement of the DISCOMs and
  - ii. The cost for short term power and variable cost of long term power together for deriving the average rate to be applied on the admitted quantum of power purchase requirement.
- 4.37 Accordingly, the Commission has admitted the actual fixed cost as claimed by the Petitioners in line with the methodology priscribed by the Hon'ble APTEL except for the fixed charges for Torrent and BLA Power Station. With regard to power purchase from Torrent Power station, some of the stakeholders have raised the issue with regard that it is against the principles of Merit Order Dispatch (MOD) on the basis of variable cost of generating station. Therefore, in line with the view taken by the Commission in true up for FY 2013-14, the Commission has considered it appropriate to keep in abeyance the

quantum of power purchase from Torrent Power stations and its cost. Further, with regard to BLA power station the Commission in retail tariff order for FY 2016-17 had noted as follows:

- "3.50....The Commission has not considered the availability from BLA Unit 1&2 and its cost, in view of the Commission's orders dated 22 May, 2015 and 25 July, 2015 in the matter of the petition No. 16/2014 and 36/2015, respectively."
- 4.38 Therefore, considering the view taken by the Commission in retail supply tariff order for FY 2016-17 and current status of the same, the Commission has not considered the power purchase cost towards BLA power in this order. Accordingly, the Commission has allowed the actual fixed cost excluding the fixed cost towards Torrent and BLA power station.
- 4.39 The summary of fixed charges as considered by the Commission is shown in table below:

Table 125: Fixed Cost Admitted by the Commission (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Fixed Cost Admitted in Tariff Order for FY 2016-17	3,869.21	4,272.62	3,742.63	11,884.46
Fixed Cost Claimed in True-up Petition for FY 2016-17	2,938.39	3,553.95	3,089.28	9,581.63
Fixed Cost Admitted in True-up Order for FY 2016-17	2,911.35	3,522.93	3,060.79	9,495.08

4.40 Further, in regard to the Petitioners request for disallowance of power purchase cost for the quantum of power purchase attributable to excess loss in distribution system, the Commission observe no merit. The losses in Intra-State and Inter-State transmission system are beyond the control of the Petitioners, however, these losses would have been very low, if the Petitioners would have achieved the distribution losses as per the target specified by the Commission and restricted its unmetered sale for agriculture and domestic consumers within the norms specified by the Commission. Similarly, computation of pool energy rate (Rs./kWh) based on the actual power purchase cost as per audited accounts and total energy procured by the Petitioner as per DSM/UI account would lead to higher per unit rate due to inclusion of cost of power of costlier plants, which could have been avoided by the Petitioners, if they would have achieved the target loss levels and restricted their sales to unmetered agriculture and domestic consumers within the norms specified by the Commission. Therefore, considering that the Petitioners have not achieved the norms specified by the Commission, the inefficiency of the Petitioners should not be passed on to the consumers of the State. Accordingly, the Commission has recomputed the energy charges of the Petitioners as per the following approach:

- Monthly Energy Requirement computed considering the monthly energy sales admitted by the Commission grossed up with admitted loss levels of Distribution System, Intra-State and Inter-State transmission network;
- To meet this monthly energy requirement, scheduled energy of each generating stations has been considered as per monthly State Energy Account. Scheduling of the generating stations has been considered as per the monthly MOD issued by MPSLDC;
- Shortfall if any in meeting the energy requirement has been considered to be met through purchase of power from open market at rate equal to energy charge of the last generating station in the MOD;
- Energy charge worked out for each generating station considering the actuals energy and other charges as per the MPPMCL statement on annual basis provided by the Petitioners.
- 4.41 Based on the above approach, the Commission has computed the energy charges of Rs. 9,879.38 Crore at per unit energy charges of Rs. 1.80/kWh.
- 4.42 Accordingly, the total power purchase cost determined by the Commission for FY 2016-17 is given in the table below:

Table 126: Admitted Power Purchase Cost (Rs. Crore)

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Fixed Cost of Power Purchase for FY 2016-17 (Rs. Crore)	A	2,911.35	3,522.93	3,060.79	9,495.08
2	Inter-State Transmission Charges (Rs Crore)	В	437.08	509.49	459.61	1,406.17
3	MPPMCL Cost Admitted (Other cost which can't be apportioned) (Rs. Crore)	С	44.04	49.70	47.69	141.44
4	UI / DSM Charge Admitted (Rs. Crore)	D	(102.04)	0.00	61.99	(40.05)
5	Reactive Energy Charges Admitted (Rs. Crore)	Е	(5.71)	39.23	2.25	35.77
6	Other Income of MPPMCL	F	144.99	175.81	129.15	449.95
7	Sub-total	G= A+B+C+D+E- F	3,139.74	3,945.54	3,503.19	10,588.47
8	Pooled variable rate (Rs. / kWh)	Н	1.83	1.78	1.81	1.80
9	Quantum of Power Purchase Admitted (MUs)	I	17,096.92	21,876.58	15,873.69	54,847.19
10	Total Variable Cost admitted (Rs. Crore)	J=H*I/10	3,121.84	3,892.14	2,865.39	9,879.38
11	Total Power Purchase Cost Admitted for FY 2016-17 (Rs. Crore)	K=G+J	6,261.59	7,837.68	6,368.58	20,467.85

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
12	Supplementary Power Purchase Cost for FY 2014-15 and FY 2015-16 (Rs. Crore)	L	284.85	369.72	288.90	943.46
13	Power Purchase Cost admitted including supplementary bills (Rs. Crore)	M=K+L	6,546.43	8,207.40	6,657.48	21,411.31

- 4.43 It is observed that the total power purchase cost excluding MPPTCL and SLDC charges as admitted in the retail tariff order for FY 2016-17 was Rs. 19,920.05 Crore, whereas in this order the Commission has admitted power purchase cost of Rs.21,861.26 Crore. The major reason for this increase is as follows:
  - Increase in variable charges due to upward revision in energy charges of the generating stations;
  - Inclusion of supplementary Power Purchase Cost of Rs. 943.46 Crore, which pertains to the period prior to FY 2016-17.

## **Intra- State Transmission Charges**

4.44 Transmission charges admitted in the Retail Tariff Order, Audited Accounts and as filedfor FY 2016-17 by East, West and Central DISCOMs including SLDC charges are given in the table below:

Table 127: Transmission Charges including SLDC charges for FY 2016-17 (Rs. Crore)

Sl. No.	DISCOM	Transmission charges as per	Transmission charges as per	Transmission charges as
		tariff order	audited account	filed
1	East	673.16	789.14	789.14
2	West	870.56	1,149.59	1,149.59
3	Central	708.64	944.37	944.37
4	Total	2,252.36	2,883.10	2,883.10

4.45 It has been observed from the above table that East, West and Central DISCOMs have claimed charges as per Audited Accounts. Hence, the same has been admitted by the Commission. The admitted transmission charges inclusive of SLDC charge is shown in the Table below:

**Transmission charges DISCOMs** Sl. No. (including SLDC charges) as per Audited Accounts 1 East DISCOM 789.14 2 West DISCOM 1,149.59 Central DISCOM 3 944.37 **Total** 2,883.10

Table 128: Transmission Charges admitted by the Commission for FY 2016-17 (Rs. Crore)

## **Operation and Maintenance (O&M) Expenses**

#### **Petitioners' Submission:**

4.46 The Commission had admitted the total O&M Expenses as Rs. 3,561.41 Crore in the Tariff Order for FY 2016-17. DISCOM-wise break-up of the O&M expenses admitted in the Tariff Order is given in the table below:

Table 129: O&M Expenses admitted in Tariff Order of FY 2016-17 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
O&M Expenses	1,247.07	1,200.37	1,113.96	3,561.41

- 4.47 The Petitioners have claimed the O&M Expense in accordance withthe MYT Regulations, 2015. The East DISCOM has claimed O&M expenses of Rs 1220.74 Crore which comprises of employee expenses to the tune of Rs. 805.05 Crore (expense capitalised Rs 31.09 Crore and net expense is Rs 783.19 Crore), R&M expenses to the tune of Rs. 174.16 Crore (expense capitalised Rs 27.10 Crore and net expense is Rs 147.06 Crore) and A&G expenses Rs. 212.30 Crore. The Petitioner is also claiming the cost of actual cash outflow towards terminal benefits to the tune of Rs. 9.22 Crore, which is not a part of Transco's ARR.
- 4.48 The West DISCOM has claimed O&M expenses of Rs. 1,027.89 Crore comprises of Rs.761.03 Crore including of terminal benefits of Rs. 14.84 Crore towards Employee expenses, A&G expenses of Rs. 143.38 Crore, and R&M expenses of Rs. 123.48 Crore.
- 4.49 The Central DISCOM has claimed O&M expenses of Rs. 1,135.46 Cr comprises of Rs. 906.46 Cr including of terminal benefits of Rs. 186.41 Cr towards Employee expenses, A&G expenses of Rs. 98.49 Cr, and R&M expenses of Rs. 123.48 Cr for FY 2016-17.
- 4.50 Accordingly, O&M expenses claimed by the Petitioners are shown in the tablebelow:

West East Central **Particulars** DISCOM DISCOM DISCOM **O&M** Expenses 1,191.52 949.05 1,013.05 Terminal Benefit 9.22 14.84 186.41 Total O&M Expenses claimed 1,200.74 1,027.89 1,135.46

Table 130: O&M Expenses claimed by Petitioners for FY 2016-17 (Rs. Crore)

#### **Commission's Analysis on O&M Expenses:**

- 4.51 The Commission had specified norms for O&M expenses in the MYT Regulations, 2015. These norms were fixed on the basis of past audited figures of the Distribution Licensees. The rationale behind fixing these norms was to promote competition, adoption of commercial principles, efficient working of the Distribution Licensees and protection of Consumers' interest. However, it is observed that the Petitioner have been not able to keep its operational efficiency in line with the targets specified by the Commission in the Regulations. Accordingly, the Commission in accordance to MPERC MYT Regulations, 2015, has decided not to pass the burden of their inefficiencies on the consumers of the States, by considering the norms specified in these Regulation as ceiling norms and thereby allowing O&M expenses on actuals, if the same is lesser as compared to norms specified in the Regulations.
- 4.52 Further, in accordance with the MYT Regulations,2015 dearness allowance, pension andterminal benefits, taxes to be paid to the Government or Local Authorities and fees to be paid to MPERC is allowable on actual basis. Therefore, the same has been considered by the Commission on actual basis. Also, the Commission has considered the actual Operation and Maintenance expenses capitalized during the year as per the audited account of FY 2016-17 and has reduced the same from the admitted Operation and Maintenance expenses.
- 4.53 Further, the Commission observed that some DISCOMs are booking expenses towards contractual employees under employee expenses, whereas some are booking it under the A&G Expenses. Therefore, the Commission has considered the lesser of the actual O&M expenses as per the audited accounts vis-a-vis normative O&M expenses in totality.
- 4.54 Accordingly, based on the above, the expense wise analysis of each component is shown in the following paragraphs:

## **Employee Expenses, Terminal Benefits & Arrears**

4.55 The Commission has carried out detailed scrutiny of the actual employee expenses excluding DA, arrears, pension and terminal benefit is higher than norms as per the

- provision of the MYT Regulations, 2015 and has compared the same with the norms specified in the Regulations.
- 4.56 Further, in accordance with the MYT Regulations, 2015, the DISCOMs are eligible to claim DA, terminal benefits, incentives paid to Employees on actuals. Accordingly, the Commission has considered the DA on actuals for FY 2016-17. As regards the issue of expenses against terminal benefits for the MPSEB/successor entities as well as pension payments to pensioners, the Commission has considered the terminal benefits and pension expenses on "Pay as you go" principle under the transmission charges. Therefore, the Commission has not considered any provisioning made under the head "Terminal Benefits to Employees" in this True-up for FY 2016-17 and allowed only the actual payment made to employees including leave encashment but excluding pension and gratuity. Further, the Commission has observed that the Petitioner has claimed audit charges under the head of Terminal Benefits, which has not been considered by the Commission under Employee Expenses as the same needs to be managed under the allowed A&G expenses for FY 2016-17. Therefore, the Commission has considered the audited charges under actual A&G expense.
- 4.57 Based on the above, the Employee Expenses as per actuals and as per the provision of Regulations for FY 2016-17 is shown in the following table:

Table 131: Normative and Actuals Employee Expenses computed for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
SI. NO.	Faruculars	Normative*	Actual	Normative*	Actual	Normative*	Actual
1	Employee Expenses	385.00	314.47	403.00	409.09	359.00	377.34
2	DA	320.63	320.63	304.25	304.25	286.80	286.80
3	Terminal Benefits including incentives	49.64	49.64	53.49	53.49	74.72	74.72
4	Arrears	3.92	3.92	0.14	0.14	0.00	0.00
5	Total	759.19	688.66	760.88	766.97	720.52	738.86

<sup>\*</sup> As per the provision of the Regulations

## **A&G Expenses**

4.58 The Commission has analysed the actual A&G expenses and compared the same with the norms specified in the Regulation. Further, with regards to the actual taxes paid to the government, the Commission has considered the actual taxes paid by the DISCOMs except for the entry tax, as the same has been already been considered as part of norms approved for A&G Expense by the Commission.

4.59 The Commission has considered the actual audit charges booked under the head of Terminal Benefits under actual A&G expenses. Further, the Commission has observed that the MPERC Fees claimed by the Petitioner is in line with actual fees paid to the Commission. Therefore, the Commission has considered the same. Accordingly, based on the above, A&G expenses as per actual and as per the provision of Regulations for FY 2016-17 is shown in the following table:

Table 132: Normative and Actual A&G Expenses computed for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
Sr. No.	Sr. No. Paruculars	Normative*	Actual	Normative*	Actual	Normative*	Actual
1	A&G Expenses	168.00	182.11	129.00	131.17	96.00	97.94
2	Taxes	2.86	2.86	2.23	2.23	0.84	0.84
3	MPERC Fees	0.58	0.58	0.65	0.65	0.55	0.55
4	Total	171.44	185.54	131.88	134.05	97.39	98.33

<sup>\*</sup> As per the provision of the Regulations

# **R&M Expenses**

4.60 The provision for R&M expenses in the MYT Regulations,2015 is @ 2.3% on the opening GFAof the financial year for all DISCOMs. The Commission has also analysed the actual R&M expenses as per the audited accounts for FY 2016-17. Accordingly, based on the above, R&M Expense as per actual and as per the provision of Regulations for FY 2016-17 is shown in the following table:

Table 133: Normatitive and Actuals R&M Expenses computed for FY 2016-17 (Rs. Crore)

DISCOMs	GFA	GFA % as per norms	Normative R&M expenses	Actual R&M Expenses
East	6,168.98	2.3%	141.89	174.16
West	5,510.55	2.3%	126.74	147.89
Central	7,466.52	2.3%	171.73	78.94
Total	19,146.05	2.3%	440.36	400.99

4.61 Accordingly, based on the above analysis, the Commission compared the O&M Expenses computed as per the provision of the Regulations and actual O&M Expense as per audited account of FY 2016-17. Based on the approach detailed above, the Commission has admitted the lower of the O&M computed as per Regulations and as per audited accounts. In view of the above, the admitted O&M expenses for FY 2016-17 are as shown in the following table:-

Table 134: O&M expenses admitted for DISCOMs for FY 2016-17 (Rs. Crore)

Particulars	Actual	Normative	Admitted
East DISCOM	990.17	1014.32	990.17
West DISCOM	1,010.60	981.19	981.19
Central DISCOM	890.99	963.50	890.99
Total O&M expenses	2,891.77	2,959.02	2,862.36

## **Interest on Project Loans**

#### **Petitioners' Submission:**

4.62 The Petitioners have claimed interest on project loans (inclusive of finance charges) of Rs.168.96 Crore, Rs. 75.47 Crore and Rs. 148.62 Crore for East, West and Central DISCOMs, respectively based on the methodology adopted by the Commission in previous orders.

# **Commission's Analysis on Interest on Project Loans:**

- 4.63 The Commission has examined the claims of DISCOMs from their filings and Audited Accounts. As per Regulations 31.1 to 31.9 of the MYT Regulations, 2015, for allowing interest and finance charges all loans shall be identified for the assets capitalised till the relevant year. In the absence of information related to loans mapping with particular assets, it cannot be ascertained as to how much loan is related to completed fixed assets and how much is related to capital work in progress.
- 4.64 Further Regulation 21.1 of the MYT Regulations, 2015, specifies that debt-equity ratio shall be 70:30 for calculation of interest on loan and for return on equity subject to Regulation 21.2. As per Regulation 21.2, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be considered as normative loan. Also, if the actual equity deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff. Accordingly, the Commission has adopted the following principles for computing interest on project loans.

# Principles adopted for calculation of interest on project loans

4.65 In the True-up Order for FY 2016-17, the interest on project loans has been admitted based on the fixed asset created till 31st March, 2017, on the basis of Audited Accounts for FY 2016-17 subject to its approval in review of the Investment plan approved by the Commission. Accordingly, based on the Commission view in order dated 24.04.2021 in Petition No. 63 of 2017 in the matter of approval of investment plan for East DISCOM for FY 2016-17 to FY 2019-20, a lumpsump amount of Rs. 913.25 Crore has been disallowed towards capex in FY 2016-17 to FY 2019-20 for the circle, wherein the East DISCOM was

neither able to reduce losses in FY 2019-20 with respect to losses in FY 2016-17 nor have brought down the losses at par with the specified loss trajectory in the Regulations. As the year wise detail of the disallowed GFA is not available, the Commission has considered the 25% of the disallowed GFA during each year of FY 2016-17 to FY 2019-20 (i.e. Rs. 228.31 Crore).

- 4.66 The Commission has adopted the methodology for allocating the admitted Gross Fixed Assets (GFA) addition during the year into debt and equity in accordance to the provision of the Regulations as explained below:
  - a. Allocation of fixed assets into debt and equity as on 31<sup>st</sup> March, 2016 has been considered as per the True-up Order of FY 2015-16.
  - b. Net addition to GFA during FY 2016-17 has been worked out after subtracting the consumer contribution amount from total addition to GFA as available in the audited accounts of DISCOMs subject to approval in investment plan.
    - i. The Commission has considered closing GFA admitted in the True-up Order for FY 2015-16 as the opening GFA for FY 2016-17.
    - ii. Further, the Commission considered the closing consumer contribution and grants for FY 2015-16 as the opening consumer contribution & grants for FY 2016-17. With regards to addition in consumer contribution and grants, it is observed that the addition in consumer contribution and grants is not clearly shown in audited accounts of East and Central DISCOM (addition in consumer contribution and grants, net of capitalization amount only available). Therefore, for these DISCOMs, the difference in the opening and closing value of the Consumer Contribution / Grants for FY 2016-17 has been considered as the addition in Consumers Contribution / Grants, whereas the income booked under other income booked towards depreciation created through consumer contribution and grants has been considered as part of other income. For West DISCOM, as the addition in Consumer Contribution and Grant submitted by it in reply to data gaps tallies with the figures available in the accounts, the same has been considered.
  - c. Equity in excess of 30% of the net GFA added during FY 2016-17, has been considered as normative loan. However, if the actual equity deployed is less than 30% of the net GFA, then actual equity has been considered for computation of RoE Further, only such equity capital is to be considered which has been actually utilized for creation of asset. The equity so derived has been added to the equity considered at the end of FY 2016-17 and balance net addition to GFA has been considered as funded through debt.

- d. Balance of net addition to GFA has been considered as having been funded through debt and added to the total debt considered at the end of FY 2015-16. In absence of the actual dates of capitalization of individual assets, interest on project loans has been computed based on the average of the opening and closing loans for the financial year.
- 3.110 In accordance with the Regulation 31.3 of the MYT Regulations, 2015, debt repayment is equal to the depreciation admitted for that year. As regards the weighted average rate of interest for the computation of interest on loans, the Commission has verified the weighted average rate of interest on project loans for East, West and Central DISCOMs and observed that the Central DISCOM has considered loan taken from PP/SLR Bonds in its computation whereas the East DISCOM had considered working capital Loans from Public Bonds, SLR Bonds, Debentures/PP Bonds and West DISCOM had considered Loans from SLR/PP Bonds. The Petitioners were asked to explain the purpose of undertaking these loans. However, the Petitioners were unable to justify that these loans were taken for funding project specific works. Therefore, the Commission while approving the weighted average rate of interest has not considered these loans. Accordingly, the Commission has computed the revised weighted average rate of interest for projects specific loans for each DISCOM and admitted the weighted average rate of interest of 9.41%, 10.63% and 6.65% for East, West and Central DISCOMs, respectively.
- 4.67 Further, it was observed that Central DISCOM has not claimed interest and finance charges in accordance to the provision of the MPERC Tariff Regulations. In its reply to data gaps, Central DISCOM submitted the revised computation of Interest and Finance charges in accordance to the provision of the MPERC Tariff Regulation. In its revised submission, Central DISCOM has claimed Interest and Finance charges of Rs. 193.22 Crore comprising Interest charges of Rs. 171.96 Crore and Finance charges of Rs.21.26 Crore.
- 4.68 Finance Charges claimed by East and West DISCOMs are Rs. 64.08 Crore and Rs. 14.85 Crore respectively. The Commission after scrutinizing DISCOMs submission with audited accounts considered only cost of raising funds, bank charges, commitment charges and guarantee/ LC charges. Accordingly, the Commission admitted Other Finance Charges as Rs. 61.61 Crore, Rs. 14.29 Crore and Rs. 21.26 Crore for East, West and Central DISCOMs, respectively. The Commission has not considered the Petitioners' claimed towards the surcharge on delayed payment or rebate to consumer on timely payment by East DISCOM, West DISCOM and Central DISCOM of Rs. 2.47 Crore, Rs. 0.55 Crore and Rs. 2.15 Crore, respectively claim under the head of finance charges. Further, the Commission has not considered the rebate to consumers for timely payment of bills as expense towards finance charges as this rebate encourages consumers to pay bills timely which improves cash flow of the Petitioners. Therefore, passing of this rebate as expenses in the ARR will defeat the whole purpose of introducing the rebate. Further, the

Commission has considered the actual interest and finance charges capitalized as per audited account of FY 2016-17 and has reduced the same from the admitted interest and finance charges.

4.69 Details of interest on project loans along with other finance charges admitted in true-up of FY 2016-17 for DISCOMs are given in the table below:

Table 135: Interest on Project Loans admitted by the Commission for FY 2016-17 (Rs. Crore.)

Particulars	Legend	East DISCOM	West DISCOM	Central DISCOM	Total for State	
On oning Dobt aggregated with		DISCONI	DISCON	DISCON	State	
Opening Debt associated with		1 (01 (7	705 (0	2540.61	5026 00	
GFA (Closing Debt as Per FY	A	1,681.67	795.60	2549.61	5026.88	
2015-16 True-up)		707.00	11 - 2 -	1001 =0	2 2 4 2 2 4	
GFA Addition during the year	В	595.00	416.36	1201.70	2,213.06	
Consumer Deposit and Grants utilized during the year	C	216.66	411.66	151.13	779.45	
	E D C	270.24	4.70	1050.57	1 422 61	
Net GFA Addition during the year	E=B-C	378.34	4.70	1050.57	1,433.61	
70% of addition to net GFA	F=70%*E	294.31	3.29	880.57	1,178.17	
considered as funded through debt					,	
Debt repayment during the year	G	117.10	97.11	148.37	362.59	
(Scheduled)	)	117.10	27.11	110.57	302.37	
Closing debt associated with	H=A+F-G	1858.87	701.78	3281.81	5,842.46	
GFA	11-2111 G	1020.07	701.70	3201.01	2,042.40	
Average debt associated with Loan	I=Average (A, H)	1770.27	748.69	2915.71	5,434.67	
Weighted average rate of interest	J	9.41%	10.63%	6.65%	8.10%	
(%) on all loans as per Petitioner	J	9.41%	10.05%	0.05%	8.10%	
Interest on Project Loans	K=I*J	166.58	79.59	193.89	440.06	
Interest Capitalised	L	(45.45)	(57.75)	(22.62)	(125.83)	
Other Finance cost	M	61.61	14.29	21.26	97.16	
Interest cost admitted on project	N=K+L+M	192 74	26 12	102 52	411 40	
loans in True-Up	N=N+L+NI	182.74	36.12	192.53	411.40	

## **Interest on Working capital**

## **Petitioners' Submission:**

4.70 East and West DISCOMs have claimed interest on working capital on the basis of norms as specified in the terms and conditions of MYT Regulations, 2015, while Central DISCOM has claimed as actuals. East, West and Central DISCOMs have claimed Interest on Working Capital as Rs. 57.29 Crore, Rs. 25.18 Cr and Rs. 121.53 Crore, respectively,

as against Rs. 74.92 Crore, NIL and Rs. 31.96 Crore amounts for East, West and Central DISCOMs admitted by the Commission in the Tariff Order for FY 2016-17.

## Commission's Analysis on Interest on working capital:

- 4.71 The Commission has observed that the Central DISCOM has not submitted the working capital requirements separately for the wheeling and retail supply activity, while East and West DISCOMs have submitted separately for the wheeling and retail supply activity.
- 4.72 The Commission directed the Central DISCOM to submit the revised claim of interest on working capital on the basis of norms as specified in the terms and conditions of Tariff Regulations, 2015. The Central DISCOM has submitted the revised claim on interest of working capital of Rs. 3.83 Crore instead of its initial claim of Rs. 121.53 Crore.
- 4.73 Regulation 22 of the MYT Regulations, 2015 specifies the methodology for the computation of working capital requirement for the Distribution Licensees as follows:

## "22. Working capital

- 22.1. Following shall be included in the Working capital for supply activity of the Licensee:
  - (i) Receivables of two months of average billing reduced by power purchase cost of one month and any consumer security deposit,
  - (ii) O&M expenses for one month, and
  - (iii) Inventory (meters, metering equipment, testing equipment are particularly relevant in case of supply activity) for 2 months based on annual requirement for previous year.
- 22.2. Following shall be included in the Working capital for wheeling activity of the Licensee:
  - (i) O&M expenses for one month, and
  - (iii) Inventory (excluding meters, etc. considered part of supply activity) for 2 months based on annual requirement considered at 1% of the gross fixed assets for previous year.
- 22.3. The norms described above shall be applicable for each year of the tariff period."

- 4.74 Accordingly, in line with the approach adopted by the Commission in previous order and in line with the provisions of the Regulations, the Commission has considered Gross block at the start of FY 2016-17 as Rs 6,168.98 Crore, Rs. 5,368.85 Crore and Rs. 7,466.52 Crore for East, West and Central DISCOMs, respectively. One percent of this GFA has been prorated to two months to work out the inventory for retail and wheeling activity each DISCOMs respectively. This has been further divided into wheeling and retail inventory in the ratio of 80:20 in line with the approach adopted in the last tariff order. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements of working capital have been considered based on the expenses admitted by the Commission in the relevant sections of this order. Further as noted in previous true up orders also, as both the activities are undertaken simultaneously by the DISCOMs, the available resources are common for both. Therefore, the Commission has taken working capital requirement together for wheeling and retail activities. Accordingly, the Commission has only considered one Month O&M Expense towards the wheeling activity only.
- 4.75 Further, Regulation 36 of the MYT Regulations, 2015 specifies as follows for the computation of interest on working capital:

# "36. Interest charges on working capital

Working capital shall be computed as provided in these Regulations and Rate of interest on working capital shall be equal to the State Bank of India Advance Rate as on April 1 of the relevant Year. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has borrowed in excess of the working capital loan computed on normative basis."

4.76 Accordingly, for the purpose of interest rate on working capital, State Bank of India Advance Rate as on 1st April 2016 i.e. 14.05% has been taken. The admitted interest on working capital is shown in the table below:

Table 136: Interest on Working Capital admitted by the Commission for FY 2016-17 (in Rs. Crore)

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State	
For wheeling activity							
A)	1/6th of annual requirement of inventory for previous year	2	8.23	7.35	9.96	25.53	
B)	1/12th of total O&M expenses	1	82.51	81.77	74.25	238.53	

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State
C)	Total Working capital (A+B)		90.74	89.11	84.20	264.06
D)	Rate of Interest		14.05%	14.05%	14.05%	14.05%
E)	Interest on Working capital		12.75	12.52	11.83	37.10
For Re	etail Sale activity					
A)	1/6th of annual requirement of inventory for previous year	2	2.06	1.84	2.49	6.38
B)	Receivables equivalent to 2 months average billing	2	1,241.72	1,729.39	1,240.94	4,212.04
C)	1/12th of power purchase expenses	1	545.54	683.95	554.79	1,784.28
D	Consumers Security Deposit		544.32	864.51	735.79	2,144.61
E)	Total Working capital (A+B-C-D)		153.91	182.77	(47.14)	289.54
F)	Rate of Interest		14.05%	14.05%	14.05%	14.05%
G)	Interest on Working capital		21.63	25.68	(6.62)	40.68
	Summary					
	For wheeling activity		12.75	12.52	11.83	37.10
	For Retail Sale activity		21.63	25.68	(6.62)	40.68
	Total Interest on working Capital		34.37	38.20	5.21	77.78
	Total Interest on working Capital admitted		34.37	38.20	5.21	77.78

# **Interest on Consumer Security Deposits**

#### **Petitioners' Submission:**

4.77 Petitioners have claimed interest on consumer security deposit as per their Audited Accounts for FY 2016-17. East, West and Central DISCOMs have claimed Rs. 50.57 Crore, Rs. 62.99 Crore and Rs. 54.87 Crore respectively as against Rs. 40.32 Crore, Rs. 90.11 Crore and Rs. 61.87 Crore respectively admitted by the Commission in the Tariff Order for FY 2016-17.

## Commission's Analysis on Consumer Security Deposit

- 4.78 As per the Regulation 31.9 of the MYT Regulations, 2015 interest on consumer security deposit shall be considered at the rate specified by the Commission. In the Tariff Order for FY 2016-17, the Commission admitted the interest on consumer security deposit @ 7.75%.
- 4.79 The Commission has observed that the actual interest amount as per audited accounts of the DISCOMs is less than interest on consumer security deposit admitted in Retail Tariff Order for FY 2016-17 except in case of East DISCOM where it is marginally higher than

admitted one. Further, the Commission worked out the interest on average security deposit for FY 2016-17 at 7.75% prevailing RBI Bank Rate as on 1st April 2016, which is as follows:

Table 137: Interest on Security Deposit worked out by the Commission as per Regulation for FY 2016-17 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening Security Deposit	442.52	814.06	697.74	1,954.32
Closing Security Deposit	646.12	914.95	773.83	2,334.90
Average Security Deposit	544.32	864.51	735.79	2,144.61
Interest on Security deposit as per norms	42.18	67.00	57.02	166.21

4.80 From above, it can be observed that the Petitioner has paid lower amount of security deposit as compared to interest on security deposit computed above as per the provision of the Regulations except for East DISCOM. Therefore, the Commission has decided to admit the interest amount on consumer security deposit as per the Audited Accounts of the DISCOMs. Summary of interest on consumer security deposit admitted in the Tariff Order, claimed in the True-up Petitions and admitted in this True up Order for FY 2016-17 is shown in table below:

Table 138: Interest on Consumer Security Deposit admitted for FY 2016-17 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Admitted in tariff order for FY 2016-17	40.32	90.11	61.87	192.30
Claimed in true up Petition for FY 2016-17	50.57	62.99	54.87	168.43
As per Audited Accounts for FY 2016-17	50.57	62.99	54.87	168.43
Admitted in this true-up order	50.57	62.99	54.87	168.43

## **Return on Equity**

#### **Petitioners' Submission:**

4.81 Petitioners have claimed return on equity @ 16%. East, West and Central DISCOMs have claimed return on equity as Rs. 293.25 Crore, Rs 168.05 Crore, Rs 311.18 Crore, respectively as against Rs. 255.26 Crore, Rs 180.81 Crore, Rs 305.92 Crore, respectively admitted by the Commission in the Tariff Order for FY 2016-17.

#### **Commission's Analysis on Return on Equity:**

- 4.82 As explained in section of Interest on Project Loans the equity contribution has been considered as 30% on the net GFA addition during FY 2016-17, if the actual equity deployed is more than 30% of the net GFA. Further, only that equity capital is required to be considered, which has been utilized for funding of the project. Accordingly, the Commission directed the Petitioners to submit the actual funding of the GFA addition for FY 2016-17. In reply, all the DISCOMs submitted the funding details for FY 2016-17. Accordingly, the actual equity deployed has been considered subject to equity addition being within 30% of the net GFA. Any equity in excess of the 30% of the net GFA has been considered as normative loan.
- 4.83 Closing equity of FY 2015-16 as admitted by the Commission in True-up Order of FY 2015-16 has been considered as opening value of equity for FY 2016-17. Further, the rate of return on equity has been considered as per the MYT Regulations @16%. The computation of return on equity as admitted is shown in the table below:

Table 139: Return on Equity admitted for FY 2016-17 (Rs. Crore)

S.	Particulars	East	West	Central	Total for
No.	Particulars	DISCOM	DISCOM	DISCOM	State
1	Opening Equity identified with GFA (Closing equity as per True-up of FY 2015-16)	1286.25	1024.74	1312.18	3,623.16
2	GFA Addition during the year	595.00	416.36	1201.70	2,213.06
3	Consumer Deposit and Grants utilized during the year	216.66	411.66	151.13	779.45
4	Net GFA Addition during the year	378.34	4.70	1050.57	1,433.61
5	30% Equity added during the Year	113.50	1.41	315.17	430.08
6	Actual Equity	84.03	23.85	170.00	277.88
5	30% of addition to net GFA considered as funded through equity ( <b>Min of 5,6</b> )	84.03	1.41	170.00	255.44
6	Closing Equity Considered for FY 2016-17	1370.28	1026.15	1482.18	3,878.60
7	Average Equity identified with GFA and considered for FY 2016-17	1328.26	1025.44	1397.18	3,750.88
8	RoE @16% admitted in True-up of FY 2016-17	212.52	164.07	223.55	600.14

## **Depreciation**

#### **Petitioners' Submission:**

- 4.84 The Petitioner have submitted that as per the Second Amendment to MPERC (Recovery of expenses and other charges for providing Electric Line or Plant used for the purpose of giving Supply) (Revisions-I) Regulations, 2009 (RG-31(I) of 2009), the manner of the recognition of asset created through consumer contribution as well as depreciation thereon has been elaborated. Further Accounting Standard 12, provides guidance on the asset created through government grant. Accordingly, as per provision of the Regulation, DISCOM can charge depreciation on the full amount of asset and amortize the corresponding amount from grant to the P&L account. Therefore, treatment given by the DISCOM in the accounts is in line with the Regulation (RG-31) and prevailing Accounting Standards.
- 4.85 Further, the Petitioners have claimed Depreciation as charged in the books of the Petitioners for the Assets capitalized during the year and as the beginning of the year consistent with the rates of depreciation specified in MYT Regulations, 2015 (except West DISCOM). Further, the West DISCOM adopted the rate of depreciation notified by the Commission in Regulation from the FY 2010-11 as per the clarification issued by the Ministry of Corporate Affairs vide general circular No 31/2011 dated 31st May 2011. Since, DISCOMs adopted depreciation rates specified in the Regulations only from FY 2010-11, a separate depreciation model was used to consider depreciation as per Regulations since FY 2006-07. Accordingly, the Petitioner's (West DISCOM) has considered the Depreciation for FY 2016-17.
- 4.86 Accordingly, the Petitioners have claimed net depreciation of Rs. 303.80 Crore, Rs. 237.30 Crore and Rs. 272.54 Crore respectively for East, West and Central DISCOMs, respectively as against Rs. 134.91 Crore, Rs. 106.91 Crore and Rs. 161.46 Crore respectively approved by the Commission in Tariff Order for FY 2016-17.

# **Commission's analysis on Depreciation:**

- 4.87 The Commission in Regulation No. 32 of the MYT Regulations, 2015, has specified the following methodology for computation of depreciation:
  - a. The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission
  - b. The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency

actually availed.

- c. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
- d. Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- e. Depreciation shall be calculated annually based on 'straight line method' and at rates specified in Annexure II to these Regulations for the assets of the Distribution System declared in commercial operation after 31/03/2016.
  - Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets.
- 4.88 The Commission in its True-up Order for FY 2005-06 dated January 16, 2008 clarified that irrespective of the accounting practice followed by the utilities, the Commission will allow depreciation as per the depreciation rates specified in the MYT Regulations, 2015.
- 4.89 The Commission has observed that claims against depreciation by the DISCOMs have not been duly substantiated by the detailed Fixed Asset Registers in the format prescribed by the Commission to ensure that claims made are only against those assets which have not been fully depreciated. DISCOMs in the past also did not submit these details despite repetitive directions of the Commission. Accordingly, in order to reprimand the Petitioners, the Commission in truing up for FY 2016-17 has allowed the same depreciation rate as approved in Tariff Order for FY 2016-17 i.e., 2.44%, 2.81%, and 2.44% for East, West and Central DISCOMs respectively. Accordingly, considering GFA addition (net of consumer contribution and grants) as discussed in "Interest & Finance Charges" Section of this Order, the admitted depreciation for FY 2016-17 is as shown in the table below:

Table 140: Depreciation admitted by the Commission (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening GFA on 1 April, 2016 (Closing GFA net of consumer contribution & grants as per True-up of FY 2015-16)	4,610.07	3,453.69	5,555.53	1,3619.29
Add: GFA Added during the year	595.00	448.55	1,201.70	2,245.25
Less: Deductions during the year	0.00	32.19	0.00	32.19

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Less: Consumer Contribution and grants during the year	216.66	411.66	151.13	779.45
Net GFA addition during the year	378.34	4.70	1,050.57	1,433.61
Closing GFA on 31 March, 2017	4,988.41	3,458.39	6,606.10	15,052.90
Average GFA	4,799.24	3,456.04	6,080.81	14,336.10
Rate of Depreciation	2.44%	2.81%	2.44%	2.53%
<b>Depreciation admitted by the Commission</b>	117.10	97.11	148.37	362.59

#### Other items of ARR

4.90 Apart from the above discussed components, there are certain other items which form part of the ARR. These include bad debts, other miscellaneous expenditure, any prior period expenses / credits, income tax and fringe benefit tax. These components are analyzed in the following section:

#### Bad and doubtful debts

#### **Petitioners' Submission:**

4.91 DISCOMs have claimed the bad and doubtful debts as shown in the table below:

**Bad Debts as per** Bad Debts as per **DISCOM Bad Debt claimed** tariff order audited accounts East 2.00 100.89 100.89 West 2.00 158.51 158.51 2.00 262.84 277.46 Central

Table 141: Bad Debts claimed by DISCOMs (Rs. Crore)

# Commission's Analysis on Bad and Doubtful debts:

- 4.92 The MYT Regulations,2015 provide for admission of bad debts as amount actually writtenoff subject to the maximum of 1% of the sales revenue. Vide letter dated 04th December, 2019, the Commission directed the DISCOMs to submit the details of bad debt claimed. In reply to the queries DISCOMs have submitted as below:
  - (a) East DISCOM submitted that amount written off under various scheme of Bakaya Rashi Samadhan Yojna and Punar Sayojan Yojna is Rs 100.89 Crore.
  - (b) West DISCOM submitted that the amount written off under various scheme is Rs. 103.51 Crore and amount written off against surcharge is Rs 55.00 Crore.

- (c) Central DISCOM submitted that amount written off against various schemes is Rs. 75.40 Crore.
- 4.93 From above it can be observed that majority of the debt has been written off against a scheme or withdrawal / false demand, whereas some write off is against dues. The Commission has already the taken view in True-up Order for previous years that the principal amount written off under any scheme or withdrawn / false demand shall not be considered under bad debts, as the same has been waived off at the Petitioners own behest.
- 4.94 With regards to write off against dues, it is observed that none of the DISCOM has provided any details about the efforts made for the recovery of the dues. Accordingly, the Commission has admitted Bad Debt against these dues limited to 1% of the revenue from sales of power. The admitted bad debts for FY 2016-17 are shown as follows:

Table 142: Bad Debts admitted by the Commission for FY 2016-17 (Rs. Crore)

Tubic 142. Dan Debis damilica by	tite Con		<i>JUI</i> 1 1 20	710 17 (113: Clotc)
<b>Particulars</b>	East	West	Central	<b>Total for State</b>
Debt written off against scheme	100.89	103.51	75.40	279.80
Demand Withdrawn / false demand	0.00	0.00	187.44	187.44
Written off against dues	0.00	55.00	0.00	55.00
Total	100.89	158.51	262.84	522.24
Debt written off under consideration	0.00	55.00	0.00	55.00
1% of sales revenue	63.48	66.52	55.37	185.36
Admitted	0.00	55.00	0.00	55.00

### Any other expense

Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) Petitioners' Submission:

4.95 West DISCOM has claimed Rs. 0.87 Crore under Sundry expenses. DISCOMs claims under miscellaneous losses & write-offs / sundry expenses / net prior period charges – (credits)/ extra ordinary items are shown in the table below:

Table 143: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit)/ Extra Ordinary Items claimed by DISCOMs (Rs. Crore)

Particulars	East	West	Central	Total for
Particulars	DISCOM	DISCOM	DISCOM	State
Misc. Losses & Write-offs	0.00	0.00	0.00	0.00
Net Prior Period Charges / (Credit)	0.00	0.00	0.00	0.00
Extra Ordinary Items excluding Liability of wheeling charges towards MPPTCL written off	0.00	0.00	0.00	0.00

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Sundry Expenses/Miscellaneous Losses	0.00	0.87	0.00	0.87
Total other expenses claimed in this true-up	0.00	0.87	0.00	0.87

#### **Commission's Analysis**

- 4.96 The Commission directed West DISCOM to submit the details of miscellaneous losses & write-offs / sundry expenses / net prior period charges (credits) claimed in the Petitions. West DISCOM in reply submitted that the claim for prior period/ Expenses and Exceptional item is Nil.
- 4.97 Accordingly, considering the submission of the Petitioners, the Commission has not allowed any amount towards prior period and other exceptional expenses.

#### **Revenue from Sale of Power**

#### **Petitioners' Submission:**

4.98 The Commission had admitted the projection of Sales as 15,730 MU, 17,793 MU and 15,029 MU at revenue of Rs. 9,005 Crore, Rs. 10,251 Crore and Rs. 9,072 Crore for East, West and Central DISCOMs, respectively in the Retail Supply Tariff order for FY 2016-17 dated 05th April, 2016. As against the same, the Sales filed are 13,408.90 MU, 17,565.17 MU and 12,309.14 MU at revenue of Rs. 7,418.77 Crore, Rs. 10,368.24 Crore and Rs. 8,012.11 Crore by East, West and Central DISCOMs, respectively.

### **Commission's Analysis**

- 4.99 The Petitioner's in their Audited Accounts have booked the revenue from sale of power excluding subsidy and other income to the tune of Rs. 6340.50 Crore, Rs. 6651.73 Crore and Rs. 5534.36 Crore for East, West and Central DISCOMs, respectively.
- 4.100 The Commission understands that the Petitioners had implemented retail tariffs as per the tariff order issued by the Commission on 05th April, 2016 and based on the same the following revenue has been booked in the audited accounts excluding subsidy and other income. Further, the Commission has also considered recoveries from theft/ malpractices of Rs.7.23 Crore and Rs. 2.33 Crore for East and Central DISCOMs, respectively, as part of revenue from sale of power.

Table 144: Revenue from sale of power excluding subsidy and other income as per Audited Accounts (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Revenue from sale of power				
Revenue if oili sale of power	6,347.73	6,651.73	5,536.69	18,536.16

- 4.101 Further, the Commission also recognizes that the Petitioners have received tariff subsidy from State Government other than the revenue from sale of power as reported in the audited balance sheets. DISCOMs have also received other income and non-tariff income during FY 2016-17 as booked in the Audited Accounts. Thus, in addition to the revenue from sale of power, the Commission has also considered the following revenue, as reported in audited accounts, for this true-up exercise and as discussed subsequently:
  - Non-Tariff Income
  - Subsidy received from State Govt.
  - Other income

#### Non-tariff income

4.102 In addition to the above revenue from sale of power, the non-tariff income has been considered separately as stated below for all the three DISCOMs as per their respective Audited Accounts:

Table 145: Break up of Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Misc. charges from consumers (Including Supervision Charges)	64.35	80.73	33.41	178.50
2	Income from wheeling charges	0.38	3.12	15.63	19.14
3	Meter rent	43.66	61.72	42.45	147.83
	Total Non-tariff income	108.39	145.58	91.49	345.46

# **Subsidy from State Government**

4.103 The Petitioner's Audited Accounts for FY 2016-17 reveal that revenue subsidy to the tune of Rs. 1102.56 Crore, Rs. 3724.58 Crore and Rs. 1908.96 Crore has been received from the Government of Madhya Pradesh by East, West and Central DISCOMsrespectively. Accordingly, the Commission has considered this amount as the income of the Petitioners, as it is a part of the revenue from sale of power to the subsidized consumers, which is shown as follows:

.

Table 146: Subsidy considered Audited Accounts (Rs. Crore)

Particulars	East	West	Central	Total for
1 articulars	DISCOM	DISCOM	DISCOM	State
Subsidy received from GoMP	1,102.56	3,724.58	1,908.96	6,736.10

# **Other Income**

# **Petitioners' Submission**

4.104 The other income claimed by the Petitioners is mentioned in the table as follows:

Table 147: Other Income as submitted by the Petitioner (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.28	0.00
	Interest on FDRs/Investment	11.07	30.67	33.49
A	Sub-Total (A)	11.07	30.95	33.49
В	Other Non-tariff Income			
	Delayed payment surcharge	0.00	160.81	0.00
	Interest & penal interest on advance to suppliers	11.73	0.00	11.73
	Interest from banks	0.00	0.00	0.22
	Scrap sales	0.00	6.38	0.00
	Income from staff recoveries	0.36	0.00	0.88
	Deferred income (consumer contribution)	100.06	128.20	0.00
	RGGVY amortisation	0.00	0.00	100.06
	Misc services/receipts	9.15	13.10	9.15
	Income from trading (other than electricity)	21.97	6.18	21.97
В	Sub-total (B)	143.27	314.68	143.49
С	Total other income (A+B)	154.34	345.63	176.98
D	Total other income (excluding DPS)	154.34	184.81	176.98

# **Commission's Analysis**

- 4.105 The Commission has not considered the delayed payment surcharge as part of income of DISCOMs as per the Regulations as any additional interest on working capital for the delayed payment is also not considered by the Commission.
- 4.106 For West DISCOM the Commission has computed depreciation on the net asset addition after reducing grants and consumer contribution from the actual gross asset addition during the year. Therefore, the Commission has not considered the income booked towards the depreciation for assets created through consumer contribution and grants. However, for East and Central DISCOM as the proper details of the consumer constribution and grants were not available, the Commission has considered the other income booked towards the depreciation for assets created through consumer contribution and grants.
- 4.107 The Commission has also not considered the waived off amount towards liability of wheeling charges towards MPPTCL in other income as this amount is not booked as expense in Intra-state transmission charges.
- 4.108 Accordingly, the other as admitted by Commission is shown as follows:

Table 148: Other Income as Admitted by Commission (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.28	6.56
	Interest on FDRs/Investment	11.07	30.32	33.49
	Sub-Total (A)	11.07	30.60	40.05
В	Delayed Payment Surcharge	199.93	160.81	510.85
C	Other Non-Tariff Income			
	Interest & penal interest on advance to suppliers	11.73	0.00	6.56
	Interest from banks	0.00	0.00	0.22
	Income from staff recoveries	0.36	0.00	0.88
	Deferred income (consumer contribution)	100.06	0.00	70.21
	Misc services/receipts/ any other income	31.12	25.67	59.32
	Profit on sale of stores	0.00	0.00	3.28

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
С	Sub-total (C)	143.27	25.67	140.47
D	Total Other Income (A+B+C)	354.27	217.08	691.36
E	Total Other Income (D-B)	154.34	56.27	180.52

- 4.109 Accordingly, the Commission admits the actual other income of Rs. 154.34 Crore, Rs 56.27 Crore, and Rs 180.52 Crore for East, West and Central DISCOMs respectively as per audited balance sheet excluding the components as discussed above.
- 4.110 Based on above discussion, the total revenue admitted by the Commission for the period April, 2016 to March, 2017 is mentioned in the table below:

Table 149: Total revenue, non-tariff income and subsidy admitted (Rs. Crore)

DISCOM	Revenue from sale of power	Non-tariff income	Revenue subsidies from GoMP	Other income (excluding DPS)	Total revenue income admitted for true-up
East	6,347.73	108.39	1,102.56	154.34	7,713.02
West	6,651.73	145.58	3,724.58	56.27	10,578.17
Central	5,536.69	91.49	1,908.96	180.52	7,717.67
Total	18,536.16	345.46	6,736.10	391.13	26,008.85

# **Saving from Operational Efficiency Measures**

- 4.111 The Petitioner in its submission during tariff order for FY 2016-17 requested the Commission to bridge the gap amounting to Rs. 1191 Crore through Sale of surplus Power at a better rate, efficiency improvements and cost reduction.
- 4.112 However, on this issue, the Commission noted as follows in Tariff Order for FY 2016-17:

"The Commission is not in agreement with the Petitioners claim to bridge proposed unrecovered gap of Rs 1191 Crore through sale of surplus power at a better rate, efficiency improvements and cost reduction. The Petitioners have not demonstrated any such achievements in the past e.g., the loss reduction trajectory specified by the Commission. The Commission has therefore directed the Petitioners to work-out a concrete plan and methodology with quantitative analysis for proposed saving of Rs.1191 Crore envisaged from various operational efficiency measures and submit the same to the Commission.

However, presently the Commission has considered a moderate saving of Rs 600 Crore from various operational efficiency measures and may consider the amount of Rs. 1191 Crore on filing of aforesaid plan for proposed saving. The Petitioners are also required to maintain a separate account for the saving achieved through operational efficiency measures so as to quantify their accomplishment in this regard at the time of true up exercise for consideration of the Commission."

4.113 The Commission has observed that the Petitioner has not made any submission in compliance to the direction of the Commission and has not maintained any separate account to keep track of the saving made thrugh operational efficiency measures. Therefore, the Commission in order to reprimand the Petitioner has considered Rs. 600 Crore as deemed revenue gained by the Distribution Licensees on improvement of operational efficiency as approved in the Tariff Order for FY 2016-17.

# Revenue Surplus / (Deficit) admitted

4.114 Based on the scrutiny of various cost components regarding revenue income and expenditures of DISCOMs, the Commission has determinted the following Surplus / (Deficit) for the period April 2016 to March 2017 for recovery by the Licensee through retail tariffs in future years:

Table 150: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2016-17 (Rs. Crore)

D (1.1	East D	ISCOM	West D	ISCOM	Central l	DISCOM	Total f	or State
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME								
Tariff Income	6,316.21	6,347.73	6,643.66	6,651.73	6,103.15	5,536.69	19,063.02	18,536.16
Non-tariff income		108.39		145.58		91.49		345.46
Net other income (excluding Delayed Payment Surcharge)	269.96	154.34	133.00	56.27	212.28	180.52	615.24	391.13
Subsidy	1,102.56	1,102.56	3,724.58	3,724.58	1,908.96	1,908.96	6,736.10	6,736.10
Savings from Operational Efficiency	-	231.93	-	88.24	-	279.83	-	600.00
Total Income (A)	7,688.73	7,944.95	10,501.24	10,666.41	8,224.39	7,997.50	26,414.36	26,608.85
EXPENSES								
Power Purchase								
Power Purchase Cost	7,083.24	6,546.43	8,525.58	8,207.40	7,095.18	6,657.48	22,703.99	21,411.31
MP Transco Charges	789.14	789.14	1,149.60	1,149.59	944.37	944.37	2,883.11	2,883.10
Total Power Purchase (Incl. Transmission) (B)	7,872.38	7,335.57	9,675.18	9,356.99	8,039.55	7,601.85	25,587.10	24,294.41
O&M Expenses (Net of Capitalisation)								
Employee Expenses	435.62	314.47	403.00	403.00	398.59	377.34	1,237.21	1,094.81
DA	320.63	320.63	304.25	304.25	286.80	286.80	911.68	911.67
Terminal Benefits	58.03	49.64	53.64	53.49	250.63	74.72	362.30	177.85
Arrears	-	3.92	0.14	0.14	-	-	0.14	4.06
A&G Expenses	212.30	182.11	143.38	129.00	98.49	97.94	454.17	409.05
R&M Expenses	174.16	174.16	123.48	126.74	130.51	78.94	428.15	379.84
Other expenses (including Taxes & MPERC Fees)	-	3.44	-	2.88	-	1.39	-	7.71

Dout oulous	East D	ISCOM	West D	ISCOM	Central I	DISCOM	Total f	or State
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
O&M Expenses Capitalised	(58.19)	(58.19)	-	(38.31)	(29.55)	(26.13)	(87.74)	(122.62)
Total O&M (C)	1,142.55	990.17	1,027.89	981.19	1,135.47	890.99	3,305.91	2,862.36
Other Expenses							-	-
Depreciation	303.80	117.10	237.30	97.11	272.54	148.37	813.63	362.59
Interest & Financing Charges on Project Loans (Net of Capitalisation)	123.51	182.74	75.47	36.12	148.62	192.53	347.60	411.40
Interest on working capital loans	57.29	34.37	25.18	38.20	121.53	5.21	204.00	77.78
Interest on Consumer Security Deposit	50.57	50.57	62.99	62.99	54.87	54.87	168.43	168.43
Return on Equity	293.25	212.52	168.05	164.07	311.18	223.55	772.48	600.14
Bad & Doubtful Debts	100.89	-	158.51	55.00	277.46	1	536.86	55.00
Any Other Expense	-	-	0.87	1	-	1	0.87	-
<b>Total Other Expenses (D)</b>	929.30	597.31	728.36	453.50	1,186.20	624.53	2,843.87	1,675.34
Total Expenses $E = (B + C + D)$	9,944.23	8,923.05	11,431.42	10,791.68	10,361.22	9,117.37	31,736.87	28,832.10
Revenue Gap $F = (E-A)$	2,255.50	978.10	930.18	125.27	2,136.83	1,119.88	5,322.51	2,223.25
Add: Impact of True-ups of DISCOMS ARR FY 2005-06, FY 2012-13, <b>(G)</b>	408.57	408.57	835.49	835.49	680.98	680.98	1,925.04	1,925.04
Gross Expenses $H = (E + G)$	10,352.80	9,331.62	12,266.91	11,627.17	11,042.20	9,798.35	33,661.91	30,757.14
Total Revenue Gap I = (H - A)	2,664.07	1,386.67	1,765.67	960.76	2,817.81	1,800.86	7,247.55	4,148.29

# A5: TRUE UP OF AGGREGATE REVENUE REQUIREMENT OF FY 2017-18

Analysis of Expenses during from the period April 2017 to March 2018

# Sale of energy

5.1 In the retail supply tariff order issued on 31<sup>st</sup> March, 2017 for FY 2017-18, the Commission admitted the sale of energy for FY 2017-18 as shown in the table below:

Table 151: Sales admitted in Tariff Order dated 31st March, 2017 (MU)

DISCOM	East DISCOM	West	Central	Total for
DISCON	East DISCOM	DISCOM	DISCOM	State
LT Sale	12,015.00	14,281.00	12,034.00	38,330.00
HT Sale	3,263.00	4,145.00	3,987.00	11,395.00
Total Sale	15,278.00	18,426.00	16,021.00	49,725.00

5.2 A comparison of Sales as admitted in Tariff Order, as per the R-15 statements and as claimed in the True-up Petition is given in the table below:

Table 152: Sales as per Tariff Order, monthly R-15 statement and as filed in True-up Petition for FY 2017-18 (MU)

Particulars		East DISCOM	West DISCOM	Central DISCOM	Total for State
A 1 '44 1' 41 TD '66	LT Sale	12,015.00	14,281.00	12,034.00	38,330.00
As admitted in the Tariff Order	HT Sale	3,263.00	4,145.00	3,987.00	11,395.00
01401	Total Sale	15,278.00	18,426.00	16,021.00	49,725.00
41. 7.47	LT Sale	11008.58	14,243.81	9908.62	35,161.01
As per monthly R-15 report	HT Sale	3094.14	4,364.25	3,367.80	10,826.19
Тероге	Total Sale	13,955.67	18,608.06	13,423.42	45,987.20
A 691 1 * 750	LT Sale	11,008.58	14,256.98	9,908.62	35,174.18
As filed in True-up Petition	HT Sale	3,094.15	4,364.25	3,367.80	10,826.20
1 Cution	Total Sale	14,102.73	18,621.23	13,276.42	46,000.38

5.3 The Commission has observed that the Sales as filed in the True-up Petitions by DISCOMs is almost same as recorded in their Annual R-15 statements. However, the sales submitted by the West DISCOM is at variance by 13.17 MU with respect to sales booked in monthly R15 Statement. The Commission has accordingly considered the sales as per the monthly R15 statement for further analysis and approval.

5.4 The Commission had approved the assessment of sale to the unmetered category of rural domestic and agriculture consumers in the tariff order as shown in the table below:

Table 133. Busis of butting to un-metered consumers										
Assessed units for un-	Assessed	units f	for un-	Assessed	units f	or un-				
metered rural domestic	metered	agri	cultural	metered agricultural						
connections (units per	connectio	ns (units	per HP	connections (units per HP						
connection per month)	per montl	<b>1</b> )		per montl	<b>1</b> )					
Rural	Category	Rural	Urban	Category	Rural	Urban				
Kurai	Thr	ee Phase	,	Single Phase						
April to March	April to	Septem	ber	April to September						
	Permanent	80	90	Permanent	90	90				
75	Temporary	195	220	Temporary	205	230				
75	Octobe	er to Mai	rch	October to March						
	Permanent	170	170	Permanent	180	180				
	Temporary	195	220	Temporary	205	230				

Table 153: Basis of billing to un-metered consumers

5.5 On scrutiny of the sales for the unmetered domestic consumers recorded in R-15 statement (basic sale/billing data statement) for FY 2017-18, it has been observed that the actual unmetered sales to domestic consumers is within the monthly benchmark approved by the Commission. Therefore, the Commission has admitted the actual sale to domestic unmetered consumers. However, on scrutiny of the sales to unmetered agricultural consumers recorded in monthly R-15 statement for FY 2017-18, it is observed that the sale to un-metered category of agriculture consumers had been booked in excess of the prescribed monthly benchmarks, when compared with the number of consumers and their load. Accordingly, the Commission has accepted the metered sales as per R-15 statement, whereas the sales to un-metered agricultural consumers has been admitted as per monthly benchmarks prescribed in tariff order for FY 2017-18. A summary of the the unmetered sale as per monthly R-15, Sales as per prescribed benchmark and Sales in excess of the prescribed benchmark as observed from the monthly R-15 statement is shown in the table below:

Table 154: Summary of sale to the unmetered category booked in excess of the specified benchmark (MU):

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for un-metered agricultural connections
East	5,075.47	66.68
West	8,347.56	0.16

DISCOM	Unmetered Sales as per monthly R15	Sales booked in excess of the specified benchmark for un-metered agricultural connections
Central	4,554.77	80.77
State	17,977.80	147.62

5.6 The details of energy sale as per Tariff Order for FY 2017-18, as per true up Petition of the DISCOMs and as admitted by the Commission for the purpose of the True-up are given in the following table:-

Table 155: Energy sale as per Tariff Order for FY 2017-18, as per filing of the DISCOMs and as admitted by the Commission (MU)

	F	East DISCON	Л	V	Vest DISCO	М	Ce	entral DISCO	OM	7	Total for Stat	e
Category	As per tariff order FY 2017-18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017- 18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017-18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017- 18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18
LOW TENSION												
LV 1: Domestic Consumers	4,262.00	4,170.44	4,170.44	3,661.00	3,840.02	3,831.44	4,005.00	3,790.38	3,790.38	11,928.00	11,800.84	11,792.26
LV 2: Non – Domestic	1,051.00	967.33	967.33	1,029.00	1,037.54	1,035.23	970	885.26	885.26	3,050.00	2,890.13	2,887.82
LV 3: Public Water Works and Streetlights	408	427.68	427.68	455	436.1	435.73	361	345.78	345.78	1,224.00	1,209.56	1,209.19
LV 4: Industry	365	354.02	354.02	591	586.33	584.68	283	273.43	273.43	1,239.00	1,213.78	1,212.13
LV 5: Agricultural Consumers	5,929.00	5,089.11	5,022.43	8,545.00	8,356.98	8,356.56	6,415.00	4,613.77	4,533.00	20,889.00	18,059.86	17,911.98
LT Sale (MU)	12,015.00	11,008.58	10,941.90	14,281.00	14,256.97	14,243.64	12,034.00	9,908.62	9,827.85	38,330.00	35,174.17	35,013.39
HIGH TENSION												
HV 1: Railway Traction	-	-	-	-	-	-	-	-	-	-	-	-
HV 2: Coal Mines	463.00	453.33	453.33	-	-	-	44.00	26.21	26.21	507.00	479.54	479.54
HV-3: Industrial and Non- Industrial	2,344.00	2,256.60	2,256.60	3,566.00	3,731.74	3,731.74	3,513.00	2,976.47	2,976.47	9,423.00	8,964.81	8,964.81
HV-4: Seasonal	9.00	8.00	8.00	12.00	12.16	12.16	2.00	1.60	1.60	23.00	21.76	21.76
HV-5: HT Irrigation and Water Works	162.00	110.25	110.25	536.00	577.06	577.06	255.00	207.42	207.42	953.00	894.73	894.73

	East DISCOM		1	v	Vest DISCO	М	Ce	entral DISCO	M	7	Total for Stat	e
Category	As per tariff order FY 2017-18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017- 18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017-18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18	As per tariff order FY 2017- 18	As per true up Petition FY 2017- 18	As admitted in true up order FY 2017- 18
HV-6: Bulk residential	286.00	265.97	265.97	31.00	12.24	12.24	174.00	146.64	146.64	491.00	424.85	424.85
users HV-7: Bulk												
Supply to Exemptees	-	0	0	1.00	31.04	31.04	-	9.45	9.45	1.00	40.50	40.50
HT Sale (MU)	3,263.00	3,094.16	3,094.16	4,145.00	4,364.24	4,364.24	3,987.00	3,367.79	3,367.79	11,395.00	10,826.19	10,826.19
GRAND TOTAL HT + LT (MU)	15,278.00	14,102.74	14,036.06	18,426.00	18,621.21	18,607.88	16,021.00	13,276.41	13,195.64	49,725.00	46,000.36	45,839.59

# **Power Purchase Quantum and Cost**

#### **Petitioners' Submission**

- 5.7 The Petitioners have submitted that the energy requirement (MU) admitted in the Tariff Order by the Commission was based on the normative loss trajectory as per MYT Regulations, 2015 which differs from the actual loss levels for FY 2017-18.
- The Petitioners have submitted that the Commission while projecting the power purchase requirement does not consider the quantum of energy sale to other DISCOM's and UI energy at DISCOMs periphery. Also, the losses outside their periphery i.e. losses of MPPTCL and PGCIL is beyond their control and therefore the Petitioners have requested to determine the average per unit rate based on the actual net energy input at DISCOM periphery for sale to retail consumers only. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States.
- 5.9 The Petitioner further submitted that to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which is more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM's including UI within the State and also banking of power to other States. Also, the calculation of average per unit rate should not be based on purchase at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried out. This results in erroneous calculation of energy balance and the UI quantum of each DISCOM is left unattended.
- 5.10 The State Energy Account (SEA) and State UI gets revised regularly and as a result the

- quantum and cost as considered during the audited accounts/ energy audit finalization gets revised. The Petitioners have considered actual net drawl and schedule energy during the period as per latest DSM reports and considered amount as per audited accounts.
- 5.11 The Petitioners in reply to the data gaps have submitted that they have considered the MPPTCL losses of 2.75% in accordance with the Annual Report on Regulatory Compliance for FY 2017-18. With regard to Inter-State losses, the Petitioners have submitted the Month wise and Region wise break-up of the losses for FY 2017-18.
- 5.12 Further, with regard to cost of power purchase, the Petitioners have submitted that the primary reason for increase in power purchase cost is account on the following reasons:
  - Payment of Fuel Cost adjustment on actuals;
  - Payment of Renewable Energy Purchase Cost;
  - Payment of actual Inter-State and Intra-State transmission charges;
  - Payment of UI/DSM charges and MPPMCL charges
- 5.13 The Petitioners have submitted that they do not have any material control on the losses outside their periphery i.e. M.P. Transco and PGCIL losses as they are external to their periphery and involve complex interconnected grid. Therefore, it will be appropriate to determine average per unit rate based on the net actual energy input at DISCOM periphery for sale to retail consumers only, which more authentic and definite in nature and may not change even after the closure of financial year. This would also take into account the sale and purchase of electricity between the DISCOM including UI within the State and also banking of power to other States. It is to be noted that calculation of average per unit losses should not be based on calculated at ex-bus, which may be revised by way of reconciliation of regional/State Energy Accounts even after the closure of the financial year for which true-up has already been carried.
- 5.14 The Petitioners have requested the Commission to determine the cost of power purchase to be adjusted (disallowed) in the revenue requirement of the Petitioners' for the quantum of power purchase of disallowed power by applying the basic principle that all such costs and expenses on average basis, would have avoided by the Petitioner if the quantum of power whose purchase was disallowed by the Commission has not been purchased.
- 5.15 Based on above, the Petitioner has claimed the power purchase cost as follows:

Table 156: Claimed Power Purchase Cost for FY 2017-18 (Rs. Crore)

Sr.	Particulars	East DISCOM		West DISCOM		Central DISCOM		Total for State	
No.	No. Particulars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
1	Distribution Loss Level (%)	27.05%	27.05%	16.57%	16.57%	37.51%	37.51%	26.86%	26.86%

Sr.	De orthograph	East D	ISCOM	West Dl	SCOM	Central 1	DISCOM	Total fo	or State
No.	Particulars	Actual	Claimed	Actual	Claimed	Actual	Claimed	Actual	Claimed
2	Fixed Cost for FY 2017-18	2,610.44	2,610.44	3,296.07	3,296.07	2,989.87	2,989.87	8,896.38	8,896.38
3	Supplementary Bills of Previous FYs	514.26	507.52	728.61	724.9	606.4	594.89	1,849.27	1,827.31
4	Variable Cost for FY 2017-18 after adjusting the sale of additional power and other income	3,336.24	3,000.95	3,978.79	3,936.22	3,862.26	3,108.78	11,177.29	10,045.95
5	Other Charges (ED, Cess, Heavy Water Charges, Water Charges, MOPA, Insurance, Others etc.)	272.32	244.96	322.84	319.39	318.87	256.66	914.03	821.01
6	Inter State Transmission Charges for FY 2017-18 including SLDC	460.47	460.47	549.64	549.64	531.01	531.01	1,541.12	1,541.12
7	Other Cost of MPPMCL which cannot be apportioned	139.75	139.75	161.53	161.53	153.48	153.48	454.76	454.76
8	Other Adjustment based on Reconciliation with MPPPMCL	29.49	26.53	(66.51)	(65.8)	37.02	29.8	0.00	(9.47)
	MPPMCL Cost	7,360.15	6,987.79	8,967.36	8,918.33	8,495.91	7,661.49	24,823.42	23,567.61
A	Sup. Bill Due to revision of SEA for the FY 14-15	1.73	1.73		-	35.38	35.38	37.11	37.11
В	Intra State Transmission Charges for FY 2017-18	850.83	850.83	1,030.22	1,030.22	857.3	857.3	2,738.35	2,738.35
С	Power Purchased Directly by DISCOMs	4.14	4.14		-	-	-	4.14	4.14
D	DSM/UI at Intra State Boundary	158.82	158.82	19.32	19.32	9.39	9.39	187.53	187.53
Е	Reactive Energy Charges	(4.27)	(4.27)	(1.31)	(1.31)	3.48	3.48	(2.10)	(2.10)
	Total	8,374.22	8,001.86	10,019.20	9,970.17	9,404.47	8,570.05	27,797.89	26,542.08

# Commission's Analysis of Power Purchase Requirement and Cost

# **Power Purchase Requirement**

5.16 Details of power purchase including inter-State transmission charges and losses as admitted the Retail Supply Tariff Order for FY 2017-18 and as per the audited accounts of DISCOMs are given in the table below:

Table 157: Power purchase quantum and cost admitted in Tariff Order and as per the Audited Accounts.

DISCOM	Particulars	Admitted in the tariff order	Actual as per audited accounts	
East	Power Purchase Quantum (MU)	19,434.00	20,347.44*	
DISCOM	Power Purchase Cost (Rs. Crore)	6,937.73	8,374.22#	
West	Power Purchase Quantum (MU)	23,022.00	23,450.82*	
DISCOM	Power Purchase Cost (Rs. Crore)	9,262.39	10,019.21#	
Central	Power Purchase Quantum (MU)	20,627.00	22,328.20*	
DISCOM	Power Purchase Cost (Rs. Crore)	7,648.31	9,404.47#	
Total for	Power Purchase Quantum (MU)	63,083.00	66,126.46	
the State	Power Purchase Cost (Rs. Crore)	23,484.44	27,797.90	

<sup>\*</sup>As Power Purchase quantum is not reflected in Audited Accounts, considered equal to as Petitioned. #It includes supplementary power purchase cost of period prior to FY 2017-18.

5.17 Further, on analysis of the data submitted by the Petitioner, it has been observed that the Petitioners have not submitted the complete details of energy balance in format "Schedule 4a" which requires that the Inter State and Intra State losses be separately shown, whereas the Petitioners have submitted figures combining both these losses. Energy balance details as submitted by DISCOMs are shown in the Table below:

Table 158: Energy Balance as filed by DISCOMs for FY 2017-18

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State		
Total Energy Sale (MU)	14,102.73	18,621.23	13,276.41	46,000.37		
A. Distribution losses (%)	27.05%	16.57%	37.51%	26.71%		
B. Distribution losses (MU)	5,229.32	3,698.35	7,968.82	16,896.49		
At T-D interface (MU)	19,316.12	22,627.29	21,316.74	63,260.15		
A. Transmission loss of MPPTCL (%)						
B. Transmission losses of MPPTCL						
(MU)		Not Su	hunitta d			
At MP periphery		Not Su	billitted			
A. External losses (%)						
B. External losses (MU)						
Total energy requirement (MU)	20,347.44	23,450.82	22,328.20	66,126.46		

5.18 However, for admitting the power purchase cost, the Commission in line with the approach adopted in truing up of previous years has computed the normative power purchase requirement by following the principle of grossing up sales with normative loss levels which is narrated below:

- i. The admitted actual sales (say X) made by the DISCOMs have been grossed up by the normative Distribution Loss levels (say Y) to arrive at the power required at DISCOM periphery i.e. T-D boundary (say Z=X/(1-Y)).
- ii. The quantum (Z) thus arrived at has further been grossed up by the STU losses (MP Transco) (A) to arrive at the quantum of power required at the State boundary (Say B= Z/(1-A)).
- iii. Finally, the quantum (B) is grossed up by the actual external losses (say C) to arrive at the total energy requirement i.e. D=B/(1-C).
- 5.19 In order to compute the energy balance for DISCOMs, it is necessary to know the losslevels at each stage. Therefore, inter-State transmission, intra-State transmission and distribution losses need to be identified correctly. The intra-State transmission loss has been submitted as 2.75% by MPPTCL in their annual report of regulatory compliance report for FY 2017-18. Accordingly, the same loss level has been considered as the Intra-State transmission losses for the present True-up exercise. The Commission had approved the distribution loss levels for working out power purchase requirement in the Retail Supply Tariff Order for FY 2017-18 as specified in the MYT Regulations, 2015 as shown in the table below:

Table 159: Distribution loss trajectory for FY 2017-18 (%)

Year	East	West	Central
	DISCOM	DISCOM	DISCOM
FY 2017-18	17%	15.50%	18%

- 5.20 The Commission observed that the Petitioner has submitted the monthly actual external transmission losses (computedbased on the weekly losses issued by RLDCs) of Inter State Transmission system for FY 2017-18. Accordingly, the average losses for FY 2017-18 applicable for Western Region and Eastern Region have been worked out as 3.80% and 2.27%, respectively. The external losses (MU) thus arrived by multiplying the applicable losses (%) with the power purchase (MU) from the respective regions has been apportioned based on the total power purchase (MU) by each DISCOMs.
- 5.21 Based on above, the power purchase requirement admitted by the Commission for FY2017-18 is shown in the table below:

Table 160: Analysis of Power purchase quantum (MU)

S.	Particulars	East	West	Central	Total for
No.		DISCOM	DISCOM	DISCOM	State
1	Total Energy Sale (MU)	14,036.04	18,607.90	13,195.64	45,839.59

S. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
2	A. Distribution Losses (%)	17.00%	15.50%	18.00%	16.69%
	B. Distribution Losses (MU)	2,874.85	3,413.28	2,896.60	9,184.74
3	At T-D interface (MU)	16,910.90	22,021.18	16,092.25	55,024.33
4	A. Transmission loss of MPPTCL (%)	2.75%	2.75%	2.75%	2.75%
	B. Transmission losses of MPPTCL (MU)	478.20	622.71	455.05	1,555.96
5	At MP periphery	17,389.10	22,643.89	16,547.30	56,580.28
6	External losses (MU)	424.03	470.57	443.17	1,337.77
7	Net energy requirement (MU)	17,813.13	23,114.46	16,990.47	57,918.05

#### **Power Purchase Cost**

5.22 On analysis of the power purchase cost submitted by the Petitioner it was observed that there was variation between the power purchase cost booked as per audited accounts of the DISCOMs and MPPMCL account. A comparison of power purvchase cost as per the Petition, as per audited accounts of DISCOMs and MPPMCL is shown in the table below:

Table 161: Comparison of power purchase cost as submitted by the Petitioners (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
As filed in Petition	8,001.86	9,970.19	8,570.05	26,542.10
As per the audited accounts of DISCOMs	8,374.22	10,019.20	9,404.47	27,797.89
As per MPPMCL audited account	7,360.15	8,967.36	8,495.91	24,823.42

5.23 The Commission through data gap directed the Petitioners to submit the reconciliation of the power purchase cost as per audited account of DISCOMs and MPPMCL. In reply Petitioner submitted the reconciliation statement, which shows that the major variation is due to additional expenses booked in the audited accounts of DISCOMs pertaining to Intra State transmission charges, SLDC charges, UI charges and some expenses which has been booked in the audited accounts of MPPMCL of previous year. The reconciliation statement submitted by the Petitioners is shown below:

Table 162: Reconcilation of power purchase cost as per DISCOMs audited account and MPPMCL accounts submitted by the Petitioners (Rs. Crore)

	Power Purchase Cost	MP State	East DISCOM	Central DISCOM	West DISCOM
1	Fixed cost	8,896.38	2,610.44	2,989.87	3,296.07
2	Previous years' supplementary bills of Generators	1,849.27	514.26	606.40	728.61

	Power Purchase Cost	MP State	East DISCOM	Central DISCOM	West DISCOM
3	Variable cost	13,121.54	3,923.29	4,506.26	4,691.99
	Sale of additional power	1,213.90	362.61	397.50	453.78
	Other Income	730.34	224.43	246.49	259.42
4	Variable cost after adjusting Sale of additional Power & Other income	11,177.30	3,336.24	3,862.26	3,978.79
5	Other Charges (Total FPA charges +Income Tax+ED, Cess, Heavy Water charge, water charges+MOPA, Insurance+Any Other charges)	914.04	272.32	318.87	322.84
6	Other costs passed to DISCOMs - which cannot be apportioned station wise-	454.76	139.75	153.48	161.53
7	Inter state Transmission charges	1,531.68	457.65	528.00	546.03
8	Supplymetnory Cost of FY 2014-15 &FY 2015-16 based on Reconcialation of MPPMCL	(0.00)	29.49	37.02	(66.51)
9	Power Purchase Cost as per MPPMCL Statement/Accounts	24,823.42	7,360.15	8,495.91	8,967.36
10	Additonal bill/Supplymentory bills/ bill revisions of Previous year	37.11	1.73	35.38	-
11	Power Purchase from others	4.14	4.14	-	-
12	UI/DSM Charges	187.53	158.82	9.39	19.32
13	Reactive Energy Charges	(2.10)	(4.27)	3.48	(1.31)
14	Intra state Transmission Charges	2,738.35	850.83	857.30	1,030.22
15	SLDC Charges	9.44	2.82	3.01	3.61
	Power Purchase Cost as per DISCOM Audited Accounts	27,797.89	8,374.22	9,404.47	10,019.20

- 5.24 Accordingly, the Commission in line with the approach adopted in previous true up orders and considering that the DISCOMs have made some payments directly to other entities also like transmission charges, UI charges etc., has considered power purchase cost as per audited accounts of DISCOMs for further scrutiny as per following section.
- 5.25 While scrutinising the power purchase costs as indicated in the audited accounts of the DISCOMs, the Commission has observed that in support of their claim the Petitioners have furnished a statement indicating month wise, station wise details of power purchase quantum and costs (fixed cost, variable charges, other charges / costs) with DISCOM wise apportionment for corroborating the figures in audited accounts for FY 2017-18. The total fixed cost for the stations as indicated in this statement is Rs. 8,896.38 Crore, Variable and Other Charges of Rs. 12,091.33 Crore (net of revenue from sale of power and other income) Supplementary Power Purchase Cost of Rs. 1,849.27 Crore, UI/DSM charge of Rs. 187.53 Crore, Other Cost of MPPMCL of Rs. 454.76 Crore and reactive energy charges of Rs.

(2.10) Crore. The Commission has analysed the component wise power purchase claimed by the Petitioner in the following Section.

#### MPPMCL Cost of Rs. 454.76 Crore

5.26 With regards to the Other Cost of Rs. 454.76 Crore (Rs. 139.75 Crore, Rs. 153.48 Crore and Rs. 161.53 Crore for East, Central and West DISCOM, respectively) included in Power Purchase Cost, whichwas not apportioned station wise by the Petitioner, the Commission vide letter dated 04<sup>th</sup> December, 2019, sought details in this regard from the Petitioner. In response, MPPMCL vide letter dated 23<sup>rd</sup> December, 2019 submitted the requisite details. The breakup of the Other Cost as submitted by the MPPMCL is as follows:

Table 163: Details of Other Cost submitted by the Petitioner for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	Amount	Details
1	Power Purchase Cost	(62.75)	Energy bills which have not been passed to the DISCOMs in their monthly energy bills. Less: Purchase Bills passed through revised base sheet
2	Exchange of Power (Trading Margin)	0.27	Trading Margin paid on power purchase through Exchange
3	Bank Charges	3.19	Charges paid to Bank for LC facility
4	Open Access Charge for Banking of Power	45.72	Open Access Charges paid for banking of power
5	Banking of Energy	258.66	Liability towards Banking of Energy
6	Employee benefit Expense (including salary)	73.14	Employee Benefit Expenses of MPPMCL
7	Finance Cost	94.67	Interest paid on working capital loans
8	Other Expenses	38.16	Other A&G related expenses of MPPMCL
9	Depreciation	3.71	Depreciation expenses on MPPMCL assets
10	Total	454.76	

5.27 On the analysis of the component wise details of the Other Cost it was observed that certaincost / (Revenue) pertains to provisioning for banking of power, surcharge on delayed payment rebate on sale of power and free electricity to employees, which cannot be passed

onto the State DISCOMs, therefore, the Commission has disallowed such expenses. Details of Other Expenses which have not been admitted by the Commission are as follows:

Table 164: Other expenses in Power Purchase Cost not considered by the Commission for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Amount	Reason for Disallowance
1	Banking of Energy	258.66	The amount pertains to provision made for payment of Banking of Energy and hence no actual payment has been received.
2	Rebate on Sale of Power	3.99	The amount pertains to rebate provided to MPIDC (MPAKVN) on sale of Power, the burden of which cannot be passed as cost to State DISCOMs.
3	Surcharge on Delayed Payment	2.42	The Commission does not consider any surcharge earned or paid on account of delayed payment.
4	Supply of Free Electricity to Employee	0.60	The amount pertains to free electricity provided by MPPMCL to its employees. As the Commission in Retail Supply Tariff Order had not allowed any supply of free electricity to its Employees. Hence the expense of the same cannot be passed on to the consumers of the State DISCOMs.
5	Finance Cost	94.67	These Loans have been taken by MPPMCL for working capital requirement and do not pertain to funding of the Capital Projects of the DISCOMs. Since the Commission has already allowed the DISCOMs normative Interest on Working Capital it would not be appropriate to allow finance cost to MPPMCL, separately.
	Total	360.35	, ,

5.28 Based on above, the admitted MPPMCL cost for FY 2017-18 for each DISCOM which has been apportioned based on the actual claimed MPPMCL cost is shown in the following table:

Table 165: MPPMCL Cost admitted for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Actual MPPMCL cost as per accounts	139.75	153.48	161.53	454.76
2	MPPMCL Cost disallowed	110.74	128.00	121.62	360.35
3	MPPMCL cost admitted	29.01	33.53	31.86	94.41

#### Other income of MPPMCL of Rs. 730.34 Crore

5.29 The power purchase cost also includes an amount of Rs. 730.34 Crore towards Other income / rebate received by MPPMCL. Since, the Commission has allowed to pass on the expenses of MPPMCL towards its operation and maintenance to the Petitioners, any income earned by it should also be passed onto them. However, it is observed that majority of other income is towards rebate of prompt payment to generators and since the Commission has admitted the power purchase cost towards normative energy energy requirement only. Therefore, the Commission has admitted other income in proportion to the admitted energy requirement, which is shown in the table below

Table 166: Other income of MPPMCL admitted for FY 2017-18

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	20,347.44	23,450.82	22,328.20	66,126.46
2	Actual Other Income (Rs. Crore)	В	224.43	259.42	246.49	730.34
3	Quantum of Power Purchase Admitted (MUs)	C	17,813.13	23,114.46	16,990.47	57,918.05
4	Other Income of MPPMCL admitted (Rs. Crore)	D=B*C/A	196.48	255.70	187.57	639.74

# Unscheduled Interchange (UI) / Deviation Settlement Mechanism (DSM) and Reactive Energy Charges

5.30 It is observed that the Petitioner has claimed UI / DSM of Rs. 187.53 Crore for FY 2017-18 based on the actual payment towards these charges. Per unit rate of UI / DSM charges paid by the DISCOMs is on higher side signifying indiscipline in power drawl by the DISCOMs. The UI / DSM is not meant for trading of electricity and is mainly an instrument for grid discipline and settling the unintended deviations during the normal course of operations and when the frequency is in normal operating range according to the Grid Code. Further, additional UI / DSM charges are required to be paid when the DISCOMs draws more power than their scheduled drawl when the grid frequency is low. Accordingly, the Distribution utilities are required to project their demand precisely. Presently, Presently, the Commission in this order has admitted pro-rated actual UI / DSM charges to the admitted normative energy requirement for FY 2017-18. However, the Petitioners are

- directed to reduce their payment towards UI / DSM charges by adopting efficient management, proper scheduling of power etc.
- 5.31 Similarly, the Commission has admitted the pro-rated reactive energy charges towards admitted normative energy requirement for FY 2017-18 as shown in table below

Table 167: UI/DSM and Reactive Energy Charge Admitted for FY 2017-18

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Quantum of Power Purchase Procured as per petition (MUs)	A	20,347.44	23,450.82	22,328.20	66,126.46
2	UI / DSM Charge (Rs. Crore)	В	158.82	19.32	9.39	187.53
4	Quantum of Power Purchase Admitted (MUs)	С	17,813.13	23,114.46	16,990.47	57,918.05
5	UI / DSM Charge Admitted (Rs. Crore)	D=B/A*C	139.04	19.04	7.15	165.23
6	Reactive Energy Charges (Rs. Crore)	Е	(4.27)	(1.31)	3.48	(2.10)
8	Reactive Energy Charges Admitted (Rs. Crore)	F=E/A*C	(3.74)	(1.29)	2.65	(2.38)

# Supplementary Power Purchase Cost of Rs. 1,849.27 Crore

- 5.32 Further, the power purchase booked in the audited account also includes an amount of Rs. 1,849.27 Crore (Rs. 514.26 Crore of East DISCOM, Rs. 728.61 Crore of West DISCOM and Rs. 606.40 Crore of Central DISCOM) as "supplementary bills raised by the generators for the period prior to 2017-18". However, the scrutiny of the supplementary bill details furnished to the Commission in support of aforesaid claim of Rs. 1,849.27 Crore has revealed that amount of Rs. 182.22 Crore pertains to period prior to FY 2014-15, whereas, Rs. 277.21 Crore, Rs. 647.60 Crore and Rs. 742.24 Crore pertains to FY 2014-15, FY 2015-16 and FY 2016-17.
- 5.33 The amount of Rs. 1,849.27 Crore has been accounted for in the audited accounts for FY 2017-18, therefore, it would be appropriate to consider these supplementary bills of the past years in the true up for FY 2017-18. Since in the past years' true up orders, the power purchase cost of a year was admitted on the basis of the actual metered sale, normative unmetered sale and normative losses of that year; the year wise claims of the power purchase cost have been worked out accordingly. However, it is a matter of concern that the Petitioner has been raising claim on account of supplementary Power Purchase cost for the period from FY 2005-06 onwards in almost all truing up exercise, thereby increasing the power purchase cost exorbitantly. In this regard, the Commission vide deficiency note directed the Petitioner to submit the details of all the supplementary power purchase claimed till date in true up Petitions for FY 2015-16 to FY 2017-18 identifying the reason for the claim along with the justification for not claiming the amount in the said years. The

Petitioner has provided some of the details in the reply, which requires further clarification. Accordingly, the Commission has not considered the Petitioners' claim towards the supplementary power purchase cost for the period for which true up has already attained finality i.e. upto FY 2013-14 in this Petition. However, the Commission allows Petitioner to approach the Commission to claim the said amount separately on furnishing of the adequate details. Further, since the Commission has approved true up of FY 2014-15 in this order, the amount of supplementary power purchase pertaining to FY 2014-15 of Rs. 277.21 Crore, FY 2015-16 of Rs. 647.60 and FY 2016-17 of Rs. 742.24 Crore has been considered for approval in this order. The Commission has reworked this amount based on the the actual metered sale, normative un-metered sale and normative losses admitted in true up of FY 2014-15, FY 2015-16 and FY 2016-17, respectively. Approach adopted by the Commission in approval of power purchase cost towards supplementary bills of FY 2014-15 to FY 2016-17 is as follows:

- Full Fixed Cost allowed except for the fixed cost towards torrent power generating station as per the approach adopted in true up of FY 2014-15 to FY 2016-17 and Fixed Cost towards BLA power station as per true up of FY 2016-17.
- Variable and other cost admitted only for those plants which has been considered as scheduled for meeting the normative energy requirement of FY 2014-15 to FY 2016-17 as per respective true ups.
- Variable and other cost of torrent power generating station not considered as per the approach adopted in true up of FY 2014-15 to FY 2017-18. Further, Variable and other cost of BLA power generating station not considered as per the approach adopted in true up of FY 2016-17.
- 5.34 The working of supplementary power purchase cost is shown as follows:-

Table 168: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Fixed Cost as per actual supplementary bills	A	190.19	236.36	215.72	642.28
2	Fixed Cost disallowed towards supplementary bills	В	0.48	0.46	0.41	1.36
3	Total Fixed Cost allowed towards supplementary bills	С=А-В	189.71	235.90	215.31	640.92
4	Variable and Other Cost as per actual supplementary bills	D	304.66	375.31	344.80	1,024.77

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
5	Variable Cost disallowed towards supplementary bills	E	(0.19)	(0.41)	(0.28)	(0.88)
6	Total Variable Cost allowed towards supplementary bills	F=D-E	304.84	375.72	345.08	1,025.65
7	Total Power Purchase Cost allowed towards supplementary bills	G=C+F	494.56	611.62	560.39	1,666.57

5.35 The admitted supplementary power purchase cost is shown as follows.

Table 169: Supplementary Power Purchase Cost Admitted by the Commission (Rs. Crore)

		Petitioners Claimed				Admitted			
Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State	East DISCOM	West DISCOM	Central DISCOM	Total for State	
Supplementary Bills for FY 2014-15 to FY 2016-17	494.85	611.67	560.52	1667.04	494.56	611.62	560.39	1,666.57	

# **Inter-State Transmission Charges**

5.36 The Commission in Retail supply tariff order for FY 2017-18 had admitted the inter state transmission charges of Rs. 1,406 Crore based on the actual charges for FY 2015-16. However, the actual inter State transmission charges paid by the DISCOMs in FY 2017-18 is Rs. 1,531.68 Crore. As inter-State transmission charges are uncontrollable for DISCOMs, the Commission has admitted the actual inter State transmission charges of Rs. 1,531.68 Crore as per actuals in true up of FY 2017-18.

#### **Fixed and Variable Cost of generating station**

- 5.37 The Commission has noted that DISCOMs had procured power in excess of admitted energy requirement computed based on norms specified in the MYT Regulations and methodology adopted in previous orders. Similar situation had arisen during the True-up exercise of previous years. Hence, the Commission has decided to adopt the same approach as followed for the True-up of previous years by taking cognisance of the Judgment of the Hon'ble APTEL dated 15th September, 2015 in Appeal nos. 234, 270, 271 and 276 of 2014, in the matter of True-up Orders of previous years issued by the Commission. Accordingly, the power purchase cost has been determined by considering:
  - i. Full fixed cost for the generating stations meeting the power purchase requirement of the DISCOMs and

- ii. The cost for short term power and variable cost of long term power together for deriving the average rate to be applied on the admitted quantum of power purchase requirement.
- 5.38 Accordingly, the Commission has admitted the actual fixed cost as claimed by the Petitioners in line with the methodology priscribed by the Hon'ble APTEL except for the fixed charges for BLA and Torrent Power Station. With regard to power purchase from Torrent Power station, some of the stakeholders have raised the issue with regard that it is against the principles of Merit Order Dispatch (MOD) on the basis of variable cost of generating station. Therefore, in line with the view taken by the Commission in true up for FY 2013-14, the Commission has considered it appropriate to keep in abeyance the quantum of power purchase from Torrent Power stations and its cost. Further, with regard to BLA power station the Commission in retail tariff order for FY 2017-18 had noted as follows:
  - "2.29 In view of the Commission's orders dated 22 May, 2015 and 25 July, 2015 in Petition No. 16/2014 and 36/2015, respectively the Commission has not considered the availability and the cost of generation from BLA Units 1&2."
- 5.39 Therefore, considering the view taken by the Commission in retail supply tariff order for FY 2017-18 and current status of the same, the Commission has not considered the power purchase cost towards BLA power in this order. Accordingly, the Commission has allowed the actual fixed cost excluding the fixed cost towards torrent and BLA power station.
- 5.40 The summary of fixed charges as considered by the Commission is shown in table below:

Table 170: Fixed Cost Admitted by the Commission (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Fixed Cost Admitted in Tariff Order for FY 2017-18	2,997.41	3,550.78	3,181.42	9,729.61
Fixed Cost Claimed in True-up Petition for FY 2017-18	2,610.44	3,296.07	2,989.87	8,896.38
Fixed Cost Admitted in True-up Order for FY 2017-18	2,592.09	3,271.43	2,966.27	8,829.79

5.41 Further, in regard to the Petitioners request for disallowance of power purchase cost for the quantum of power purchase attributable to excess loss in distribution system, the Commission observe no merit. The losses in Intra-State and Inter-State transmission system are beyond the control of the Petitioners, however, these losses would have been very low, if the Petitioners would have achieved the distribution losses as per the target specified by the Commission and restricted its unmetered sale for agriculture and domestic consumers within the norms specified by the Commission. Similarly, computation of pool energy rate (Rs./kWh) based on the actual power purchase cost as per audited accounts and

total energy procured by the Petitioner as per DSM/UI account would lead to higher per unit rate due to inclusion of cost of power of costlier plants, which could have been avoided by the Petitioners, if they would have achieved the target loss levels and restricted their sales to unmetered agriculture and domestic consumers within the norms specified by the Commission. Therefore, considering that the Petitioners have not achieved the norms specified by the Commission, the inefficiency of the Petitioners should not be passed on to the consumers of the State. Accordingly, the Commission has recomputed the energy charges of the Petitioners as per the following approach:

- Monthly Energy Requirement computed considering the monthly energy sales admitted by the Commission grossed up with admitted loss levels of Distribution System, Intra-State and Inter-State transmission network;
- To meet this monthly energy requirement, scheduled energy of each generating stations has been considered as per monthly State Energy Account. Scheduling of the generating stations has been considered as per the monthly MOD issued by MPSLDC, Schedule Energy from BLA and Torrent Power generating station has not been considered.
- Shortfall if any in meeting the energy requirement has been considered to be met through purchase of power from open market at rate equal to energy charge of the last generating station in the MOD;
- Energy charge worked out for each generating station considering the actuals energy and other charges as per the MPPMCL statement on annual basis provided by the Petitioners.
- Based on the above approach, the Commission has computed the energy charges of Rs. 10,879.93 Crore at per unit energy charges of Rs 1.88/kWh.
- 5.43 Accordingly, the total power purchase cost determined by the Commission for FY 2017-18 is given in the table below:

West Total for **East** Central Sr. No. **Particulars** Reference **DISCOM DISCOM DISCOM** State Fixed Cost of Power Purchase for 1 2,592.09 3,271.43 2,966.27 8,829.79 A

В

457.65

546.03

Table 171: Admitted Power Purchase Cost (Rs. Crore)

FY 2017-18 (Rs. Crore)

(Rs Crore)

2

Inter-State Transmission Charges

1,531.68

528.00

Sr. No.	Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	Total for State
3	MPPMCL Cost Admitted (Other cost which can't be apportioned) (Rs. Crore)	С	29.01	33.53	31.86	94.41
4	UI / DSM Charge Admitted (Rs. Crore)	D	139.04	19.04	7.15	165.23
5	Reactive Energy Charges Admitted (Rs. Crore)	E	(3.74)	(1.29)	2.65	(2.38)
6	Other Income of MPPMCL	F	196.48	255.70	187.57	639.74
7	Sub-total	G= A+B+C+D+E-F	3,017.57	3,613.04	3,348.36	9,978.98
8	Pooled variable rate (Rs. / kWh)	Н	1.86	1.93	1.83	1.88
9	Quantum of Power Purchase Admitted (MUs)	I	17,813.13	23,114.46	16,990.47	57,918.05
10	Total Variable Cost admitted (Rs. Crore)	J=H*I/10	3,313.75	4,454.04	3,112.14	10,879.93
11	Total Power Purchase Cost Admitted for FY 2017-18 ( Rs. Crore)	K=G+J	6,331.33	8,067.09	6,460.50	20,858.91
12	Supplementary Power Purchase Cost for FY 2014-15 to FY 2016- 17 (Rs. Crore)	L	494.56	611.62	560.39	1,666.57
13	Power Purchase Cost admitted including supplementary bills (Rs. Crore)	M=K+L	6,825.88	8,678.71	7,020.89	22,525.48

5.44 It is observed that the total power purchase cost excluding MPPTCL and SLDC charges as admitted in the retail tariff order for FY 2017-18 was Rs. 21,316 Crore, whereas in this order the Commission has admitted power purchase cost of Rs. 23,165.22 Crore. The major reason for this increase is due to inclusion of supplementary power purchase cost of Rs. 1,667.93 Crore for prior period.

# **Intra-State Transmission Charges**

5.45 Transmission charges admitted in the Retail Tariff Order, Audited Accounts and as filed for FY 2017-18 by East, West and Central DISCOMs including SLDC charges are given in the table below:

Table 172: Transmission Charges including SLDC charges for FY 2017-18 (Rs. Crore)

Sl. No.	DISCOM	Transmission charges as per tariff order	Transmission charges as per audited account	Transmission charges as filed
1	East	756.67	853.65	853.65
2	West	969.65	1,033.83	1,033.83

Sl. No.	DISCOM	Transmission charges as per tariff order	Transmission charges as per audited account	Transmission charges as filed
3	Central	806.05	860.31	860.31
4	Total	2,532.37	2,747.79	2,747.79

5.46 It has been observed from the above table that East, West and Central DISCOMs have claimed charges as per Audited Accounts. Hence, the same has been admitted by the Commission. The admitted transmission charges inclusive of SLDC charge is shown in the Table below:

Table 173: Transmission Charges admitted by the Commission for FY 2017-18 (Rs. Crore)

Sl. No.	DISCOMs	Transmission charges (including SLDC charges) as per Audited Accounts
1	East	853.65
2	West	1,033.83
3	Central	860.31
	Total	2,747.79

# **Operation and Maintenance (O&M) Expenses**

#### **Petitioners' Submission:**

5.47 The Commission had admitted the total O&M Expenses as Rs. 3,993.88 Crore in the TariffOrder for FY 2017-18. DISCOM-wise break-up of the O&M expenses admitted in the Tariff Order is given in the table below:

Table 174: O&M Expenses admitted in Tariff Order of FY 2017-18 (Rs. Crore)

Particulars	East	West	Central	Total
	DISCOM	DISCOM	DISCOM	for State
O&M Expenses admitted in Tariff Order for FY 2017-18	1,368.18	1,341.09	1,284.61	3,993.88

- 5.48 The Petitioners have submitted that they have claimed the O&M Expenses in accordance with the MYT Regulations, 2015.
- 5.49 The East DISCOM has claimed O&M expenses of Rs 1,210.22 Crore which comprises of employee expenses to the tune of Rs. 822.48 Crore (expense capitalised is Rs 28.91 Crore and net expense is Rs 793.57 Crore), R&M expenses to the tune of Rs. 168.84 Crore (expense capitalised is Rs 7.06 Crore and net expense is Rs 161.78 Crore) and A&G expenses to the tune of Rs 218.90 Crore. The Petitioner is also claiming the cost of actual

- cash outflow towards terminal benefits to the tune of Rs. 41.28 Crore which is not a part of Transco's ARR.
- 5.50 The West DISCOM has claimed O&M expenses of Rs. 1,019.99 Crore which comprises of Rs. 731.24 Crore towards Employee expenses including terminal benefits of Rs. 14.84 Crore, A&G expenses of Rs. 152.73 Crore, and R&M expenses of Rs. 136.32 Crore.
- 5.51 The Central DISCOM has claimed O&M expenses of Rs. 1,406.98 Crore which includes Rs. 1,127.85 Crore towards Employee expenses including terminal benefits of Rs. 5.09 Crore, A&G expenses of Rs. 133.55 Crore, and R&M expenses of Rs. 145.58 Crore for FY 2017-18.
- 5.52 Accordingly, O&M expenses claimed by the Petitioner's are shown in the table below:

Particulars	East DISCOM	West DISCOM	Central DISCOM
O&M Expenses	1,168.94	1,005.15	1,401.89
Terminal Benefit	41.28	14.84	5.09
Total O&M Expenses claimed	1,210.22	1,019.99	1,406.98

Table 175: O&M Expenses claimed by Petitioners for FY 2017-18 (Rs. Crore)

# Commission's View and Analysis on O&M Expenses:

- 5.53 The Commission had specified norms for O&M expenses in the MYT Regulations. These norms were fixed on the basis of past audited figures of the Distribution Licensees. The rationale behind fixing these norms was to promote competition, adoption of commercial principles, efficient working of the Distribution Licensees and protection of Consumers' interest. However, it is observed that the Petitioners' has been not able to keep its operational efficiency in line with the targets specified by the Commission in the Regulations. Accordingly, the Commission in accordance to MPERC MYT Regulations, 2015, has decided not to pass the burden of their inefficiencies on the consumers of the States, by considering the norms specified in these Regulation as ceiling norms and thereby allowing O&M expenses on actuals, if the same is lesser as compared to norms specified in the Regulations.
- 5.54 Further, in accordance with the MYT Regulations,2015 dearness allowance, pension and terminal benefits, taxes to be paid to the Government or Local Authorities and fees to be paid to MPERC is allowable on actual basis. Also, the Commission has considered the actual Operation and Maintenance expenses capitalized during the year as per the audited account of FY 2017-18 and has reduced the same from the admitted Operation and Maintenance expenses.

- 5.55 Further, the Commission observed that some DISCOMs are booking expenses towards contractual employees under employee expenses, whereas some are booking it under the A&G Expenses. Therefore, the Commission has considered the lesser of the actual O&M expenses as per the audited accounts vis-a-vis normative O&M expenses in totality.
- 5.56 Accordingly, based on the above, the expense wise analysis of each component is shown in the following paragraphs.

# **Employee Expenses, Terminal Benefits & Arrears**

- 5.57 The Commission has carried out a detailed scrutiny of the actual employee expenses excluding DA, arrears, pension and terminal benefit is higher than the norms as per the provision of the MYT Regulations, 2015 and has compared the same with the norms specified in the Regulations.
- 5.58 Further, in accordance with the MYT Regulations, 2015, the DISCOMs are eligible to claim DA, terminal benefits, incentives and arrears paid to Employees as per actuals. Accordingly, the Commission has considered the DA on actuals for FY 2017-18. As regards the issue of expenses against terminal benefits for the MPSEB/successor entities as well as pension payments to pensioners, the Commission has considered the terminal benefits and pension expenses on "Pay as you go" principle under the transmission charges. Therefore, the Commission has not considered any provisioning made under the head "Terminal Benefits to Employees" in the True-up Petition for FY 2017-18 and allowed only the actual payments made to employees including leave encashment but excluding pension and gratuity. Further, the Commission has observed that the Petitioner has claimed audit charges under the head of Terminal Benefits, which has not been considered by the Commission under Employee Expenses as the same needs to be managed under the allowed A&G expenses for FY 2017-18. Therefore, the Commission has considered the audited charges under actual A&G expense.
- 5.59 Based on the above, the Employee Expenses as per actuals and as per the provision of Regulations for FY 2017-18 is shown in the following table:

Table 176: Normative and Actuals Employee Expenses computed for FY 2017-18 (Rs. Crore)

Sr. Particulars		EAST DIS	COM	WEST DIS	WEST DISCOM		AL M
No.		Normative*	Actual	Normative*	Actual	Normative*	Actual
1	Employee Expenses	396.00	341.36	415.00	612.13	370.00	622.32
2	DA	284.04	284.04	238.16	238.16	230.77	230.77

Sr.	Particulars	EAST DIS	СОМ	WEST DISCOM		CENTRAL DISCOM	
No.		Normative*	Actual	Normative*	Actual	Normative*	Actual
3	Terminal Benefits including incentives	50.17	50.17	67.79	67.79	67.30	67.30
4	Arrears	136.42	136.42	12.21	12.21	12.10	12.10
5	Total	866.63	811.99	733.16	930.29	680.17	932.48

<sup>\*</sup>As per the provision of the Regulations

# **A&G Expenses**

- 5.60 The Commission has analysed the actual A&G expenses and compared the same with the norms specified in the Regulation. Further, with regards to the actual taxes paid to the government, the Commission has considered the actual taxes paid by the DISCOMs except for the entry tax, as the same has been already been considered as part of norms approved for A&G Expense by the Commission.
- 5.61 The Commission has considered the actual audit charges booked under the head of Terminal Benefits under actual A&G expenses. Further, the Commission has observed that the MPERC Fees as claimed by the Petitioner is in line with actual fees paid to the Commission. Therefore, the Commission has considered the same. Accordingly, based on the above the A&G expenses as per actual and as per the provision of Regulations for FY 2017-18 is shown in the following table:

Table 177: Normatitive and Actuals A&G Expenses computed for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
		Normative*	Actual	Normative*	Actual	Normative*	Actual
1	A&G Expenses	179.00	206.58	138.00	122.22	103.00	130.39
2	Taxes	1.91	1.91	1.90	1.90	3.37	3.37
3	MPERC Fees	0.37	0.37	0.45	0.45	0.39	0.39
4	Total	181.28	208.86	140.34	124.56	106.76	134.15

<sup>\*</sup>As per the provision of the Regulations

# **R&M Expenses**

5.62 The provision for R&M expenses in the MYT Regulations, 2015 is @ 2.3% on the opening GFA of the financial year for all DISCOMs. The Commission has also analysed the actual R&M expenses as per the audited accounts for FY 2017-18. Accordingly, based on the

above, R&M Expense as per actual and as per the provision of Regulations for FY 2017-18 is shown in the following tables:

Table 178: Normative and Actuals R&M Expenses computed for FY 2017-18 (Rs. Crore)

DISCOMs	GFA	GFA % as Normative R&N		Actual R&M	
DISCONS		per norms	expenses	Expenses	
East	6,763.98	2.3%	155.57	168.84	
West	5,926.91	2.3%	136.32	112.53	
Central	8,668.22	2.3%	199.37	83.11	
Total	21,359.11	2.3%	491.26	364.48	

5.63 Accordingly, based on the above analysis, the Commission compared the O&M Expenses computed as per the provision of the Regulations and actual O&M Expense as per audited account of FY 2017-18. Based on the approach detailed above, the Commission has admitted the lower of the O&M computed as per Regulations and as per audited accounts. In view of the above, the admitted O&M expenses for FY 2017-18 are as shown in the following table:

Table 179: O&M expenses of DISCOMs admitted for FY 2017-18 (Rs. Crore.)

Particulars	Actual	Normative	Admitted
East DISCOM	1,150.59	1,164.53	1,150.59
West DISCOM	1,135.26	977.71	977.71
Central DISCOM	1,121.28	958.54	958.54
Total O&M expenses	3,407.99	3,100.78	3,086.98

#### **Provision for Terminal Benefit Trust Fund**

5.64 The Commission in Retail Supply Tariff Order for FY 2017-18 had considered an amount of Rs. 120 Crore towards Pension and Terminal Benefit Trust Fund (liabilities provision) which is to be contributed by the DISCOMs to the Registered Terminal Benefits Trust for FY 2017-18. Therefore, the Commission in line with the view taken by the Commission in Retail Supply Tariff Order for FY 2017-18 has allowed the provision for Terminal Benefit of Rs. 120 Crore in this order, which is shown in the following table:

Table 180: Provision for Terminal Benefit Trust Fund admitted by the Commission in FY 2017-18 (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Provision for Terminal benefits Trust Fund	40	40	40	120

# **Interest on Project Loans**

#### **Petitioners' Submission:**

5.65 The Petitioners have claimed interest on project loans (inclusive of finance charges) of Rs. 150.08 Crore, Rs. 44.51 Crore and Rs. 6.37 Crore for East, West and Central DISCOMs, respectively based on the methodology adopted by the Commission in previous orders.

# **Commission's Analysis on Interest on Project Loans:**

- 5.66 The Commission has examined the claims of DISCOMs from their filings and Audited Accounts. As per Regulations 31.1 to 31.9 of the MYT Regulations,2015 for allowing interest and finance charges all loans shall be identified for the assets capitalised till the relevant year. In the absence of information related to loans mapping with particular assets, it cannot be ascertained as to how much loan is related to completed fixed assets and how much is related to capital work in progress.
- 5.67 Further Regulation 21.1 of the MYT Regulations, 2015, specifies that debt-equity ratio shall be 70:30 for calculation of interest on loan and for return on equity subject to Regulation 21.2. As per Regulation 21.2, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be considered as normative loan. Also, if the actual equity deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff. Accordingly, the Commission has adopted the following principles for computing interest on project loans.

# Principles adopted for calculation of interest on project loans

5.68 In the True-up Order for FY 2017-18, the interest on project loans has been admitted based on the fixed asset created till 31<sup>st</sup> March, 2018 on the basis of Audited Accounts for FY 2017-18 subject to its approval in review of the Investment plan approved by the Commission. Accordingly, based on the Commission view in order dated 24.04.2021 in Petition No. 63 of 2017 in the matter of approval of investment plan for East DISCOM for FY 2016-17 to FY 2019-20, a lumpsump amount of Rs. 913.25 Crore has been disallowed towards capex in FY 2016-17 to FY 2019-20 for the circle, wherein the East DISCOM was neither able to reduce losses in FY 2019-20 with respect to losses in FY 2016-17 nor have brought down the losses at par with the specified loss trajectory in the Regulations. As the year wise detail of the disallowed GFA is not available, the Commission has considered the 25% of the disallowed GFA during each year of FY 2016-17 to FY 2019-20 (i.e. Rs. 228.31 Crore).

- 5.69 The Commission has adopted the methodology for allocating the admitted Gross Fixed Assets (GFA) addition during the year into debt and equity in accordance to the provision of the Regulations as explained below:
  - a. Allocation of fixed assets into debt and equity as on 31<sup>st</sup> March, 2017 has been considered as per the True-up Order of FY 2016-17.
  - b. Net addition to GFA during FY 2017-18 has been worked out after subtracting the amount received towards consumer contribution during the year from total addition to GFA as available in the audited accounts of DISCOMs subject to approval in investment plan.
    - i. The Commission has considered closing GFA admitted in the True-up Order for FY 2016-17 as the opening GFA for FY 2017-18.
    - ii. Further, the Commission considered the closing consumer contribution and grants for FY 2016-17 as the opening consumer contribution & grants for FY 2017-18. With regards to addition in consumer contribution and grants, it is observed that the addition in consumer contribution and grants is not clearly shown in audited accounts of East and Central DISCOM (addition in consumer contribution and grants, net of capitalization amount only available). Therefore, for these DISCOMs, the difference in the Deffered Income has been considered as the addition in Consumers Contribution / Grants, whereas the income booked under other income booked towards depreciation created through consumer contribution and grants has been considered as part of other income. For West DISCOM, the addition in Consumer Contribution and Grant submitted by it in reply to data gaps tallies with the figures considered as per the accounts.
  - c. Equity in excess of 30% of the net GFA added during FY 2017-18, has been considered as normative loan. However, if the actual equity deployed is less than 30% of the net GFA, then actual equity has been considered for computation of RoE. Further, only such equity capital is to be considered which has been actually utilized for creation of asset. The equity so derived has been added to the equity considered at the end of FY 2017-18 and balance net addition to GFA has been considered as funded through debt.
  - d. Balance of net addition to GFA has been considered as having been funded through debt and added to the total debt considered at the end of FY 2016-17. In absence of the actual dates of capitalization of individual assets, interest on project loans has been computed based on the average of the opening and closing loans for the financial year.

- 5.70 In accordance with Regulation 31.3 of the MYT Regulations, 2015, debt repayments is equal to the depreciation admitted for that year. As regards the weighted average rate of interest for the computation of interest on loans, the Commission has verified the weighted average rate of interest on project loans for East, West and Central DISCOMs which were claimed at 8.97 %, 9.16% and 5.43% and found that the Central DISCOM have considered loan taken from PP/SLR Bonds in its computation whereas the East DISCOM had considered working capital Loans from Public Bonds, perpetual loans ,SLR Bonds, Debentures/PP Bonds and West DISCOM had considered Loans from SLR/PP Bonds and Perpetual Loans. The Petitioners were asked to explain the purpose of undertaking these loans. However, the Petitioners were unable to justify that these loans were taken for funding project specific works. Therefore, the Commission while approving the weighted average rate of Interest has not considered these loans. Accordingly, the Commission has computed the revised weighted average rate of interest for projects specific loans for each DISCOM and admitted the weighted average rate of interest of 5.64%, 6.66% and 5.43% for East, West and Central DISCOMs, respectively.
- 5.71 Further, it was observed that Central DISCOM has not claimed interest and finance charges in accordance with the provisions of the MPERC Tariff Regulations. In its reply to data deficiency, Central DISCOM submitted the revised computation of Interest and Finance charges in accordance to the provisions of the MPERC Tariff Regulation. In its revised submission, Central DISCOM has claimed Interest and Finance charges of Rs. 102.11 Crore comprising Interest charges of Rs. 6.67 Crore and Finance charges of Rs.95.45 Crore.
- 5.72 Finance Charges claimed by East and West DISCOMs are Rs. 12.95 Crore and Rs. 10.27 Crore respectively. The Commission after scrutinizing DISCOMs submission with audited accounts has considered only cost of raising funds, bank charges, commitment charges and guarantee/ LC charges. Accordingly, the Commission admitted Other Finance Charges as Rs. 7.32 Crore, Rs. 7.31 Crore and Rs. 10.03 Crore for East, West and Central DISCOMs, respectively. The Commission has not considered the Petitioners' claimed towards the penal charges of delayed payment or rebate to consumer on timely payment by East DISCOM, and West DISCOM of Rs. 5.63 Crore, and Rs. 2.96 Crore respectively as per Commission approach in previous orders. Further, the Commission has considered the actual interest and finance charges capitalized as per audited account of FY 2017-18 and has reduced the same from the admitted interest and finance charges.
- 5.73 Details of interest on project loans along with other finance charges admitted in true-up of FY 2017-18 for DISCOMs are given in the table below:

Table 181: Interest on Project Loans admitted by the Commission for FY 2017-18 (Rs. Crore.)

Particulars	Legend	East DISCO M	West DISCOM	Central DISCOM	Total for State
Opening Debt associated with					
<b>GFA</b> (Closing debt as Per FY	A	2,084.40	701.78	3281.81	6067.99
2016-17 True-up )					
GFA Addition during the year	В	256.84	572.93	836.46	1,409.39
Consumer Deposit and Grants utilized during the year	С	234.91	517.45	394.06	1,146.42
Net GFA Addition during the year	E=B-C	21.93	55.48	442.40	519.81
70% of addition to net GFA considered as funded through debt	F=70%*E	15.35	38.84	436.34	490.53
Debt repayment during the year (Scheduled)	G	127.56	97.96	166.59	392.10
Closing debt associated with GFA	H=A+F-G	1972.19	642.65	3551.56	6,166.41
Average debt associated with Loan	I=Average (A, H)	2028.30	672.22	3416.69	6,117.20
Weighted average rate of interest (%) on all loans as per Petitioner	J	5.64%	6.66%	5.43%	5.63%
Interest on Project Loans	K=I*J	114.40	44.77	185.53	344.69
Interest capitalised	L	(83.96)	(33.34)	(10.54)	(127.84)
Other Finance cost	M	7.32	7.31	10.03	24.66
Interest cost admitted on project loans in True-Up	N=K+L+M	37.76	18.74	185.02	241.51

# **Interest on Working capital**

# **Petitioners' Submission:**

5.74 East and West DISCOMs have claimed interest on working capital on the basis of norms as specified in the terms and conditions of Tariff Regulations, 2015 while Central DISCOM has claimed as actuals as per the Audited Accounts. East, West and Central DISCOMs have claimed interest on working capital as Rs. 72.61 Crore, Rs. 37.73 Cr and Rs. 35.69 Crore, respectively, as against Rs. 85.97 Crore, Rs. 63.99 Crore and Rs. 46.38 Crore, respectively admitted by the Commission in the Tariff Order for FY 2017-18.

# Commission's Analysis on Interest on working capital:

- 5.75 The Commission has observed that the Central DISCOM have not submitted the working capital requirement separately for the wheeling and retail supply activity, while East and West DISCOMs has submitted working capital requirement separately for the wheeling and retail supply activity.
- 5.76 The Commission directed the Central DISCOM to submit the revised claim of interest on working capital on the basis of norms as specified in the terms and conditions of Tariff Regulations, 2015. The Central DISCOM has submitted the revised claim on interest of working capital of Rs. 35.14 Crore instead of its initial claim of Rs. 35.69 Cr.
- 5.77 Regulation 22 of the MYT Regulations, 2015 provides for the methodology for the computation of working capital requirement for the Distribution Licensees as follows:

# "22. Working capital

- 22.1. Following shall be included in the Working capital for supply activity of the Licensee:
  - (i) Receivables of two months of average billing reduced by power purchase cost of one month and any consumer security deposit,
  - (ii) O&M expenses for one month, and
  - (iii) Inventory (meters, metering equipment, testing equipment are particularly relevant in case of supply activity) for 2 months based on annual requirement for previous year.
- 22.2. Following shall be included in the Working capital for wheeling activity of the Licensee:
  - (i) O&M expenses for one month, and
  - (iii) Inventory (excluding meters, etc. considered part of supply activity) for 2 months based on annual requirement considered at 1% of the gross fixed assets for previous year.
- 22.3. The norms described above shall be applicable for each year of the tariff period."
- 5.78 Accordingly, in line with the approach adopted by the Commission in previous order and in line with the provisions of the Regulations, the Commission has considered Gross Fixed

Assets at the start of FY 2017-18 as Rs 6,992.29 Crore, Rs. 5,785.21Crore and Rs. 8,668.22 Crore for East, West and Central DISCOM, respectively. One percent of this GFA has been pro-rated to two months to work out the inventory for retail and wheeling activity which has been further divided into wheeling and retail inventory in the ratio of 80:20 in line with the approach adopted in the last true up order. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements of working capital have been considered based on the expenses admitted by the Commission in the relevant sections of this order. Further as noted in previous true up orders also as both the activities are undertaken simultaneously by the DISCOMs, the available resources are common for both. Therefore, the Commission has taken working capital requirement together for wheeling and retail activities. Accordingly, the Commission has only considered one Month O&M Expense towards the wheeling activity only.

5.79 Further, Regulation 36 of the MYT Regulations, 2015 specifies as follows for the computation of interest on working capital:

# "36. Interest charges on working capital

Working capital shall be computed as provided in these Regulations and Rate of interest on working capital shall be equal to the State Bank of India Advance Rate as on April 1 of the relevant Year. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has borrowed in excess of the working capital loan computed on normative basis."

5.80 Accordingly, for the purpose of interest rate on working capital, State Bank of India Advance Rate as on 1st April 2017 i.e. 13.85% has been taken. The admitted interest on working capital is shown in the table below:

Table 182: Interest on Working Capital admitted by the Commission for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State
For wh	For wheeling activity					
A)	1/6th of annual requirement of inventory for previous year	2	9.02	7.90	11.56	28.48
B)	1/12th of total O&M expenses	1	95.88	81.48	79.88	257.24
C)	Total Working capital (A+B)		104.90	89.38	91.44	285.72
D)	Rate of Interest		13.85%	13.85%	13.85%	13.85%
E)	Interest on Working capital		14.53	12.38	12.66	39.57

Sl. No.	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	Total for State
For Re	etail Sale activity					
A)	1/6th of annual requirement of inventory for previous year	2	2.25	1.98	2.89	7.12
B)	Receivables equivalent to 2 months average billing	2	1,389.86	1,972.98	1,432.51	4,795.35
C)	1/12th of power purchase expenses	1	568.82	723.23	585.07	1,877.12
D	Consumers Security Deposit		685.32	973.29	817.77	2,476.38
E)	Total Working capital (A+B-C-D)		137.98	278.43	32.56	448.97
F)	Rate of Interest		13.85%	13.85%	13.85%	13.85%
G)	Interest on Working capital		19.11	38.56	4.51	62.18
	Summary					
	For wheeling activity		14.53	12.38	12.66	39.57
	For Retail Sale activity		19.11	38.56	4.51	62.18
	Total Interest on working Capital		33.64	50.94	17.17	101.76
	Total Interest on working Capital admitted		33.64	50.94	17.17	101.76

#### **Interest on Consumer Security Deposits**

#### **Petitioners' Submission:**

5.81 Petitioners have claimed interest on consumer security deposit as per their Audited Accounts for FY 2017-18. East, West and Central DISCOMs have claimed Rs. 31.69 Crore, Rs. 54.50 Crore and Rs. 56.16 Crore respectively as against Rs. 55.79 Crore, Rs. 63.59 Crore and Rs. 52.89 Crore respectively admitted by the Commission in the Tariff Order for FY 2017-18.

# **Commission's Analysis on Consumer Security Deposit:**

- 5.82 As per the Regulation 31.9 of the MYT Regulations,2015 interest on consumer security deposit shall be considered at the rate specified by the Commission. In the Tariff Order for FY 2017-18, the Commission admitted the interest on consumer security deposit @ 6.75%.
- 5.83 The Commission has observed that the actual interest amount as per audited accounts of the DISCOMs is more than interest on consumer security deposit admitted in Retail Tariff Order for FY 2017-18 except in case of Central DISCOM where it is marginal lower than

admitted . Further, the Commission worked out the interest on average security deposit for FY 2017-18 at 6.75% prevailing RBI Bank Rate as on 1<sup>st</sup> April 2017, which is as follows:

Table 183: Interest on Security Deposit worked out by the Commission as per Regulation for FY 2017-18 (in Rs. Crore)

		***	G 1	TD 4 1 0
Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening Security Deposit	646.12	914.95	773.83	2334.90
Closing Security Deposit	724.51	1031.63	861.71	2617.86
Average Security Deposit	685.32	973.29	817.77	2476.38
Interest on Security deposit as per norms	46.26	65.70	55.20	167.16

5.84 From above, it can be observed that the Petitioner has paid higher amount of security deposit, except in case of East DISCOM as compared to interest on security deposit computed above as per the provision of the Regulations. Therefore, the Commission has decided to admit the interest amount on consumer security deposit as per the Audited Accounts of the DISCOMs. Summary of interest on consumer security deposit admitted in the Tariff Order, claimed in the True-up Petitions and admitted in this True up Order for FY 2017-18 is shown in table below:

Table 184: Interest on Consumer Security Deposit admitted for FY 2017-18 (Rs. Crore)

Particulars	East	West	Central	Total for
Faruculars	DISCOM	DISCOM	DISCOM	State
Admitted in tariff order for FY 2017-18	31.69	54.50	56.16	142.35
Claimed in true up Petition for FY 2017-18	55.79	63.59	52.89	172.27
As per Audited Accounts for FY 2017-18	55.79	63.59	52.89	172.27
Admitted in this true-up order	55.79	63.59	52.89	172.27

# **Return on Equity**

#### **Petitioners' Submission:**

5.85 Petitioners have claimed return on equity @ 16%. East, West and Central DISCOMs have claimed return on equity as Rs. 307.16 Crore, Rs. 174.41 Crore, Rs. 318.61 Crore respectively as against Rs. 219.05 Crore, Rs. 177.63 Crore, Rs. 302.14 Crore, respectively, admitted by the Commission in the Tariff Order for FY 2017-18.

# **Commission's Analysis on Return on Equity:**

5.86 As explained in section of Interest on Project Loans, the equity contribution has been

considered as 30% on the net GFA addition during FY 2017-18, if the actual equity deployed is more than 30% of the net GFA. Further, only that equity capital is required to be considered, which has been utilized for funding of the project. Accordingly, the Commission directed the Petitioners to submit the actual funding of the GFA addition for FY 2017-18. In reply, all the DISCOMs submitted the funding details for FY 2017-18. Accordingly, the actual equity deployed has been considered subject to equity addition being within 30% of the net GFA. Any equity in excess of the 30% of the net GFA has been considered as normative loan.

5.87 Closing equity of FY 2016-17 as admitted by the Commission in True-up Order of FY 2016-17 has been considered as opening value of equity for FY 2017-18. Further, the rate of return on equity has been considered as per the MYT Regulations @16%. The computation of return on equity as admitted is shown in the table below:

Table 185: Return on Equity admitted for FY 2017-18 (Rs. Crore)

S.		East	West	Central	Total for
No.	Particulars	DISCOM	DISCOM	DISCOM	State
1	Opening Equity identified with GFA (Closing Equity as per True-up of FY 2016-17)	1370.28	1026.15	1482.18	3,878.60
2	GFA Addition during the year	256.84	572.93	836.46	1,666.23
3	Consumer Deposit and Grants utilized during the year	234.91	517.45	394.06	1,146.42
4	Net GFA Addition during the year	21.93	55.48	442.40	519.81
5	30 % of the Net GFA addition	6.58	16.64	132.72	155.94
6	Actual Equity Addition	39.02	25.89	6.06	70.97
5	Net GFA considered as funded through equity (Min. of 5,6)	6.58	16.64	6.06	29.28
6	Closing Equity Considered for FY 2017-18	1376.86	1042.79	1614.90	4,034.55
7	Average Equity identified with GFA and considered for FY 2017-18	1373.57	1034.47	1548.54	3,956.57
8	RoE @16% admitted in True-up of FY 2017-18	219.77	165.52	247.77	633.05

# **Depreciation**

#### **Petitioners' Submission:**

- 5.88 The Petitioner have submitted that as per the Second Amendment to MPERC (Recovery of expenses and other charges for providing Electric Line or Plant used for the purpose of giving Supply) (Revisions-I) Regulations, 2009 (RG-31(I) of 2009), the manner of the recognition of asset created through consumer contribution as well as depreciation thereon has been elaborated. Further Accounting Standard 12, provides guidance on the asset created through government grant. Accordingly, as per provision of the MYT Regulation, 2015, DISCOM can charge depreciation on the full amount of asset and amortize the corresponding amount from grant to the P&L account. Therefore, treatment given by the DISCOM in the accounts is in line with the Regulation (RG-31) and prevailing Accounting Standards.
- 5.89 Further, the Petitioners have claimed Depreciation as charged in the books of the Petitioners for the Assets capitalized during the year and at the beginning of the year in consistent with the rates of depreciation specified in MYT Regulations, 2015 (except West DISCOM). Further, the West DISCOM adopted the rate of depreciation notified by the Commission in Regulation from the FY 2010-11 as per the clarification issued by the Ministry of Corporate Affairs vide general circular No 31/2011 dated 31st May 2011. Since, DISCOMs adopted depreciation rates specified in the Regulations only from FY 2010-11, a separate depreciation model was used to consider depreciation as per Regulation since FY 2006-07. Accordingly, the Petitioner's (West DISCOM) has considered the Depreciation for FY 2017-18.
- 5.90 Accordingly, the Petitioners have claimed net depreciation of Rs. 335.28 Crore, Rs. 244.33 Crore and Rs. 300.71 Crore for East, West and Central DISCOM respectively as against Rs. 116.50 Crore, Rs. 105.05 Crore and Rs. 159.54 Crore approved by the Commission in Tariff Order for FY 2017-18.

# Commission's analysis on depreciation claims:

- 5.91 The Commission in Regulation 32 of the MYT Regulations,2015 has specified the following methodology for computation of depreciation:
  - a. The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission

- b. The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.
- c. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
- d. Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- e. Depreciation shall be calculated annually based on 'straight line method' and at rates specified in Annexure II to these Regulations for the assets of the Distribution System declared in commercial operation after 31/03/2016.
  - Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets.
- 5.92 The Commission in its True-up Order for FY 2005-06 dated January 16, 2008 clarified that irrespective of the accounting practice followed by the utilities, the Commission will allow depreciation as per the depreciation rates specified in the Regulations.
- 5.93 The Commission has observed that claims against depreciation by the DISCOMs have not been duly substantiated by the detailed Fixed Asset registers in the format prescribed by the Commission to ensure that claims made are only against those assets which have not been fully depreciated. DISCOMs in the past also did not submit these details despite repetitive directions of the Commission. Accordingly, in order to reprimand the Petitioners, the Commission in truing up for FY 2017-18 has allowed the same depreciation rate as approved in Tariff Order for FY 2017-18 i.e., 2.44%, 2.81%, and 2.44% for East, West and Central DISCOMs respectively. Accordingly, considering GFA addition (net of consumer contribution and grants) as discussed in "Interest & Finance Charges" Section of this Order, the admitted depreciation for FY 2017-18 is as shown in the table below:

Table 186: Depreciation admitted by the Commission (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Opening GFA on 1 April, 2017 (Closing GFA net of consumer contribution & grants as per True-up of FY 2016-17)	5,216.72	3,458.39	6,606.10	1,5281.21
Add: GFA Added during the year	256.86	603.94	836.46	1,697.26

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Less: Deductions during the year	0.02	31.01	0.00	31.03
Less: Consumer Contribution and grants during the year	234.91	517.45	394.06	1,146.42
Net GFA addition during the year	21.93	55.48	442.40	519.81
Closing GFA on 31 March, 2018	5,238.65	3,513.87	7,048.50	1,5801.02
Average GFA	5,227.68	3,486.13	6,827.30	15,541.12
Rate of Depreciation	2.44%	2.81%	2.44%	2.52%
Depreciation admitted by the Commission	127.56	97.96	166.59	392.10

#### Other items of ARR

5.94 Apart from the above discussed components, there are certain other items which form part of the ARR. These include bad debts, other miscellaneous expenditure, any prior period expenses / credits, income tax and fringe benefit tax. These components are analysed in the following section:

#### Bad and doubtful debts

# **Petitioner's Submission:**

5.95 DISCOMs have claimed the bad and doubtful debts as shown in the table below:

Table 187: Bad Debts claimed by DISCOMs (Rs. Crore)

DISCOM	Bad Debst as per tariff order	Bad Debts as per audited accounts	Bad Debts claimed
East	2.00	14.75	14.75
West	2.00	237.00	237.00
Central	2.00	23.28	23.28

# Commission's Analysis on Bad and Doubtful debts:

- 5.96 The MYT Regulations, 2015, provide for admission of bad debts as amount actually written-off subject to the maximum of 1% of the revenue from sale of power. The Commission vide data gaps directed the DISCOMs to submit the details of bad debt claimed. In reply to the queries DISCOMs have submitted as below:
  - (a) East DISCOM submitted that amount written off various scheme of Bakaya Rashi Samadhan Yojna and Punar Sayojan Yojna is Rs 14.75 Crore.

- (b) West DISCOM submitted that the amount written off under various schemes of Bakaaya Rashi Samadhaan Yojna Rs. 19.54 Crore and amount written off against dues is Rs 217.46 Crore.
- (c) Central DISCOM submitted that the amount written off against various schemes Samadhan Yojana Rs. 23.28 Crore.
- 5.97 From above it can be observed that majority of the debt has been written off against a scheme or withdrawal / false demand, whereas some write off is against dues. Further, principal amount written off under any scheme or withdrawn / false demand as the same has been waived off at the Petitioners own behest.
- 5.98 With regards to write off against dues, it is observed that none of the DISCOMs have provided any details about the efforts made for the recovery of the dues or approval taken from the Board of Directors. Accordingly, the Commission has admitted Bad Debts against these dues. The admitted bad debts for FY 2017-18 are shown as follows:

Table 188: Bad Debts admitted by the Commission for FY 2017-18 (Rs. Crore)

Particulars	East	West	Central	Total for State
Debt written against scheme	14.75	19.54	23.28	57.57
Demand Withdrawn / false demand	0.00	0.00	0.00	0.00
Written off against dues	0.00	217.46	0.00	217.46
Total	14.75	237.00	23.28	275.03
Debt written off under consideration	0.00	217.46	0.00	217.46
1% of sales revenue	70.66	75.20	63.36	209.22
Admitted	0.00	75.20	0.00	75.20

# Any other expense

Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) Petitioners' Submission:

5.99 West DISCOM has claimed Rs. 0.53 Crore under Sundry expenses. DISCOMs claims under misc. losses & write-offs / sundry expenses / net prior period charges – (credits)/ extra ordinary items are shown in the table below:

Table 189: Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit)/ Extra Ordinary Items claimed by DISCOMs (Rs. Crore)

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Misc. Losses & Write-offs	0.00	0.00	0.00	0.00

Particulars	East	West	Central	Total for
Farticulars	DISCOM	DISCOM	DISCOM	State
Net Prior Period Charges / (Credit)	0.00	0.00	0.00	0.00
Extra Ordinary Items excluding Liability of wheeling charges towards MPPTCL written off	0.00	0.00	0.00	0.00
Sundry Expenses/Miscellaneous Losses	0.00	0.53	0.00	0.53
Total other expenses claimed in this true-up	0.00	0.53	0.00	0.53

# **Commission's Analysis**

- 5.100 The Commission directed DISCOMs to submit the details of misc. losses & write-offs / sundry expenses / net prior period charges (credits) claimed in the Petitions. East, West and Central DISCOMs submitted their responses.
- 5.101 Considering the above submissions of DISCOMs, the Commission has undertaken detailed head wise analysis of Misc. Losses & Write-offs / Sundry Expenses / Net Prior Period Charges / (Credit) as claimed in the Petition and provided in the Audited Accounts of the DISCOMs.
- 5.102 Accordingly, the Commission after verifying expenses from the audited accounts of the West DISCOM has admitted the miscellaneous losses & write-offs / sundry expenses / net prior period charges (credits) has admitted nil expenses considering the fact that the Commission has already allowed the expenses pertaining to addition in GFA in accordance to the Regulations.

#### **Revenue from Sale of Power**

#### **Petitioner's Submission:**

5.103 The Commission had admitted the projection of Sales as 15,278 MU, 18,426 MU and 16,021 MU at revenue of Rs. 9,419.45 Crore, Rs. 11,363.80 Crore and Rs. 10,278.76 Crore for East, West and Central DISCOMs, respectively in the Retail Supply Tariff order for FY 2017-18 dated 31st March, 2017. As against the same, the Sales filed are 14,102.73 MU, 18,621.23 MU and 13,276.41 MU at revenue of Rs. 8,332.88 Crore, Rs. 11,837.85 Crore and Rs. 8,595.08 Crore by East, West and Central DISCOMs, respectively.

# **Commission's Analysis**

5.104 The Petitionersin their Audited Accounts have booked the revenue from sale of power excluding subsidy and other income to the tune of Rs. 7,060.16 Crore, Rs. 7,519.88 Crore and Rs. 6,336.15 Crore for East, West and Central DISCOMs, respectively.

5.105 The Commission understands that the Petitioners had implemented retail tariffs as per the tariff order issued by the Commission on 31st March, 2017 and based on the same the following revenue has been booked in the audited accounts excluding subsidy and other income. Further, the Commission has also considered recoveries from theft/ malpractices of Rs.6.28 Crore for East DISCOMs as part of revenue from sale of power.

Table 190: Revenue from sale of power excluding subsidy and other income as per Audited Accounts

Particulars	East	West	Central	Total for
	DISCOM	DISCOM	DISCOM	State
Revenue from sale of power	7,066.44	7,519.88	6,336.15	20,922.47

- 5.106 Further, the Commission also recognizes that the Petitioners have received tariff subsidy from State Government other than the revenue from sale of power as reported in the audited balance sheets. DISCOMs have also received other income and non-tariff income during FY 2017-18 as booked in the Audited Accounts. Thus, in addition to the revenue from sale of power, the Commission has also considered the following revenue, as reported in audited accounts, for this true-up exercise and as discussed subsequently:
  - Non-Tariff Income
  - Subsidy received from State Govt.
  - Other income

#### Non-tariff income

5.107 In addition to the above, revenue from sale of power, the Non-Tariff Income has been considered separately as stated below for all the three DISCOMs as per their respective Audited Accounts:

Table 191: Break up of Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
1	Misc. charges from consumers (Inculding Supervision Charges)	86.96	76.13	24.47	187.56
2	Income from wheeling charges	0.34	7.65	51.07	59.06
3	Meter rent	48.28	64.40	39.08	151.76
	Total Non-tariff income	135.58	148.18	114.62	398.38

# **Subsidy from State Government**

5.108 The Petitioners Audited Accounts for FY 2017-18 reveal that tariff subsidy to the tune of Rs. 1,272.72 Crore, Rs.4,317.97 Crore and Rs. 2,258.93 Crore has been received from the Government of Madhya Pradesh by East, West and Central distribution companies respectively. Accordingly, the Commission has considered this amount as the income of the Petitioners, as it is a part of the revenue from sale of power to the subsidized consumers, which is shown as follows:

Table 192: Subsidy considered as per Audited Accounts (Rs. Crore)

Particulars	East DISCOM	West DISCOM		
Subsidy received from GoMP	1,272.72	4,317.97	2,258.93	7,849.62

#### Other Income

#### **Petitioners' Submission:**

5.109 The other income claimed by the Petitioners is mentioned in the table below.

Table 193: Other Income as submitted by the Petitioners (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.19	0.06
	Interest on FDRs/Investment	9.88	29.70	39.05
A	Sub-Total (A)	9.88	29.88	39.11
В	Other Non-Tariff Income			
	Delayed Payment Surcharge	0.00	206.68	679.08
	Interest & penal interest on advance to suppliers	11.91	0.00	2.52
	Interest from banks	0.00	0.00	0.35
	Utility charges	0.00	0.00	6.54
	Scrap sales	0.00	9.66	0.00
	Lease rent	0.00	0.00	0.28
	Income from staff recoveries	0.75	0.00	0.00
	Income from staff welfare activities	0.00	0.10	0.00
	Deferred income (consumer contribution)	112.05	127.09	125.21

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
	Misc services/receipts	31.12	11.88	45.61
	Profit on sale of stores	0.00	0.00	6.52
	Income from trading (other than electricity)	15.48	2.27	0.00
	Sale of Tender form	0.00	0.00	0.74
В	Sub-total (B)	171.31	357.68	866.85
С	Total other income (A+B)	181.19	387.56	905.96
D	Total other income (excluding DPS )	181.19	180.88	226.88

- 5.110 The Commission has not considered the Delayed Payment Surcharge as part of income of DISCOMs as per the Regulations as any additional interest on working capital for the delayed payment is also not considered by the Commission.
- 5.111 For West DISCOM the Commission has computed depreciation on the net asset addition after reducing grants and consumer contribution from the actual gross asset addition during the year. Therefore, the Commission has not considered the income booked towards the depreciation for assets created through consumer contribution and grants. However, for East and Central DISCOM as the proper details of the consumer consitribution and grants were not available, the Commission has considered the other income booked towards the depreciation for assets created through consumer contribution and grants.
- 5.112 The Commission has also not considered the waived off amount towards liability of wheeling charges towards MPPTCL in other income as this amount is not booked as expense in Intra-state transmission charges.
- 5.113 Accordingly, the other income as admitted by Commission is shown as follows:

Table 194: Other Income as Admitted by Commission (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
A	Income from Investment, Fixed & Call Deposits			
	Interest on Staff loans & advances	0.00	0.19	0.06
	Interest on FDRs/Investment	9.88	29.71	39.05
A	Sub-Total (A)	9.88	29.90	39.11
В	Delayed payment surcharge	262.23	206.68	679.08

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	
С	Other Non-tariff Income				
	Interest & penal interest on advance to suppliers	11.91	0.00	2.52	
	Interest from banks	0.00	0.00	0.35	
	Income from staff recoveries	0.75	0.00	0.00	
	Income from staff welfare activities	0.00	0.10	0.00	
	Deferred income (consumer contribution)	112.05	0.00	125.21	
	Misc services/receipts/ any other income	46.60	23.81	53.17	
	Profit on sale of stores	0.00	0.00	6.52	
С	Sub-total (C)	171.31	23.91	866.85	
D	Total Other Income (A+B+C)	443.42	260.49	905.96	
E	Total Other Income (D-B )	181.19	53.81	226.88	

- 5.114 Accordingly, the Commission admits the actual other income of Rs. 181.19 Crore, Rs 53.8 Crore, and Rs 226.88 Crore respectively for East, West and Central DISCOMs as per audited balance sheet excluding the components as discussed above.
- 5.115 Based on above discussion, the total revenue admitted by the Commission for the period April, 2017 to March, 2018 is mentioned in the table below:

Table 195: Total Revenue, Non-Tariff Income and subsidy admitted (Rs. Crore)

DISCOM	Revenue from sale of power	Non-tariff income	Revenue subsidies from GoMP	Other income (excluding DPS)	Total revenue income admitted for true-up
East	7,066.44	135.58	1,272.72	181.19	8,655.93
West	7,519.88	148.18	4,317.97	53.81	12,039.84
Central	6,336.15	114.62	2,258.93	226.88	8,936.58
Total	20,922.47	398.38	7,849.62	461.88	29,632.35

# Revenue Surplus / (Deficit) admitted

5.116 Based on the scrutiny of various cost components regarding revenue income and expenditures of DISCOMs, the Commission has considered the following surplus / (deficit) for the period April 2017 to March 2018 for recovery by the Licensee through retail tariffs in future years:

Table 196: Revenue Surplus/(Deficit) admitted in True-up of ARR for FY 2017-18 (Rs. Crore)

	East Dl	ISCOM	West D	ISCOM	Central 1	DISCOM	Total fo	or State
Particulars	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
INCOME								
Tariff Income	7,060.16	7,066.44	7,519.88	7,519.88	6,336.15	6,336.15	20,916.19	20,922.47
Non-tariff income		135.58		148.18		114.62		398.38
Net other income (excluding	316.77	181.19	144.32	53.81	342.26	226.88	803.35	461.88
Delayed Payment Surcharge)		181.19		33.81		220.88		401.88
Subsidy	1,272.72	1,272.72	4,317.97	4,317.97	2,258.93	2,258.93	7,849.62	7,849.62
Total Income (A)	8,649.65	8,655.93	11,982.17	12,039.84	8,937.34	8,936.58	29,569.16	29,632.35
EXPENSES								
Power Purchase								
Power Purchase Cost	7,148.21	6,825.88	8,936.36	8,678.71	7,709.74	7,020.89	23,794.31	22,525.48
MP Transco Charges	853.65	853.65	1,033.83	1,033.83	860.31	860.31	2,747.79	2,747.79
Total Power Purchase (Incl.	8,001.86	7,679.53	9,970.19	9,712.54	8,570.05	7,881.20	26,542.10	25,273.27
Transmission) (B)	0,001.00	7,077.55	7,770.17	),/12.5 <del>4</del>	0,570.05	7,001.20	20,542.10	23,213.21
O&M Expenses (Net of								
Capitalisation)								
Employee Expenses	449.66	341.36	415.00	415.00	618.72	370.00	1,483.38	1,126.36
DA	284.04	284.04	238.16	238.16	230.77	230.77	752.97	752.97
Terminal Benefits	88.78	50.17	65.86	67.79	278.36	67.30	433.00	185.26
Arrears		136.42	12.21	12.21	-	12.10	12.21	160.73
A&G Expenses	218.40	206.58	138.00	138.00	129.15	103.00	485.55	447.58
R&M Expenses	168.84	168.84	136.32	136.32	145.58	199.37	450.74	504.53
Other expenses (including Taxes & MPERC Fees)	0.50	2.28	14.73	2.34	4.40	3.76	19.63	8.38
O&M Expenses Capitalised		(38.96)	-	(32.11)	-	(27.75)	-	(98.82)
Provision for Terminal Benefit	-	40.00	-	40.00	-	40.00	-	120.00
Total O&M (C)	1,210.22	1,190.73	1,020.28	1,017.71	1,406.98	998.54	3,637.48	3,206.98
Other Expenses								
Depreciation	335.28	127.56	244.33	97.96	300.71	166.59	880.32	392.10
Interest & Financing Charges on Project Loans	150.08	37.76	44.51	18.74	6.37	185.02	200.96	241.51
Interest and Finance Charges on working capital loans	72.61	33.64	37.73	50.94	35.69	17.17	146.03	101.76
Interest on Consumer Security Deposit	55.79	55.79	63.59	63.59	52.89	52.89	172.27	172.27
Return on Equity	307.16	219.77	174.41	165.52	318.61	247.77	800.18	633.05
Bad & Doubtful Debts	14.75	-	237.00	75.20	23.28	-	275.03	75.20
Any Other Expense	(122.92)	_	0.52	-	(27.75)	_	(150.15)	-
Total Other Expenses (D)	812.75	474.51	802.09	471.95	709.80	669.43	2,324.64	1,615.89
Total Expenses $E = (B + C + D)$	10,024.83	9,344.78	11,792.56	11,202.19	10,686.83	9,549.17	32,504.22	30,096.15
Revenue Gap F = (E-A)	1,375.18	688.85	(189.61)	(837.65)	1,749.49	612.59	2,935.06	463.80
Add: Impact of True-up of DISCOMs ARR for FY 2006-07 and APTEL Order for FY 2007-08 to FY 2011-12 (G)	840.40	840.40	687.98	687.98	864.09	864.09	2,392.47	2,392.47
Gross Expenses $H = (E + G)$	10,865.23	10,185.18	12,480.54	11,890.17	11,550.92	10,413.26	34,896.69	32,488.62
Total Revenue Gap I = (H - A)	2,215.58	1,529.25	498.38	(149.67)	2,613.58	1,476.68	5,327.54	2,856.27

# A6: PUBLIC OBJECTIONS AND COMMENTS ON LICENSEES' PETITION FOR FY 2014-15 TO 2017-18

Date of publication of public notice in newspapers: 23<sup>rd</sup> November, 2019

Last date for receiving the objections/ suggestions/ comments: 11th December, 2019

Date of public hearing: 11th December, 2019

In response to the public notices issued, 8 Nos. of objections/ suggestions/ comments was received against the Petitions filed by the West, East and Central DISCOMs

Suggestions from the objectors and response of the DISCOMs thereon are summarized in the following paragraphs.

# ISSUE No. 1: Extension of Timeline for filing the Comments/Objections

# **Issue Raised by Objectors**

Many stakeholders requested the Commission to extend the timeline for filing of the Comments/Objections for the True-up Petitions for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18.

# **Response from DISCOM**

The Petitioner submitted that the Commission may look into this matter.

#### **Commission's Views**

Considering the suggestion of the stakeholders, the Commission extended the timelines for filing the Comments/ Objections by 20 days upto 31<sup>st</sup> December 2019.

# ISSUE No. 2: Rejection of Petition on account of delayed filing

#### **Issue Raised by Stakeholders**

The Petitions should not be accepted as the Petitioners have not submitted the Petition in accordance to the timelines provided in the MYT Regulations, 2012 and 2015 and also not submitted any reason for the same.

Further, another Stakeholder citied Para 57 of the Hon'ble APTEL Judgment dated 11<sup>th</sup> November, 2011 in OP No.1 of 2011 for rejecting the Petition on the grounds of delayed filing.

# **Response from DISCOM**

The True-up orders of FY 2008-09, FY 2009,10, FY 2010-11 and FY 2011-12 were under litigation before Hon'ble APTEL in regard to methodology of computation of Power purchase Cost. In compliance of Directives of APTEL's Judgment dated 15<sup>th</sup> September, 2015, the Commission vide order dated 12.01.2017 allowed additional power purchase cost for the above years. The true-up of FY 2013-14 was filed on 13<sup>th</sup> June, 2016 and was under the consideration of the Commission, which was necessary for filing of the Petition of FY 2014-15. Further, the Commission is duly empowered to condone any such delay.

Moreover, preparation and filing of Petition for true-up for a particular financial year basically rests on the Truing-up order passed in the previous years as the approved closing figures of GFA, liabilities and over/under expenditure has to be considered as respective carry forwarded opening balances and other similar over/under expenditure.

Although, issue of the delayed filing of the Petition has been raised, stakeholder has not indicated any prejudice caused to him due to such delayed filing. Further, the Commission always approves the prudent cost only in accordance with the Regulations, so there should be no grievance to any persons in the matter.

Further, the Judicial pronouncement quoted by the stakeholder is not applicable in the present circumstance of the case. Further, directions of the Hon'ble APTEL have been quoted out of context and such direction was issued to protect the interest of the DISCOM by allowing speedy recovery of the prudent cost from consumers.

#### **Commission's Views**

The Commission has noted the submission of the stakeholders and agrees that there has been substantial delay in filing of the true-up Petitions by the Licensees. Therefore, the Commission has not allowed any carrying cost on the Revenue Gap admitted on True up of FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18.

#### ISSUE No. 3: Revenue from Sale

#### **Issue Raised by Objectors**

The Petitioners in the Petitions for four years have indicated loss of Rs. 9,000 Crore due to non-realization of revenue. As per Hon'ble APTEL's Judgment, the burden of loss should not be passed on to the consumers. Hence, the loss due to non-realization of revenue should not be considered.

Further, the Petitioners in Petition has shown reduction of Rs.1,393.80 Crore, Rs. 1,399.84 Crore, Rs. 2,528.79 Crore, Rs. 2,296.20 Crore from Sale of electricity for FY 2014-15, FY 2015-16, FY

2016-17 and FY 2017-18, respectively, and also mentioned that reason for low revenue has been mentioned earlier. However, there is no mention of reason for reduction of revenue anywhere in the Petition. Beside this, the State energy account submitted by the Petitioners clearly shows that many industries in the State have been allowed to procure power from Open Access, which contribute to average monthly electricity consumption of 5 to 10 Crore units, which has resulted in reduction of revenue for the State. Further, there is no mention of revenue recovered from CSS and statutory Electricity Duty in the Petition.

The Petitioners have considered only revenue from sale of power and have not not considered the miscellaneous revenue such as Meter rent, Misc. revenue/Recovery towards theft, unauthorized use of electricity, etc.

The Petitioners have mentioned in the Petition that the revenue received towards theft and unauthorized energy has not been considered and working of the revenue has been done on the basis of the normative losses. Further, the contention of the Petitioners is totally misconceived as the energy was being utilized by miscreants by adopting to theft/malpractice and some have been detected and the unbilled energy has been billed and corresponding revenue has been realized. Therefore, in all fairness these amounts are required to be added in revenue received from energy sales. Thus, it is evident that the Petitioners have not submitted actual figures in the Petition.

Further, the Petitioners has mentioned in the Petition that the energy sale and corresponding revenue received from sale of electricity as considered by the Commission in actual has been less and therefore deficit of Rs 24,888.90 Crore be allowed in the true up, however, the contention of the Petitioners are misconceived.

The Stakeholders requested the Commission that in case less revenue from sales is being considered to be allowed in the truing up then

- (a) Restrict power purchase cost to the corresponding to sale and losses allowed by the Commission only;
- (b) Account for the surplus energy sold in open market and its cost;
- (c) In case excess energy could not be sold suitable revenue be deemed to be received on the rates as per Power Exchange rates as surplus situation has developed due to defective demand forecast by the Petitioners and PPAs executed without proper forecast for which consumers should not be burdened.

# **Response from DISCOM**

The Petitioners have filed the True-up Petitions of ARR for FY 2014-15 and FY 2015-16 as per the principles laid down in the MYT Regulations, 2012. Similarly, the true-up Petitions for FY 2016-17 and FY 2017-18 has been submitted as per MYT Regulations, 2015. Further, each component of ARR claimed by the DISCOM has been explained in the Petition.

With regards to variation of sales, the ARRs are prepared based on the projections and norms provided by the Commission in its MYT Regulations and the Commission admits the same as per normative parameters only. Therefore, the MOD considered in the ARR is theoretical, whereas during actual operating conditions the demand incident is an uncontrollable parameter and varies abruptly during the peak of Rabi seasons due to which there may be variation in cost of power purchase and hence, other associated costs. Hence, the costs reflected in the Truing up exercise are based on actual expenses incurred by the Licensees on actual operating conditions.

Beside this, True-up Petition of ARR for FY 2014-15 to FY 2017-18 has been filed before the Commission as per provisions of the applicable MYT Regulations and based on the audited accounts of the respective year.

Further, the income earned from metering charges has been duly considered in the Non-Tariff Income/Other Income (Schedule 2 of true up format).

#### **Commission's Views**

The Commission after undertaking detailed prudence check of the revenue from sale of power submitted by the DISCOMs has admitted revenue from sale of power as per the audited accounts of the respective years. Further, the Commission has also considered revenue earned by the DISCOMs from Non-Tariff Income, Other Income and Subsidy received from the State Government for arriving at the total revenue realized by the DISCOMs for the True-up of of FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. Details of the Revenue from Sale of Power, Other Income and Non-Tariff Income as admitted has been dealt in respective chapters of this order.

#### ISSUE No. 4: Power purchase Cost

# **Issue Raised by Objectors**

The Petitioner has claimed Rs. 3976.78 Crore for FY 2014-15 and Rs. 3,549.32 Crore for FY 2015-16 Crore on account of increase in Power Purchase Cost. Further, the Petitioners in Table 9 of the Petition has only provided details of the actual electricity purchase expenses without providing generation plant-wise details of actual expenditure against approved retail tariff order for FY 2014-

15 and FY 2015-16. Moreover, the expense provided has been exaggerated and power purchased at high rates.

For FY 2016-17, the Petitioner has claimed Rs. 26,479.31 Crore on account of purchase of power of 61,226 MU, which is 960 MU less than the approved retail tariff order. Then also the Petitioners have claimed Rs, 4,306.9 Crore more than the approved power purchase cost. In addition to this, Rs.3,414.69 Crore in additional cost has been claimed, which is unacceptable.

For FY 2017-18, the Petitioner has claimed Rs. 27,797.89 Crore on account of purchase of power of 66,126 MU, which is more than the approved retail tariff order. In addition to this, Rs.2,693.66 Crore in additional cost has been claimed, which is unacceptable.

For four year true-up, the DISCOMs have claimed a deficit amount of Rs. 13,634.74 Crore in total against the Power Purchase cost.

Further, the stakeholders provided following details to support their claims: -

- (a) The Petitioners have again claimed FCA under this Petition, which has been already recovered by the Petitioners from the consumers as approved by the Commission from time to time. Therefore, claim of FCA amount under the power purchase cost is factually incorrect.
- (b) The Petitioners have surplus high-cost electricity then also Petitioners have purchased 24.3, 7.07 and 4.44 Crore Units at cost of Rs. 246, Rs. 6.33 and Rs. 84.51 Crore from Torrent Power, at average rate of Rs. 6.70, Rs.19.03 and Rs 19 per unit for FY 2014-15, FY 2015-16 and FY 2016-17, respectively. Moreover, this has been purchased during the months when the State had surplus power. Similarly, for J.P Power Unit 1& 2, 211.1 and 92.5 Crore Units at cost of Rs. 1,290 and Rs. 831.42 Crore for FY 2014-15 and FY 2015-16 have been purchased and given to other States in form of banking of power.

Further, the Petitioners have stated that energy has been sold outside the State. However, the Petitioners have not indicated to whom this energy was sold and method of sale resorted to. As per MPERC Power Purchase Procurement Regulations, 2004, the Petitioners are under obligation to sell power through competitive bidding in accordance with the above Regulations and also obtain approval of the Commission.

(c) The Petitioners in the Petition have mentioned that, in order to meet the requirement of Rabi season requirement, Petitioners have purchased costly power. However, MPPMCL did not schedule cheaper power available from NTPC Tap Vidhyut Grah Vindhyachal Unit

- 1 to 5, which was available to Petitioners at Rs.1.75 and Rs.1.50 per unit, and instead scheduled and supplied costly power in Rabi season. Further, the issue of not scheduling power and production affected on account of it has been raised by NTPC in WRPC meeting held on 3<sup>rd</sup> March, 2015.
- (d) The Petitioners have purchased 5.22 and 1.548 Crore Units at cost of Rs. 34.35 Crore and Rs. 22.89 Crore from the BLA Power Plant and Gadarwara, which accounts to total per unit cost of Rs 6.57 per unit and Rs. 14.80 per unit for FY 2015-16 and FY 2016-17. Further, the Petitioners have breached the Commission's order dated 22<sup>nd</sup> May, 2015 and 25<sup>th</sup> July, 2015 in which the Commission has directed the Petitioners to purchase power from BLA Power as per the allocated coal mines and its availability to generate electricity from this coal mine until new fuel supply contract is available to BLA Power. In addition, the Petitioners have purchased power for whole year from them and also paid full fixed charges of Rs. 34.35 and Rs. 22.89 Crore for FY 2015-16 and FY 2016-17, respectively.
- (e) The Petitioners have purchased 201.2, 199.32 190.3 and 177.35 Crore Units at cost of Rs. 713.57 Crore, Rs. 622.65 Crore, Rs. 583.32 Crore and Rs. 553.95 Crore for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18, respectively, from Lanco Amarkantak Power plant through PTC Power Trading Company. Further, the power was purchased at Rs. 3.12 per unit, as the original power purchase agreement concluded on 30<sup>th</sup> May, 2005 and after that the power purchase cost shall be Rs. 2.20 per unit, which is also not line with the power purchase agreement dated 26<sup>th</sup> November, 2012. Further, from letter dated 10<sup>th</sup> September, 2015 by MPPMCL, it can be observed that the fixed charges of Lanco Amarkantak Power plant were automatically amended, which is mentioned in the bill for each month issued by the Lanco Amarkantak. It appears that the Petitioners haes not brought to the notice of the Commission that it will amend the above annual capacity.
- (f) The Petitioner has mentioned that 29 Crore units at cost of Rs 168.34 Crore has been purchased from Badarpur Power Plant, which amounts to per unit cost of Rs.5.79 per unit. However, the Petitioners haes surrendered this power on grounds of costly power for which no approval has been taken from the Commission.
- (g) The Petitioners have purchased 2.391 and 44.03 Crore Units at cost of Rs. 131.73 Crore and Rs. 247.48 Crore from Jhabua Power, which amounts to per unit cost of Rs. 5.09 and Rs. 5.62 per unit for FY 2016-17 and FY 2017-18, respectively. The construction of the plant was supposed to be completed by 3<sup>rd</sup> May, 2016 and commercial production from January, 2017. However, due to incomplete construction of railway lines for coal transportation the plant generation capacity got reduced, but the Petitioners are paying fixed charges. Therefore, it is requested to the Commission to consider the plant as incomplete and be excluded from commercial production.

- (h) The Petitioners in the Petition have claimed Rs. 606.81 Crore for FY 2014-15, Rs. 787.08 Crore for FY 2015-16, Rs. 1,218.36 Crore for FY 2016-17 and Rs.1,849.27 Crore for FY 2017-18 on account of pervious Supplementary Bills, Rs. 37.11 Crore on account of Supplementary Bills without any description and Rs. 212.05 Crore and Rs. 454.76 Crore on account of Other Cost for FY 2016-17 and FY 2017-18. Further, no explanation has been provided by the Petitioners. However, the Petitioners claim that MOD principle has been followed by them for scheduling of power. Therefore, the Commission should undertake in-depth analysis on recovery of amounts through Supplementary Bills, so that sanctity of the MOD principle can be maintained.
- (i) Beside this, the power purchased through PTC Power Trading Company has not even approved by the Commission. Therefore, it is completely illegal. Further, Petitioners have breached order dated 11<sup>th</sup> April, 2017 of Hon'ble Supreme Court in which the sanctity of power purchase contract of Tata Power/Adani Power has been asked to be maintained.
- (j) The Petitioner has mentioned that 111.74, 96.5, 239.13 and 385.5 Crore units at cost of Rs. Rs. 291.08 Crore, Rs. 750.57 Crore, Rs. 198.47 Crore, and Rs.1,213.90 Crore, respectively, have been sold under Open Access throughout the year, which amounts to per unit cost of Rs. 2.60 per unit, Rs. 2.05 per unit, Rs. 3.14 per unit and Rs. 3.15 per unit for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18, respectively.
  - The Petitioners have not provided any reason for the deficit in selling of surplus electricity in Open Access as compared with the approved retail tariff order. Moreover, deficit in selling of surplus electricity has been passed on the consumers.
- (k) For the month of April, 2016 to September, 2016, very small amount of the scheduling / purchasing has been made from thermal power plants of the MP Power Generating Company, which is due to deliberately overstating the cost of coal. For this reason, the scheduling of MP Generating Company did not take place on account of MOD Principles and other relatively expensive power generating plants were scheduled. Therefore, the Commission should investigate the matters as its puts burden on the general consumer.

#### Response from DISCOM

The FCA Charges are recovered from/paid to the consumers based on the actual fuel cost passed to DISCOMs by the Generators. The FCA charge considers any variation in approved energy charges with respect to actual energy charges. Further, the FCA cost is trued up and passed to consumers with approval of the Commission.

Regarding procuring of costly power from Torrent Power Ahmedabad and J.P. Bina Power and selling in the form of Banking, the Petitioner submitted that a Power Sale Agreement (PSA) was signed between M/s PTC India Ltd and Power Trading Co. Ltd on 16<sup>th</sup> January, 2007 for supply of 50 to 100 MW Power from Torrent Sugen for period of 25 years. Moreover, reason for non-consideration of Torrent Sugen by the Commission was due to non-scheduling of the plant during the year. In addition to this, Petitioners submitted that as per condition of PPA, MPPMCL has to pay Fixed charges as well as variable charges for gas under TOP / SOP obligation. Therefore, in order to fulfil its obligations under the PPA and to safeguard the interest of the consumers of the State a small portion of power was scheduled from M/s Torrent Power based on MoD principles as and when required in peak load session only. In the same manner, power from M/s JP Bina was scheduled only on MoD basis as and when required.

Regarding procuring of costly power from BLA, the Petitioner submitted that MPPMCL scheduled power generated by M/s BLA Power using blended coal, i.e., coal blended with pet coke. Blended coal is mentioned in the definition of "Fuel" in the PPA. Further, such power, generated by using blended coal, was scheduled based on MoD principle only. Further, MPPMCL has always acted in consonance with the Tariff Order dated 22.5.2015 issued by the Commission. Furthermore, MPPMCL has always scheduled power based only on MoD principle and in the event such power was not scheduled from M/s BLA Power, then the next higher generator in the MoD would have been scheduled causing additional financial burden. This would have been against public interest. Therefore, power from M/s BLA Power has only been scheduled when they fit in MoD and stopped when they fell out of MoD. Moreover, the power has been scheduled in accordance with the Tariff Order dated 22<sup>nd</sup> May, 2015 (which was applicable till 31<sup>st</sup> March, 2016) determined by the Commission and in accordance with relevant MYT Regulations, 2015 (proviso to Regulation 7.11). MPMCL continued to schedule power from M/S BLA till March 2017 on MoD principle and continued to pay variable charges at ceiling @Rs. 2.18/kWh determined by the Commission.

As regards procurement of expensive power from Torrent Power Ahmedabad and selling to other states in the form of banking, the Petitioner submits that MPPMCL imported energy through banking arrangement to cater the system peak demand of Rabi season months from November to February and exported the energy during lean demand period, i.e., rainy and summer season months from February to September. Further, MPPMCL banks energy from MPPMCL Pool power and not from the specific source, hence, the energy taken from Torrent may not be linked to banking arrangement, moreover, MPPMCL carries out banking arrangement on Annual Plan basis, which may be different in real time due to scanty rains or coal shortages, etc. Summarily in FY 2015-16 the specific source of J P Bina cannot be linked to Banking arrangement.

Further, MPPMCL provides schedule of power looking to system requirement, considering MoD. In Feb 2016, MPPMCL entered into three banking arrangements with West Bengal, Chhattisgarh

and Punjab, the net supply was being availed during system demand period, i.e., 07:00 to 17:00 Hours and was being returned in off peak.

As regards not scheduling of NTPC Tap Vidhyut Grah, Vindhyachal, the Petitioner submitted that as per Declared Capacity the schedule was given to NTPC Vindhyanchal Unit # 1 to 5. Further, the information regarding purchase of power from various generators has been shown in the true-up Petition FY 2015-16 in Table no. 9.

As regards procurement of Lanco Amarkantak Power through PTC, the Petitioner submitted that a Settlement Agreement between the MPPMCL, PTC and M/s Lanco Amarkantak Pvt Ltd was signed on 16th October, 2012, to resolve all the disputes for ensuring sale of 300 MW power from M/s Lanco Amarkantak Pvt Ltd to MPPMCL through M/s PTC on an agreed Capital Cost of Rs. 1,236.40 Crore and at the tariff to be determined by MPERC. Hence, in accordance with above Settlement Agreement, parties agreed to remove capping rate of Rs 2.20 per unit as per rate fixed under PPA dated 30<sup>th</sup> May, 2005. Moreover, the Commission vide its order dated 1<sup>st</sup> December, 2012 approved the power procurement process including the Tripartite Agreement along with PPA and PSA for a term of 25 years. Further, the Petitioner in accordance with Settlement Agreement dated 16th October, 2012 and in accordance to the CERC (Terms and Conditions of Tariff) Regulations, 2014, MPPMCL filed a Petition (35/2016) before MPERC, for determination of the annual fixed cost and energy charges for FY 2014 to 2019. However, the Commission vide its order dated 23<sup>rd</sup> August, 2017 in Petition No. 35/2016 declined to determine the tariff for the Control Period from Y 2014-19, holding that it is beyond its jurisdiction. Therefore, the Petitioner has filled an appeal before Hon'ble APTEL, challenging the above order, which is pending before Hon'ble APTEL. Meanwhile invoices received from PTC for power purchase for FY 2016-17 was provisionally verified on mutually agreed basis, which was also allowed by the Commission in ARR and Retail Tariff Supply Order for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18.

As regards the Hon'ble Supreme Court directions for Tata Power/Adani Power, the Petitioner submitted that electricity rate of M/s Lanco Amarkantak Pvt Ltd has been derived in accordance with Settlement Agreement dated 16<sup>th</sup> October, 2012 and was signed between the MPPMCL, PTC & M/s Lanco Amarkantak Pvt Ltd and in accordance to the CERC (Terms and Conditions of Tariff) Regulations, 2014.

As regards procurement of power from Badarpur Plant, the Petitioner submitted that every year demand is increasing in Rabi season, i.e., from October to February, which requires projection and planning to meet out the Maximum demand in the season. Accordingly, CEA was requested to allocate power to MPPMCL from unallocated share, that is how MPPMCL got the allocation from Badarpur in October, 2014. After scheduling power from Badarpur, energy bills were received indicating very high rate, therefore MPPMCL in the month of December, 2014 requested to surrender this power allocation which was cancelled in December, 2014. Further, it is

responsibility of MPPMCL to provide power to all the consumers round the clock, accordingly various decisions are taken to meet the demand, which are subsequently approved by Management and by the Commission.

As regards fixed charges of Lanco Amarkantak Power, the Petitioner submitted that vide letter dated 10<sup>th</sup> September, 2015, MPPMCL informed to PTC that with the issuance of CERC (Terms and Conditions of Tariff) Regulations, 2014, it has been observed that capacity charge payable from April 2014 onwards is less than the tariff approved by the Commission vide order dated 26<sup>th</sup> December, 2012. Further, the above-mentioned change in the yearly capacity has been brought to the Commission's cognizance through Petition No. 35/2016 for determination of the annual fixed cost and energy charges for FY 2014-19.

The supplementary bills are raised by the Power Generators to MPPMCL, which is passed to DISCOMs, for the power supplied during the previous years. The supplementary bills of generatorwise and related year-wise data and the detailed computation of year-wise supplementary cost claimed in true up Petition for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18 has been submitted to the Commission.

The surplus energy available after meeting the demand of the DISCOM are traded at Power Exchanges in real time. Accordingly, the power generating stations are scheduled as per the MoD principle to meet the energy demand of the DISCOMs. However, there is variation in actual revenue earned from the sale of surplus power w.r.t amount approved in Tariff Order. In addition to this, MPPMCL sells contingency surplus energy through Exchange with rate above variable charges of on bar plant. Moreover, the rate quoted by the Commission are based on previous year data, which cannot be applicable on current scenario.

The Petitioner has claimed the power purchase cost after deducting the energy charges, over and above the normative loss approved by the Commission.

The Fixed charges are to be paid to generators irrespective of scheduling the energy from the power stations. Therefore, it is requested to the Commission to consider the power purchase cost as claimed in true up Petition.

As regards termination of high cost PPAs, Petitioner submitted that the purchase from central generating stations and IPPs is based on the long-term power purchase agreement and as per these PPA's fixed charge is an obligation that is to be paid, which cannot be avoided. Moreover, MPPMCL is exploring ways to sell power through PTC on short-term and medium-term bidding to reduce idle capacity charge.

Further, MPPMCL is surrendering costly power of NTPC Solapur and NTPC Khargaon STPS allocated to MP State from MoP, Gol. In addition to this, the costly power of DVC Power Stations, i.e., MTPS, CTPS and DSTPS under the PPA dated 3<sup>rd</sup> March, 2006 and 14<sup>th</sup> May, 2007 has been surrendered by MPPMCL in May, 2017 and April, 2018.

As regards sale of power outside State, surplus power and banking of power, the Petitioner has submitted all the details of actual month-wise sale of surplus energy along with revenue earned from it to the Commission. As regards the banking of energy, MPPMCL will supply power to other utilities/traders in surplus situation and draws the power when it is required. As the banking of energy is carried out on energy terms, there will be no financial settlements involved. The cost incurred for banking of energy is included in MPPMCL cost, which was already submitted to the Commission.

Further, the Petitioner submitted that sale of surplus energy is done to Energy Exchanges (IEX), and MPIDC. The Petitioner clarified that surplus energy trade is in accordance with the MPERC Regulations.

As regards energy purchase at higher rate and energy sale at lower rate, the Petitioner submitted that during the peak hours to meet the demand costliest power was procured, and during the offpeak hours the same power has been sold through Power Exchanges in real time.

#### **Commission's Views**

The Commission considering the submissions made by the stakeholders and view taken by the Commission in order for True Up of FY 2013-14. The Commission has not considered the cost of power purchase from M/s Torrent Power for FY 2014-15 to FY 2017-18. Further, the Commission in line with the view taken in retail tariff order for FY 2016-17 and FY 2017-18 has not considered the power purchase cost for the power purchased from BLA Power.

Also, the Commission has admitted the power purchase cost towards the normative power purchase requirement computed considering the admitted normative sales grossed up with the allowable loss levels as per the provisions of the Regulations. The detailed methodology adopted by the Commission for admittance of power purchase cost has been detailed in the respective chapter of this order.

# ISSUE No. 5: O&M Expenditure, Interest & Finance charges, Depreciation and Return on Equity

# **Issue Raised by Objectors**

All the three DISCOMs are not declaring any dividend to their shareholders for last several years. RoE recovered from the Power Consumers are to be utilized to only pay the dividend to shareholders of Power DISCOMs, but the Petitioners are not paying the dividends.

The Petitioner should return all the money along with interest, received from consumers in the name of RoE, because this money cannot be adjusted against any losses.

Further, the Petitioners have claimed ROE as per MYT Regulations amounting to Rs 2,790.46 Crore. Therefore, the stakeholder requested the Commission to defer the revenue gap proposed by the DISCOMs in true up Petitions as it is quite high, for the interest of consumers of the State and looking into the present condition of the State. Otherwise, abnormal rise in tariff will affect the industries in the State.

The Stakeholder requested the Commission that a huge amount is allowed towards depreciation and this amount should be kept for replacement of equipments, etc. Beside this, the stakeholders requested that the Commission should not allow the deprecation on the assets handed over by the consumers as well as by the developer of colony. Moreover, the provision of Rs 3,155.58 Crore seems to be very high and needs to be audited by the experts.

The Stakeholders suggested that the Operation and Maintance cost should be allowed as per actual. Similarly, the interest and finance charges should be allowed only on the amount actually paid during this period. Further, it must be audited by the experts of Commission before allowing the above amount in up Petitions.

#### Response from DISCOM

The Petitioners have claimed O&M expenditure, Interest & Finance charges, depreciation and RoE in accordance with the applicable MYT Regulations.

#### **Commission's Views**

The Commission has allowed Return on Equity, Interest on Loan in accordance to the provisions of the MYT Regulations, which has been appropriately dealt in relevant section of this order. However, considering the non-submission of Fixed Asset Register in accordance to the format prescribed by the Commission, Depreciation has been allowed at the same rate as allowed in Retail Tariff Order for respective years.

Further, the Commission has considered the lesser of the actual O&M expenses as per the audited accounts vis-a-vis normative O&M expenses in totality.

# ISSUE No. 6: Payment of DPS by the DISCOMS

#### **Issue Raised by Stakeholders**

Income from Delayed Payment Surcharge to be considered as part of other income, which shall result into reduction of Revenue Gap.

# **Response from DISCOM**

The delayed payment surcharge have been considered in the Petitions in accordance with the MYT Regulations, 2015, as reproduced below:

"41.2 The delayed payment surcharge shall not be considered as income for the purpose of determination of gap between Aggregate Revenue Requirement and tariff & other income."

# **Commission's Views**

The Commission has not considered Delayed Payment Surcharge as part of other income as per the provisions of the MYT Regulations.

#### ISSUE No. 7: Bad Debts and doubtful debts

#### **Issue Raised by Stakeholders**

The Petitioners have claimed Rs 307.94 Crore, Rs. 286.94 Crore, Rs.536.86 Crore and Rs.269.03 Crore for bad debts against the tariff order, whereas the Commission has approved Rs. 6 Crore for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. Further, the Petitioners have not submitted any documents supporting the claim. Therefore, the amount claimed against bad debts should be disallowed.

Further, the proposed bad and doubtful debts amounting to Rs 1,382.76 Crore may also have surcharge and waive off amount due to various schemes. Therefore, the Commission should deeply go through the records before allowing any amount. In addition to this, the Commission should also direct DISCOM to initiate action against defaulter and officers. Moreover, it has been observed that the claim of the DISCOMs for provision of bad and doubtful debts is very much on higher side when compared to the meager amounts actually written off in the past.

Furthermore, stakeholder submitted that the Petitioner have been vested with powers under Dues Recovery Act, 1961 and incompetency of the Petitioners to recover the dues from the defaulters

cannot be allowed to be recovered from the paying consumers by allowing the same in truing-up exercise. Moreover, the Petitioners have not stated any reasons for converting the legitimate dues as bad debts and its failure to recover the heavy dues from defaulters.

# **Response from DISCOM**

The MYT Regulations provide for the bad and doubtful debt and same has been claimed as per actuals written off. Further, the Commission considers the claim of the Petitioners only after prudence check.

# **Commission's Views**

The Commission has not considered any bad debt towards demand withdrawal or any amount waived off under the government schemes. Further details of the approach adopted for admittance of bad and doubtful debt has been appropriately dealt in relevant section of this order.

# ISSUE No. 8: Allocation of T&D Losses to HV-3.4 Category

#### **Issue Raised by Stakeholders**

The West DISCOM's Distribution Losses are very less as compared to the other two DISCOMs, but the burden of which is equally shared by all the consumers, which is incorrect. Further, the losses occurring specifically from power intensive industries are as low as 2.05% to 3%. Therefore, burden of other consumers should not be passed on to the Power Intensive consumers.

# **Response from DISCOM**

The Petition filed by the Petitioners pertains to the true-up of ARR for FY 2014-15 to FY 2017-18. Therefore, issue of determination of the tariff of any individual consumer category is not the subject matter of these Petitions.

# **Commission's Views**

The Commission has observed that the issue raised by the Stakeholder is not related to the subject matter of the present True-up Petition.

ISSUE No. 9: Impact of UDAY

#### **Issue Raised by Stakeholders**

Grant received under UDAY should be considered.

# **Response from DISCOM**

Under the Uday Scheme, loan amount shall be taken over by the GoMP through book adjustment and no amount is to be made available by the Government in cash. As the loan liability of the Company is to be reduced under UDAY Scheme, it will have impact on the weighted average interest rate of the Company, which has already been considered by the DISCOMs. Further, the Petitioners stated that the Petitioners have filed the Petitions as per provision of the MYT Regulations and on normative basis. Therefore, book adjustments to be carried out under UDAY Scheme will have no impact on the ARR except the impact on the weighted average interest rate.

#### **Commission's Views**

The treatment of UDAY Scheme has been considered and appropriately dealt in relevant section of this order.

ISSUE No. 10: Excluding income from various income like Power Factor surcharge, TMM charge, Cross Subsidy Surcharges, late fee

#### Issue Raised by Stakeholders

All the other income earned from Power Factor Surcharges, TMM, Cross Subsidy Surcharge, Additional Surcharge should be considered by the Commission.

# Response from DISCOM

In accordance with MYT Regulations issued by the Commission, all types of income are included on the basis of audited financial statements of the Company. In the Petition, Tables 40 and 41 has description of revenue from sale of electricity and in Table 39 has description of Other income. Further, item wise details of other income have been given in Schedule No. 2 of the format annexed to the Petition.

In respect of income from late fees, its to be stated that income from late fees has been not been considered as income in accordance with the MYT Regulations issued by the Commission. Therefore, the present Petition has been filed accordingly.

# **Commission's Views**

The Commission has considered various Other Income and Non-Tariff Income as per the provisions of the MYT Regulations, which has been appropriately dealt in relevant section of this order.

# ISSUE No. 11: Payment of Subsidy

# **Issue Raised by Stakeholders**

The Petitioners have regularly violated Section 65 of the Electricity Act, 2003 and MYT Regulations regarding manner in which subsidy are paid in advance and which has been confirmed by the Auditors of the Petitioners. Further, the Commission has not initiated any action under Section 142 & 146 of Electricity Act, 2003, which has resulted into running of fraudulent schemes by the Petitioners.

# Response from DISCOM

The payment of Subsidy by the Govt. of MP is not a part of true-up exercise. However, while considering the revenue realization, the Commission considers 100% revenue realized by the DISCOM against the sales made by the DISCOMs.

#### **Commission's Views**

The Commission has considered the State Government subsidy as part of the revenue, in the trueup of the respective years, which has been appropriately dealt in relevant section of this order.

#### ISSUE No. 12: High Cost of Electricity

# **Issue Raised by Stakeholders**

Only one or two States in the country have high cost of electricity and the State of Madhya Pradesh is one of them. However, the DISCOMs are in financial losses. Hence, it is requested to the Commission to make a thorough investigation on this account and burden of the losses should not be passed on to the consumers as abundance of natural resources are available in the State.

#### **Response from DISCOM**

The average cost of electricity supply for a particular State varies from State to State. Further, electricity rates are determined on the basis of the applicable Regulations, EA 2003, and Cross subsidy roadmap issued by the Commission. However, the Petitioners provides 10 hours and 24 hours of electricity supply to agricultural and other consumer categories, respectively.

#### **Commission's Views**

The Commission has carried out thorough due diligence while admitting the ARR in true up of FY 2014-15 to FY 2017-18. It has not allowing any pass through of losses not allowable as per MYT Regulations.

# ISSUE No. 13: Impact on the New Industries

# **Issue Raised by Stakeholders**

The State Government of Madhya Pradesh has made intensive efforts to set up new Industries in the State under Magnificent Madhya Pradesh campaign in FY 2014-15, i.e., 6 years ago. Therefore, this true-up will have impact on the new industries. Further, it will discourage and be complete injustice to new industries coming to the State.

#### **Response from DISCOM**

In order to encourage new industries, the exemption which was given only to the green field consumers has been extended to new industries in the Retail Tariff Order of FY 2019-20. Presently, all new consumers whose agreement are in the FY 2016-17 or later will be given rebate of Rs1/unit or 20% of the Contract Demand, whichever is lower.

# **Commission's Views**

The Commission has taken cognizance of stakeholders' suggestions and Petitioners' reply and accordingly decided this true up order.

# ISSUE No. 14: Poor Management of Surplus Electricity

#### **Issue Raised by Stakeholders**

According to the State Energy Account, the Petitioners had availability of 57,121 MU, Scheduling of 40,776 MU and Backing down of 16,345 MU from coal thermal plants. Moreover, as per Retail Tariff order of FY 2015-16, the surplus electricity was 19,592 MU in total (17,305 MUs from thermal power plant and 2,287 MU from renewable energy), which is to be sold in the open market at 3.16 per unit and revenue of Rs 6,191 Crore was to be generated as per the Commission Order. However, the Petitioners sold only 1,282 MU, which generated revenue of Rs. 347.82 Crore, out of which the Petitioner sold 965 MU in IEX at rate of 2.05 per unit, which is breach of the Commission's order.

#### **Response from DISCOM**

The surplus energy available after meeting the demand of the DISCOM are traded at Power Exchanges in real time. According, the power generating stations are scheduled as per the MoD principle to meet the energy demand of the DISCOMs. However, there is variation in actual revenue earned from the sale of surplus power w.r.t amount approved in Tariff Order.

#### **Commission's Views**

The Commission has admitted the power purchase quantum and cost after undertaking detailed prudence check of the power purchase submitted by the DISCOMs in accordance with the provisions of the retail supply tariff order for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. Further, the Commission has admitted the power purchase cost towards the normative power

purchase requirement computed considering the admitted normative sales grossed up with the allowable loss levels as per the provisions of the Regulations. The detailed methodology adopted by the Commission for admittance of power purchase cost has been detailed in the respective chapter of this order. Moreover, the Commission has considered the actual revenue earned from sale of surplus power.

#### ISSUE No. 15: Medium and Short Term Power Purchase

# <u>Issue Raised by Stakeholders</u>

All Medium-term and Short-term power purchase are required to comply with the provisions of the MPERC Power Purchase Regulations. In addition to this, the Commission has not allowed Short-term and Medium-term power purchase as there is no specific direction/order by the Commission in this regard. Further, the Petitioners in order to conceal their inappropriate actions of violating the Commission's Regulations are trying to mislead the Commission.

The Power Purchase Regulations emphasizes that all short/medium power purchase procurement are to be done on the basis of the competitive bidding and with prior approval of the Commission to ensure fairness, reasonability and transparency. However, the Petitioners have not provided any details, method, and justification for Medium-term power purchase procurement in the true-up Petition. Therefore, its requested to the Commission to disallow it in true up exercise. Further, the Stakeholders requested the Commission to examine the status of such power purchase and to take suitable action against defaulters in order to avoid such occurrence in future.

#### **Response from DISCOM**

The Petitioner submitted that power procurement for medium-term is carried with prior approval of the Commission and the short-term power procurement is done through Power Exchanges. MPPMCL being no profit no loss organization, procuring power on behalf of the three DISCOMs is strictly following the Regulations in meeting the demand of DISCOMs.

#### **Commission's Views**

The Commission has admitted the power purchase quantum and cost after undertaking detailed prudence check of the power purchase submitted by the DISCOMs in accordance with the provisions of the retail supply tariff order for FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18, which has been appropriately dealt in relevant section of this order.

# **ANNEXURE-1**

Sr. No.	Name of the objector		
1.	Shri. S.M Jain		
1.	M/s Venus Alloys Pvt. Ltd. Indore		
2.	Shri Shubham Jain & Shri Sandeep Jain		
۷.	M/s Rathi Iron & Steel Industries Ltd		
3.	Shri C.B Singh		
3.	M/s Jaideep Ispat & Alloys Pvt. Ltd.		
4.	Shri. S.M Jain		
4.	M/s All India Induction Furnaces Association		
5.	Shri M.C Bansal		
Justice for Public Cause Foundation Trust (JPCFT)			
	Shri Rajendra Agrawal		
6.	1995/A Gyan Vihar Colony, Narmada Road, Jabalpur -4802002		
0.	Shri Rajesh Choudhary		
	101 D.N Jain Shopping Complex, Jabalpur-482002		
7.	Shri. D.Khandelwal		
/.	960, Napier Town Jabalpur		
8.	Dr. P.G Najpande		
0.	Jabalpur		